

Birmingham Children's Hospital NHS Foundation Trust Birmingham Children's HOSpital Quality Report

Steelhouse Lane Birmingham Tel:0121 333 9999 Website:www.bch.nhs.uk

Date of inspection visit: 17-19 May 2016, Unannounced 26 May 2016 Date of publication: 21/02/2017

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

Overall rating for this hospital	Outstanding	☆
Urgent and emergency services	Good	
Medical care	Outstanding	\overleftrightarrow
Surgery	Good	
Critical care	Outstanding	公
Neonatal services	Requires improvement	
Transitional services	Outstanding	\overleftrightarrow
End of life care	Outstanding	公
Outpatients and diagnostic imaging	Good	

Letter from the Chief Inspector of Hospitals

We conducted this inspection from the 17-20 May 2016. We returned to the hospital for an unannounced to see the hospital services outside of core business hours.

This is a specialist trust and we made a public commitment to inspect these before June 2016. We held no other intelligence to have raised the risk to require us to inspect before this date.

We conducted this inspection under our comprehensive methodology, giving the trust notice of our inspection. This enabled us to request information prior to the inspection, review information we held about the trust and speak with stakeholders of the trust. We inspected the main site, based in the centre of Birmingham. We also inspected Forward Thinking Birmingham this is a mental health service offered to young people up to the age of 25yrs. The services offered care both in-patients at Parkview and within community hubs.

Please note the service offered under Forward Thinking Birmingham had commenced fully April 2016 just prior to our inspection. BCH (Birmingham Children's Hospital) is the lead provider of the service delivered by a consortium. The inspection findings are in separate reports.

Please note when we refer to Paediatric intensive care unit (PICU) we are describing to critical care for children and young people.

We rated the hospital 'outstanding' overall;

Our key findings were as follows:

- Staff understood how and the importance of raising incidents. Learning was shared amongst the staff group to keep improving quality. The trust had started to report excellence and sharing learning when things when well.
- Multidisciplinary team working was embedded in the trust.We observed this in action.
- The feedback from parents and children was positive, with them reporting they were treated with respect and dignity.Bereaved parents described the compassionate care they received from the staff.
- Results of surgical outcomes demonstrated the team performed better or the same as comparable services.
- We noted how responsive the trust was, for instance, they were piloting a service with the aim to reduce readmissions to the hospital by having health visitors conduct follow-up calls to patients who had been discharged form ED.
- As the trust served patients and parents from outside of the Birmingham environs, parents were able to use nearby accommodation free of charge. This allowed them the opportunity to stay near by their child whilst they were receiving treatment. They were also able to seek support from other families using the accommodation.
- All cancer referrals met the treatment targets, and 100% of all children were seen within six weeks of referral.
- Safer staffing tool demonstrated there was enough nursing staff to meet patients' needs supplemented by bank staff.Staffing sickness rates were below the England average.
- The trust had a strategy in place to ensure it met its vision. Systems were in place to ensure the board were aware of any risks that could prevent it from meeting the vision.
- Staff were aware of the values and were assessed against them as part of the appraisal process.
- The leadership was well respected amongst the staff group and were effective, with succession planning in place and a board development programme.

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- The culture was one of support of each other, staff referred to 'Team BCH', and using opportunities to listen to patients carers and visitors.
- Seven never events had occurred in surgery. This had resulted in the theatre team being investigated internally to try to identify a pattern and areas for improvement. The trust had commissioned an external company to help them identify areas of improvement. A theatre task force was in place to drive the momentum.
- There had been outbreaks of reportable infections, and we saw that improvements were needed regarding hand hygiene in neonatal services. However, we did find most areas to be visibly clean.
- Consultant staffing levels in neonatal did not meet the best practice guidelines. There was a vacancy rate of 26% in child and adolescent mental health services (CAMHS).
- We saw there were a lack of up to date care plans in place for (CAMHS) patients and a lack of outcome data for neonatal services.
- PLACE scores returned demonstrated that patients were not fully satisfied with the food. The trust had done work to improve the food with the support of dieticians and the introduced defined meal times. This included feedback place mats and music for example.
- PICANET data (2014) demonstrated that standardised mortality ratios were within expected range.

We saw several areas of outstanding practice including:

- Within medical care, we saw outstanding use of storytelling therapists to help with children's emotions, anxiety and distress during their stay in hospital, and to help to explain treatment processes to them. Following a session of storytelling therapy, one parent reported their child had not asked for their usual pain relief overnight.
- On the PICU, a safety huddle (a safety briefing meeting) was held three times throughout the day to review patients and the PICU patient flow. An additional safety huddle was held at 4.30pm during the inspection, as patient demand was greater than capacity, which was attended by the Medical Director who was on call that evening. This was outstanding practice with team involvement for safety.
- The trust has implemented a Rare Diseases Strategy, which will deliver an innovative approach for children who due to their rare or undiagnosed condition would be required to attend multiple outpatient appointments with a variety of specialities. The Rare Disease Centre will enable all clinicians involved in the care of the child to be present to provide a holistic approach in one appointment.
- Transition services demonstrated a service which was actively supporting young people to moveinto adult services. Services were offered both in and out of the hospital, and the multidisciplinary team worked in a cohesive fashion such as joint clinics.
- End of life core service supported children and young people and their families during palliative care and at the end of their life.Services were responsive, with referrals accepted within 24 hours. Urgent discharges were achieved within 24hrs so children and young people could die where they requested.

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 that learning from serious incidents involving neonates ward are shared consistently across the trust.
- Review governance processes to ensure neonatal services assess, monitor and mitigate risks to all neonates across the trust. This should include reviewing the neonatal governance structure and morbidity and mortality meetings.

- Radiology must ensure that a radiologist is always available for advice and for protocolling CT and MRI examinations.
- Within CAMHS community, the trust must ensure there are sufficient numbers of skilled and qualified staff to provide an effective service.

Please note more outstanding practice and 'must' and 'should' actions can be found at the end of the report.

Professor Sir Mike Richards

Chief Inspector of Hospitals

Our judgements about each of the main services

Service

Rating

Urgent and emergency services

Good

g Why have we given this rating?

We have rated this service as good. This is because:

- There was a clear process for reporting incidents, staff knew how to report incidents and received feedback when they did.
- We saw that lessons were learnt when things went wrong, actions were taken and practice changed as a result.
- Paediatric early warning scores were recorded during the triage assessment which meant that each child's condition was closely assessed and monitored.
- Staff were trained, competent and followed evidence based practice and national guidance.
- Staff contributed to a range of local and national audits including those led by the Royal College of Emergency Medicine (RCEM). The RCEM reviewed the submitted data and developed action plans with the findings.
- Staff were kind, caring and compassionate towards children, young people, and their families. They were pleased with the level of care and treatment they received in the department.
- The service had a plan in place to ensure services were delivered to meet patient needs over the winter period.
- Patients with complex needs and learning disabilities were supported with specialist care.
- An admission avoidance board updated attendees about alternative support available to them in the community which could mean they were seen quicker elsewhere.
- The department mostly met the target for patients been seen and treated within 4-hours. Where the 95% target was not met, the departments was above the England average.
- Staff were aware of the vision and values of the trust and felt the challenges of the department were understood and their commitment was valued and respected.
- There was a clear strategy for the future of the service.

However we also saw that:

			 In the observation unit, children in the unit were without identification bands in place, which meant their identity, could be difficult to determine; two of which had received prescribed treatment. We observed the unit was left unstaffed for over five minutes. There was limited space for medication preparation in the resuscitation area. The waiting area was at times overcrowded and unkempt, with no domestic service to clean away the litter or attend to the public facilities. There was limited information for parents and patients on how to complain if they were unhappy about the service. The risk register did not correspond with the risks within the department with staff anxieties relating to major incidents not being acknowledged. We were not assured that all risks were being addressed.
Medical care	Outstanding	☆	Overall, we rated medical care at Birmingham Children's Hospital as outstanding. Safe was rated good.
			• There was a positive, transparent culture of incident reporting and learning from incidents. Sufficient numbers of appropriately qualified and trained staff were on duty to ensure patients were kept safe.
			• Staff used national guidelines and evidence-based treatment when looking after patients. The hospital took part in several national audits and staff were encouraged to carry out local audits. Results of audits were used to improve patients' experiences and care.
			• Feedback from parents and patients about the care they received was consistently excellent. Parents, carers and patients we spoke with said staff "went the extra mile" and were "brilliant" or "excellent" and the care given was much more than they expected.
			• Patients and their families were treated with respect, dignity and compassion, particularly at the most difficult times Parents were involved at every stage and were treated as individuals.

Surgery

Good

 Patients were treated as individuals and different approaches were taken, when needed, to care for them in the most appropriate way. Staff supported people from different cultures, backgrounds and religions and made adjustments to accommodate their needs.

 Leaders had an inspiring purpose and common focus to deliver the best possible care to the children in their care, and this attitude was shared by staff at all levels. Staff across all groups were proud of the organisation as a place to work and spoke highly of the culture. Many staff told us the hospital was "the best place they had ever worked" and said they "couldn't imagine working anywhere else".

We rated this service as good because, with the safe domain being rated as requires improvement:

- Staff understood how to report incidents and managers shared learning from incidents across the surgical directorates.
- The surgical wards and theatres we visited were clean and tidy.
- Managers used recognised tools to determine staffing levels and skill mix, and they put systems in place for continuity of services.
- The surgical directorates followed National Institute for Health and Care Excellence (NICE) guidance and nationally recognised best practice.
- Staff used national and local audits to monitor patient outcomes and identified opportunities for improvements.
- The acute pain team provided effective treatment to patients.
- We saw minutes from a multidisciplinary team (MDT) meeting and observed good working relationships between staff.Nursing staff understood their role and were up-to-date with their specialist training, appraisals and supervision.
- Staff provided a professional, caring and compassionate service to patients within a calm

ward atmosphere.Family members confirmed this in person as well as through comments in the NHS Friends and Family Test (FFT) questionnaire.

- Birmingham Children's Hospital is aleading UK specialist paediatric centre, which delivers surgical services for young people from across the country.
- The hospital kept older children and teenagers of the same gender together and did not place them in mixed sex wards.
- Staff managed bed availability to ensure they could admit patients as required. In addition, we saw an effective MDT working with complex needs patients.
- There was a clear vision within the surgical directorate.Staff were positive about proposals to merge the hospital with a neighbouring trust whose services complemented their own.
- A clear governance system was in place and was effective in delivering a good service to patients. Staff felt supported by managers and described positive leadership and an open door policy.
- Many innovative practices took place within the surgery directorate including the 'intent day' where staff were actively involved in creating their own values. In addition, an 'app tree wall' (a picture of a tree) displayed children's, parents and families' feedback on the service.

However:

- Despite staff sharing information in relation to surgical 'never events' (serious, largely preventable patient safety incidents that should not occur if proper preventative measures are taken), avoidable mistakes continued to happen.
- We saw evidence of engagement with other trusts in relation to information sharing about never events, but there was no exchange of staff between trusts or peer review of practice, which may have reduced the number of never events.

 The trust had two inconsistent computer systems, which monitored staff training. One system would suggest that a particular member of staff had completed training while the other suggested they had not.

• We found staff were honest and open with patients; however, not all staff understood the point at which the trust became legally obliged to follow Duty of Candour procedures.

Safety was rated as outstanding because:

- The Paediatric Intensive Care Unit (PICU) and high dependency unit (HDU) had clear, effective systems and processes in place within this service to promote safe and effective holistic care.
- Staff understood their roles, responsibilities and was proud of how the service had developed, including participating in local, national and international safety programmes.
- Learning was based on thorough analysis and an investigation into when things went wrong and when things went well.

Effectiveness was rated as outstanding because:

- The policies seen were based on National Institute for Health and Care Excellence (NICE) and other relevant guidelines.
- Staff participated in a wide range of clinical audits and were involved in research.
- Care bundles and individualised care pathways were embedded in practice.
- Patient outcomes were monitored and presented in the annual paediatric intensive care report, which included the international benchmark.
- Staff received a structured induction with agreed development objectives, which were monitored with clear competencies developed by the education team within this service.
- There was a holistic approach to assessing, planning and delivery of care delivered by the multidisciplinary team across this service.

Caring was rated as outstanding because:

• The high dependency unit (HDU), Paediatric Intensive care Unit (PICU), supporting services

Critical care

Outstanding

including the post-acute care enablement (PACE) team and the transport team staff all demonstrated that they were fully committed to delivering high quality, individualised patient-centred care.

• Children and their families were treated with compassion, dignity and respect. Parents stated they were positive about the care received by their children and felt involved and informed.

Responsive was rated as outstanding because:

- The flow of children through PICU was managed effectively to avoid delays with discharges and manage capacity with the increased demands on this service. Safety huddles were held three times a day with extra huddles as demand necessitated.
- The individual needs of the children were met with the use of individualised patient photographic folders with clear instructions relating to their individual position preferences.
- Any delays with discharge were escalated at the earliest opportunity and the capacity managed with support from the hospital operational clinical site team.
- Parents and families were supported during and after discharge from this service.

Well-led was rated as outstanding because:

- This clinical service group had a vision and strategy for development of the service. All staff spoken to confirmed they were part of 'team BCH' and all staff knew the local vision.
- Staff were able to raise concerns and were supported.
- Leadership was visible and there was a keen sense of teamwork and a positive culture.
- Research and implementation of findings was very strong with communication sheets contained within each patient family folder.
- The staff worked well in engaging with the children and their families and external groups to seek feedback and support for the service.

We rated this service as 'requires improvement' because we rated safe as inadequate. Effective and responsive and well led as requires improvement with caring rated as good.

Neonatal services

Requires improvement

- This service lacked clear identity, strategy and clinical leadership, which affected all aspects of care for neonates at this trust. Neonates could be cared for within any department of the hospital; we saw variation in the care babies received dependant on their location.
- This trust had two external reviews of their neonatal service dating back to January 2015 and January 2016 respectively.
- Nurse staffing levels did not meet national standards because of the increased number of babies on NSW requiring high dependency care.
- The trust did not collect adequate data on the quality and performance of neonatal care; this is a national standard. The trust was not fully using the gold standard of the neonatal network IT system to aid effective communication and care planning.
- This service did not always investigate serious incidents because of the lack of recognition of the severity or the potential harm to babies. Senior management lacked this understanding and therefore opportunities to learn from serious incidents were lost. Senior managers also lacked knowledge of risk register management.
- We found several concerns with the safety of the environment and equipment.
- The provision of neonatologists' from the local maternity unit was not meeting the service level agreement of four hours neonatologist presence Monday-Friday. Senior management described the relationship between surgical paediatricians and the neonatologists' as 'unengaged'. Following the inspection we had information from the trust to demonstrate that improvements had been made.
- Mandatory training for registered nurses on the neonatal surgical ward fell below the trust target.
- Safeguarding children training for both nursing and medical staff fell below the trust target.

- Nurses working in neonatal care services require specialist training. There was no clarity on the number of staff required or eligible to complete specialist training, or which course they would be required to complete.
- All levels of staff lacked awareness of the full duty of candour process. Staff did not always recognise the seriousness of incidents and therefore missed opportunities to learn. This increased the risk of them not recognising when duty of candour applied.
- Staff were not aware of a missing child policy. A baby was abducted from NSW in July 2015.The policy was not a standalone policy but since our inspection, the trust said it was addressing this.

However:

- The trust was responsive to the concerns we highlighted following our inspection with immediate actions taken to address leadership and service issues and a strategic plan was made.
- There was a date set for public involvement to discuss the future of the service and to influence improvements.
- The neonatal surgical outreach team was responsive to the individual needs of surgical neonates and provided cross-organisational boundary care to meet these needs. This service had a clear strategy and demonstrated effectiveness of reducing cot days at the trust and out of region transfers.
- Staff were aware of how to report incidents and received some feedback.
- We observed good multi-disciplinary working between professionals.
- Parents praised the care that staff gave their babies and this shown in parent feedback and nominations for local awards. Staff demonstrated the trust values and described the culture as 'team BCH'.
- The records we viewed met national standards for record keeping.
- The trust had a process in place for assessing and responding to deteriorating children with the provision of the PACE team.

Transitional services



Overall we rated the service as outstanding because:

- There was a holistic approach to planning patient's transition to other services, which fully reflected individual circumstances and preferences.
- We found there was a real passion and commitment across multidisciplinary teams to deliver a patient centred and high quality service for young people and adolescents (patients) transitioning to adult care.
- There was a transitional care policy for young people with long term conditions and/or disability (the policy) that encompassed the activities needed to support patients transitioning to adult care.
- The was an Adolescent and Transition Forum (A&TF) to ensure the policy was implemented and Young Person's Advisory Group (YPAG) which had the remit to support and monitor the use of the policy.
- The progress on implementing transition pathways for individual specialties was varied. There were 36 specialities where transition arrangements were either in place and well established or some in the earlier phases of development. Progress was dependent upon the complexity and rarity of individual medical conditions.
- There were a number of specialties participating in national research programs and used the outcome of these to develop innovative and pioneering approaches to high quality care for patients transitioning to adult care.
- Patients received treatment and care according to national guidelines. Transition services obtained good quality outcomes as evidenced by a range of national audits such as the Royal College of Paediatric and Child Health (RCPCH) and the National Institute of Health and Care Excellence (NICE) as a basis to quality assure its transition services.
- Transition services used the Department of Health 'You're Welcome' self-review tool,

'Quality criteria for young people friendly health services, 2011' to monitor standards via the Commissioning for Quality and Innovation framework (CQUIN).

- Feedback from patients and parents were positive, children and young people were treated with dignity, respect and kindness. Staff communicated with patients and their parents and provided information in a way that they could understand.
- Transition clinical leads and champions felt valued and supported by their managers and received the appropriate training and supervision to enable them to meet patients' individual needs.
- There were a range of examples of transition plans. Specialties used innovative and efficient ways to deliver more joined-up care to patients transitioning to adult care. There was a holistic approach to planning people's transition to other services.
- The service involved other organisations and there were examples of the local community being integral to how services were planned and ensured that services met patient's needs.
- Transition teams had reviewed its framework and processes for governance to support patients transitioning into adult care.
- Staff we spoke with, minutes of meetings, monitoring data and audit of transition pathways demonstrated the governance processes for transition services were in place for the majority of specialities.
- There was a YPAG which was proactive in ensuring patients were involved in the development, design and delivery of services for children and young people.
- There was an open, transparent culture with a clear vision and strategy for transition services which was led by a strong management team. Staff told us and we saw evidence that they were consulted and part of the development of the strategy, they were engaged and enthusiastic about the new developments within the transition service.

However we found:

		 Not all specialities used the trust's documentation. Plans to support transition for the remaining 16 of the 36 specialities needing amending or further embedding. A centralised approach to how information was shared with other external providers when taking over the care of patients transitioning to adult care was in the process of being developed. Further work was needed to formalise governance processes so themes and areas of concerns specifically relating to transition could be identified and acted upon in a more timely and effective manner. Through conversations with transition clinical leads and champions there was a development opportunity to create a better understanding and appreciation of the needs of adolescents transitioning to adult care.
End of life care	Outstanding 🖒	 During our inspection there were no patients at the hospital requiring end of life care, although there were some palliative care patients, therefore we have gained assurance from documents and interviews with staff. Overall, we rated end of life care at Birmingham Children's Hospital as outstanding, having safe, effective and well led as good.
		 There was a positive, transparent culture of incident reporting and learning from incidents. Sufficient numbers of appropriately qualified and trained staff were on duty to ensure patients were kept safe.
		 Staff used national guidelines and evidence-based treatment when looking after patients. The hospital took part in several national audits and staff were encouraged to carry out local audits. Results of audits were used to improve patients' experiences and care.
		 Feedback from parents and patients about the care they received was consistently excellent. Parents, carers and patients we spoke with said staff "went the extra mile" and were "brilliant" or "excellent" and the care given was much more than they expected.

- Patients and their families were treated with respect, dignity and compassion, particularly at the most difficult times, and bereaved parents were given genuine, compassionate care with clear emotional support if a child died. Staff displayed a great sense of pride in the end of life care provided at the hospital. Patients' needs and those of families and other representatives of patients were considered throughout the process and following death. Parents were involved at every stage and were treated as individuals.
- Patients were treated as individuals and different approaches were taken, when needed, to care for them in the most appropriate way.
 People from different cultures, backgrounds and religions were supported by staff and adjustments were made to accommodate their needs.
- Leaders had an inspiring purpose and common focus to deliver the best possible care to the children in their care, and this attitude was shared by staff at all levels. Staff across all groups were proud of the organisation as a place to work and spoke highly of the culture. Many staff told us the hospital was "the best place they had ever worked" and said they "couldn't imagine working anywhere else".

We rated outpatient and diagnostic imaging services as good.

The safety and responsiveness of the service was good because:

- There were clear processes for the reporting of incidents.
- Staff were encouraged to report incidents using the electronic incident reporting system.
- We observed staff using appropriate hand washing techniques and personal protective equipment, such as gloves and aprons whilst delivering care.
- Care was provided at flexible times to increase the accessibility of the service being provided.

Outpatients and diagnostic imaging

Good

• The trust involved the Young Person's Advisory Group when planning the delivery of outpatient and diagnostic imaging services.

There was an outstanding level of caring across all outpatient and diagnostic imaging services because:

- When speaking to children, parents and carers they were continually positive about the care that was provided and the way that staff treated them.
- People told us and we saw that staff made an extra special effort when they provided care. Staff were committed to empowering young people through providing them with appropriate information and support to enable them to make decisions around the care they received.
- Children, young people and their carers told us that they were treated with compassion, dignity and respect.
- We saw numerous examples of staff going beyond the remits of their role to overcome obstacles to ensure the needs of the child, family and carers were met.
- We found strong local leadership in outpatient departments.

However, we also found areas requiring improvement in the well led domain, relating mostly to diagnostic imaging services:

- We observed and staff told us that radiographers and radiologists did not work as a cohesive team.
- The on call system for radiographers was not in line with trust policy with regard to compensatory rest for staff called out during on call shifts.
- The trust wide appointment scheduling system had not been fully implemented in radiology.
- Clinical staff in outpatient departments were performing administrative tasks due to a lack of administrative and clerical support. We observed that this was adding to the delays experienced by patients in the ENT clinic.



Birmingham Children's Hospital Detailed findings

Services we looked at

Urgent & emergency services; Medical care; Surgery; Critical care; Neonatal services; Transition services; End of life care; Outpatients & Diagnostic Imaging.

Detailed findings

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Background to Birmingham Children's Hospital

The Birmingham Children's Hospital is over 150 years old, services have been provided from Steelhouse Lane since 1862.

Birmingham Children's Hospital is a specialist paediatric centre, offering care to young patients from Birmingham, the West Midlands and beyond.

The trust employs 3,700 people and provides a range of specialist services, including the treatment of the complex heart conditions, chronic liver and kidney disease, cancer, serious burns, epilepsy, neurology and cystic fibrosis. There are also 11 nationally commissioned services.

There are 378 beds, including a 31 bedded intensive care unit, the largest in the UK. The trust has an £251m annual income and 270,600 patient visits each year

Birmingham has a higher proportion of ethnic minority groups than the England average. The largest minority group is Asian/Asian British ethnicity (26.6% of the population compared to an England average of 7.7%). The second largest minority group is Black/Black British (9% of the population compared to an England average of 3.5%).

Birmingham local authority district ranked seventh out of 326 local authorities in the 2015 indices of multiple deprivation, making it one of the most deprived areas in the country.

Infant mortality rates and obesity in children are worse than the England average.

The trust was last inspected by CQC in November 2013 and was rated as 'compliant'.

Our inspection team

Our inspection team was led by:

Chair: Dr Michael Anderson, Consultant, Chelsea and Westminster Hospital NHS Foundation Trust

Head of Hospital Inspections: Tim Cooper, Care Quality Commission

The team included CQC inspectors and a variety of specialists: Paediatric A&E Consultant/Nurse, A&E Nurse, Paediatricians, Paediatric Nurses, Paediatric Surgeons, Paediatric Critical Care Doctor, Paediatric Critical Care Nurse, Paediatric Nurse – Neonatology, Consultant Neonatologist, CAMHS Doctor, CAMHS Nurse, CAMHS Psychologist and a Transition Nurse.

Detailed findings

How we carried out this inspection

We inspected this service as part of the comprehensive inspection programme and visited the hospital on 17, 18 and 19 May 2016. We also visited unannounced on 26 My 2016.

We met with the trust executive team and ward managers, service leaders and clinical staff of all grades. We observed how people were being cared for, reviewed treatment records and spoke with 156 people who use the service, carers and / or family members, over 500 staff and reviewed information given to us by the provider we looked at 216 personal care or treatment records of people who use the service.

During our visits to the trust we held eight planned focus groups to allow staff to share their views with the inspection team. These included all the professional clinical and non-clinical staff. Through these groups and during the inspection we spoke to over 200 members of staff.

Facts and data about Birmingham Children's Hospital

Birmingham Children's Hospital provides children's health services for young patients from Birmingham, the West Midlands and beyond. There are 378 beds on the site, of which 347 are for general and acute services and 31 for critical care. There 13 operating theatres

As at June 2015, the trust employed 3,427 staff including 419 medical staff and 1,161 nursing staff.

Over 270,600 patients visit the hospital each year, including over 53,000 Emergency Department patients, 175,000 outpatients and approximately 44,000 inpatient admissions.

Our ratings for this hospital

Our ratings for this hospital are:

For the period 2014/15, the trust's revenue was just under £4.3 million and had a deficit of just over £23,000.

The trust provides 34 different specialties (including liver transplant surgery, cardiac surgery, burns, major trauma, craniofacial surgery, blood and marrow transplantation, specialised respiratory and dermatology, neurology, cystic fibrosis).

Detailed findings



Notes

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

Information about the service

The Emergency Department (ED) at Birmingham Children's Hospital provides a 24 hour, seven day a week service to children and young people in the local area and beyond. The service is a member of a regional trauma network and a designated trauma unit for children and young people. The department can provide care for a wide range of medical conditions, minor illnesses and injuries through to major trauma.

During 2014 /2015, ED saw over 53,000 children and young people of which 21% of attendances resulted in an admission to the hospital; this was below the national average (22%). Children, young people and their parents/ carers were referred by 999 calls, their GPs or attended 'self-referring' walking into the reception area. The majors' area consisted of a six-bedded observation bay, 10 cubicles (two set up as high dependency), a 3-bedded resuscitation room and the clinical decision unit had six trolleys. The minor injury area consisted of a treatment room, three cubicles and a seating area.

Over the course of the inspection, we spoke with 16 children and relatives and 30 staff including nurses, doctors, consultants, senior managers, ambulance crews and support staff. We observed care and treatment in the waiting area, the minor and major injury areas, the observation unit and resuscitation area. We reviewed 33 sets of care records.

Summary of findings

We have rated this service as good. This is because:

- There was a clear process for reporting incidents, staff knew how to report incidents and received feedback when they did.
- We saw that lessons were learnt when things went wrong, actions were taken and practice changed as a result.
- Paediatric early warning scores were recorded during the triage assessment which meant that each child's condition was closely assessed and monitored.
- Staff were trained, competent and followed evidence based practice and national guidance.
- Staff contributed to a range of local and national audits including those led by the Royal College of Emergency Medicine (RCEM). The RCEM reviewed the submitted data and developed action plans with the findings.
- Staff were kind, caring and compassionate towards children, young people, and their families. They were pleased with the level of care and treatment they received in the department.
- The service had a plan in place to ensure services were delivered to meet patient needs over the winter period.
- Patients with complex needs and learning disabilities were supported with specialist care.

- An admission avoidance board updated attendees about alternative support available to them in the community which could mean they were seen quicker elsewhere.
- The department mostly met the target for patients been seen and treated within 4-hours. Where the 95% target was not met, the departments was above the England average.
- Staff were aware of the vision and values of the trust and felt the challenges of the department were understood and their commitment was valued and respected.
- There was a clear strategy for the future of the service.

However we also saw that:

- In the observation unit, children in the unit were without identification bands in place, which meant their identity, could be difficult to determine; two of which had received prescribed treatment. We observed the unit was left unstaffed for over five minutes.
- There was limited space for medication preparation in the resuscitation area.
- The waiting area was at times overcrowded and unkempt, with no domestic service to clean away the litter or attend to the public facilities.
- There was limited information for parents and patients on how to complain if they were unhappy about the service.
- The risk register did not correspond with the risks within the department with staff anxieties relating to major incidents not being acknowledged. We were not assured that all risks were being addressed.

Are urgent and emergency services safe?



We have rated this service as good for safe. This is because:

- There was a clear process for reporting incidents, staff knew how to report incidents and received feedback when they did.
- We saw that lessons were learnt when things went wrong, actions were taken and practice changed as a result.
- A high standard of medical documentation was recorded.
- Nurse staffing levels and skill mix reflected planned levels.
- Paediatric early warning scores were recorded during the triage assessment.
- The department met with the major trauma services quality indicators as they were able to access a paediatric consultant 24 hours a day.

However we also saw

- We witnessed the observation unit was left unstaffed for over five minutes. Children in the unit were without identification bands in place which means their identity could be difficult to determine; two of which had received prescribed treatment.
- There was limited space for medication preparation in the resuscitation area.

Incidents

- Two serious incidents were reported between March 2015 and February 2016. One incident related to the lack of provision of blood products and the other incident related to an invasive procedure. Staff we spoke with were aware of the route cause analysis report and the findings. We were informed about the learning from these two events by the nursing staff in the department. This had included amendments to the major trauma protocol and massive haemorrhage protocol and a change in specific surgical procedures in the department.
- On average, 11 incidents were reported each month. There were a higher number of incidents reported during the busy times in October 2015 (18) and

December 2015 (17). The majority of incidents resulted in no harm (113). The most commonly reported incident category was medication incident (35). The second most commonly reported category was treatment, procedure (18).

- The number of incidents recorded within each incident type was generally consistent. However there was a higher number of medication incidents in March 2015 (5) and February 2016 (6) compared to an average of three over the 12 month period.
- The department reported 91% of incidents to the National Reporting and Learning System (NRLS) within 30 days of the incident in line with the reporting guidelines. There had been no incident reported over 90 days after the incident since June 2015 and there had been no incidents reported over 30 days since September 2015.
- There were 192 NRLS incidents that had been recorded between March 2015 and May 2016; 162 were logged as no harm including 38 medication incidents and 15 clinical assessments. Twenty-five incidents were logged as low harm, one with moderate harm, two with severe harm and one death.
- Staff showed us how they accessed the electronic incident reporting system and all staff had access. Positive reporting was encouraged to promote patient safety. Verbal and written feedback was given to the reporter and a monthly incident safety bulletin was distributed in the form of a newsletter. Staff were made aware of incidents occurring in other areas of the hospital through the quarterly casebook, team brief and department meetings. When an incident had occurred, we saw action cards were introduced to learn from the event and instigate safe practice. For example, a signature list of staff trained to give medication had been formulated as previously it was unclear which staff were appropriately trained and blood administration competencies were checked for band 6 staff.
- There had been no Never Events reported between March 2015 and February 2016. Never Events are serious incidents that are wholly preventable as guidance or safety recommendations provide strong systemic protective barriers are available at a national level and should have been implemented by all healthcare providers.

- There were no black breaches reported between March 2015 and February 2016. A black breach is where handovers from ambulance arrival to the patient being offloaded in to ED took longer than 60 minutes.
- Mortality and Morbidity reviews were discussed at quarterly meetings and staff involved in the case for discussion was encouraged to attend. Consultants and nurses attended the trust mortality and morbidity (M&M) meetings when children had attended ED. The clinicians also attended intensive care M&M's for those admitted from ED, the finding were recorded in meeting minutes and discussed within the department.
- We saw that Duty of Candour (DoC) was applied during the complaints and incident investigation processes. We heard of a recent event involving a medication error whereby the parent was informed as soon as the incident was recognised and the DoC section on the incidents was completed.
- Staff told us about openness and transparency. However, staff examples we heard did not fully demonstrate that the principles of DoC were fully understood by all staff.

Cleanliness, infection control and hygiene

- Throughout the inspection, we saw varying levels of cleanliness in the waiting area depending on the amount of people waiting. The department did not have 24-hour domestic cover and at times nursing staff had to attend to the cleanliness of the waiting area. On one occasion, we found a public toilet in the waiting area without hand soap and paper towels and a gel dispenser was empty in a corridor. Parents/carers we spoke with told us they saw varying levels of cleanliness depending on what time of day they attended and how busy it was.
- We saw staff regularly washed their hands and used hand gel between patients. The trust's 'bare below the elbow' policy was adhered to. Protective clothing was worn as per the infection control policy in most cases. We did see one nurse wearing an apron and gloves cleaning a cot with a wipe, however they did not change their protective clothing before handling clean linen and the curtains.
- ED was included in a range of local audits. For example, an infection prevention and control audit took place between October and December 2015. The results of this highlighted that hand washing compliance was 90%

in one month and this was lower than the target of 95%. Focussed hand washing sessions were organised in January 2016; the results had improved and were recorded as 100% for April 2016.

- Intra Venous access audits scored 70% and catheter insertion audits scored 60%; staff told us about the action plans to address the low-compliance in these areas included doctors improved hand hygiene and the correct equipment available.
- Cleaning schedules were on display in all areas, detailing which areas and items required cleaning on a daily and weekly basis and records to confirm it had been completed.
- Stickers were placed on 'clean' equipment throughout the department to indicate that they had been cleaned and were ready for use.
- There were policies and procedures within the department's on managing children with infections to prevent cross infection.

Environment and equipment

- Security arrangements were in place 24-hours a day, seven days a week in the department. A security guard stood at the emergency doors. Guard's positions around the hospital site were rotated each hour. The guards told us they were vigilant to people who should not be entering the building and also supported the staff when trauma/emergency admission arrived. Staff told us that they were supportive during busy periods.
- When major trauma cases were brought to the entrance of ED screens were used to protect patients privacy and dignity. Staff used key cards to enter the patient areas and the receptionist assisted relatives to enter the area after their identity was established.
- We visited the decontamination unit and discussed the protocols and procedures for it use. The necessary equipment was stored adjacent to the unit HAZMAT (hazardous material) arrangements. We were told that staff received annual training however; a decontamination scenario had not been performed since 2015. A respirator and facemasks were kept in reception in case a chemical contaminated patient presented.
- We reviewed the helipad procedure for admission of patients via the air ambulance. We witnessed 'receiving staff' wearing high visibility jackets but not wearing ear defenders or goggles. We were told this was not in line with the training staff had been provided.

- Within the waiting area was a children's play area. The organisation, cleaning of the toys and availability of the activities was the responsibility the play worker. We were told that toys were cleaned in between each use when individual children were playing with them. Staff said it was more challenging to ensure toys were cleaned appropriately in the communal play area. We did not see toys being cleaned during the inspection.
- We saw one trolley mattress and one patient chair which was torn and in a poor state of repair which could increase the risk of patient infection. The trolley mattress had been repaired with black tape, which was not in line with the trusts infection control policy. This was removed immediately when we pointed it out to staff.
- Foot operated bins were in place and in working order.
- Resuscitation equipment was in place, checked and signed appropriately.
- An anaesthetic machine in the resuscitation bay had not been checked daily. It had been checked only 13 times between 16 February and 18 May 2016. The department policy was for the equipment to be checked daily.
- The resuscitation bag in the transfer bay was checked monthly but signed daily and did not have the tag numbers recorded.

Medicines

- When patients were allergic to any medicines, this was recorded on their casualty card on admission to ED. This followed part of the initial safety assessment during triage which was undertaken "for every child, every time".
- Staff knew how to report medicine incidents. We were told that lessons were learnt and positive action taken to prevent them happening again. For example, following two separate incidents where the incorrect amount of medicine was administered the department now use an electronic drug calculator. We were told this was a really helpful and useful tool to prevent medicine errors.
- We observed guidelines for emergency medicines were easily accessible for staff to read in the resuscitation area.
- Medicines were stored securely and safely. Controlled drugs were stored securely in controlled drug cabinets which met legal requirements. Twice daily checks were made on controlled drugs records to ensure they were accurate and up to date.

• We found that there was insufficient workspace for staff to prepare and check medicines. Staff had undertaken risk assessments and made changes to how they managed medicines, however, the limited space made preparing drugs for administration difficult and at times confusing. We were told in an ideal world a bigger workstation space for medicines would be in place.

Records

- All care records were in paper format and all health care professionals documented in the same place. We looked at 33 sets of care records, which were completed appropriately in most cases. For example, on day one of the inspection 15 of the 16 care records we checked had risk of allergies checked and all had safeguard status ticked.
- Patients had been assessed and their paediatric early warning score (PEWs) was noted as a baseline observation at the time of triage, within 15 minutes of arrival.

Safeguarding

- National guidance sets out the required training and competency of staff working with children and young people. This states that all staff working in healthcare should be trained to level 1, Level 2 is for non-clinical and clinical staff who have some degree of contact with children and clinical staff who could potentially contribute to assessing, planning, intervening and evaluating the needs of a child or young person should all be trained to Level 3.
- Data provided by the trust from April 2016 showed that 98% of staff had completed level 1 training, 90% had completed level 2 and 97% had completed level 3. This was against a trust target of 95%.
- We saw that when a child protection case, a looked after child or any safeguarding issues were identified an alert was linked to the child's name; the electronic recording system highlighted the situation to other professionals. We were told that the alert was not always marked as required for some new admissions however; the receptionist and triage nurse did review previous admission history. The receptionist duties were covered 24 hours a day.
- Following guidelines and protocols staff were aware to look for signs of female genital mutilation (FGM) and child sex exploitation whilst reviewing a child; safeguard

training sessions and specific staff away days ensured the staff had the knowledge to deal with cases appropriately. Two staff members were trained to teach FGM awareness.

• Child protection supervision was arranged weekly in the department.

Mandatory training

- Mandatory training was delivered though specific training days for the department, e-learning or trust wide training days. Staff discussed their training needs during their appraisals.
- The trust target for training compliance was 95%, data provided by the trust from April 2016 showed average compliance was 93%.
- Training records for April 2016 showed for 11 of the 18 mandatory training courses, compliance with the trust target had been achieved. Of the six where compliance was not achieved, there was child protection level 2 (90%), patient manual handling (88%), fire safety (75%), basic life support (90%), information governance (85%), infection control level 2 (89%) and safe clinical handover (90%).

Assessing and responding to patient risk

- We noted one registered nurse responsible for the care of up to six patients in the Observation Area of the ED. This meant that if the nurse left the area to collect medication, patients were left unobserved. The area was specifically arranged to ensure children under observation were being monitored and assessed for deterioration; without observation, the children were left at risk. We witnessed the Observation Area to have no staff in attendance for over five minutes whilst the staff member organised an infusion, away from the area.
- We saw there were four children the Observation Area of which three were without identification bands; two of which had received prescribed treatment. This lack of identification left children vulnerable, for example, if the child deteriorated and the parents were removed from the situation. Following the inspection, a name band audit was carried out and the data submitted to CQC. This audit data, on almost all days, showed staff had continued to be prompted to issue name bands to children in the department.
- We heard examples of staff being subjected to violence and aggression during the triage process from anxious relatives which had not been reported as an incident.

The staff were aware of the violence and aggression policy and the "no tolerance" approach of such events. However, they considered the parents to be stressed and anxious about their child's health and thought it unnecessary to report it. A violence and aggression working group had been set up to review the reporting process.

- We heard examples of the security staff being reactive rather than proactive which had on occasions led to incidents occurring instead of being avoided. The security staff we spoke with had not attended safeguard training.
- In the 12 months to January 2016, there were 1,702 (20.1%) ambulance journeys with a turnaround above the target of 30 minutes of which 12 were delayed for more than 60 minutes. (Please note; some of the ambulances were bringing patients direct to wards due to their complex conditions, which meant a longer handover, this is included in the figures.) During the same period the average turnaround time was 25 minutes.
- We observed that the target of 15 minutes for clinical assessment of patients arriving by ambulance was met. All patients were assessed and their paediatric early warning score (PEWs) was noted as a baseline observation at the time of triage.
- 'Patient First' electronic system handover system was used which did not allow for paper based handover sheets to be printed. Ninety percent of staff had attended the safe clinical handover training which they told us had been beneficial in supporting all staff in this process.
- In order to ensure patient safety, it is essential that patients are seen in order of clinical priority and not in order of attendance. The Manchester Triage System (MTS) was used to assess each child soon after entering the department. MTS is a clinical risk management tool used by clinicians in emergency departments worldwide to enable them to safely manage patient flow when clinical need far exceeds capacity.
- We were told that the deteriorating patients were reviewed by a consultant with the decision to transfer a patient out of the department jointly made with speciality consultants at that time.
- Every week day a consultant reviewed all the patient results and reviewed the management of the patients; any discrepancies were followed up with an immediate phone call to the family.

 Children and their relatives were met and greeted on arrival in the resuscitation area. Initial observations were recorded following handover from the paramedics. However, we did witness one child accepted in the resuscitation area was subsequently left alone for 10 minutes with no staff in attendance. They were lying flat with a cervical collar in place. The staff were organising care and analgesia.

Nursing staffing

- Planned staffing levels and actual numbers were displayed within the unit and staff deployment was displayed on an electronic screen. Staffing numbers were at the planned level during the inspection. Staffing was planned on the knowledge of the department need, ensuring skilled staff for each area and covered 'known' high demand times.
- There was a nurse in charge on each shift supported by junior staff nurses and healthcare support workers. Shift start times were staggered to support busier times.
- There were three vacancies, which were covered by bank staff or staff from the intensive care unit.
- E-roster was in place to organise staffing rotas and ensure the correct use of skill mix. Registered nurse staffing numbers were generally higher than planned in the day; at night, the registered nurse staffing number did not meet the planned level due to vacancies and sickness with night planned levels ranged from 87% in December 2015 to 97% in November 2015. Clinical support worker staffing was generally higher than planned at night but in the day, the planned level was only met in one month October 2015 due to staff absence.
- The trusts own 'fully trained' bank staff were booked when staffing levels fell below the planned numbers. Agency staff did not work in the department.
- There were four advanced nurse practitioners in the department; two fully qualified and two in training. They contributed to the rota providing cover from 12.00 to 22.30.

Medical staffing

• The department had six full time consultants providing department cover from 0800 to 23.00 Monday to Friday and 10.30 to 19.30 on Saturday and Sunday. During winter, locum shifts increased the weekend cover to 08.00 to 23.00.

- There was a visible presence of the consultants in the department who were co-ordinating referrals and supervising junior doctors.
- Overnight consultant cover was an 'on call' system. The department did not have a consultant 'on site' 24 hours a day however, in line with the NHSE Major Trauma Services Quality Indicators, consultants were available within the specified times. Following the inspection the trust shared a document with us which identified from April 2016 to September 2016 consultants were available to attend within five minutes on 29 out of 30 occasions.
- All consultants were paediatric emergency medicine trained including, advanced paediatric life support (APLS) and emergency trauma centre (ETC).
- There were ten middle grade staff, six of whom had substantive contracts, the remainder being trainees.
- The middle grade rota was supported by international fellows on a 2-year training programme. All middle grade staff were APLS and advanced trauma life support trained and some were ETC trained.
- There were eight junior doctors in the ED; soon to increase to nine with the recent agreement to allocate another to ED. There was also a clinical fellow teaching post for medical student teaching contributing part time to the rota.
- We observed the air ambulance crew handover the patient to the trauma team including the 30 second 'hands off' handover which was calm and controlled.
- Medical handovers took place daily at 08.00, 16.00 and 22.00. We observed that each patient and their observations were discussed including work remaining to be completed, any concerns or issues.
- Locum support was booked in peak times such as winter pressures and during training.

Major incident awareness and training

• The trust had a major incident plan in place, which had been reviewed annually and last updated in August 2015. Written specifically for ED this document described how to prepare the organisation to cope with the effects following a significant disruption of service up to a period of two weeks post event. Staff we spoke with in ED were not fully aware of the procedure but knew there was a policy as major incident scenario training had been delivered during the previous 12 months. • The lead person had escalated the need to include major incident training on induction days and within mandatory training however this had yet to be arranged.

Are urgent and emergency services effective? (for example, treatment is effective)



We rated this service as good for effective. This was because:

- Staff were trained, competent and followed evidence based practice and national guidance for the emergency department.
- We saw evidence of effective multidisciplinary working.
- Staff contributed to a range of local and national audits including those led by the Royal College of Emergency Medicine (RCEM). Contribution to local quality audits were displayed round the unit including a rapid diagnostic test promoting antibiotic avoidance.

However we also saw:

• Coordination between electronic and paper based record systems did not always work in partnership and this, on occasions, caused delays in having access to the necessary records.

Evidence-based care and treatment

- Staff working in the department followed National Institute for Health and Care Excellence (NICE) and The Royal College of Emergency Medicine (RCEM) guidelines regarding treatment. Policies and procedures were based on current best practice and had been revised and updated regularly.
- The trust performed similar to other trusts in the two of the three RCEM audits it took part in in 2014/15; recording of clinical information and initial management and fundamental standards of the fitting child. The trust had taken action with regards to the low performance (35%) for discharged patients given safety information. An advice leaflet for those children who were discharged from the ED following a febrile convulsion had been produced with an audit planned to be completed by June 2016 to measure its effectiveness.

- Care pathways were in place for specific conditions in order to standardise and improve the care for children and young people. For example, staff showed us care pathways for the management of sepsis and asthma.
- A trial diagnostic test had been introduced in the department, as part of the national drive for antibiotic avoidance in children. Following a strict criteria 'Rapid Strep' throat swabs' were used to assess if antibiotics were needed. Follow up swabs were sent for longer incubation however the rapid test results were proving to be precise. ED were collecting data and submitting this as part of the trial.
- ED was leading on an 'Eclipse Study' relating to seizures and the use of two different types of medication. This was consultant led; alert cards and prompts were seen in the department.

Pain relief

- We saw that staff followed recognised pain management protocols and we observed good use of this.
- Pain scores were assessed using a pictorial face. We observed these faces painted onto walls around the department. Patients were able to choose how much pain they felt by looking at a picture of a face. This helped staff determine the amount of pain relief needed for a patient.
- From records reviewed and observations of patient care we saw that pain levels were monitored regularly, pain scores were recorded within the patient notes and pain relief was provided according to patient needs.
- Pain level scales were displayed on the wall using 'smiley faces' to help children express the level of pain they were feeling.
- Data provided by the trust showed that Nursing Care Quality Indicators for ED (NCQI's) scored above the trust target for pain management between April 2015 and February 2016. For each of these months there was a score of 100% aside from May 2015 where the score was 94%.

Nutrition and hydration

• Staff told us that children and young people could access food from the hospital canteen. We saw family members advised about the availability of the canteen, vending machines and also a local shop to purchase food and drinks.

- In line with good practice, there was information on display in the waiting area that advised patients that they should not consume food and drink until the triage nurse or doctor had seen them.
- Children and young people being cared for in the observation unit were provided with water and juice. Hot food was provided for teatime meals for inpatients and children that had been in the department for a considerable amount of time. Outside of meal times, there was signage within the observation area reminding families to ask if food was required.

Patient outcomes

- NCQI's were monitored to assess outcomes for patients including observations, pain management, hygiene and skin care. In April 2016, five of the eight outcomes scored above the trust target of 95%, food and nutrition (71%), cannulation (83%) and communication (83%) all scored below the target.
- Between November 2015 and February 2016, four per cent of patients returned to the ED within seven days, unplanned, with the same condition. This was better than the trust target of five per cent

Competent staff

- Medical and nursing staff had appropriate qualifications and skills to work with acutely ill children.
- Consultants were 'on call only' from 23.00 to 08.00 either staying on the hospital site or within 30 minute travel time. A business case was currently planned for a staged increase in numbers to 10 consultants in order to deliver a seven day working (08.00 to 23.00 seven days a week). The current junior clinical staff model provided 24-hour cover, seven days a week and on weekdays there were four doctors until 02.00 with a registrar and junior doctor between 02.00 and 08.00. At weekends when the department activity was greater there were three doctors from 22.00 until 02.00 reducing to two until 08.00.
- The ED had a clear induction process for students, newly qualified nurses and new members of staff. This explained how the department was managed and the objectives they needed to meet to become a competent member of the team. Staff we spoke with said they had felt well supported when they started working in the department and were supernumerary during the induction process.

- Staff we spoke with said they felt supported with training and opportunities for professional development. However the staff did not receive formal clinical supervision and we were told by the manager that there was no educator role employed for the department.
- Simulation training took place on Tuesdays and Thursdays. Staff picked a topic and the scenario was carried out with learning points and interventions discussed to develop new staff and revisit competencies.
- Staff received an annual appraisal with their line manager. Staff told us the individual planned objectives were in line with the trust values and vision. The appraisal rate for all staff in ED exceeded the trust target of 85%. Between April 2015 and January 2016 clinical support workers appraisal rate was 90%, medical and dental staff was 88% and nursing staff was 86%.
- Revalidation ensured that the doctors practicing in the organisation were up to date and fit to practice. Robust systems of appraisal and clinical governance supported the doctors with their induction, on call support and revalidation process.
- Student nurses told us they had been welcomed in to the department and involved in the delivery of care and assessments. They showed us their induction folder, which had been signed off by their mentor, and they had access to a student folder which held information to support and enhance their clinical experience.

Multidisciplinary working

- Arrangements were in place to refer children and young people to specialist services within the trust, for example, to the Child and Adolescent Mental Health Service (CAMHS).
- Staff told us they valued the contribution of other professional disciplines. We saw medical and nursing staff worked well with other specialities to provide effective care to children and young people.
- The Clinical Decisions Unit (CDU) assessed patients whose GP had referred them to the ED. Staff we spoke with explained that this worked well.
- The Paediatric Assessment Clinical Intervention and Education (PACE) team assisted with trauma patients and staff told us that this was a supportive service to work with. We saw the PACE team present during observation of treatment of a trauma patient that arrived during the inspection.

- We observed staff within the ED working with paramedics who had brought children to the department. The teams worked well together and we saw effective handovers and information shared.
- Paramedics we spoke with told us they had good working relationships with the ED staff of all levels.
 Historically, they told us the staff had always been well respected and respectful of each other with good communication and support in difficult situations.

Seven-day services

- The ED was open seven days per week and twenty-four hours per day. When the ED x-ray facility was closed, the patients were escorted with a member of staff to the x-ray department in the main building. Phlebotomy services for the department were available at all times.
- At weekends, one consultant was on duty between 08:00 to 23:00 and one available on call from 23.00 to 08.00. The consultant was supported by three junior and middle grade doctors from 22.00 until 02.00 reducing to two until 08.00.

Access to information

- Information that was required to deliver effective care and treatment was accessible to staff including electronic care and risk assessments, care plans, case notes and test results. However, coordination between electronic and paper based systems did not always work in partnership and this, on occasions, caused delays in having access to the necessary records.
- Ongoing care records were shared appropriately with other departments, in line with relevant protocols.
- Referrals and discharge arrangements including transfer and transition information was addressed in a timely way following the trust procedures.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- We saw staff gain verbal consent prior to any treatment or procedures and saw evidence where written consent had been gained.
- Staff we spoke with had a good understanding of the need to gain consent. The 'Gillick Competency Assessment' helps clinicians to identify children aged 16 or under who have the legal capacity to consent to medical examination and treatment. Fraser guidelines assessments were used where appropriate.

Good

Are urgent and emergency services caring?

We rated this service as good for caring. This was because:

- We found that overall, children, young people, and their families were pleased with the level of care and treatment they received in the Emergency Department (ED).
- We saw staff interacting with patients directly in a way that was easy for them to understand what was happening.
- Staff reassured children and their carers throughout consultations and staff clearly explained plans for treatment.
- We found that there were effective arrangements in place for families and staff to be supported following the death of a child.

Compassionate care

- We spoke to 16 children and young people, with their parents. They all expressed satisfaction with the service. One of the parents we spoke with said the staff were friendly and made time to chat and listen to concerns.
- We observed staff treating patients and saw that they were kind, caring and compassionate to the patient and their family members. All staff were respectful to those they were caring for.
- The percentage of patients who would recommend the service was generally higher than the England average and similar to other children's trusts. The friends and family survey results from May 2015 to January 2016 were above 90% with only three occasions scoring 82%, 88% and 89%. There were 2,140 respondents and of these 1,957 would recommend the service (91.4%)
- Staff told us they were actively encouraging patients to provide feedback and also to download the ED 'app' to collect this.

Understanding and involvement of patients and those close to them

• The children, young people and their carers we spoke with said that staff had explained the process for triage and assessment with them. They had been kept informed with how they would be treated. One young person told us that she was pleased that staff had talked to her directly about the treatment and felt included in the decision making around options.

• We observed staff use clear, understandable language when explaining the diagnosis and treatment with patients. We saw a consultant assessing a child during which explanation was provided for each procedure and reassurance was given throughout.

Emotional support

- Staff offered children and young people appropriate levels of reassurance and comfort during their time on the department.
- We spoke with staff that showed awareness of how concerns regarding their child may lead to parents becoming stressed and frustrated with waiting for care and treatment. Staff were able to describe ways that they try to help with this such as providing information about waiting times and providing as much information as possible throughout the process.
- The multi religion chaplaincy team were available to support families and staff in the event of the death of a child or young person. Staff within the department had access to a bereavement team and counselling service.
- Team leaders also held debriefing sessions with relevant staff members when they required support. All of the staff we spoke with described the team as being very supportive for patients and families as well as each other within the department.

Are urgent and emergency services responsive to people's needs?

(for example, to feedback?)

We rated this service as good for responsive. This was because:

Good

- The service had a plan in place to ensure services were delivered to meet patient needs over the winter period.
- A pilot scheme was in place to work with local health visitors to ensure that children who had attended ED were referred for follow up.
- Patients with complex needs and learning disabilities were supported with specialist care.

- An admission avoidance board updated attendees about alternative support available in the community which could mean their child was seen sooner.
- The department mostly met the target for patients been seen and treated within 4-hours. Where the 95% target was not met, the departments was above the England average.

However we also saw:

- Information leaflets were only available in English language.
- Patients that do not wait to be seen was increasing and above the England average.
- None of the people we spoke with, were aware of the trusts complaints procedure.

Service planning and delivery to meet the needs of local people

- The trust was currently reviewing their 2015 winter plans and its overall effectiveness. The trust told us that early learning from 2015 had demonstrated that some changes to the service need to be established for the 2016/17 winter period. This included re-locating a dedicated minor injury service during the peak November & December period to an existing outpatient facility.
- Staff told us that the ED was working on relationships with GP's. GP's that sent children into the service did not manage the parent's expectations in regards to waiting times. The reception staff provided those that attended via the GP the information on arrival which on occasions caused parents to be frustrated as they presumed they would be seen as priority.
- We heard that a pilot scheme had been commenced working with local Health Visitors to ensure that children who had attended ED were referred for follow up. Staff told us that this was on-going and results and outcomes were not yet available. This exercise was also part of the admission avoidance process, educating parents to use other available support such as local 'walk in' centres and pharmacists.
- At busy times, the waiting area was overcrowded and unkempt, with no domestic service to clean away the litter or attend to the public facilities.

Meeting people's individual needs

- The waiting area offered seating and a small play area in a low lighted, open area. There were adequate disabled toilet, baby-changing facilities, a breast feeding room and a mobile telephone charger was available.
- The senior management team in ED told us that the facilities were not adequate for the overall demand on the service; plans to move to a new site were being discussed. We were told that the seating area at times was insufficient, very warm and unkempt.
- The Language Line translation services were available on request for children and young people or their parents whose first language was not English. Staff told us they also had the support of doctors and other health professionals who were fluent in a variety of languages.
- Patients with complex needs and learning disabilities (LD) were supported with specialist care when necessary; some patients attended with a 'patient passport' containing their health details. LD champions supported the staff when necessary.
- Patients with special health needs were assessed through the general triage process; those with mental health needs or learning disability were prioritised to avoid further distress and anxiety.
- Written advice leaflets on various conditions and health problems were available for patients and their relatives, visual advice leaflets or leaflets in languages other than English were not available.
- Babies brought in to the department were triaged and then taken with their parents to the corridor to wait away from the main seating area
- Senior staff told us that if there was a long waiting time in the department a staff member would explain the reason for the delay and apologise. We saw a staff member informing patients in the waiting area when they were next to be seen and reassuring them of the estimated waiting time.
- An admission avoidance board was displayed to provide information to families regarding alternative sources of advice and care if they wished to access it. For example, local walk-in centres where waiting times might be shorter.
- Vending machines were situated in the waiting area that was fully stocked and functional during our visit.

Access and flow

• In April 2016, the percentage of patients seen or admitted within 4-hours of arrival at the department was 96.5% which was similar to other children's trusts.

Between May 2015 and April 2016, the department achieve the 4-hour waiting time target in eight out of the 12 months. The department did not meet the target in November 2015 (88%), December 2015 (86.5%), February 2016 (92.5%) and March 2016 (93.1%).

- Median total time in ED was generally better than the England average, however since September 2015, the total time in A&E had been increasing and in the past twelve reported months it was above the England average in six months. The median time to treatment was 89 minutes against the trust target of 60 minutes.
- The quality performance report for March 2016 reported that ED attendances were 14% higher in February 2016 than in February 2015. There had been 4,821 attendances, which was the highest recorded February total since records began. Year to date activity was 4% above the same period for 2014/15.
- A standard operating procedure was used for 'see and treat minor's pathway'. The aim of this pathway was for patients presenting with a minor injury to be seen and treated without having to undergo the full triage process. This would potentially free up time for the triage nurse to assess other patients and reduce overall triage waiting times and an improvement in patient flow and experience.
- We looked at the standard operating procedure for admitting patients from the ED to the Paediatric Assessment Unit (PAU). The procedure was followed when a bed was available to improve efficiency and to avoid unnecessary delay admitting patients to a hospital bed; therefore improving patient flow into the hospital and improving the patient journey by reducing waiting time. Current admission rate was 20%.
- For the period May 2015 to April 2016, The England average rate of patients leaving without being seen was 2.8%. During the same period, the average for the department was 3.5%. During that period data showed a steady increase, peaking at 6.9% in December 2015.
- We were told that if children left the department prior to being treated a consultant would make contact the following day to ensure that they received care when necessary. During a 24-hour period during the inspection, we noted that 11 patients left without being seen after triage and one patient had left without triage. We observed these patients were contacted by the consultant the following day.

• Thirteen complaints were received between January 2015 and February 2016 of which 11 were resolved. The main theme of the complaints related to care and communication.

- Senior management told us of the open and honest culture that they display with all the families that they care for and they would deal with concerns before they escalated but we noted that these verbal complaints were not being recorded.
- None of the children and young people or their parent that we spoke with, were aware of the trusts complaints procedure and there were no signs, posters or leaflets visible in the waiting areas. Signs were in place promoting the 'feedback app' as well as comments cards and face to face opportunities to feed back with the nurse in charge were encouraged.
- We did not see any signs directing people to the Patient Advice and Liaison service.

Good

Are urgent and emergency services well-led?

We rated this service as good for well led. This was because:

- The culture of the department was caring not only for patients and relatives but also for the staff who worked there.
- Staff were aware of the vision and values of the trust and understood their role in protecting children.
- There was a strategy for the future development of the service.
- A comprehensive business continuity plan was in place.
- Staff felt the challenges of the department were not underestimated and their commitment was valued and respected.
- The trauma group attend local and national meetings to discuss cases, review wider learning and bring good practice to the department.

However we also saw:

• The risk register did not correspond with staff concerns or some of the issues identified during the inspection.

Leadership of service

Learning from complaints and concerns

- The department was led by the unit manager; supported by a clinical lead nurse, four advanced nurse practitioners and senior nurses. Consultants, an associate specialist and specialist doctors engaged with the nursing team to demonstrate an effective leadership team.
- Senior nurses were seen walking around the department at the beginning of their shift once the handover was completed. Staff told us this occurred every time a handover was completed and demonstrated they were supported and valued.
- All levels of staff told us that they worked in a department were senior staff were approachable and listened to them. They described them as sensitive and thoughtful when they needed support. We heard examples of staff using the open door policy to meet with senior staff when 'things went wrong' or 'not as expected'.
- Staff felt the challenges of the department were not underestimated by the management and their commitment was valued and respected.

Vision and strategy for this service

- Staff we spoke with was aware of the vision of the trust and told us their annual appraisal was linked with the values. They told us of their part in ensuring that quality and safety were always priority including good quality care and safety of children in the department.
- ED adhered to the trust strategy undergoing a review of the department over 2016 summer months with a plan to revisit the ED specific vision, strategy and values reassessing the demand on the service.
- There had been two occasions where the police had allowed traffic and the public to move before the agreed time following the air ambulance leaving the site. Staff were concerned this could happen again. There was a service level agreement in place with the provider of the air ambulance and West Midland Police, but not the hospital. The trust said they had good relationships and continued to discuss provision.
- The threat of major incidents was causing the staff in ED anxiety as they felt the training was inadequate and not practiced in mock events.

- We heard examples of the strategy being developed and the benefits of the potential new site; they hoped to separate the minor and major trauma areas and described how this would benefit the staff working environment and improve the patient experience.
- Staff of all levels told us how their role included the need to be part of a wider team, a culture of working with other professionals had been developed to achieve the best outcomes for children. For example the pilot with the health visitors.
- We were shown an urgent and critical care chronicle from October 2015 whereby staff had brought together key issues in light of the forthcoming busy winter period to ensure they captured processes that worked well and a list of reminders for staff such as the safety huddle at handover when staff reviewed each child's case in the department.

Governance, risk management and quality measurement

- There was a clear governance system in place, that focused on quality. An integrated performance report was produced on a monthly basis which was reviewed by local managers as well as the trust board. ED activity and acuity levels were reviewed measuring KPI's and performance.
- For example the March 2016 report showed that ED did not meet the target four hour wait from arrival to departure. Activity levels were at a record high in the month of March, 6% up on the previous record and 11% up on March 2015. Achieving 93.1% of patients seen in four hours was noted better than might be expected. The median time to treatment was 100mins vs. a target of 60.
- Items on the risk register included the x-ray door to be added in the 'lock down' process and the lack of space in the CDU area. Other issues such as the waiting area in busy periods, the absence of name bands on some children in the department following triage and evidence of violence and aggression were not included. We were told that a 'Resolving Conflict Policy' had been introduced; however staff were unsure if they had seen this. The management had recognised that increased communication to the people in the waiting room during busy times enabled them to manage incidents proactively.
- We looked at the ED business continuity plan which aimed to prepare the organisation to cope with the

effects following a significant disruption of service up to a period of two weeks post event. The objectives were defined and prioritised the critical functions of the department, analysed the emergency risks to the department, detailed the agreed response to an emergency and identified key contacts during an emergency.

- Staff demonstrated they were familiar with their role in collecting data for audit and the importance of quality measures being recorded for the NCQI's.
- BCH Safety Case Book publication updated staff throughout the hospital. This document contained training updates, hospital news, serious incident case reports and was available on the safety board.
- The trauma group attend local and national meetings to discuss cases, review wider learning and to share good practice.
- There had been two occasions where the police had allowed traffic and the public to move before the agreed time following the air ambulance leaving the site. Staff were concerned this could happen again. There was a service level agreement in place with the provider of the air ambulance and West Midland Police, but not the hospital. The trust said they had good relationships and continued to discuss provision.

Culture within the service

- During the busy winter period 2015/2016, when staff had little or no time to take their breaks the management organised food to be delivered to the department throughout the shift ensuring that staff were fed and had been able to continue working under pressure.
- Staff told us there was good interaction between all the staff in the department. We witnessed staff enjoying their work and communicating with other colleagues. Staff told us they were happy to come to work and felt well supported by the management team and senior staff.
- We heard examples of feeling well supported when new in the department being encouraged to complete and sign off their competencies at the earliest opportunity.
- Staff told us they were proud to work at the hospital and hoped they assisted to keep the good reputation that it had gained.

Public engagement

- The play worker told us they engaged with families in the waiting area when their time allowed; and worked weekends when necessary to support staff during busy times.
- The BCH website held a wealth of information including a virtual tour of the site to show to children and alleviate anxieties. The website was child friendly and easy to use.
- Patients and relatives were asked to leave feedback on cards in the department which had not been widely used or by downloading the 'feedback app' to leave their comments.
- A 'you said we did' board was displayed in the waiting area. For example better communication about waiting times, which was being addressed.

Staff engagement

- A staff communication book had been commenced in the staff room to update staff on recent events they may have missed whilst on days off or annual leave.
- Staff meetings were infrequently arranged, however minutes were recorded when meetings took place. We were told that informal meetings took place almost daily when staff were brought together to discuss a current issue or recent events.
- The intranet updated staff on current issues and events in the hospital. Staff told us they felt well informed through bulletins and newsletters.

Innovation, improvement and sustainability

- A trial diagnostic test had been introduced as part of the national drive for antibiotic avoidance in children.
 Following a strict criteria 'Rapid Strep' throat swabs' were used to assess if antibiotics were needed. Follow up swabs were sent for longer incubation however the rapid test results were proving to be precise. ED were collecting data and submitting this as part of the trial.
- ED planned to undertake discussions over 2016 summer months to revisits the ED specific vision, strategy and values.
- ED sustainability was under discussion and the future move to the new site was planned to address the overcrowding and building issues.

Medical care

Safe	Good	
Effective	Outstanding	\Diamond
Caring	Outstanding	\Diamond
Responsive	Outstanding	\Diamond
Well-led	Outstanding	\Diamond
Overall	Outstanding	

Information about the service

Medical care at Birmingham Children's Hospital is provided across eight wards and units, covering oncology, haematology, hepatology, cardiology, general paediatrics, paediatric assessment, complex care, and nephrology, and in patients' homes by a team of community staff. The hospital treated patients from birth to 17 years of age, using a total of 164 in-patient beds and 47 day case beds. In the financial year 2014/15, the hospital had 43,151 in-patient admissions.

We spoke with 14 patients and relatives, 24 staff of different grades and professions and reviewed 18 sets of patient documentation.

Summary of findings

Overall, we rated medical care at Birmingham Children's Hospital as outstanding. Safe was rated good.

- There was a positive, transparent culture of incident reporting and learning from incidents. Sufficient numbers of appropriately qualified and trained staff were on duty to ensure patients were kept safe.
- Staff used national guidelines and evidence-based treatment when looking after patients. The hospital took part in several national audits and staff were encouraged to carry out local audits. Results of audits were used to improve patients' experiences and care.
- Feedback from parents and patients about the care they received was consistently excellent. Parents, carers and patients we spoke with said staff "went the extra mile" and were "brilliant" or "excellent" and the care given was much more than they expected.
- Patients and their families were treated with respect, dignity and compassion, particularly at the most difficult times Parents were involved at every stage and were treated as individuals.
- Patients were treated as individuals and different approaches were taken, when needed, to care for them in the most appropriate way. Staff supported people from different cultures, backgrounds and religions and made adjustments to accommodate their needs.
• Leaders had an inspiring purpose and common focus to deliver the best possible care to the children in their care, and this attitude was shared by staff at all levels. Staff across all groups were proud of the organisation as a place to work and spoke highly of the culture. Many staff told us the hospital was "the best place they had ever worked" and said they "couldn't imagine working anywhere else".

Are medical care services safe?

We rated medical care services as 'good' for safety. This is because:

Good

- Openness and transparency about safety was encouraged. Staff understood their responsibilities to raise incidents and were positively supported to do so
- Staff had received or were scheduled to receive training in all areas of personal and patient safety
- Staffing levels and skill mix were planned and implemented to keep patients safe. Vacant shifts were covered by bank staff who were familiar with the hospital and its processes. Agency staff were not used
- Risks to patients and to service provision were anticipated and plans were in place to mitigate them

However we also saw:

- Nurses completing medicine administration rounds did not always change their disposable aprons between patients, which may have caused a risk of cross-infection.
- Medicine charts did not encourage staff to record administration times accurately

Incidents

- A total of 1,467 incident reports had been completed on medical wards and units in the year preceding our inspection. Of these, 1,172 were graded as 'near miss' or 'no harm'.
- The remaining 295 incident reports comprised 284 graded as 'minor' harm, 10 as 'moderate' harm and one as 'catastrophic'. The 'catastrophic' incident involved an unexpected death of a patient and was under investigation at the time of our inspection. Where appropriate, notes on the 'moderate' and 'catastrophic' harm incidents confirmed the trust had complied with its obligations under Duty of Candour.
- No 'never events' had been reported on medical wards or units in the two years preceding our inspection.
 'Never events' are serious patient harm incidents that are largely avoidable if proper safety measures are used.
- Staff told us incident reporting was actively encouraged in the hospital. Every member of staff we asked knew how to access the incident reporting system, and was

able to give us examples of incidents they or colleagues had reported and the learning outcomes from their investigation. Staff talked about, and showed us, the hospital's periodical 'safety casebook' which detailed learning from incidents and from reports of positive outcomes through the trust's 'learning from excellence' programme.

- One member of staff told us about an incident they had reported, and said the relevant associate service director had emailed them the same day in response to the report. The email had thanked them for highlighting the issue and given feedback on the form, including guidance to help with future incident reports. They had had a one-to-one meeting with the ward sister the next day to be given further feedback and told what changes were being made to improve the situation.
- A registered nurse told us they had completed a number of incident reports and had always had a one-to-one meeting with the ward manager the following day to discuss the incidents. The trust circulated an email to all staff fortnightly, detailing any themes in incident reporting and lessons learnt. We were shown several examples of these emails, which detailed safety incidents all staff needed to be aware of and positive feedback from parents and patients.
- One doctor told us there was a culture of incident reporting at the hospital and managers encouraged it. They said incident reporting in many hospitals was mainly done by nurses, but consultants at this hospital encouraged junior doctors to report incidents. They said the consultants' attitude was one of "we can't get better if we've nothing to learn from".
- One specialist registrar told us about an incident they had reported while providing out of hours cover at night. After handover the next morning two consultants and an associate service director had met with them to discuss a plan to ensure similar incidents did not happen again. They told us the senior staff had dealt with the incident very quickly and effectively and they were confident the changes meant similar incidents would not reoccur.
 - Senior managers were able to explain the process of informing parents or carers if an incident involved a patient. They told us they would always telephone the family to discuss the matter before sending a letter, as they knew receiving a letter from the hospital could frighten families of children with complex or terminal conditions.

Duty of Candour

- At ward level, managers we spoke with were aware of Duty of Candour but could not tell us the types of incident that would trigger the process.
- We saw references to Duty of Candour in incident investigation reports, where the level of patient harm had been graded as 'moderate' or higher. We were reassured that managers responsible for incident review and investigation had a good understanding of the trust's responsibilities under this duty.

Safety thermometer

- Every ward and unit we visited had a safety dashboard displayed near its entrance, in an area visible to visitors. The safety dashboard displayed information on infection rates and incidents involving patient harm.
- The NHS safety thermometer does not report data at ward level for children's services. Hospital-wide data has been included in the 'trust wide' section of our report.

Cleanliness, infection control and hygiene

- On all of the wards we visited we saw clear infection control notices on side room doors, explaining what levels of personal protective equipment (PPE) staff and visitors needed to wear when entering.
- We saw well-stocked apron and glove dispensers and hand cleansing gel dispensers on every ward we inspected.
- Two parents of a child who was being barrier nursed told us staff always washed their hands on entering and leaving the room and always wore aprons and gloves while looking after their child. Parents of a baby on a cardiology ward told us nurses always wore aprons while providing care for their child, and always washed their hands before and after contact with the patient.
- We saw staff using appropriate personal protective equipment such as disposable aprons, gloves and facemasks when providing treatment for patients, and we saw staff cleaning their hands before and after every patient contact.
- However, on one ward we saw two nurses taking part in a medicines round, who were wearing red 'Do not Disturb' aprons. The nurses were not changing their aprons between each patient's room or using an extra disposable apron over the top of them, which may have

caused a risk of cross-infection. We raised this with the ward manager who spoke with the nurses concerned immediately and reassured us they would bring the matter up in ward meetings and at handover.

- On ward 12 we were shown infection control audit results for the six months leading up to our inspection. Results of the audits were all in line with or better than the trust's targets, and were displayed on a staff notice board. A ward manager told us they were given protected time to complete infection control and cleanliness audits.
- We were given audit results published by the hospital's infection prevention and control committee, for the third quarter of 2015/16. The audits had been completed on 10 wards and units, including wards 2, 7, 10, 15 and the dermatology, complex care, haemophilia and oncology units. They provided data on hand hygiene, 'bare below the elbows' practise, intravenous access sites and on-going care, MRSA screening and training compliance. Apart from ward 15's 'IV line on-going care' which scored 87%, results of all audits were 90% or above, with the majority being 100%. The audit showed an explanation for the low score for 'IV line on-going care' on ward 15 and evidenced that staff had been given extra training to address this.
- The infection control nurse emailed audit results to ward managers as soon as they were completed. Any audit results giving cause for concern were also recorded on the trust's incident reporting system.
- Each ward had specific labels for expressed breast milk bottles, which detailed the patient's name and their mother's name, and the date and time the milk was expressed. Every mother who was expressing milk had a separate, colour-coded, named box in the refrigerator used to store milk, in which her bottles were kept.
- The trust had not recorded any instances of MRSA or C.difficile over the year leading up to our inspection.

Environment and equipment

- On the paediatric assessment unit, there were 16 side rooms and three beds in a bay. All of the side rooms had windows onto the ward corridor and were visible from the nurses' station, and had curtains. This meant nurses were able to observe patients at all times but patients' dignity could be preserved during medical examinations and treatment.
- We checked the emergency trolleys on every ward we visited. We saw most daily checks had been completed

and recorded, medicines and consumables were in date and properly packaged and portable appliance testing was in date. On ward 15, checks had not been recorded on 19 days from November 2015 to April 2016. We raised this with managers on both wards, who told us they would remind staff about the importance of completing regular checks on this equipment, and would monitor compliance.

- Access to every ward and unit we visited was controlled with an intercom and electronic lock. We saw staff challenging visitors and confirming their identities before allowing them access to wards, and staff on wards we visited checked our identification on entry.
- We inspected equipment storerooms on all the wards and units we visited and found them all to be tidy, clean and systematically ordered.
- We checked between 20 and 30 items of consumable equipment on each ward or unit we inspected. We found they were all in date, and had appropriate, intact packaging.
- On one ward, we found a store cupboard containing batteries and non-toxic glue and paint unlocked, despite a notice on the door which read, "Keep locked at all times". The store cupboard also contained a sink for cleaners' use, and a container of cream cleaning fluid had been left on the sink. The store cupboard was adjacent to an unsupervised play area.

Medicines

- We were not reassured staff were accurately recording medicine administration on the hospital's medicine record charts. The charts had a column, divided in four sections headed 'morning', 'midday', 'afternoon' and 'evening' for staff to record the time medicines were administered to patients. We looked at 42 medicine charts and on all but one of them staff had only ticked one of the four columns rather than recording a time. This meant staff could not accurately know the time since the previous dose of a medicine was given to a patient. We raised this issue with the hospital's chief pharmacist and we have told the trust they must take action to ensure medicine administration times are accurately recorded.
- On every ward we visited, we saw nurses wearing disposable red aprons which had "do not disturb" printed on them while preparing and administering

medicines. One ward manager told us staff had agreed to a 'medicines pledge' following an incident involving medicines. All staff now understood they should not speak to nurses wearing the red aprons.

- We checked medicines refrigerators on every ward we visited. We saw staff had checked and recorded refrigerator temperatures twice daily, and guidance was displayed about what action they should take if a temperature was outside the normal range. We saw instances where temperatures had been found to be elevated into the 'amber' range, and appropriate action and further checks had been completed to ensure medicines were stored safely.
- Keys for medicines storage cupboards were kept in a key-coded safe in the treatment room on each ward. Access to the treatment room was controlled with a swipe card lock.
- However, on ward 2 we saw records showing refrigerator temperature checks had not been completed on 10 days in April 2016.
- Pharmacists checked pharmacy stock folders on each ward twice a week. This meant sufficient quantities of commonly-used medicines were available and expiry dates were regularly monitored.
- A clinical pharmacist visited the ward five days a week. They were involved in discussions with doctors and nurses about patients' individual medicine requirements.
- Staff told us about a recent change to the times of medicines being administered which had been in response to feedback from parents. Records showed patients were getting their medicines when they needed them.
- We checked two prescription charts and saw these had been correctly documented, signed and dated by the doctor. This followed trust policy. Staff had completed checks to ensure any known allergies or sensitivities to medicines were accurately recorded on patients' prescription charts within 24 hours of admission. This information is important to prevent the potential of a medicine being given in error and causing harm to a patient.
- We were told about a medicine incident that had recently occurred on the ward and how the team had worked together to change practice in order to ensure it did not happen again. We were shown the new arrangements in place which we were told were working effectively.

- Access to medicine storerooms on all the wards and units we visited was controlled with an electronic lock. Only staff with appropriate access permission on their swipe cards were able to unlock the doors.
- Controlled drugs which require special storage and recording were stored following good guidance procedures including daily checks of quantities and records, carried out by two nurses.

Records

- On the paediatric assessment unit, patient records were kept in locked boxes outside patients' rooms. The boxes could only be opened with staff members' swipe cards. This ensured records were kept secure and patient privacy was maintained.
- Nursing notes on Ocean Ward were kept in a locked cabinet. The nurse in charge held the key and ensured only authorised people had access.
- On ward 2, we found nursing notes stored in open containers on the walls outside patients' rooms.
 Following the inspection the trust told us the notes were stored outside patients' rooms for infection control reasons, and to allow parents to read their child's notes so they could be involved as partners in their care. The trust also told us ward staff monitored potential inappropriate access to the notes although a risk remained of unauthorised access.
- We looked at 42 sets of patient notes during our inspection. We saw nursing and medical notes were kept together and all entries were legible, complete and properly signed and dated. Conversations with patients' parents and carers were documented and within the care plan we saw a 'play plan' which allowed input from play facilitators and play specialists.
- Medical notes were held on a computerised system. This ensured records were secure, up to date and available to all staff who required them.

Safeguarding

- Qualified clinical staff completed training in safeguarding children and young people at level 3, and non-clinical staff completed training at level 2. This complied with guidance in the intercollegiate document 'Safeguarding children and young people: roles and competences for health care staff' published by the Royal College of Paediatrics and Child Health.
- The trust's had a target of 95% of its staff being trained to appropriate safeguarding children and young people.

They submitted data to us on 23 February 2016 which showed 97% of staff requiring level 2 training and 94.4% of staff requiring level 3 training had already completed the modules. Plans were in place to ensure the remaining staff completed their training before the end of the financial year.

Mandatory training

- The trust monitored its staff members' compliance with statutory and mandatory training through a computerised training record. The system allowed local managers to track their staff's training and meant staff could access their own training records at any time to see what they had completed and what was outstanding.
- The trust's mandatory training included nine core modules: conflict resolution, counter fraud, equality, dignity and diversity, fire safety, health, safety and clinical risk, infection prevention and control level 1, information governance, moving and handling theory and safeguarding children level 1. A further seven modules: basic life support, infection prevention and control level 2, manual handling or loads and of patients, medicines management and safeguarding children levels 2 and 3 were provided on a 'role essential' basis.
- The trust had a target of 95% for mandatory training completion. They gave us data showing, on average, 90.1% of staff on medical wards and units had completed their mandatory and role essential training as at 23 February 2016. Further training was scheduled before the financial year-end to bring the figure up to 95% or higher.

Assessing and responding to patient risk

- Staff used a nationally-recognised system, the 'paediatric early warning score' (PEWS) to recognise when children in their care were deteriorating. PEWS uses patient observations such as blood pressure, heart rate, breathing rate and level of consciousness to provide a warning score, which helps staff to identify children who are becoming sicker, before it is obvious. This means children are escalated to senior clinicians and receive treatment more quickly.
- Nursing and medical staff told us they would escalate any patient for whom they had concerns to the trust's Paediatric Assessment Clinical intervention and Education (PACE) team, which was made up of band 6

and band 7 nurses with advanced training. Children whose clinical observations or PEWS indicated they were deteriorating would automatically trigger a referral to the PACE team, however staff could refer any patient they were worried about regardless of clinical observations. Staff told us the PACE team were very helpful and quick to respond. Several parents of children in the hospital also mentioned the PACE team and told us they were very helpful when their child was unwell.

- In addition to nursing and medical handovers, staff on medical wards held multidisciplinary 'safety huddles' before and after each ward round. The safety huddles included nurses and doctors and were used to prioritise those patients most in need and to improve communication between nursing and medical staff. A ward sister told us before the morning safety huddle the nurse in charge checked five areas for each patient on the unit to decide which ones needed to be discussed in the huddle. The five questions asked were: any concerns from the nurse caring for the patient, any concerns from the patient's parents or carers, a review of the patient's observation chart, any questions from parents or carers about the patient's care plan and any significant events overnight.
- Three doctors told us the safety huddles were very efficient and effective, and had improved team working and communication. They said they knew the names of every nurse on the ward within a month of starting, partly because of the regular huddles.
- A band 6 nurse told us the safety huddles had been in place for a year, and had led to more cohesive team working between doctors and nurses. They told us no deteriorating patient or one for whom they had concerns was ever missed, and ward rounds now took place in order of patient priority rather than bed position. They felt ward rounds were more effective as a result.

Nursing staffing

• The hospital used a bespoke planning system to determine staffing levels, based on a nationally-recognised planning tool. Guidance for inpatient nurse staffing levels across the trust used guidance published by the Royal College of Nursing and the Royal College of Paediatrics and Child Health,

including: Defining Staffing Levels for Children and Young People's Service; Guidance for Clinical Professionals and Service Managers; Guidance on Safe Staffing Levels in the UK.

- Nurses used a standard handover document, which was shared with doctors. This meant information was shared consistently between doctors and nurses. The hospital had brought this system in when staff had identified information which had not been shared between doctors and nurses in their separate handovers. Staff told us communication between doctors and nurses had improved significantly.
- At handover on medical wards, the nurse in charge completed a 'nurse in charge situational awareness planning tool'. We were shown a copy of this document, which listed each patient on the ward together with details of their named nurse and the patient's early warning score. It also allowed the nurse in charge to flag up any areas of concern such as multiple teams delivering care, unfamiliar or high risk procedures and any concerns raised by the named nurse or the patient's family. This system meant the nurse in charge had an overview of activity on their ward and was able to monitor patients with higher acuity.
- A band 6 nurse on the paediatric assessment unit described the area as an 'urgent care floor', including the emergency department and high dependency unit. They told us all the nurses in those departments had experience of all three areas and moved between them to cover busier areas when needed. They said they were happy this was safe to do as, because they knew all three areas, they were familiar with the procedures and equipment used in the different departments.
- In addition to general nurses, the cardiology wards, 11 and 12, had a team of four cardiac specialist nurses, two cardiac specialist clinical support workers and three advanced nurse practitioners who provided cover from 8am to 4.30pm, Monday to Friday.
- Ward 1, the renal unit, was normally staffed by three nurses, one clinical support worker and one nursery nurse, which provided a nurse to patient ratio of 1:4. When higher dependency patients were on the unit, needing one to one care, staffing numbers were increased to provide safe cover.
- Nurses and carers working on the community complex care team, many of whom provided overnight care in patients' homes, followed the hospital's lone working policy. This policy stipulated that staff working alone

should contact a central telephone number on arrival at the patient's home and then again at regular intervals through their shift. If an expected contact did not happen, the team's duty manager would contact the carer to check they were safe.

- Between October 2015 and April 2016, 96% of planned shifts for registered nurses and 87% of care support worker shifts had been covered. This was sufficient to provide safe nursing care for children in the hospital.
- Medical care services did not use any agency nursing staff. The hospital's bank staff, all of whom were familiar with policies, procedures and working practices on the wards covered any shift shortfalls.
- The trust had a target of 3.25% for staff sickness levels. In February 2016 sickness across medical wards and units stood at 3.6%, which was worse than the trust's target, however we did not see any impact on patient care.

Medical staffing

- Consultants were present on the paediatric assessment unit from 8am until 10pm, seven days a week. General paediatric consultants were present in the hospital from 8.30am to 5.30pm, seven days a week.
- A team of three specialist registrars and four specialist trainee middle grade doctors provided out of hours cover for medical care, between 5.30pm and 8.30am Monday to Friday and over weekends, supported by on-call consultants. Junior doctors told us they felt well supported out of hours and having three specialist registrars on duty meant they could always get advice when they needed it. They also told us the consultants encouraged doctors to telephone them for advice if they had any concerns out of hours.
- Junior doctors used a bleep system to obtain emergency assistance from the specialist registrar team out of hours. Non-emergency requests were sent to a tablet computer carried by the out of hours team. The site clinical co-ordinator could also see the non-urgent jobs list and could allocate appropriate requests to other staff such as advanced nurse practitioners. The team's workload was managed in a very efficient and patient-centred manner.
- We observed medical handovers, which were also attended by senior nurses. Medical staff carried out their handovers in a structured manner which focused on problems that needed to be addressed.

• Nurses on the complex care ward told us they could contact the respiratory consultants for advice at any time of the day or night, whether they were on duty or not.

Major incident awareness and training

- Every ward and unit we visited had major incident and business continuity plan folders, kept in the nursing office. The folders contained staff contact details, copies of the relevant plans and action cards detailing what immediate steps staff should take in the event of a major incident.
- We asked a selection of staff from a variety of clinical and non-clinical roles, on all of the wards we inspected, about the folders. All of them were aware of the folders, their purpose and how to use them.
- Ward managers told us the trust conducted regular, unannounced major incident 'activation exercises'. During these events, managers contacted off-duty staff and reported their availability to allow the trust to assess its capability to respond to a major incident.
- The complex care team, who looked after patients in the community, maintained a list of which members of their staff lived closest to which of their patients. In the event of adverse weather, managers contacted staff to ask them to attend the closest patient, in order of priority, rather than those patients for whom they normally cared. In the event of extended periods of adverse weather the team would consider bringing patients in to the hospital to maintain their care.

Are medical care services effective?

We rated medical care services as outstanding for effective. Because:

Outstanding

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- Children's care and treatment was planned and delivered using current evidence-based guidance, standards and best practice.
- The trust participated in national audits to improve patient care, and staff were encouraged to undertake local audits to enhance their own professional development and to improve care for patients on their wards.

- Staff were qualified and had the skills to carry out their roles effectively, and were supported to maintain and develop their skills and knowledge.
- Staff were able to access the information they needed to assess, plan and deliver care easily and quickly.
- Staff understood consent to care and treatment and its particular interpretation when children were involved.

However we also saw:

• On some occasions, teams from different specialties who were involved with the same patient's care did not communicate effectively, and patients sometimes suffered discomfort as a result.

Evidence-based care and treatment

- Care and treatment provided on medical wards and units followed guidelines published by the National Institute for Health and Care Excellence and the Royal College of Paediatrics and Child Health.
- When we asked, staff were able to show us treatment guidelines and the trust's treatment policies on its intranet.
- In line with research conducted by the British Association of Play Therapists, the hospital used play specialists and play facilitators to help explain treatment through play and to promote patients' physical and psychological recovery. Play specialists used play to distract children from potentially unpleasant or painful procedures, and the play facilitators' role was to create activities to try to normalise the hospital environment for children.
- Play facilitators told us play was included in every child's care plan and was valued highly in the trust.
- Two play specialists were allocated to work within the emergency department.
- One play facilitator was shared between the emergency department, high dependency unit and paediatric assessment unit. The play facilitator told us they had a handover from the nurse in charge of each unit each day to identify which children had the greatest need of their service and needed to be seen first. However, the play facilitators saw every child on every ward each day.
- Junior doctors told us they took part in annual reviews of treatment guidelines before they were passed to consultants for final review and approval. This meant junior doctors were actively involved in the preparation of guidelines and were able to highlight new areas of practice for inclusion.

• The trust's respiratory teams contributed to British Thoracic Society audits on non-invasive ventilation, difficult asthma and the effectiveness of treatments.

Pain relief

- Specialist pain relief was provided by the hospital-wide acute pain team, seven days a week. In 2015, 188 medical patients had been referred to the team, making up 14% of their activity. The acute pain team were able to provide additional pain relief for patients through treatments such as epidurals (a local anaesthetic injected into the spinal column to numb nerves), syringe drivers and transdermal patches
- Between January 2015 and February 2016, all medical wards and units at the hospital had scored over 93% in audits of the National Care Quality Indicator for pain.
- A parent of a child being treated on ward 15 told us the acute pain team were "excellent" and said they had arranged a tailored package of pain medicines to provide effective pain relief.
- We saw a variety of evidence-based scoring methods used to assess children's pain, according to their age and levels of understanding.

Nutrition and hydration

- All patients were assessed for nutrition and hydration needs on admission to medical wards, based on guidelines published by the British Association for Parenteral and Enteral Nutrition (BAPEN). Staff monitored patients' fluid and food intake throughout the day and, where appropriate, night. Patients' weights, and food and fluid intake and output was recorded in nursing notes, using age-appropriate BAPEN monitoring tools.
- Medical wards operated a 'protected mealtimes' system. During patients' mealtimes doctors and nurses did not carry out any assessments or treatments (unless essential). Nurses did not take breaks during patients' mealtimes so they were available to assist with feeding those patients who needed help, and to ensure all patients were eating well.
- Apart from one family, parents and carers of a babies and children being cared for on medical wards told us staff always provided their children's feeds on time. One family of a child being cared for on ward 2 had complained about delayed feeds. The ward manager on

ward 2 was open with us about the family who had complained and encouraged us to speak to them. Managers were investigating the circumstances around the delayed feed.

• Children on cardiology wards were given a diet high in medium-chain fatty acids, which studies have shown to have potential benefits for patients living with heart problems. Staff told us the hospital's chef worked with them in choosing suitable ingredients and even went as far as to make special ice-cream to fit in with this diet.

Patient outcomes

- The trust's respiratory teams contributed to British Thoracic Society (BTS) audits on non-invasive ventilation, difficult asthma and the effectiveness of treatments, helping to develop new treatments and improve patient outcomes nationally. One of the trust's respiratory clinical nurse specialists contributed to guidelines issued by the National Institute for Health and Care Excellence and the BTS.
- The medical care division carried out monthly audits of nursing documentation and care. Results and any trends identified were fed back to staff to improve quality across the service.
- 'HbA1c levels' are an indicator of how w ell an individual's blood glucose levels are controlled over time. The NICE Quality Standard QS6 states "People with diabetes agree with their healthcare professional a documented personalised HbA1c target, usually between 48 mmol/mol and 58 mmol/mol". In the 2013/ 14 national paediatric diabetes audit, the trust scored 28.2% for the number of patients with HbA1c levels below 58mmol/mol, which was better than the England average of 18.5%.
- The trust performed better than the England average for seven out of 12 indicators in the 2014 'Epilepsy 12' audit. Epilepsy 12 is a national clinical audit, established in 2009, with the aim of helping epilepsy services, and those who commission health services, to measure and improve the quality of care for children and young people with seizures and epilepsies. The trust were an outlier for only one of the remaining five indicators: children who had an electroencephalogram (a test of electrical activity in the brain) where no contraindications were defined. For that indicator, the trust scored 88% against an England average of 94%.
- Managers on medical wards carried out monthly audits on 16 areas of patient care and safety. Audits included

cannula care, communication, medicines, hygiene, patient observations and pain relief. We were shown audit results from ward 12, from September 2015 to April 2016. Out of 128 results, 125 were graded as green (95% or higher) and only three fell below that level. They were: cannula care in October 2015 which scored 93.5%, nutrition and hydration in April 2016 which scored 94% and skin care in February 2016 which scored 93.8.

• We were shown results from medical wards' participation in nursing quality care indicator (NCQI) audits from November 2015 to April 2016. NCQIs are national indicators measuring the quality of nursing care provided to patients in hospital, using data on areas such as cannula care, communication, pain relief and hygiene. Wards 1, 11 and 12 had achieved scores of over 95% every month. The other five wards had achieved scores over 95% in most months and over 90% in the remaining cases, apart from the complex care bay which had scored 84.8% in March 2016 and 85.3% in November 2015, and ward 2 which had scored 85.7% in November 2015. All of the months in all wards were rated either green or amber; none were red.

Competent staff

- Staff told us the trust were very supportive around training. One nursery nurse told us they had expressed interests in learning disabilities and breastfeeding and the trust had sent them on courses about both. As a result, they were now a learning disabilities champion and advised patients' parents about breastfeeding.
- A nurse on the paediatric assessment unit also told us they were actively encouraged to attend training, and in the last year had completed courses on intravenous access and management, total parenteral nutrition, paediatric intermediate life support and conflict resolution.
- A nurse on the paediatric assessment unit told us they had had a patient who was newly diagnosed with diabetes on the ward the month before our inspection, and had had daily input from a diabetic specialist nurse. The nurse and two colleagues recognised they would like to know more about diabetes and asked for training. The following month a half-day refresher had been put on, led by a nurse specialist with input from a consultant and an expert patient.

- The trust's target for staff appraisal completion was 85% over the financial year. Up to January 2016, 74.2% of doctors had had an appraisal and the majority of staff who were still outstanding had appraisal dates booked in.
- Nurses told us the trust was very helpful and supportive about revalidation. They provided 'drop-in' workshops to assist their nurses and guidance documents were available on the intranet.
- Junior doctors told us they never had problems getting leave to attend conferences or external training. One told us they had never had to miss a teaching session even when on call as hospital managers were very good at flexing staff to accommodate training.
- Junior doctors told us they completed at least one audit during each of their six-week rotations, which they then presented at departmental and trust meetings.
- Junior doctors told us consultants set them learning goals most days, such as to complete a workplace-based assessment, to ensure trainees completed these as they went along rather than trying to get them all done in the last week of their rotation.
- Play specialists and facilitators held monthly meetings for play staff from every specialty in the hospital. During these meetings they shared learning and discussed any new guidance from the National Association of Play Specialists.
- A student nurse on the paediatric assessment unit told us staff were always happy to find the time to help with their educational needs and interests, and gave us an example of when they wanted to learn how to set up feeds. They had been shown how to do it and told us they now felt confident in carrying out this procedure.
- We were given copies of the 'new starter' flowcharts for complex care staff on Ocean Ward and the community team. Both detailed a structured induction plan, running over a 12-week period, including a mixture of self-directed study, shadowing, observed practice and assessments. We were also given a copy of the complex care 'welcome pack', given to new starters. The welcome pack contained information on trust policies and procedures, guidance about incident reporting and details of local policies and procedures specific to work on Ocean Ward and in the community. It also included instructions on action to be taken in an emergency.
- A newly qualified band 5 nurse on ward 8 told us they had a preceptor and 'buddy' to help with their

induction, which was scheduled to last four weeks. They had mainly worked alongside their preceptor and buddy but felt happy to speak to any other member of staff if they needed advice.

- A clinical nurse educator told us the ward or unit-based induction for newly qualified nurses' was planned to last four weeks, but that could be extended when necessary if staff or preceptors felt nurses needed more support. We were given details of the newly qualified nurses' training programme. It included sessions on point of care testing, experience, intravenous medicine administration, blood product administration, emotional resilience, recognising the sick child, and monitoring, assessing and escalating concerns.
- Experienced nurses on the paediatric assessment unit were able to undertake an internal, accredited, five-day training 'paediatric assistant' course. Through this they were trained in a number of extra skills such as venous access and operation of specialised equipment for children with breathing problems.
- Qualified nurses and care support workers on the complex care team completed competency documents on tracheostomy and ventilator care. We were shown copies of these documents which were well structured and provided evidence of staff's competence in these areas.
- The complex care team clinical educator and their deputy carried out supervision shifts with each member of staff on the community and Ocean Ward teams at least once per month.
- Staff on ward 1, the renal ward, rotated through one week on the haemodialysis unit then three weeks on the ward. This ensured all staff maintained skills in both areas. Newly qualified nurses on the ward worked through a renal competency booklet. After a year working on the ward they were able to undertake a one-week course on peritoneal dialysis.
- Nurses on the cardiology wards attended a cardiac study day once a month, to refresh their knowledge and skills and to keep them informed about new guidelines, latest research and lessons learnt from recent incidents. On starting to work on these wards nurses also attended an introduction to cardiology course, staged as half a day per month, over ten months.

- Each year, three cardiology nurses were offered the opportunity to attend a national cardiology course held at Great Ormond Street Hospital. Different nurses attended each year, and shared updated knowledge with their colleagues on their return.
- Cardiology nurses had allocated time to shadow nurses in the hospital's paediatric intensive care and high dependency units, to help them understand the care and treatment provided there and to familiarise them with the step-down process.
- The hospital's team of respiratory clinical nurse specialists had funding for appropriate higher education leading to bachelor's and master's degrees, and for specialist training on subject such as allergies and prescribing.
- The specialist palliative care team held training days for nursing and medical staff. Subjects covered on these days included syringe drivers and subcutaneous devices, discussions about resuscitation and 'do not attempt cardiopulmonary resuscitation' decisions, advanced care planning and discharge for end of life care. We were shown evaluations of two training days, made up of end-of-course feedback from delegates. The vast majority of delegates' comments were positive, or offered constructive suggestions for improvements. The specialist palliative care team used the feedback to improve their training days.

Multidisciplinary working

- The hospital had two 'Roald Dahl' nurses, who specialise in supporting children living with a variety of serious, rare and undiagnosed conditions. The Roald Dahl nurses acted as a link for children with complex needs, and co-ordinated communication and care across multiple specialties who would not normally have multidisciplinary meetings.
- The trust's complex care team, based on Ocean Ward, worked with the trust's community team, local authorities, health visitors, school nurses and social workers when arranging for patients with long term conditions to be discharged home.
- Staff told us about multidisciplinary team working between oncology, diagnostic imaging and surgery when treating patients who had solid tumours. They told us radiologists, oncologists and surgeons worked as

one team for the patient's benefit. One member of staff said "the right people come together to do the right thing for the patient, regardless of which directorate they work in".

- We saw a multidisciplinary ward round taking place on ward 8, involving consultant and middle grade hepatologists and surgeons, a pharmacist, a dietician and a nurse. Patient details and histories were presented in a clear manner and notes were taken by nursing and medical staff.
- Staff sent copies of discharge summaries to patients GPs' when they left the hospital's care. Patients' parents or carers were also given electronic copies of discharge summaries.
- The hospital's discharge co-ordinator had built up relationships with external agencies who were involved with on-going care for patients after they left the hospital. They worked with mental health teams, health visitors, school nurses, local authorities, clinical commissioning groups and the private sector as required.
- The hospital's cardiology wards worked closely with Birmingham Women's Hospital to plan care for new-born babies with congenital heart problems, based on their antenatal ultrasound scans.
- The hospital's team of respiratory clinical nurse specialists provided shared care for children with respiratory conditions who were being cared for by other acute NHS hospitals across the West Midlands. They also provided training days for GPs and community nursing staff on areas such as difficult asthma, non-invasive ventilation and home oxygen therapy.
- A senior nurse on one medical ward informed us about a family who had had a negative experience and asked us to speak with them. The family told us about poor multidisciplinary team working between surgery teams and the medical ward where their child was being looked after. Due to communication failings between the teams their child had ended up being nil by mouth for two days, until the surgery took place. The child had been distressed and hungry and their parents said they had been desperate for help and didn't know where to turn. We highlighted this case to the trust's senior management during our inspection. However, we did not hear about any other poor experiences relating to multidisciplinary team working.

- Consultant paediatricians were present on the paediatric assessment unit from 8am to 10pm, seven days a week. This exceeded the minimum levels of care recommended by the Royal College of Physicians.
 Outside those hours, medical cover was provided by the hospital's out-of-hours team, supported by consultants on call.
- Physiotherapists, occupational therapists and speech and language therapists worked a rota covering 8am to 10pm, Monday to Friday and 8am to 4pm on Saturdays.
- Medical wards and units had access to pharmacy services seven days a week. Overnight cover was provided by an on-call pharmacist.

Access to information

- The hospital's guidelines, policies and procedures were available on its intranet. Medical, nursing and non-clinical staff at all levels were aware of this and were able to locate these documents quickly when we asked them to.
- We saw folders, notice boards and information leaflets in staff areas giving information on incidents, safety thermometer performance and staffing.
- A student nurse on the paediatric assessment unit told us qualified staff actively encouraged them to look up guidelines for management of patients' conditions rather than just explaining them verbally. They said this helped them to know where to find policies and guidelines, and told us the intranet was a good information resource used by all staff.
- Senior managers informed ward managers of changes to policies or guidelines by email. Ward managers ensured that this information was mentioned and reinforced at handovers for at least a week, to ensure all staff were aware.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

• All staff we spoke with demonstrated a good understanding of Gillick competence (a system for assessing whether a child under 16 years of age is able to make their own decisions about treatment), consent, capacity and deprivation of liberty safeguards. They clearly explained how they would assess whether a patient was able to consent to their own treatment and the process they followed if that was not possible.

Seven-day services

Are medical care services caring?

Outstanding

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We rated medical care services as outstanding for caring. Because:

- Feedback from parents and patients about the care they received was consistently excellent.
- Parents, carers and patients we spoke with said staff "went the extra mile" and were "brilliant" or "excellent" and the care given was much more than they expected.
- Staff were visibly motivated and keen to provide high quality care to patients and went out of their way to make patients, families and carers feel part of care planning.
- Patients', parents' and carers' views were valued and used in all discussions regarding patient care and the patient was always at the centre of care plans.
- Patients and their families were treated with respect, dignity and compassion, particularly at the most difficult times, and bereaved parents were given genuine, compassionate care with clear emotional support if a child died.
- Staff displayed a great sense of pride in the end of life care provided at the hospital.
- Patients' needs and those of families and other representatives of patients were considered throughout the process and following death. Parents were involved at every stage and were treated as individuals.

Compassionate care

- Parents and carers told us they could always trust the hospital's staff to care for their children. They told us staff treated patients "like their own", provided "outstanding" care and they "couldn't recommend the staff highly enough".
- We spoke with 30 parents and carers and, all of them told us the care their child received was "brilliant" or "excellent". One parent told us the care had been "excellent" for the two years they had been coming to the hospital.
- The parents of a child with learning disabilities told us staff provided "exceptional care, no exceptions".
- The parents of a baby being cared for on a cardiology ward told us they could not find words to describe how

caring and compassionate the staff were, and the care they had seen allowed them to hand their baby over at night with confidence when they went to their accommodation.

- Two parents on the paediatric assessment unit told us the staff "couldn't be more caring".
- We saw staff displaying genuine compassion and treating children with respect and dignity.
- One patient told us that the nurse was like a friend. We observed the nurse helping the child to apply make-up and get ready for a trip to the local shop.
- A parent of a child being cared for on a cardiology ward gave us an example of ward staff going "above and beyond" to allow the child the simple pleasure of going out of the hospital to get an ice cream. Staff had adjusted the child's intravenous medicine times and settings, and had changed all the treatment and monitoring equipment to portable apparatus to allow them to leave the building for a short while.
- One member of staff told us their child had been treated at the hospital and described the care they had received as "exceptional".
- One parent of a child being treated on ward 8 told us the staff were very considerate at night. They said lights were turned down low, only essential treatment was carried out and nursing staff spoke in whispers. They also told us the dialysis team were "off the scale brilliant" and provided "phenomenal" care.
- Parents of a child receiving chemotherapy treatment told us staff supported them as a family, were always smiling, positive and cheerful.
- Another member of staff whose child had been treated at the hospital told us they "couldn't fault the care" their child had received and said the play facilitators were "lifesavers".
- Two parents of a child on the paediatric assessment unit told us they "couldn't fault the service and care", and described the play facilitator as "fantastic" and a "lifesaver".
- A child who was living with autism told us they liked the nurses because they worked with the child rather than telling them what to do.
- A play specialist on one ward told us they looked after the NHS 'Friends and Family Test' questionnaires for the ward. On weekdays they identified patients due for discharge through ward rounds and ensured they had questionnaires. At weekends, questionnaires were

attached to discharge summaries given to families. They told us they had a target of 40 returned questionnaires per month and were achieving 50 per month on average.

Between November 2015 and March 2016, medical wards had received 799 responses to the NHS 'Friends and Family Test', from 3,761 eligible families. This was a response rate of 21.2%, which was slightly lower than the England average of 23.7% for the same period. However, 98% of the respondents said they would recommend Birmingham Children's Hospital to their friends and family, which was higher than the England average of 95.4%.

Understanding and involvement of patients and those close to them

- Parents and carers of children on all the wards and units we visited told us doctors and nurses kept them informed about what was happening with their child's care and discussed their children's treatment options, medication and nutritional needs with them.
- Two parents of a child on the paediatric assessment unit told us staff involved them in every aspect of and decision about their child's care and they always understood what was happening.
- Three parents of two children being treated on ward 12 told us about two of the consultants who had been involved with their care over the preceding three years. They described one as "an inspiration" and the other as "fantastic". They told us the doctors "bent over backwards" to help them, listened to them and acted on what they said, and focused on their patients' quality of life.
- Staff used pictures when explaining care and discharge plans to help younger children understand what was happening and to help include them in their care.
- One parent told us staff paid attention to details and made the children feel like individuals.
- Parents said that the communication was "excellent", they were listened to and their opinion counted.
- A patient on the oncology unit and their parents told us the unit's nursing staff always took time to talk to the patient and explain their treatment to them, and address any concerns they had. They also said their doctor was "excellent", described them as approachable and said they always took the time to explain things clearly and in simple language.

- Two carers of a child on ward 2 told us the staff "care for the carers as well as the children".
- Parents of a child being cared for on ward 12 told us about a junior doctor who had introduced themselves and told them they wanted to discuss a treatment plan. The doctor had started by saying "You know your child best. What do you think?".
- One band 6 nurse told us the culture among staff was family focused, not just about the patient.

Emotional support

- During the twice-daily safety huddles, doctors made sure other staff knew about any patients who had been given bad news during the ward round. On the paediatric assessment unit a junior doctor told us the nurse in charge always made sure they spoke to those patients after the huddle to answer any questions they may have or just to spend time talking with them.
- A ward clerk on a cardiology ward told us they had been trained to talk to and look after parents on the ward if a child suffered a cardiac arrest and was being resuscitated.
- During their induction programme, which ran over a ten-month period, newly qualified nurses were trained on how best to communicate with stressed patients.
- The trust provided counselling services to guide families through treatment choices and help them make difficult decisions. Parents told us they knew how to access these but were happy to talk to any of the staff about these issues.
- The hospital's chaplaincy team, the 'centre for paediatric spiritual care', was made up of employed staff and 20 volunteers from a number of faith leaders from different religions. Its members were available 24 hours a day, seven days a week for religious or pastoral support families and children during end of life care or at any stage of children's treatment, and to conduct services and rituals.
- The hospital's chaplaincy service had developed 'spiritual play' to help with spiritual care for children, and had published a book on the subject to help chaplaincy teams in other children's services. 'Spiritual play' included a number of activities designed to help children cope emotionally with their diagnosis and stay in hospital, such as 'a room with a view', crayon art, fingerprint pictures and sensory pictures.
- A key component of spiritual play involved children making a bracelet with different colours and shaped

beads to express their own spirituality, then having a conversation about it. Each coloured bead represented a different feeling or emotion, for example green represented 'peace' and white 'hope for the future'. We were told about a patient who made their bracelet and, when asked about the beads, said "All the things on this side are the things I thank God for and all the things on this side are the things I ask God for". This demonstrated how the bracelets helped children to deal with their feelings about their treatment and illness.

Are medical care services responsive?

We rated medical care as outstanding for responsiveness. This is because:

Outstanding

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- Services were planned and delivered to meet the needs of the local, and national population.
- Patients were treated as individuals and different approaches were taken, when needed, to care for them in the most appropriate way.
- Parents' and carers' requests were listened to and where possible changes were made to care plans to meet those requests.
- Care and treatment was co-ordinated between other NHS trusts and partner agencies such as local authorities.
- People from different cultures, backgrounds and religions were supported by staff and adjustments were made to accommodate their needs.
- Staff displayed a great deal of pride in working for the hospital and worked together to give the best care possible.

Service planning and delivery to meet the needs of local people

- Parents had access to a room off each of the wards to make drinks, eat or rest. The rooms were clean and had a kettle, fridge and microwave for parents to use. They also provided a separate area for parents to shower and change their clothing.
- Each ward in the hospital had a play area, called 'The Den'. The hospital's play specialists and facilitators had standardised the layout of and equipment in each of the play areas so children who moved between wards had a familiar area to use.

- Monitoring equipment for children being cared for in side rooms on the cardiology wards and isolation rooms on other wards was situated outside the rooms. A small aperture in the wall allowed monitoring leads to be fed through and attached to patients. This improved infection control, meant audible alerts on the monitors did not disturb the children, and allowed all patient monitors to be visible from the nurses' station.
- Medical wards provided a "buddy" system for parents to support each other.
- We saw individualised discharge plans with the "path to home" clearly described and then displayed in the patients room.
- A teacher from a local school visited one patient and over several weeks had helped with preparation for an exam, which took place on the ward during the inspection.
- The hospital had accommodation for parents from outside the local area to stay in while their child was being treated. Some of this was on site in the trust's buildings and the Ronald McDonald House Charities provided other accommodation nearby.
- The complex care team clinical educators provided training for parents and carers of children with long term conditions to allow them to administer medicines and other care after children were discharged home.

Access and flow

- Between February 2015 and January 2016, only 11% of patients treated on medical wards at the hospital had more than one ward move during their stay.
- Ocean Ward provided care for patients who were medically fit to be discharged home but who were waiting for adjustments or equipment to allow their care to continue there.
- The complex care team, based on Ocean Ward, provided 'step down' care from high dependency units for patients with long term or complex conditions, allowing beds on those units to be released for acutely ill children. The team's goal was to provide support for patients with complex conditions, such as those requiring ventilation, to allow them to be cared for at home. Part of the team concentrated on community nursing, provided training for families or carers and liaised with other agencies such as local authorities to obtain equipment and modifications for patients'

homes. The team then managed long-term care for patients, in some cases providing 24-hour support through a team of qualified nurses and care support workers.

- If any patients the community complex care team normally managed at home were admitted to the hospital, the community team maintained an overview of their in-patient care and helped to transition them back home.
- A family support worker was available to support parents before discharge and to help with planning and communication with GPs and community services.
- The cardiology wards had four cardiac nurse specialists and two care support workers who focused on family support. These staff worked with families while their child was a patient on the ward, through outpatients appointments and after discharge home. Their role was to support the social aspects of care and help ease patients' transition back home. This system allowed the staff to identify many social issues. The team assessed patients and their family environment using the 'common assessment framework', a standard system used across all agencies responsible for children's welfare. They also acted as a liaison between the hospital and other services dealing with children's health, social and education needs, including NHS trusts from outside the local area.
- Family support workers provided education for parents and carers while children were in the hospital, showing them when and how to access support, and a follow up service for advice after discharge.
- All children on medical wards had a cartoon representation of their 'path to home' displayed near their bed. The posters showed regularly updated target dates and key milestones that needed to be achieved for a safe discharge, and meant patients knew why they were staying in the hospital.
- Children who had been an inpatient at the hospital for longer than thirty days were flagged on the bed management system. Every Thursday, the trust held a meeting called 'What are we waiting for?', attended by the lead nurse, head of nursing, ward managers and consultants from each specialty. During these meetings, staff discussed each child on the flagged list to establish whether they needed to remain in the hospital for clinical reasons or, if not, what was delaying their discharge home.

• Patients who were undergoing or had undergone stem cell transplants, and their families or carers, had 24-hour a day, seven days a week telephone access to the haematology and oncology ward. Patients carried an 'alert' card which allowed them direct access to the ward, within one hour of attending the hospital's emergency department.

Meeting people's individual needs

- Children with learning disabilities were sensitively managed and their individual needs taken into account.
 Staff used a 'traffic light' flagging system to make sure that this information was communicated to all staff.
- Staff used a 'learning disabilities passport' for any patients with learning disabilities. The passport explained the needs of each individual patient and helped staff adapt their care to minimise distress to patients. Wards had learning disabilities champions who reviewed passports to ensure wards met patients' needs and made recommendations to the band 6 learning disabilities lead nurse. Champions also identified newly admitted patients who were living with learning disabilities and would benefit from a passport.
- We saw one incident where a child with learning disabilities became agitated and upset. Staff dealing with the child were calm and reassuring until a nurse to whom the patient responded well was able to attend. The child calmed down and within a short period of time was happily taking part in normal activities again. All of the staff involved acted professionally and displayed empathy with the child and his mother.
- Parents of one child who was living with autism told us the ward's learning disabilities nurse had created a chart of their child's likes and dislikes, and a list of their preferred nurses. Only the child's preferred nurses provided care for them, to minimise distress caused by unfamiliar routines. Because the child became distressed when wearing a hospital wristband, staff had produced a poster showing a photograph of the child holding a sign showing their identity details, which was displayed above their bed and reproduced as stickers in their notes. Nurses caring for this child told us they had plenty of support from the learning disabilities nurse who had provided training for them on how best to care for the patient.
- A parent of another child living with autism described staff on the cardiology ward as "fantastic". They told us the learning disabilities nurse, ward nurses and play

specialist had all worked together to identify the child's needs and find out what worked for them. Because of this, the child had been calm enough for their cardiac procedure to be carried out. The child's parent told us the learning disability nurse and play specialist were particularly helpful in accommodating the child's needs.

- On one ward where patients were not meant to remain for longer than two days, one patient had been allowed to remain for over five weeks rather than being transferred to a different ward. The patient was living with autism, and found disruptions in their routine and loud noises disturbing. Because of this, staff had arranged for them to stay in a side room on the same ward.
- The hospital's admission paperwork included questions about children's food likes and dislikes, special toys and normal daytime and bedtime routines. Staff told us this allowed them to get to know the children and make their hospital stay as normal as possible for them.
- Medical wards had child-friendly, low-level furniture which staff used to encourage children to eat together round a table at mealtimes, rather than separately at their bedsides.
- The hospital had purchased an ice cream maker to help meet the dietary needs of a particular patient who was having difficulty getting nutrition through other foods.
- Staff told us children on cardiology wards, who were on a diet high in medium-chain fatty acids found Easter particularly difficult, as they were unable to eat chocolate. Play facilitators helped the children make Easter eggs from jelly sweets, which they are able to eat, instead, to help them through this time.
- Play staff had a 'party cupboard' containing equipment such as decorations, banners, blank cards and presents suitable for a range of ages. This meant families could celebrate events on the ward, so that patients did not miss siblings' birthdays or other celebrations, and allowed 'emergency parties' to be held in the event that a child was admitted to the hospital on or near their birthday.
- Play specialists and play facilitators had a large and varied number of toys available. If staff, children or families asked for toys or games that were not held in stock, the Birmingham Children's Hospital Charity made funds available to purchase them. Out of hours, play staff were authorised to buy toys or games their patients needed and claim the cost back from the charity.

- On their admission to a ward, staff gave children a sticker sheet to keep track of when they saw people such as doctors, nurses, the play team and catering staff. This helped children to know who to expect and to see it as a game. Two parents of a child on the paediatric assessment unit told us about the sticker chart and said it had helped their child cope with their stay.
- One day each week, play specialists asked all children, families and carers on the wards they covered for feedback on their service and what could be done to improve it for the children.
- The hospital had access to translation services, and use of the service was well embedded with staff. We saw staff requesting a translator for a patient on one ward, and we were still present when the translator arrived half an hour later. We spoke with a parent whose first language was not English, but who spoke and understood English well. They told us they were happy to speak with staff using English but that staff insisted on using an interpreter for 'serious' discussions to ensure complete understanding.
- We saw an entry in a patient's notes confirming staff had used a translation service while gaining consent for a procedure. The entry included the translation service's job reference and was countersigned by a middle grade doctor.
- All children who were being treated on wards 11 and 12, the hospital's cardiac wards, were allocated a named cardiac nurse specialist and given a card with the nurse's contact details.
- Ward 1, the renal unit, had a separate room for patients aged ten and over. Access to the room was controlled with staff members' swipe cards. The room contained games and books appropriate for older patients, including games consoles which had been purchased with funds from the hospital's charity.
- Medical wards all had facilities for parents. As a minimum, these included a quiet room, toilet, shower and breastfeeding room.
- Parents of a baby being cared for on a cardiology ward told us staff had trained them in basic life support to help them deal with any emergencies after their child was discharged home. Staff had also trained the parents to feed the child through a 'naso-gastric' tube (a narrow tube that passes through the child's nose and into their stomach) to allow them to continue with this method of feeding at home.

Learning from complaints and concerns

- Between January 2015 and February 2016 the hospital had received 52 complaints relating to care and treatment on medical wards and units. Complaints and learning from investigations was discussed at the medical group's monthly governance meetings and cascaded to ward staff through meetings and newsletters.
- Parents we spoke with told us they knew about the hospital's complaints procedures, but in most cases, ward staff dealt with problems at the time they were raised.
- We saw information leaflets and posters about the hospital's patient advice and liaison team prominently displayed in areas accessible to patients, families and other visitors.
- Parents and carers of children being treated on medical wards were able to use simple forms to record any worries they had about their child's care. The forms had space for parents and carers to write down what they wanted staff to know and what they would like staff to do. They could be used in discussions with staff or left for staff to read, as preferred.
- We saw notice boards on the wards and staff office that gave details of learning from complaints and incidents. For example, staff told us following one concern new practice had been introduced to improve the use of cannulas.
- The trust circulated a monthly health and safety bulletin to all staff, telling them about incidents that had happened across the hospital to raise awareness about ways in which harm could be avoided.
- On every ward and unit we visited we saw leaflets about how to make a complaint and the trust's patient advice and liaison team.



We rated medical and end of life care services as outstanding for well-led. This is because:

• Leaders had an inspiring purpose and common focus to deliver the best possible care to the children in their care, and this attitude was shared by staff at all levels

- Staff across all groups were proud of the organisation as a place to work and spoke highly of the culture. Many staff told us the hospital was "the best place they had ever worked" and said they "couldn't imagine working anywhere else"
- Governance and quality management processes were robust and regularly reviewed to ensure they were effective
- Staff at all levels were encouraged to suggest improvements and challenge areas of practice they considered to be inefficient. Managers had a culture of accepting ideas and challenges from staff and implementing them where possible
- Quality of patient care was paramount in governance meetings and at ward level
- The service was transparent and open about performance and patient satisfaction issues, and was receptive to constructive criticism and open to change
- Directors and managers engendered a 'family' feeling amongst the workforce. The ethos of 'team BCH' was embedded and well-received by staff

Leadership of service

- Staff told us they regularly saw senior managers and board members on the 'shop floor'. They told us on average they saw each of the trust executives at least twice a month. A student nurse on the paediatric assessment unit told us they had seen the chief nurse on the ward at least four times during their placement. A nurse on the same unit told us they saw the chief nurse on the unit at least twice a month, and said the executive board were very visible and approachable.
- Staff told us the trust's chief executive always attended events the wards put on, and gave us an example of a 'reading day' on ward 12. The chief executive had visited and taken part in story telling with the ward's children.
- Two nurses on the cardiology ward told us as well as the ward's managers, everyone in the senior team at the hospital was approachable, and specifically mentioned the director of nursing and their deputies.
- At least three days every week consultants held informal meetings for junior doctors in the hospital cafeteria. Junior doctors told us this helped them get to know consultants and each other, and provided opportunities for them to discuss patients and share learning.

- Two junior doctors told us they felt very well supported by the hospital's consultants, who regularly made time for a 'coffee and a chat' to discuss career goals and offer mentoring advice.
- Junior doctors told us they knew the trust's executives by name and the executives had supported them during the recent industrial dispute. The executive team worked with the junior doctors to ensure cover was in place where it was needed during the dispute to keep patients safe.
- Nurses told us they had opportunities to shadow seniors to develop their careers. One band 6 nurse told us ward and senior managers referred to band 6 staff as "future band 7" rather than "band 6".
- Senior nurses in the respiratory team told us they had good support from the trust's senior management team.
- Staff on all the wards we visited told us they felt supported and appreciated by their immediate managers and the senior management team. They told us their local managers and the trust's executives listened to their views.
- The trust's education and learning department ran leadership training at different levels for staff from band 5 upwards. Staff we spoke with were aware of internal leadership training courses called 'team mate', 'team player' and 'leading the way'.
- The hospital's team of respiratory clinical nurse specialists told us the lead nurse supported them in their education and to attend conferences.

Vision and strategy for this service

- Staff on the liver unit had their own, local set of values, using the mnemonic 'LIVER': Listen don't interrupt, share information, support; Inspire learn, develop, encourage, lead by example; Value respect each other, be approachable 24 hours a day; Enthusiastic smile, stay positive; Reliable use buddy system, tidy up, cover breaks, plan care. We saw these values displayed on notice boards and staff told us they identified with them in their work.
- The palliative care team had a vision statement which said they wanted "all patients and their carers, including children and young people, across Birmingham to have 24/7 equitable access to high quality, consistent palliative and end-of-life care when they need it, with accurate identification and proactive management of all of their palliative care needs: physical, social,

psychological, spiritual and cultural." Staff we spoke with on the palliative care team told us they identified with this vision and felt it fitted with what they wanted to achieve in their work.

- The neuroscience, haematology and oncology clinical group management team's vision was "Enabling teams to provide excellent patient care, creating the environment for individuals and teams to succeed and flourish." Managers we spoke with were aware of the vision, and told us it accurately reflected their day-to-day priorities.
- The cardiac, transplant and gastro-intestinal clinical group's mission statement was "To deliver high profile, world class, child and family focused quality care through networks, innovation and leadership in service delivery, and a strapline which read "where world class care happens". Throughout our inspection, we saw managers and staff who worked in this clinical group demonstrating this ethos.

Governance, risk management and quality measurement

- We were shown risk registers for the cardiac, transplant and gastro-intestinal; neuroscience, haematology and oncology and specialised medicine clinical groups. In total, 16 recorded risks related to medicine. We saw many of these had responses and actions from a number of different staff, and the emphasis on all of them was on resolving issues to keep patients safe from avoidable harm. Actions were regularly reviewed and updated.
- Managers held monthly cross-department governance meetings to share risks, mortality and morbidity findings, good practice and learning from incidents. We were shown minutes of these meetings, during which managers discussed activity, succession planning, developments in clinical practice, risks, governance and personnel.
- Senior managers at the trust shared learning from and discussed incidents during monthly clinical risk and quality committee meetings.
- Managers used a single electronic system to monitor compliance with mandatory training. On medical wards, managers discussed their staff's levels of mandatory training at monthly meetings with the head nurse.
- Lead nurses, heads of nursing, deputy divisional managers, clinical leads and representatives from the trust's finance and human resources departments

attended weekly clinical group meetings. During these meetings, they reviewed and discussed incident reports, 'confirm and challenge', patient experience feedback and innovation. Minutes of these meetings showed discussions about incidents, mandatory training, appraisals, audits and performance against clinical quality indicators.

• The head of nursing carried out weekly spot checks on nursing notes and fed comments on their quality back to ward managers.

Culture within the service

- Staff frequently referred to 'Team BCH' during our conversations with them. They described the hospital as an enjoyable place to work, and told us they could not imagine working anywhere else and coming to work there was the best decision they had made. Numerous staff told us they "loved their job".
- Several staff, from a range of clinical grades and non-clinical roles, told us they felt lucky to be able to work at the hospital and reassured it was local for their own children.
- Nurses told us on occasions when they had to move to work on a different ward due to staff One nursery nurse told us they had worked at the hospital for over ten years and said the team was "like a family". They said everyone regarded everyone else as important, no matter their clinical grade or job role.
- One member of staff on the paediatric assessment unit told us the head nurse had recently visited the ward while they were very busy and had stayed to help with basic nursing care such as changing bed linen. This demonstrated senior managers empathised with ward staff and were willing to assist when staff were under pressure.
- Nursing staff told us they felt surgeons at the hospital were dedicated to giving children a chance of an improved quality of life.
- One junior doctor who had been at the hospital for less than a year, told us doctors' welfare was actively monitored and doctors were encouraged to finish shifts on time and take breaks. Another junior doctor told us the trust was "open to suggestions of change".
- Play facilitators told us they felt their importance was recognised as part of children's holistic care.

- Nurses told us on occasions when they had to move to work on a different ward due to staff shortfalls they were always made to feel welcome, no matter where they had come from or where they had been asked to work.
- The trust provided a support service for staff experiencing difficulties with stress, anxiety or other psychological problems. One ward manager told us they had also paid for external counsellors to look after their staff following a traumatic incident on the ward.
- Staff told us they were proud of how well everyone in the hospital worked well together for the benefit of patients, their families and carers.

Public engagement

- The respiratory team had formed a group called 'SWAG' ('Super Wonderful Asthma Group') for senior school-age children living with difficult asthma. The group held quarterly discussion and activity days during which the patients exchanged experiences of dealing with their illness and gave the respiratory team ideas about what they wanted from the team and the hospital.
- We saw 'Welcome' booklets on all the wards we visited, giving patients and their families details about staff uniforms, contact telephone numbers for the ward, guidelines about visiting and infection control, information about facilities and food and how to give feedback.
- Nurses on the cardiology ward told us the lead nurses met every week to share good practice and feedback from the young people's group. They cascaded this information down to ward staff in their specialties.
- The trust had developed a free smartphone 'app' for patients, their families and other visitors to give feedback on the hospital.

Staff engagement

- Staff told us about the chief executive's 'monthly briefing' meetings, which were open to all staff to attend. They told us the sessions were informative and well-attended, and were uploaded as a 'podcast' on the trust's intranet for any staff who were not able to be there in person.
- Staff told us they felt informed and up-to-date about what was happening trust wide.

- Managers on the paediatric assessment unit circulated a monthly 'PAU newsletter' to staff, by email. The newsletter included feedback on incidents and complaints and shared good practice from the unit and other areas of the hospital.
- The hospital held quarterly meetings for its ward clerks to give them updates on system changes and any training they needed. At the end of the meeting the clerks were given a feedback form on which they could make suggestions for improvements in practice.
- Nurses told us about 'away days' held for band 5 and band 6 nurses, during which they were updated on the trust's strategic goals and vision and given the opportunity to talk to senior staff. They told us they felt senior staff listened to their concerns and gave us examples of things that had changed or improved following these events.

Innovation, improvement and sustainability

- The hospital, led by its safety lead paediatrician, had taken part in a national learning programme hosted by the Royal College of Paediatrics and Child Health. The programme was called 'Situational Awareness For Everyone', or 'S.A.F.E.', and involved trials and development of the safety huddle system, starting on the paediatric assessment unit. The programme initially involved 12 hospitals but had been expanded to 28 due to its success.
- The non-cystic-fibrosis respiratory team had close links with the West Midlands and national respiratory nurses' groups, both of which worked to share best and new practice. The team were involved with studies about psychological aims for patients living with asthma, lung function tests, asthma control tests and peak flow monitoring.

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

Information about the service

Birmingham Children's Hospital (BCH) NHS Foundation Trust provides surgical services to children and young people. The hospital is one of the three regional centres for organ transplants. At the time of our inspection Birmingham Children's Hospital was the only service in England to provide a combined liver and kidney transplant procedure.

The hospital occupies an old Victorian building. Due to the constraints of the building and the availability for expansion, surgical theatres are spread throughout the site rather than in one purpose-built complex.

There are 13 theatres in five locations within the hospital. Each theatre block is appropriately equipped and staffed to meet the needs of patients who use these services. There are 128 designated beds for surgical patients across the hospital. Some wards cater for specialist procedures or particular groups of patients; these include surgical day care, the burns ward, the intensive care unit (ICU) and the neonatal surgical ward.

We spoke with a number of people during our inspection, including 39 patients and family members and 116 staff of various grades and positions. We also reviewed 17 care plans and patient records.

Summary of findings

We rated this service as good because, with the safe domain being rated as requires improvement:

- Staff understood how to report incidents and managers shared learning from incidents across the surgical directorates.
- The surgical wards and theatres we visited were clean and tidy.
- Managers used recognised tools to determine staffing levels and skill mix, and they put systems in place for continuity of services.
- The surgical directorates followed National Institute for Health and Care Excellence (NICE) guidance and nationally recognised best practice.
- Staff used national and local audits to monitor patient outcomes and identified opportunities for improvements.
- The acute pain team provided effective treatment to patients.
- We saw minutes from a multidisciplinary team (MDT) meeting and observed good working relationships between staff. Nursing staff understood their role and were up-to-date with their specialist training, appraisals and supervision.
- Staff provided a professional, caring and compassionate service to patients within a calm ward atmosphere. Family members confirmed this in person as well as through comments in the NHS Friends and Family Test (FFT) questionnaire.

- Birmingham Children's Hospital is a leading UK specialist paediatric centre, which delivers surgical services for young people from across the country.
- The hospital kept older children and teenagers of the same gender together and did not place them in mixed sex wards.
- Staff managed bed availability to ensure they could admit patients as required. In addition, we saw an effective MDT working with complex needs patients.
- There was a clear vision within the surgical directorate. Staff were positive about proposals to merge the hospital with a neighbouring trust whose services complemented their own.
- A clear governance system was in place and was effective in delivering a good service to patients. Staff felt supported by managers and described positive leadership and an open door policy.
- Many innovative practices took place within the surgery directorate including the 'intent day' where staff were actively involved in creating their own values. In addition, an 'app tree wall' (a picture of a tree) displayed children's, parents and families' feedback on the service.

However:

- Despite staff sharing information in relation to surgical 'never events' (serious, largely preventable patient safety incidents that should not occur if proper preventative measures are taken), avoidable mistakes continued to happen.
- We saw evidence of engagement with other trusts in relation to information sharing about never events, but there was no exchange of staff between trusts or peer review of practice, which may have reduced the number of never events.
- The trust had two inconsistent computer systems, which monitored staff training. One system would suggest that a particular member of staff had completed training while the other suggested they had not.
- We found staff were honest and open with patients; however, not all staff understood the point at which the trust became legally obliged to follow Duty of Candour (inform and apologise to patients if there have been mistakes in their care that have led to significant harm) procedures.

Are surgery services safe?

Requires improvement

We rated safe as requires improvement because:

• The trust reported seven surgical never events between March 2015 and May 2016.

Never Events are serious incidents that are wholly preventable as guidance or safety recommendations that provide strong systemic protective barriers are available at a national level and should have been implemented by all healthcare providers.

- Although staff could demonstrate good sharing of information from incidents, staff did not embed learning from incidents across the surgical directorates. This meant that preventable incidents continued to take place.
- Staff shared learning from incidents through a newsletter between the teams, however, this did not prevent further 'never events'. We saw two 'never events' were very similar incidents involving a patient having an operation to the wrong part of their body.
- Although staff were aware of the need to be open and honest with patients, they were not clear about the legal requirements of Duty of Candour. Neither were they sure about the point at which the trust had a legal duty to provide information to patients about mistakes.
- There was a complex process for assessing compliance with training. Two computer systems were not accurate in assessing training, therefore ward managers monitored staff training completion and kept individual paper records including copies of staff training certificates.

However:

- The wards we visited were clean and tidy.
- Safety thermometer (a measure of the number of patients who receive 'harm free' care) results were easily accessible by the ward staff and displayed on notice boards on each ward.
- Nursing and medical staffing levels were good, and staff used recognised tools to determine staffing levels.

Incidents

- The trust had an electronic incident reporting system. Staff were familiar with the system and understood how to report an incident. We saw how managers shared learning from incidents across the trust. Incidents formed a standing agenda item in team meetings for theatre and ward staff.
- Although staff disseminated learning to teams, it did not appear that the messages resulted in improved care.
- Between March 2015 and February 2016, the trust reported 1,546 incidents related to surgical services. These consisted of 135 relating to head and neck surgery, 425 relating to transplant and gastro-intestinal surgery and 986 relating to general surgery and surgical care. Of these incidents, the trust classified seven as serious.
- The trust reported seven surgical never events between March 2015 and May 2016. Never events are serious, wholly preventable patient safety incidents that should not occur if the available preventative measures have been implemented.
- The never events included two wrong site surgery events, one retained foreign object post-procedure, and one wrong implant/prosthesis. Staff reviewed incidents in accordance with national guidance. In addition, staff completed root cause analysis and identified when, and where errors had occurred which had led to the events.
- Staff shared information with the teams concerned across the trust. However, the process did not prevent the 'never events' even though both 'never events' were similar involving a wrong surgery site. At the time of our inspection, the trust had commissioned an external review of the 'never events', and introduced additional guidance for staff. This included a requirement for consultants to remain in theatre until the team completed all procedures rather than leaving junior staff to complete more routine procedures unsupervised.
- There was good evidence of engagement with other trusts in relation to incidents and practices within theatres. The trust also felt that the 'never events' were so significant, that an external review would be more productive than an internal review.
- Mortality and morbidity meetings took place every two weeks and included representatives from all the surgical specialities.
- Since November 2014, 'Duty of Candour'. 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. Nursing staff we spoke with were aware of the need to be open and honest with patients, however the majority did not fully understand at what level of harm this became a legal requirement. Consultants and doctors had a clearer understanding. One consultant said: "This is something which we have always done here. The legal requirement formalises the process." We were given examples of where patients or their families were provided with information relating to issues which had arisen, these included information provided to families following the never events which had occurred in this service.

Safety thermometer

- The NHS safety thermometer enables providers to monitor performance over time in relation to a number of identified criteria. NHS children's services have their own data set. The early warning scores (EWS) were monitored to identify the number of missed tests and the number of cases which due to the score needed to have been escalated and were not. Staff also monitored skin integrity and extravasation. Extravasation refers to the leakage of fluids outside their intended medical pathway.
- Between March 2015 and February 2016 the average monthly data set was;

Total patients – 273.1

Patients not escalated when their early warning score should have triggered an escalation – 7.6 (2.3%)

Extravasation 2.1 (0.7%)

Pain - 14.1 (4.8%)

Pressure ulcers - 1.3 (0.4%)

Moisture lesions - 3.6 (0.9%)

• The safety thermometer information was included on staff notice boards on each ward. More detailed information and analysis was available to staff on the trust intranet system.

Cleanliness, infection control and hygiene

- The overall cleanliness of the environment was clean. The sterile field (is a microorganism-free area, including free of spores) in theatres was also clean.
- Parents and their families told us the standard of cleanliness was high at all times.
- Staff screened patients for infectious diseases such as Methicillin-resistant Staphylococcus aureus (MRSA) during the pre-admission process. Procedures were in place to enable patients that had an infection to be isolated.
- We saw how the trust protected patients with immunodeficiency, and only admitted them to certain wards.
- There were no cases of MRSA, bacteraemia or clostridium difficile infection (C.Diff) within the surgical directorate between March 2015 and May 2016. The trust monitored the number of surgical site infections. Results showed nine wound infections from July 2015 to May 2016. The trust board received a monthly update on rates of infection.
- We observed staff compliance with hand hygiene procedures. We saw staff using hand gels and washed their hands. Staff completed hand hygiene audits on all the wards. Staff would not be aware when managers did the audits, which meant the audits were an accurate reflection of staff practice. We reviewed audits for three wards, which indicated a compliance rate over 95% between January 2016 and February 2016.
- We noted medical staff washed their hands and complied with guidance and were bare below the elbow (clinical staff adhered to having their sleeves rolled up to above the elbow with no jewellery or watches other than a plain wedding band) when in clinical areas. We confirmed this by their audit results for three wards, which indicated a compliance rate over 95% between January 2016 and February 2016.

Environment and equipment

- Environment audit results showed compliance rates were consistently at or above 95%. We saw theatre areas were well equipped.
- Staff had reported issues with the theatre lighting in the Parsons Theatre block. In particular, theatre five had suffered a number of incidents where the main theatre lights had failed, causing delays to patients. This was on

the surgery risk register. However, the trust did find a permanent solution to this problem where documentation showed replacement lights had been authorised from the capital budget for 2016/2017.

- Wards looked clean, although we saw and staff were quick to point out that storage was a major issue. This was true in both the ward and theatre areas. The equipment was stored in corridors and passageways. Staff completed fire safety reviews and where necessary floor space had been marked indicating areas where it was safe to store equipment without impeding safety.
- We saw evidence of staff checking the resuscitation trolleys and wards, where checks had been completed and documented. We saw maintenance logs and service schedules, which confirmed that staff maintained the theatre, wards and imaging equipment
- Wards had difficulty storing patient's own toys, clothing and personal items. Some areas had purchased large storage boxes, which sat at the end of patients beds.
- In addition to their regular nursing duties, we saw staff had to keep a constant vigil to prevent toys and games becoming trip hazards for other children, relatives or staff. There was a good example of staff interacting with patients, moving toys and speaking with families about safety.

Medicines

- We observed safe practices in relation to the storage and use of medicines within theatres. Anaesthetists prepared medication on a patient-by-patient basis, such that only one patient's drugs were out at any one time.
- Medicines in theatres and on wards were stored securely. Temperature sensitive medication was stored in refrigerators and we saw that regular temperature checks were completed, recorded and within recommended temperature range. Guidance was available to staff on what they needed to do if temperatures fell outside acceptable levels and staff we spoke with were familiar with these procedures.
- Nursing staff on wards were wearing red 'do not disturb' tunics whilst engaged on medication rounds, which enabled them to concentrate on the job in hand.
- Staff showed good practice of double checking medication prior to administration. Some wards had dedicated pharmacy technicians who attended and assisted nursing staff during drugs rounds. On the wards without technicians, a second nurse carried out this

task. Nursing staff told us the use of pharmacy technicians made the drugs round much quicker and released nurses back to their patients. Those areas without technicians told us they wished they had them.

• We observed staff dispensing drugs on a number of wards and we checked five drug administration charts, which staff completed correctly.

Records

- During our inspection, we reviewed trust policies and procedures, maintenance schedules and cleaning schedules. We also checked 17 sets of patient care records and medical notes. We did this because we wanted to ensure recorded information for patients was accurate. Staff also confirmed our observations by saying it reflected the needs of individual patients.
- Staff assessed all patients on admission for a range of potential risks including moving and handling, pressure ulcers and falls. They also completed risk assessments to avoid patient harm. Staff monitored this on a daily basis to check for increasing or decreasing risks.
- Nursing and medical notes contained information, which enabled staff to provide appropriate patient care.
- We found minor errors in some notes, for example, the escalation section of the form. This identifies when a senior member of the nursing team or a doctor is alerted to a patient's deteriorating condition. Some had been marked 'yes (Y)' but, when staff checked their records, there was nothing in the notes to suggest the patient's health had deteriorated, or any comments about the escalation process.
- Staff carried out patients' pre-operative assessments in pre-assessment clinics either in outpatients, the emergency department or on the ward.
- Staff completed standardised records, and patients and families told us they had relevant pre-operative advice. Patients also told us they were given time to ask questions and discuss the surgery and post-operative expectations.

Safeguarding

- The trust had a safeguarding policy and an identified safeguarding lead.
- Safeguarding training was a mandatory subject. Staff we spoke with understood their responsibilities in relation to safeguarding children.

- The level of training required by staff was dependant on their role. All qualified nurses were required to have level three children's safeguarding, clinical support workers and support staff were trained to level two.
- Records showed 90.7% of staff had completed safeguarding children level two, against a trust target of 95%. In addition, 91% of staff had completed safeguarding children level three against a trust target of 95%.
- The trust did not provide adult safeguarding to staff as part of their mandatory training due to being a paediatric trust.

Mandatory training

- Staff were required to complete mandatory training after their initial induction and probationary period. Refresher training was required between one and three years dependant on the subject. Records showed 89.8% of staff had completed their mandatory training against a trust target of 95%.
- Compliance with training appeared to be inconsistent across different theatres and different wards.
- It was difficult to assess compliance with training due to their system the trust used. During our inspection, we saw two sets of computer records produced for the same area for the same period. The two sets of software provided very different results. For example, staff in theatre four were shown on one system as having 60% compliance with basic life support training, whilst on a separate system the same staff were shown as being 80% compliant.
- Staff explained that some computer based training updated immediately when staff completed the course, whilst other training was reliant on the trainers or individual staff to submit printouts or attendance records. Staff had little confidence in either system.
- We saw ward managers kept folders for individual staff that included copies of all their training.
- Managers included staff that were on maternity leave or long-term sick in the percentages even though they were not available for work or not able to undertake the training.
- Overall, we found the majority of staff had completed their training. We found some wards had introduced initiatives to enable staff time to complete their training. Wards 11 and 12, provided staff with a half day. Staff told

us that if acuity was high, or other issues had arisen, they could be asked to work on the ward but otherwise would be able to use the time to complete computer-based training.

Assessing and responding to patient risk

- Recognised pathways of care were used dependant on the needs of the patient and the proposed or completed surgical procedure. Staff monitored patients throughout their stay in the hospital and used the early warning system (EWS). By recording patient observations on the EWS score sheet, staff were able to recognise changes in the patient's health and based on the new score staff could escalate the patient's condition to more senior or experienced staff or seek medical assistance.
- Staff used the handwritten EWS system throughout the trust. Staff told us there were discussions for introducing a new e-prescribing system and staff understood this would also incorporate an electronic EWS system, which would provide automatic escalation and prevent missed tests.
- Between March 2015 and February 2016, the EWS score of 91 surgical patients out of 3,277 (2.3%) was such that it should have triggered an escalation but did not.
- Following the latest series of 'never events' in the trust, senior managers undertook a review of the practices. In particular, they reviewed compliance with the World Health Organisation (WHO), safety checklist and five steps to safer surgery. This is a nationally recognised safety system in theatres to prevent never events and other serious incidents.
- The data from the WHO checklist audit from March 2016 showed there was a total activity of 1,527 surgical operations, staff completed 1,527 WHO checklists with a total completion rate of 99.79%. Previous 3 months showed a completion rate for February 2016 (99.79%), January 2016 (100%) and December 2015 was (99.92%).
- The trust identified there were issues in the way the different specialities and different sets of theatre staff interpreted and carried out the safety stops and checks. During our inspection, meetings were held between executive level managers and staff groups regarding their responsibilities and new overarching standardised procedures were put in place which were designed to help prevent future 'never events'.
- We observed interactions among staff of all levels in theatres including consultants. We found there were inconsistencies in the way staff perceived the value of

the guidance and how engaged they were with the process. During our consultant interviews, some staff felt that their skills and abilities meant that they did not need to follow the guidance.

- The WHO guidance incorporates a number of 'stops' into the surgical procedure which were designed to enable all staff involved to consider the patient, the procedure and the processes involved. There were opportunities for staff to challenge any information that did not match their understanding of what should be occurring. We witnessed incidents where staff continued to carry out tasks during the 'stops.'
- One consultant advised us that in order to capture electronically that staff followed systems, the trust introduced computers into theatres. Staff identified a designated member of the team to update the live system. However, the computers location meant that the member of staff who was entering the information had to turn their back on the procedure and the others in the room, which in effect removed that member of staff from the process.
- The information provided by the trust in relation to their response to 'never events' provided reassurance that systems going forward will be more robust. However, managers had no evidence that staff understood the new processes, which meant there were still issues with the safety of the service.
- The trust had appointed external auditors to review the 'never events' in March 2016. The final report in June 2016 made recommendations such as:
 - ensure a greater nursing input into implementing actions around 'never events'.
 - ensure a consistent application of WHO safety checklist in all theatres. A series of workshops would be helpful to ensure staff have the same shared set of standards.
 - ensure staff have sufficient knowledge in order to identify and report never events in a consistent and robust way. The trust needs to revise the current policy to include clearer guidance and needs to disseminate this to staff.
- The trust had very close links with other specialist children's hospitals. We had been informed about the 'Chariots' theatre network where senior theatre staff met with counterparts from the other hospitals. We asked if there had been any exchange of staff following the

'never events' so that staff from Birmingham Children's Hospital might observe practice and review documentation used in the other hospitals. Staff confirmed that this had not taken place.

- Medical input in all areas was visible. All grades of the medical team supported nursing 24 hours a day, seven days a week.
- Theatres were open from 9.30am-5.30pm Monday to Friday each day. There were exceptions to three theatres, which worked from 8.00am-7.30pm. The emergency theatre was available 24 hours per day seven days per week. After midnight, theatre staff who had worked up until midnight remained on call until the next morning.

Nursing staffing

- The trust used recognised tools to ensure adequate cover from suitably qualified staff on the wards. Bank staff employed by the trust covered planned vacancies. Staff covered projected staffing levels by covering vacancies and with the trust own bank staff. The nursing staff establishment based on band 5 and above was for ward 8 (31.3) whole time equivalents (WTE), ward 11 (29.6) and ward 12 (27).
- Nursing handovers took place on each ward at 7.30am, 12.30pm and 8pm each day. We observed two handovers. Staff assessed and responded to patient acuity (tools used to measure the anticipated acuity levels of patients), needs and risks and was responsive to sharing information about patient likes and dislikes.
- Theatres used bank staff where they could, however they also used agency staff for some roles. At the time of our inspection there were two agency radiology operating department practitioners (ODPs) working.
- The staff establishment in theatres was 183 (WTE). The number of staff in post was 172 with 11 (WTE) vacancies. At the time of our inspection 13 band 5 posts were being filled to cover some maternity and long term sickness and study leave. The surgical directorate has made 18 appointments since July 2016.

Surgical staffing

• Medical staffing with the surgical directorate consisted of 156 (WTE) posts. These consisted of 52% consultants, 2% middle career doctors (At least 3 years at senior house officer or a higher grade within their chosen speciality), 44% Registrar group and 1% junior doctors in foundation year one or two. The staffing mix differed considerably from the average of all English hospitals where the skill mix was 41% consultant, 11% middle career, 37% Registrar and 12% junior.

- Paediatric surgery senior trainees were on duty 24/7 with support from an on call paediatric surgical consultant. A 'hospital at night' junior trainee rota operated and included a resident junior surgical trainee available 24/7.
- Neurosurgery provided a consultant led service 9am to 5pm on weekdays with an on call consultant 24 hours during the week who also covered ward rounds at weekends. One to two senior house officers (SHOs) and two to three specialist registrars (SpRs) also supported neurosurgery at any one time. (Full establishment was two SHOs and six SpRs who rotated throughout the week).
- General surgical handover for junior doctors (including registrars and SHO's) took place at 8am and 4.30pm each day.
- Handovers to or from the hospital at night team took place at 8.30am and 5pm.
- Specialist handovers took place on individual wards at either 8am or 8.30am and again at either 4.30pm or 5pm, dependant on the speciality.

Major incident awareness and training

- The major incident response plan provided a clear action plan, which staff could follow in the event of a major incident. Action cards were available for specific areas of the hospital.
- Protocols for deferring elective activity to prioritise unscheduled emergency procedures were in place.
 When we spoke to staff they were clear, aware, and confident on these procedures. Staff also showed us that in every theatre block there was a plan for theatre and escalation process specific to theatres. This included contacting members of the theatre team and their contact details whom staff can contact during an emergency.

Are surgery services effective?

Outstanding

We rated effective as outstanding because:

- The surgery directorate provided a wide variety of procedures, which followed National Institute for Health and Care Excellence (NICE) guidance and nationally recognised best practice. Patient outcomes for patients receiving surgical procedures were good.
- Staff reviewed and completed accurate records of care plans and assessments daily.
- Staff engagement with national and local audits was good and used to monitor outcomes and identify opportunities for improvement.
- Nursing staff received appropriate specialist training, appraisals and effective supervision and understood their role. Staff supported clinical staff to complete their revalidation (renew their registration).
- MDT meetings took place in addition to good working relationships within the surgical directorate at the hospital. The majority of patients and families told us that referrals between specialities were effective within the department, where patients received a complete package of treatment and services from staff.
- The trust had a dedicated acute pain team led by a consultant anaesthetist.

However:

• The trust is not commissioned to provide a chronic pain service to meet the needs of patients who suffered with chronic pain. Patients received alternative medication such as basic analgesia or their own medication.

Evidence-based care and treatment

- Trust policies and procedures were available on the trust intranet and staff reported they could access them easily. We saw the trust reviewed and updated the trust policies at regular intervals and based on NICE and Royal College guidelines.
- We saw good examples of staff delivering care provided in line with NICE guidelines for example; CG3 preoperative tests, those recorded in preoperative assessment clinics ensuring a patient safe for surgery and QS49 relating to surgical site infection and intraoperative staff practices.
- The trust maintained theatre discipline practice such as using appropriate theatre wear and minimising movement of people in and out of the operating area. Staff ensured effective hand hygiene and decontamination to reduce the risk occurring during a procedure.

- BCH provides specialist surgical treatment for new-born babies and children with conditions that are present at birth (congenital) and that appear later in life (acquired). The hospital is also a leading centre for cancer (oncology), urology, thoracic surgery and keyhole surgery for problems in the abdomen, chest and kidney.
- Alongside the specialist surgery, BCH also undertakes general surgery of childhood conditions including procedures for hernias (A hernia occurs when an internal part of the body pushes through a weakness in the muscle or surrounding tissue wall) and appendicitis (a serious medical condition in which the appendix become inflamed and painful).
- The heart unit at the hospital is a world renowned centre for specialist treatments. Performing over 7000 echocardiograms per year. Over 550 cardiac catheters. Over 450 operations; around 400 of which are open heart operations. In addition the unit perform several complex types of surgery including; Univentricular hearts, neonatal surgery, Congenitally corrected transposition of the great arteries and complex pulmonary atesia. The department has produced over 60 publications in medical journals on these subjects since 2000..

Pain relief

- The trust had a dedicated acute pain team lead by a consultant anaesthetist. The team worked in collaboration with ward staff and clinicians to provide advice support and guidance in relation to patients suffering acute pain associated with their condition or treatment.
- When we spoke with the clinical lead for the team, they explained that the hospital is not commissioned to provide chronic pain relief. This was a constant cause of anxiety for the team, who were unable to assist some children during their stay at the hospital. Patients whose condition meant that they suffered chronic pain had to rely on basic analgesia or their own medication.
- The surgical directorate followed the 'Faculty of Pain Medicine's Core Standards for Pain Management (2015)' in respect to patients suffering acute pain.
- Patients and families we spoke with reported that overall they felt staff controlled their pain well. We did encounter one incident where a family reported a conflict between different specialities that they felt

impacted on their relative's care and pain management. We escalated this to senior managers. Managers conducted a review and staff put in place a new care plan to address the issues.

 We saw how staff screened patient's pain and scored using national recognised tools to assess the level of pain and determine appropriate interventions. Pain scores and charts were present in patient's records and accurately completed.

Nutrition and hydration

- Children who used the services at Birmingham Children's Hospital may be at risk of being or becoming malnourished due to their illness or condition. The British Association for Parenteral and Enteral Nutrition (BAPEN) categorise these patients as high risk.
- Staff assessed all patients prior to admission, and monitored and recorded nutritional intake and fluid balance throughout the day. Specialist diets and referral to dieticians was also available.
- Staff used age appropriate nutrition monitoring tools in line with BAPEN guidance.
- Drinks and snacks were available throughout the day. If patients missed meals due to treatment sessions or if patients were hungry between meals, staff provided additional meals.

Patient outcomes

- The trust had an excellent level of engagement with national audits with 100% submission rates.
- Participation in the Child Health Clinical Outcome Review Programme (Confidential enquiry) is under discussion in the trust; data collection opened in late March 2016.
- The trust reviewed eight of the national audits and actions to improve quality of health care.
- The trust provided the following comments:
 - an emergency department consultant saw all major trauma patients who required CT scan within 60 minutes.
 - staff recorded all surgical oncology work and nationally audited through the Somerset Cancer Registry in accordance with national cancer waiting times guidance.

- all cancer data required by the Cancer Outcomes and Services dataset (COSD), staff collected and entered through the Somerset Cancer Registry and reported within specified timescales to the National Cancer Registration Service.
- The surgical readmission rates between June 2015 and May 2016 were 2.8%. The trust did not provide any benchmark data to compare with themselves or with other children's trusts to assess whether this result was good or not.
- Emergency readmission rates between June 2014 and May 2015 varied between speciality and age of child. In elective surgery the trust performed better than average for paediatric medical oncology and paediatric clinical haematology with trust readmission rates of 2.4 and 1.1 for children between 1 and 18 years old, compared with national averages of 2.5 and 1.5 respectively. However, during the same period the trust readmission rate in Paediatric general surgery was 1.1 against an average of 0.6 for 1 to 18 year olds, and paediatric urology for patients under 1 year were 4.1 against an average of 1.1.
- Non elective re admission rates showed similar inconsistencies with some areas outperforming national averages and others underperforming.
- Paediatric cardiac survival rates were good, demonstrating that the trust was in the top five of thirteen participating trusts. (National Congenital Heart Disease Audit 2012-15)
- Renal transplantation survival rates were good; records supplied by the trust demonstrated that survival rates post 2009 were 98%.
- Outcome data for transplants is separated into donor type which enables comparison of short and long term outcomes for patients who have received organs from different sources. Transplant donor types are; Donor after Brain Dead (DBD) Donor after Circulatory Death (DCD) and Live Donor (LD).
- Between 1 April 2015 and 31 March 2016 a total of 11 Kidney only transplants had been completed at the hospital, of which 5 were DBD and 6 were LD. Of these 20% of the DBD and 17% of the LD transplants were completed pre-emptively. That is to say the transplants were completed before the patient had required dialysis whilst they were relatively well.
- Survival rates for patients are assessed at 1 and 5 year intervals. For the 2016 report one year survival rates were calculated based on patients receiving transplants between 1 April 2011 and 31 March 2015, and five year

rates included patients who had received transplants between 1 April 2007 and 31 March 2011. In both cases survival rates for Birmingham Children's Hospital were 100%. National figures for the same period were 100% and 97% respectively.

- Liver Transplant report (The NHS Blood and Transplant Annual Report 2016) showed that between 1 April 2015 and 31 March 2016 28 Liver transplants were completed at the hospital. This represented almost half of all Paediatric Liver transplants completed in the country during the reporting period. The other two centres completing 22 and 13 procedures during the period.
- Survival rates at one year were 95.4% based on 72 patients between 1 April 2011 and 31 March 2015, and five year survival rates were 94% for the period 1 April 2007 to 31 March 2011 demonstrating an improvement.
- Survival rates for Super-Urgent which had an average wait of 3 days was 80% after one year and 78.9% after 5yrs. Of the 28 Birmingham patients 25(89%) were elective operations whilst 3(11%) had been classified as Super-Urgent.
- Intestinal Transplant report (The NHS Blood and Transplant Annual Report 2016) showed that two patients had undergone this procedure at Birmingham Children's Hospital one included Liver and Intestine, whilst the other was intestine only. During the last ten years the hospital has completed 54 such operations, half of which were on children under 5years.
- Survival rates were below the England average for 90 days, 1year and five years at 91.7%, 83.3% and 54.4% respectively. National figures were 100%, 92.9% and 84.4%.

Competent staff

• Staff received annual appraisals and benefitted from attendance at comprehensive handover sessions where staff discussed clinical issues and outcomes in an open learning environment. Staff told us that appraisal process was effective and linked to the trust vision and values. They confirmed the process included professional development, the enhancement of clinical skills and encouragement to attend courses. We reviewed the surgical appraisal audits for three wards, which was 100% against a trust target of 85% between April 2015 and January 2016. This confirmed to us an effective appraisal system.

- Staff told us that weekly teaching sessions took place on the wards in conjunction with the link nurses and some wards had identified clinical educators who took lead roles in supporting staff and ensuring new or temporary staff received appropriate support.
- Staff told us, through effective ward supervision, incidents of poor staff performance were very rare but, when they did occur, they were well managed and proactive in raising care standards. Staff told us they could raise issues and discuss them individually or as a team. They told us they felt listened to.
- Clinical and educational supervisors supported junior medical staff. They attended audit presentation meetings, clinical updates and morbidity and mortality meetings in their protected time.
- Staff were encouraged to revalidate with their professional body. Revalidation ensures that staff retained their skills in line with changes and improvements in clinical practice. A system was in place for checking professional registration was renewed and up-to-date.
- The trust website displayed the work carried out by the consultant surgeons.
- We did see areas of training which had not met trust targets. For example only 60% of theatre staff had completed training or received updated training in basic life support; this was against a trust target of 95%. Moving and handling training had also failed to meet the trust target.

Multidisciplinary working

- Multidisciplinary working was evident throughout the surgical services at the hospital. Assessments of patient needs was an on-going process throughout their stay with therapy services, dieticians, and consultation between medical and nursing teams of different disciplines to provide an holistic package of care for each patient.
- Many of the surgical treatments provided by the trust were of a complex nature and pathways of care included multidisciplinary working as an integral part of the treatment plan. This ensured that patients on those pathways received support at appropriate times during their treatment.
- Referral between specialities was not always as effective as it could be. For example, one family member we spoke with described how they requested an ENT (ear, nose and throat) review for their child while in the

hospital. It took five weeks for the review to be completed. We also heard how conflict between specialities had caused issues for a patient's pain relief. However, these were isolated incidents and the majority of patients and families we spoke with told us they had received exemplary service during their stay.

Seven-day services

- The hospital inpatient wards operated a 365 day per year service, medical cover was available at all times with consultants on call for advice, guidance or attendance when required.
- Ward rounds operated seven days per week in all surgical wards.
- Theatres operated a seven-day service and staffed between 8.30am and midnight each day. Emergency call out continued after midnight, with staff who had worked the previous evening covering the call-out rota.

Access to information

- Policies, guidance and general information were available to all medical and nursing staff on the trust intranet site.
- Computer systems were password protected and each member of staff had their own login details.
- Staff kept patient medical notes securely when not in use. The nursing notes remained at the patient's bedside.
- Staff told us that at most times of the day they were able to access computer terminals, although at busy times they found it difficult to find a free terminal. When we asked staff to demonstrate how they would find information, they were able to login and locate the information without any problems.
- Staff shared medical alerts and general information about the trust via on-line newsletters, and emails. We also saw how learning from incidents and minutes of team meetings were displayed on staff room notice boards.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- We observed staff reminding patients and their parents or guardians of the treatment procedure taking place and asking them to sign consent forms, or to confirm verbally the details of previously provided consent.
- Signed consent forms were present in the patient records we reviewed.

- Families of patients we spoke with understood why staff asked to consent on behalf of their child. They told us that staff provided them with information and answered their questions or concerns as fully as was possible, in order to assist them in making their decisions. In addition, patients and parents told us that staff supported them and had not felt rushed or pressured into making a particular decision.
- Staff we spoke with had a good knowledge of Mental Capacity Act (MCA) 2005 and there was availability of MCA patient advice leaflets on the wards. Staff also told us they follow Gillick competency and Fraser guidelines when making decisions about contraception advice or treatment to patients under the age of 16.

Are surgery services caring?



We rated caring as good because:

- Staff were professional and a calm ward atmosphere was present on the wards and in the theatres.
- Patients, family members and relatives we spoke with told us that staff treated them respectfully.
- Relatives told us that staff gave them the opportunity to talk about the care and they felt involved.
- Staff were courteous, polite and friendly when interacting with patients and families.
- Staff on duty showed positive interactions between the team, patients and their relatives and visitors to the wards.
- Feedback from patients who used the friends and family test (FFT) questionnaire were positive about the way staff treated them during their care and treatment.
 Family members also told us that staff provided good treatment to patients.
- Staff treated patients and relatives in a compassionate and thoughtful way. Patients also discussed that staff gave them time to discuss any concerns or worries.
- Alternative accommodation called Ronald Macdonald House was also available to parents in the surrounding hospital area. The trust and a KIDS charity provided this accommodation service.

Compassionate care

- Satisfaction rates were high with almost all responses being extremely likely or likely to recommend services.
 Family members echoed this sentiment when we spoke with them.
- There was a lower response rate than the England average for FFT. Overall, response scores were lower for this trust than for other specialist children's hospitals. The FFT individual ward scores were available for each ward manager to review on a monthly basis that reviewed any negative feedback information as a way of developing a better service. The trust did not display the results for the patients and public to see. Between April 2015 and January 2016, surgery wards received 2,800 responses representing 19.5% of patients.
- Response rates across the different specialities and wards varied considerably. Day case patients who used ward 17 recorded only an 11% response rate while Ward 10 received 110% indicating that multiple responses was received from some families.
- We observed how staff interacted with patients and their families and we saw many positive interactions between staff on duty, with patients and their relatives and visitors to the wards. For example, a staff member was showing positive interaction with a patient by pushing her whilst she was on her toy bike, smiling, chatting and enjoying the experience with the child.
- The parent of one child described how the child's condition required visits to their local acute hospital in addition to visits to Birmingham Children's Hospital. They told us staff at BCH had been far better at communicating with their young child. They told us how it could take four or five staff to take a blood sample at their local hospital, while BCH staff were able to take it with one doctor.
- There was a professional, calm ward atmosphere on all the wards and in the theatres. Patients and family members we spoke with told us that staff treated them respectfully and their dignity maintained. Relatives told us they felt staff communicated effectively they were given time to talk about the care and felt involved.
 One family told us that the staff were "fantastic."; However, they also stated an area that required improvement where on occasions staff conducted ward rounds they appeared to speak across them rather than with them. Whilst speaking with the family a student nurse approached. We asked them about ward rounds and the fact that the family felt they were not involved. The student nurse applogised and said she would pass

the message on. This showed junior staff also understood how to support families and wanted to ensure that their experience in the hospital was as caring as it could be.

• We did not hear patients using call bells. Patients told us that they had bells but staff were so attentive that they rarely needed to use them.

Patient understanding and involvement

- Patients or their families told us they felt well looked after and fully informed about their plan of care. They told us they saw senior staff and doctors throughout the day and during that time, they were able to talk with them and discuss any issues.
- We listened as nursing and medical staff spoke with a variety of young people ranging from very young children of three and four years old through to teenagers. Staff were able to adjust their manner and the level of the conversation to match the intellectual level of the patient.
- Staff referred to patients by their first names or by nicknames. Patients of all ages seemed happy when approached by staff who met patients with big smiles.
- We saw how doctors or staff who were less familiar to the patients introduced themselves and explained their role when they approached them.

Emotional support

- A Consultant or a senior doctor provided bad news to families or patients. Clinical nurse specialists supported patients within some surgical specialities.
- The mental health team was available to support patients when required.
- Patients and relatives told us that they had been dealt with compassionately and in a thoughtful way, being offered time to talk and discuss their worries and concerns.



We rated responsive as good because:

• Staff tailored services to meet the needs of individual patients.

- Whilst same sex accommodation was not a requirement in children's wards, staff understood the needs of older children and young adults and ensured the protection of patient's privacy and dignity.
- There were excellent facilities for parents to stay with their children, including close ties with charitable organisations that provided comprehensive temporary accommodation near to the hospital for families who had travelled from out of the area.
- The surgical directorate managed bed availability to ensure the service admitted patients as required.
- The percentage of operations cancelled had been consistently below the children's trusts average. Cancelled elective operations to accommodate emergencies were controlled and planned which affected only low risk and low priority patients.
- MDT staff discussed and supported patients with complex needs during surgical handovers. The trust had a policy for dealing with complex needs patients and offered translation services.

Service planning and delivery to meet the needs of local people

- Birmingham Children's Hospital is one of four UK specialist paediatric centres. Surgical services are available to paediatric patients from across the country. Some specialities attract national and international patients.
- Children's services do not have the same restrictions as adult services with regard to single sex accommodation. However, all the wards we visited had informal procedures for protecting patient's privacy and dignity. Staff explained how they discussed accommodation arrangements with parents and patients on the ward. We saw examples of consideration given to place older children or teenagers with children of the same sex.
- All wards had facilities for parents to stay with young children. The trust also worked closely with charities and staff accommodated parents in the nearby Ronald Macdonald House. Families who had travelled long distances told us how being able to stay with or nearby their child had reduced the stress and worry for both themselves and their child.

- Kitchen facilities were also available on the wards to enable family members to make drinks and snacks while at the hospital. This gave family members the opportunity to relax with their relatives or simply take a break from the emotion of being on the wards.
- Staff planned cancellations of theatre lists if emergency cases prevented all the elective operations taking place. Staff compiled low risk and low priority patients who would not be adversely affected by a cancelled operation. This meant that staff could make instant decisions, which would prevent delays to urgent operations. Systems were in place, which meant that if a low priority patient suffered two cancellations, staff increased the priority so that they did not receive further cancelations.
- Theatres were available throughout the day and night to cater for patients whose condition deteriorated or for emergency cases. Theatre staff were on site until midnight each day and a call out system operated after midnight, whereby managers could recall staff to work if required.

Access and flow

- The number of operations between specialities in June 2015 and May 2016 was 62,945.
- There was a 12% decrease in the number of cancelled operations in the last 12 month period (quarter 4 2014/ 15 to quarter 3 2015/16) compared to the previous 12 months (quarter 4 2013/14 to quarter 3 2014/15).
- The percentage of operations cancelled between quarter 2 (2015/16) was 1.2%, and was better than the children's trusts average of 10.23%. Furthermore, quarter 3 (2015/16) was 0.0%, and was below the children's trusts average of 7.24%. There were no urgent operations cancelled between February 2015 and January 2016.
- Between quarter 4 (2014/15) and quarter 3 (2015/16) there were six operations that staff cancelled and not rebooked within 28 days. This equated to 1.6% of all cancelled operations.
- The service registered 19,535 day case admissions between June 2015 and May 2016.
- The surgical directorate's average length of stay between June 2015 and March 2016 were 4.6 days and 109.4 hours. Staff recorded it as being better than the England average for elective surgery and non-elective surgery.

- The trust wide theatre utilisation for BCH for November 2015 was 72%, December 2015 was 68% and January 2016 was 73%.
- Staff provided a good range of options in line with best practice who admitted patients to the wards from the emergency department, surgical assessment unit, their GP or directly from home.
- Staff described a good working relationship with patients GP's during patients discharge arrangements.
- Bed occupancy rates for surgical wards between January 2016 and July 2016 was 92.4%.
- We saw that staff cared for inpatients in areas appropriate to their condition and needs. Patients with comorbidities were the subject of multi-disciplinary team meetings, where staff developed care plans that included all aspects of their care.
- Systems were in place, which meant that if staff cancelled low priority patients due to emergencies, this could not occur on more than two occasions making the patient a priority.
- Neuroradiology, neurosurgery and neurology joint meetings took place to formulate plans for difficult cases and 'Hot Clinics' and 'rapid access clinics' were provided for urgent referrals and ante-natal counselling.
- Established pre-admission clinics for neurology patients reduced the need for patients to be admitted the day before surgery and reduced the cancelation at short notice of operations.

Meeting people's individual needs

- Staff adhered to a policy for dealing with patients with complex needs titled 'Guidelines for management of surgery for children with diabetes.' We observed a surgical handover where staff discussed complex need patients and used previous case studies of complex patients as a treatment guide when dealing with new complex patients.
- A transport service was available in the burns unit for patients who struggled to get to their appointments.
- Staff were able to describe how to respond to learning disability (LD) patients. There were two specialist learning disability nurses available in the trust to report to when seeking advice and guidance. A patient's parents gave an example of outstanding personalised care.
- We saw a poster titled 'What happens to you, matters to us' displayed on the notice board which actioned patients concerns. For example, patients said

occasionally they were unsure which nurse was caring for your baby on each shift. The trust responded to this concern by introducing new bedside notice boards, which we observed next to four beds within the surgery directorate.

- The trust had access to translation services via their own trust translator service, which used a telephone line and its own staff. Staff told us that the largest ethnic minority group at the trust was Asian Urdu and Punjabi. However, staff told us that leaflets were not routinely available in other languages but they were able to print it off when needed.
- Individual wards had responded to patients needs by providing a variety of storage boxes for toys and games, this enabled patients to have familiar items with them whilst in hospital, but ensured that toys could be stored safely when not being used. Parents and visitors were also encouraged to take items home if new toys were brought in which helped reduce clutter.
- Some wards had specific rooms, which the trust designated for older children and young adults to enjoy a more age appropriate environment, or to meet with visitors away from smaller children.

Learning from complaints and concerns

- There were 29 complaints made about surgery between 1 January 2015 and February 2016. Communication was the most frequently mentioned complaint category. In addition other complaints included, delay or failure in treatment or procedure and not being listened.
- Staff displayed posters on notice boards across all surgery departments explaining how to make a complaint.
- Staff discussed complaints at monthly governance meetings and shared them with team members at their local team meetings. We saw minutes of these meetings and staff confirmed lessons learned from complaints were shared by senior staff from emails.
- Staff across all surgery directorates could explain the processes involved in the complaints system by knowing when to escalate the complaints system to senior managers.
- The Patient and Advice Liaison Service (PALS) advertised their availability on the wards. Patients could contact from the local office, telephone calls, emails or their online contact form.

Are surgery services well-led?

We rated well led as good because:

• The surgical directorate we inspected had a clear vision and strategy. Staff were clear on how they discussed with their managers the vision and values of the trust in their appraisals.

Good

- The governance systems within the different surgical directorates were effective in delivering a robust service to patients.
- Staff were confident about the governance system and policies and procedures were in place to support them within their roles.
- Staff understood the hospital's strategic plan and were positive about the proposed merger with a neighbouring trust whose services complimented their own.
- Staff described a positive leadership culture and felt supported by their managers who were visible in the departments and provided an open door policy (encourage staff to be open and transparent).
- There were examples of innovative practices; staff described the 'Intent Day', which gave opportunities for staff to be involved in different themes such as creating their own values. In addition, an 'app tree wall' (a picture of a tree) displayed comments from children, parents and families feedback for the service.

Vision and strategy for this service

- Staff understood the vision and strategy for the trust. They understood how the appraisal system related to the vision and values and their individual appraisal supported the overall goals of the trust.
- Surgical staff described the trusts yearly 'Intent Day', which involved a big tent for one day with different themes such as producing their own values.

Governance, risk management and quality measurement

- Policies and procedures supported staff in their role. Information was accessible which enabled staff to increase their knowledge and skills.
- Staff did not just only engage with national audits, but also used it as a tool to improve services.

- Staff identified and reviewed incidents and trends. Managers shared information by giving effective feedback to staff through posting updates on staffroom notice boards.
- Managers told us the governance team review the never events and the World Health Organisation (WHO).
 However, managers also felt that the trust could have benefitted from sharing of information from neighbouring trusts rather than spending too much time developing their own WHO checklist.
- Staff entered some risks on the risk registers as far 2013 and although staff made initial updates, the items remained as risks. For example, staff identified the lack of occupational therapy within the rheumatology as a risk in September 2013. The entry shows that staff recruited a new member of the team in January 2014. The risk still appeared on the register in May 2016 even though it would appear to have been resolved. Furthermore, staff did not update to explain why the risk still existed if it had not been resolved.
- A further example on the Transplant & GI risk register referred to a dispute over funding Hepatology sources. Staff made the entry in 2011 and the team took until 2014 to update it as resolved.
- In addition, when we reviewed the risk register, it did not have 'never events' as a risk on their risk register.
- Some staff were reluctant to follow the WHO checklist. Staff did not observe safety stops, which could be indicative of a noncompliance towards the WHO checklist, which could lead to never events occurring and re-occurring. The definition of never events states all 'serious incidents that are wholly preventable as guidance or safety recommendations that provide strong systemic protective barriers are available at a national level and should have been implemented by all healthcare providers.'

Leadership of service

- We met with a number of clinical leads for the different surgical specialities and local managers. There was a culture of providing the best service for children at BCH, which we saw in practice through our observations in wards and theatres.
- Staff told us that managers supported them within their roles. Managers understood their staff, and were aware of their strengths, weaknesses and supported them to improve

• Staff were complementary at all levels about executive level managers whom they said were visible, approachable, appeared interested in, and understood their departments and the work they did.

Culture within the service

- Staff described a 'lovely place' to work for in the surgical directorate at BCH. Staff described a positive morale of friendly staff that provided good communication, reassurance and made a difference to children's lives. The inspection team also felt this positive morale when in wards and theatres.
- In addition, staff described the surgical directorate as having good collaborative team working across the wards and staff described patient care at the heart of what they do.

Public engagement and Staff engagement

- Patients and visitors were encouraged to express their views on the NHS choices website or leave feedback cards.
- Managers gave staff feedback from the FFT during weekly staff meetings. Managers also displayed the FFT information on staff notice board addressing the problems raised by patients and what measures they put in place to address them.
- Staff felt listened to and supported by senior managers when making suggestions for improvements and changes for the service.
- The trust's performance in the FFT varied compared to the England average with a monthly recommend rate of between 87.2% and 98.7% between May-15 and Jan-16 compared to an England average of 94.9%. Over this period, the trust's average recommend rate was 93.8% compared to children's trust average of 89.3%.

Innovation, improvement and sustainability

- Surgical staff were proud of receiving an award from the trust for being the 'best nurses' working for Birmingham Children's Hospital.
- Within the cardiac department, we saw innovative practice in the breastfeeding room, where they had a device that massaged mothers, played music and released aromatherapy fragrance.
- Staff from the inpatient burns unit described a poster titled the 'Burn Awareness Day' displayed for patients and staff to view on the wards. It involved a national safety awareness week, which happened yearly within the trust describing the three Cs (Cool the burn, Call for help and Cover) aimed at the safety of patients.
- The trust utilised a mobile theatre and a ward to reduce the demand on the main theatres. The trust used the theatre to increase patient flow for day case patients. This allowed staff to admit, operate on and discharge patients within a few hours. The trust had processes to admit patients to the main unit if they became ill and if staff could not discharge patients.
- Across the surgery directorate, we saw an 'app tree wall.' This was innovative as it showed a diagram of a tree with apples, which collected feedback in an innovative way by having feedback comments next to each apple. There were also tablet devices available across the departments for patients to use and give feedback on.
- Staff understood the hospital's strategic plan and were positive about the proposed merger of the hospital with a neighbouring trust whose services complemented their own.
| Safe | Outstanding | |
|------------|-------------|------------|
| Effective | Outstanding | \Diamond |
| Caring | Outstanding | \Diamond |
| Responsive | Outstanding | \Diamond |
| Well-led | Outstanding | \Diamond |
| Overall | Outstanding | ☆ |

Information about the service

Please note when we refer to Paediatric intensive care unit (PICU) we are describing to Critical care for children and young people.

The Birmingham Children's Hospital (BCH) Paediatric Intensive Care Unit (PICU) is the largest unit of its kind in the UK. The PICU at BCH is the lead centre for the West Midlands region and covers 35 specialities, including the care of conditions including respiratory, cardiac, liver, surgery, spinal, orthopaedics, metabolic, endocrine, neurology and neurosurgery.

The PICU is also the major trauma centre for the West Midlands region and is a commissioned extracorporeal membrane oxygenation (ECMO) provider (the ECMO machine provides lifesaving heart and lung technology to patients).

The Paediatric Intensive Care Unit (PICU) has 31 beds which can be a bed, paediatric cot or neonatal cot.

Children requiring intensive care receive one to one nursing care whilst those receiving high dependency care are cared for on a ratio of two patients to one nurse. The demand for the service saw the PICU have the highest admissions in England during 2014-15 with 1,352 patients. The trust had consistently admitted 120 patients each month between April 2013 and March 2016.

Children were admitted from the emergency department, through KIDS (kids intensive care decision and support

service) as well as local and tertiary referrals. Once stabilised they are transported to PICU, post operatively from theatre and from ward areas when a higher level of critical care is required.

The Family Liaison Team (FLT), included registered nurses, counsellors and play specialists, and had access to interpreters, social workers and psychological support to meet individual needs.

Critical care research and education involved all staff including housekeepers to consultants to support all the team in developments.

The hands free communications system 'Vocera' gives immediate additional communication support for staff across a large PICU area.

The children's acute transport service KIDS is a children's acute transport and advice service specialising in the management of critically ill children requiring intensive care in the Midlands region. KIDS co-ordinates the transport of sick children between intensive care units across the region. This service is responsible for coordinating all West Midland referrals for PICU and serves the 20 district general hospitals in Staffordshire, Shropshire, Birmingham, West Midlands, Coventry, Warwickshire, Herefordshire and Worcestershire.

KIDS is a West Midlands regional service which has been running for seven years. It serves the PICUs at this hospital and University Hospitals of North Midlands NHS Trust and is located at and hosted by BCH. KIDS has been operational for five years and is run by this provider although it is and is hosted by the trust but the service is located off site. KIDS is a skilled paediatric intensive care team available 24 hours a

day, seven days a week to assist in the treatment of critically ill children, both before and during transfer to intensive care. KIDS complies with the Paediatric Intensive Care Society Standards (2010) – Care of the Critically Ill Child - Retrieval and Transfer of the most critically ill.

When a referral is made through the centralised number a PICU transport consultant contacts the referring team to obtain the full history of the patient within 10 minutes. If a PICU is required the coordination team arrange a suitable bed and transport. The coordination centre continuously monitors local intensive care capacity.

During 2014/15 KIDS transferred 627 of the 1364 children referred. 342 children and babies were moved by other teams and the remainder were not moved as care could be continued in the referring unit. The majority of children were brought to BCH and 53 were moved out of region either for uplift in care or capacity reasons.

The High Dependency Unit (HDU) consists of two side rooms and a four bedded bay area.

As part of the inspection we spoke with 18 parents and 59 members of staff including, nurses, doctors, consultants, managers and support staff. Care and treatment was reviewed as well as 25 patient care records and 10 patient medication prescription records to support our decision on ratings.

Summary of findings

Safety was rated as outstanding because:

- The Paediatric Intensive Care Unit (PICU) and high dependency unit (HDU) had clear, effective systems and processes in place within this service to promote safe and effective holistic care.
- Staff understood their roles, responsibilities and was proud of how the service had developed, including participating in local, national and international safety programmes.
- Learning was based on thorough analysis and an investigation into when things went wrong and when things went well.

Effectiveness was rated as outstanding because:

- The policies seen were based on National Institute for Health and Care Excellence (NICE) and other relevant guidelines.
- Staff participated in a wide range of clinical audits and were involved in research.
- Care bundles and individualised care pathways were embedded in practice.
- Patient outcomes were monitored and presented in the annual paediatric intensive care report, which included the international benchmark.
- Staff received a structured induction with agreed development objectives, which were monitored with clear competencies developed by the education team within this service.
- There was a holistic approach to assessing, planning and delivery of care delivered by the multidisciplinary team across this service.

Caring was rated as outstanding because:

- The high dependency unit (HDU), Paediatric Intensive care Unit (PICU), supporting services including the post-acute care enablement (PACE) team and the transport team staff all demonstrated that they were fully committed to delivering high quality, individualised patient-centred care.
- Children and their families were treated with compassion, dignity and respect. Parents stated they were positive about the care received by their children and felt involved and informed.

Responsive was rated as outstanding because:

- The flow of children through PICU was managed effectively to avoid delays with discharges and manage capacity with the increased demands on this service. Safety huddles were held three times a day with extra huddles as demand necessitated.
- The individual needs of the children were met with the use of individualised patient photographic folders with clear instructions relating to their individual position preferences.
- Any delays with discharge were escalated at the earliest opportunity and the capacity managed with support from the hospital operational clinical site team.
- Parents and families were supported during and after discharge from this service.

Well-led was rated as outstanding because:

- This clinical service group had a vision and strategy for development of the service. All staff spoken to confirmed they were part of 'team BCH' and all staff knew the local vision.
- Staff were able to raise concerns and were supported.
- Leadership was visible and there was a keen sense of teamwork and a positive culture.
- Research and implementation of findings was very strong with communication sheets contained within each patient family folder.
- The staff worked well in engaging with the children and their families and external groups to seek feedback and support for the service.

Are critical care services safe?

Outstanding

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Safety in critical care services was rated as outstanding because:

- The Paediatric Intensive Care Unit (PICU) and high dependency unit (HDU) had effective systems and processes in place to protect children from harm, these included reporting and learning from incidents, multidisciplinary safety meetings, reflective meetings and sharing good practice across the service.
- All staff were genuinely open and transparent and fully committed to the children and families in their care.
- Staff understood their roles and responsibilities in relation to safeguarding children and how they worked with other agencies to promote the child's best interest.
- Nurse staffing levels were above the recommendations found in the national guidance for PICU and staff had access to a range of internal and external training, simulation scenarios and e-learning opportunities. The electronic health roster for staff supported staffing levels met PICU requirements.
- The paediatric early warning score system (PEWS) had been implemented and the situation, background, action and result (SBAR) communication tool was used to identify record and report signs of deterioration in children with clear communication across the multi-disciplinary team.
- Learning was based on thorough analysis and an investigation into when things went wrong and when things went well. All staff we spoke with were proud of how the service had developed, including participating in local, national and international safety programmes.
- An escalation process was seen for managing deteriorating children and young people which involved the multidisciplinary team, hospital at night team and the KIDS service. Research trials had commenced including one which predicted via a wireless system when the child's condition might deteriorate so team intervention was available at the earliest opportunity.
- This service included lessons from the Berwick report (a review into patient safety that made eight key recommendations for improvements), with the implementation of the BCH new safety strategy for 2014-17. This is a pro-active approach to safety with a

recognition of the need to engage in human factors training and ensure systems were robust and regularly reviewed. The trust had signed up to the government led 'sign up to safety campaign.'

Incidents

- All staff spoken to told us they used an electronic incident reporting system which had been recently reviewed by the trust to make it more efficient and user friendly. Staff gave examples of when they had reported incidents and the outcome actions completed had led to improvements within the service. For example, this included "IRIS" meetings when teams shared learning from excellence using a methodology known as appreciative inquiry when the simulated practice of patient transfers and challenging scenarios improved the team's performance.
- One hundred and fifteen incidents were reported for September 2015 for the critical care clinical service group with 89 causing no harm, 20 low harm, five moderate harm no severe and one death. Between March 2015 and February 2016 924 incidents were submitted with 292 incidents with harm. There were clear responses in the development and learning from incidents; for example, medication errors seen on the risk register which were also mentioned in the ward newsletter to increase staff awareness.
- The KIDS annual report for 2014/15 stated the team had reported a high volume of incidents despite the small size of KIDS, as the threshold was low. The highest number of incidents relate to equipment, communication and clinical care. Each incident was analysed and discussed with KIDS and reported that most incidents caused no harm to patients. On average 10 incidents were reported per month in 2015.
- Following incident investigations, findings and learning were cascaded to all staff through various methods including the safety case book which was published by the safety team. They also presented cases and articles to help share the learning from serious incidents and events to all staff. The purpose of this publication and education was to reduce the risk of similar events happening in the future and to keep children and young people safe.
- All patients referred to the unit were reviewed at a daily morning ward meeting. Monthly incident reporting data was given to the directorate management team, for scrutiny of patterns or significant incidents. Any cases

requiring a higher level of scrutiny are taken to the PICU Governance team and appropriately actioned. We saw evidence of learning and where change was implemented in staff newsletters. The two serious incident reports for 2015-2016 were shared with the team.

- Parents stated they knew about the patient advocacy liaison service (PALS) even though no leaflets were seen on HDU but there was a poster visible on the ward.
- Minutes from the team meetings included a discussion about incidents and lessons learned for sharing across all staff.
- A Non-Executive Director (NED) attends most Root Cause Analysis meetings which are undertaken for every serious incident investigation.
- Use of patient feedback mobile application data provided by the trust for October to January (when) showed they had 73 responses, 58 of which were positive although some of the negative feedback included a request for more chairs at the bedside in PICU which was addressed by the service but to still maintain a safe and accessible environment extra chairs were not provided.
- In May 2015 there was an increase in the number of medication incidents reported (six compared to an average of two over the twelve month period). Managers informed us this could have been related to the introduction of the new electronic reporting system with all staff trained and becoming familiar with the new system.
- Ninety-five per cent of incidents resulted in low or no harm. The most commonly reported incident category was medication incidents (a total of 21, 18% of all incidents). There was one incident that resulted in death which was investigated and four staff who were spoken with were aware. There was three dedicated pharmacists who supported the staff development and have reduced medication errors.
- Eighty-five percent of incidents were reported to the National Reporting and Learning System (NRLS) within 30 days of the incident and 97% were reported within 60 days.
- There had been one incident reported more than 60 days after the incident in July 2015 due to the complexities of the involvement of different specialities and cross site involvement.

- This service's mortality and morbidity meetings were held monthly and the meeting held during this inspection was attended by the specialist advisors who observed multidisciplinary attendance, improvements from meetings and appropriate changes implemented.
- All staff spoken with confirmed their awareness of duty of candour and felt all members of the team were open with parents and patients. Staff confirmed their understanding of their responsibility in relation to duty of candour. 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 to provide reasonable support to that person. Examples of when they would instigate duty of candour were discussed and one example is included in the medicines section. We saw logged incidents where duty of candour was identified on the electronic reporting system.
- The staff on PICU were able to tell us about the Real-time Adaptive & Predictive Indicator of Deterioration research project. This project was implemented to monitor vital signs continuously and there afford a more accurate benchmark of normal vital signs for the child. This then enabled staff to monitor deterioration more accurately.

Safety thermometer

- The NHS safety thermometer is a national initiative and local improvement tool for measuring, monitoring and analysing harm free care. This allows service providers to determine harm free care indicators but also records the number of harm specifically associated with PICU.
- We saw the children's safety thermometer results which had good results that were completed monthly, updated and displayed at the entrance to PICU and HDU. The proportion of children who received harm free care was consistent between March 2015 and February 2016 at 90%.
- The service used the paediatric safety thermometer with 273 mean average responses completed between March 2015 and Feb 2016. The early warning score completed, triggered but not escalated achieved a mean of 2.9%, extravasation(fluid into the tissues) 0.78%, pain 5.15%, pressure ulcers 0.5% and moisture lesions(skin damage due to fluid) 1.4% which all show above average scores.
- A safety huddle (a safety briefing meeting) is held three times throughout the day to review patients and the

PICU patient flow. An additional safety huddle was held at 4.30pm during the inspection as patient demand was greater than capacity which was attended by the Medical Director who was on call that evening. This was outstanding practice and team involvement and promoted safety.

Cleanliness, infection control and hygiene

- The unit was visibly clean with staff responsible for cleaning equipment and areas and audits of cleaning were completed and sent to the central infection prevention and control team. We saw daily checks had been completed for equipment cleaned by housekeeping staff and cleaning records were fully completed and up to date.
- The trust wide infection control policy included guidance on which children and young people should be isolated and was accessible to all staff.
- The consultant microbiologist undertook a daily ward round on the Critical Care Unit.
- The infection prevention and control team were available between the hours of 8am-5pm, six days a week with an on-call director of infection prevention and control available on Sundays and over bank holidays. There was a link nurse for PICU and HDU from the trust wide corporate infection control team who confirmed she had a good working relationship with staff from this service." This service was the role model for others".
- The annual infection prevention and control audit report was seen and demonstrated compliance with 95% of admissions screening for Methicillin Resistant Staphylococcus Aureus (MRSA) in between September 2015 and March 2016
- Staff training for hand hygiene (HH) and aseptic non-touch technique was included as part of mandatory training. Monthly hand hygiene results showed 96% compliance across this service between September 2015 and March 2016.
- Monthly audits completed for high impact interventions (part of the 'Saving Lives Infection Control Programme' to reduce healthcare acquired infections) between September 2015 and March 2016 gave results for peripheral venous catheter lines at 95%, ventilation care 91%, urinary catheters 93% and isolation 100%.
- Infection control audits were displayed on ward based boards at the ward entrance and showed a 98% compliance rate.

- Staff observed across the service were compliant with hand hygiene and complied with bare below the elbow in line with trust uniform policy. A sink was available at the entrance to PICU and HDU with hand decontamination gels were situated at the end of every bed.
- Parent's feedback regarding the ward cleanliness and staff compliance with infection control confirmed staff maintained hand hygiene and the ward areas were clean.
- Infection prevention and control training compliance was 92% for all staff against the trust target of 95%.
- No healthcare acquired methicillin resistant streptococcus aureus (MRSA) or Clostridium difficile had been confirmed during 2015.
- A PICU healthcare acquired infection presentation was held in April 2016 with a multidisciplinary presence 24 surgical site infections were reviewed between July 2013 and March 2016.
- We observed compliance with key trust policies including isolation during the week of inspection with clear signage and allocated staff conforming to policy.
- The infection control team released an audio children's book to promote hand hygiene and reduce infections, which was reviewed by the inspection team.

Environment and equipment

- The PICU area was secure and could only be accessed by intercom. An administration receptionist was based at the outer door and a ward clerk station was positioned across the second secured entrance into the PICU patient area.
- This service had a well-resourced and effectively managed dedicated area for equipment store, with on-line manuals, teaching packages, and repair and maintenance plans which supported all staff to address any problems. All equipment was checked and cleaned daily. All equipment seen in use had blue safety test compliance stickers.
- The trust's asset management system showed 1,500 pieces of equipment for PICU and the maintenance team confirmed that 80% of equipment was checked with a clear programme for the remaining equipment checks. At a focus group meeting we were informed engineers found it difficult to maintain all the

equipment. PICU received donations for equipment which meant that storage space was limited. Staff confirmed that they had plenty of equipment to support their work.

- Resuscitation equipment was checked daily and records showed this had been completed.
- There were well documented plans for PICU beds to increase from 29 beds to 33 by September 2016 to meet this demand in flow as confirmed by senior staff.

Medicines

- The trust wide medication policy was seen and had recently been reviewed. Staff were aware of the medication policy and could access it via the trust intranet and the latest copy was kept in the ward folder.
- Staff had access to the patient electronic calculation of medications which produces the exact dosage required for the child supported by the weight of the child.
- The three designated pharmacists attended PICU ward rounds and reviewed patient prescription charts and total parental nutrition (TPN) requirements. TPN is a fat and fluid replacement programme which is given intravenously.
- Ten patient prescription charts were examined and showed that medications were legible and given in time and appropriately.
- Drug fridges were all locked and temperatures were monitored and recorded daily with clear actions recorded when temperatures were outside of the normal limits with actions displayed on the fridge door for all staff to view.
- Locked medication cupboards were checked and medicines stored appropriately.
- Controlled drugs (CD) were stored and checked in accordance with CD Regulations. The CD keys had its own 'Vocera' so staff could request the keys without leaving the patient bedside. The 'Vocera' contact system is similar to a tracking contact device.
- The observed process on PICU during the inspection found that a second nurse was present to check the patient's details and prescription when checking controlled drugs and intravenous medications.
- Registered staff were assessed and supported for mathematics and drug calculation tests. There was support from the education team if an individual requires extra skills.

• A medication safety audit was implemented to improve staff awareness reported medication errors across the trust. This tool gives an accurate reporting system using the first electronic prescribing and medicines administration system for paediatrics.

Records

- Electronic records were not being introduced imminently but the paper patient care records reviewed were completed and accurate, timely and dated.
- Dieticians supporting this service kept separate records, which is not good practice and not easily accessible to nursing staff. An inaccurate length and weight record was found in the Dietician notes following a cross check against the nursing documentation. The dietician confirmed her record of length and weight had been plotted incorrectly. The nursing team re-measured the length and weight of the child immediately so the Dietician could confirm the correct measurements and senior staff were informed. The Dietician wrote the agreed care plans into the children's main folders.
- Patient records were kept at the end of each patient bed area and each patient folder contained nursing and medical assessments and records with additional holistic pages outlining preferred care, sleep positions, play activities and tastes. This is not an information governance risk as each child had one nurse to care for them and staff were covered when taking meal breaks.
- Of the 25 patient records seen, all were individualised, clear and completed in a timely manner. However, some signatures were difficult to read.
- Staff had access to information via the trust intranet such as the latest policies and procedures.

Safeguarding

- The trust safeguarding policy was accessible and staff showed us how they could access it. The policy was reviewed and was within date.
- Safeguarding training updates completed by staff at level 1were 100%, level 2 100% and level 3 94.5% with electronic training records seen for the allocated dates for the remaining staff. The trust target was 95%.
- Staff described the process they used for reporting all safeguarding concerns. Safeguarding literature and contact details for staff was by the nursing station on HDU.

- The PICU had a Lead Nurse for safeguarding and we saw clear pathways for staff to follow to make a safeguarding referral.
- Long term children (in hospital more than 3 months) were allocated a small team of staff to care for them who worked with the multidisciplinary team including the child's local authority. This was outstanding and we saw strong relationship bonds between the staff and the children in their care. In addition continuity of care developed and staff described individual staff preferences.
- Staff employed at the trust had disclosure and barring service (DBS) checks prior to employment

Mandatory training

- Mandatory training included conflict resolution, counter fraud, equality, dignity and diversity, fire safety, health and safety and clinical risk, infection prevention and control, information governance, moving and handling theory, basic life support, and medicines management.
- Staff were informed of what mandatory training was required through the electronic roster records system.
- The trust mandatory training target (core modules and role essential only) was 95%.
- The overall training rate for all modules across the PICU staff groups achieved 91.4% compliance and we saw a clear plan to meet the trust target.

Assessing and responding to patient risk

- Use of the paediatric early warning scores were seen for all 25 children reviewed
- Observations were recorded electronically through ventilation and monitoring equipment and were all supported by hard copy recordings taken hourly with access for staff.
- Patient observations were recorded every hour and reviewed using the paediatric early warning score (PEWS). PICU staff responded well to RAPID response team and resuscitation calls which staff supported across the trust and identified team members rotated to cover this responsibility.
- Staff handovers were comprehensive and included family details including the sibling's "All about me" books.

- The situation, background, assessment and recommendation tool (SBAR) helps staff anticipate the information needed by colleagues and encourages assessment skills, and these SBAR communication pads were seen to be used by staff across this service.
- Telephone contact details for services and advice were offered following discharge or for frequent attenders e.g. respiratory patients.
- Staff said they used the FLACC (face, legs, activity, cry and consolability) pain tool and the use of this was observed on HDU. A member of staff was observed assessing a child's pain using the tool for a sedated child; we reviewed the completion of the nursing documentation in relation to the assessment which was all completed.
- In addition, pain was listed on the unit white board as a flagged issue. Staff knew they must always remember to ask children or parents about pain. This was because of discussions in the regular team meetings that the team felt they could do better following patient experience feedback.
- This board was in clear view of parents. We also observed that the pain tool had been completed and filed in all of the six sets of notes that we reviewed relating to children that had been discharged.
- Clinical risk assessments were completed and dealt with appropriately and in a timely manner, for example admission height/length and weight. Admission weights were recorded with additional repeat weights recorded daily or every three days dependant on length of stay, diagnosis and the age of the child.
- The hospital operations centre team (HOC) demonstrated that the current live technology data used, allowed them to know the activity within PICU which was then discussed at each site meeting. We attended two site meetings during this inspection and saw a senior member of PICU in attendance with the head of nursing.
- Medical handovers we attended had a detailed individual patient approach centred around their diagnosis with immediate care actions identified. We were informed that this handover is consistent during out of hours cover (including weekend and nights).
- The staff on PICU were able to tell us about the Real-time Adaptive & Predictive Indicator of Deterioration research project. This project was

implemented to monitor vital signs continuously and there afford a more accurate benchmark of normal vital signs for the child. This then enabled staff to monitor deterioration more accurately.

Nursing staffing

- One to one nursing was seen throughout PICU and evidence submitted showed the planned number of registered nurses for each shift was 33 with 28.6 whole time equivalent (WTE) registered nurses in December 2015, which we were informed was increased to 31.5WTE for 2016.
- Staff skill mix and acuity tool had been reviewed in line with Paediatric Intensive Care Society Standards (2010) and safer staffing figures were submitted monthly.
- The actual versus establishment staffing numbers were displayed across this service throughout the week of inspection and all staffing numbers met the requirements and were confirmed on review of the electronic staff roster for two months prior to and following inspection. One night shift had one more registered staff than requested as one staff was allocated a supernumerary shift.
- Staffing skills were identified on the "From big to small: changing workforce" practices information sheet which divided staff into nine skill mix zones per team, for example novice, expert and competent. Staff skills were seen on the electronic health roster with no training gaps identified.
- Agency staff had not been used over the past few years and if additional staff was required bank staff would be used. There was a substantial number of the bank staff registered at the hospital. (Therefore induction processes and mandatory training was completed for this staff group.)
- All staff rotated between days and nights and different parts of the PICU and teams within. This meant that staff had an increased awareness and ability to cover any area where required.
- Shift patterns co-ordinated through the health roster system identified staff skills and shift allocation to promote appropriate work life balance in line with the European Working Directives.
- The electronic health roster was reviewed for 12 weeks and demonstrated an appropriate skill mix and staffing levels for the service during this period.

Medical staffing

- The service had twenty-four hours a day, seven days a week intensivist consultant cover.
- Data for December 2015 showed that there were 17WTE Consultants and 24.1 junior doctors or advanced nurse practitioners who were on the same rota.
- Doctors we spoke to told us that medical cover met the needs of the service and we saw the cover meeting the requirements of the service, with three consultants on during the day and two at night.
- The night cover was orientated around the hospital at night team and included the consultant on call
- The transport service established in 2011 consisted of a consultant and PICU ANP and sister to provide a seamless link between the intensive care unit and high dependency units.
- There are three medical handovers in twenty-four hours with anaesthetists present.
- Middle grade doctors and consultants had completed the advanced paediatric life support (APLS) or update
- There was no need for locum cover for this service as the consultant to junior doctor ratio was 1:2 as the medical cover met the requirements of the department.

Major incident awareness and training

- Major incident plans were found in every individuals nursing record folder with a separate sheet for parents and family members which is an exceptional practice.
- The ambulance transport service had their own plan which incorporated staff actions to support critical care areas in the case of a major incident.
- When asked about the resilience policy staff understood their responsibilities and were involved in a table top exercise completed in May 2016 with the next live practice organised for September 2016.



Effectiveness in critical care services was rated as outstanding because:

• The policies seen were based on National Institute for Health and Care Excellence (NICE) and other relevant guidelines. They were regularly reviewed and updated to ensure they reflected any changes in practice.

- Staff participated in a wide range of clinical audits and were involved in research including acute paediatric traumatic brain injury, serial creatinine clearances in PICU, immune-monitoring after paediatric liver transplantation, preventing infection using antimicrobial impregnated long lines, treatment for status epilepticus in children, infant kidney dialysis and real time adaptive and predictive indicator of deterioration a wireless system.
- Care bundles and individualised care pathways were embedded in practice and seen within all patient folders, for example the care of a long term admission.
- Patient outcomes were monitored and presented in the annual paediatric intensive care report which includes the international benchmark now being developed by eight PICUs including this trust, Ireland, South Africa and Canada. This was presented on the PICU collaborative dashboard.
- The paediatric intensive care audit network (PICANET) collects information on all children who are admitted to PICU. Staff collected data which helps to find the best ways to treat and care for children who are in intensive care so care can be better planned for and provided in future. Parents are asked if they want to be excluded from this audit and were given contact details to discuss further.
- The last published PICANET annual report was in November 2015. This national database compares performance with other paediatric intensive care units and this PICU had achieved above the average targets against other PICUs for nursing and medical staff whole time equivalent per beds.
- Staff received a structured induction with agreed development objectives which were monitored with clear competencies developed by the education team within this service. Staff were proactively supported to acquire new skills and share best practice. Staff had access to a range of internal and external training, simulation scenarios and e-learning opportunities.
- There was a holistic approach to assessing, planning and delivery of care delivered by the multidisciplinary team across this service.
- Services were provided 24 hours, seven days a week to meet the needs of children and families. There were systems to manage and share real time information not only with the parents and patients but also with teams and other services.

Evidence-based care and treatment

- Policies and care bundles used in critical care are based on National Institute for Health and Care Excellence (NICE) and other professional guidelines. They are reviewed in line with practice changes or learning from excellence or following root cause analysis investigation.
- The process to review policies regularly was overseen by the governance team with the policy review group ratifying update reviews.
- Staff meetings were held monthly for education and training and the PICU Lead Nurse for education informed us of the bespoke training, critical care programme offered in addition to mandatory training.
- Both consultants and nurses have had published articles in paediatric journals with seven articles accessible on the hospital intranet page from one Intensivist Consultant.
- Staff adherence to local policies and procedures was supported by staff meetings, clinical education and training.
- There was an annual audit plan that included a wide range of audit activity. An example seen was the PICU HCAI meeting minutes for April 2016 which included high impact intervention audits with case studies containing clear learning points in line with NICE guidelines. Surgical site surveillance confirmed there was 1% healthcare acquired infections a year.

Pain relief

- All patients had a pain score tool which was assessed frequently. A sedated ventilated child was assessed using the PEWS score in relation to pain and documentation supported this practice.
- The unit had access to the trust specialist pain team which included nurse specialists and anaesthetists. They worked closely with ward staff to make sure children were as comfortable as possible. There was a patient controlled analgesia and nurse controlled analgesia guidance booklet produced in October 2009 available on the trust intranet.
- Implementation of the Faculty of Pain Medicine's Core Standards for Pain Management (2015) was evident and all children had the pain face scoring tools.
- One of the Clinical Nurse specialists was an identified link for this service and monthly meetings were held with individual daily patient reviews as identified.

• Children's pain was assessed and managed in conjunction with the multidisciplinary team.

Equipment

• The Patient-Led Assessments of the Care Environment (PLACE) report 2015 Health and Social Care Information Centre confirmed that the trust was better than England average for three out of four areas. These areas were cleanliness, privacy, dignity and wellbeing and condition, appearance and maintenance.

Nutrition and hydration

- An incident report confirmed there were two weight charts used in PICU, the WHO growth chart and the in house weight chart. The in house weight chart reviewed had an age range on the front page with a first column stating admission weight which gave more detail than the WHO growth chart. Recommendations from the incident review had been completed and staff had discussed actions at the multidisciplinary meeting to ensure future compliance.
- The recommendations state that prevention of a similar incident in the future can be achieved by trust wide implementation of NICE Guidance 'NG29-Intravenous fluid therapy in children and young people in hospital' (Published Dec 2015). This guidance details weight and electrolyte monitoring requirements, to prevent a reoccurrence of the incident and implementation of this guidance was seen.
- There was a paediatric dietician who undertook daily ward rounds who identified any potential issues with nutrition and ensured they were addressed.
- Children were weighed on admission and their weights were reviewed daily. There were scales to weigh the child without moving them out of bed.
- Daily records were kept of intravenous infusions, parental nutrition and the child's fluid balance, with 24 hour totals completed in all records reviewed. This allowed staff to monitor the child's nutrition and hydration input and output.
- The trust currently had an up to date 'Breastfeeding and Expressing Breast Milk Policy' and 'Protocol for handling, storing and modifying expressed breast milk' policy review date 2017. Policy and protocol are accessible on the trust intranet; copies are also within ward resource binders.

Patient outcomes

- The unit participated in local and national audits such as the government led 'Sign up to Safety campaign' that aims to make the NHS the safest healthcare system in the world. Included in that campaign was the medication safety audit.
- The PICANET information displayed showed the intended outcomes for children receiving intensive care were achieved.
- PICU participation and performance in national audit was confirmed and included the developing international benchmarking of PICUs across eight countries. The service benchmarked in line or above other countries and this presentation was taken to the Paediatric Intensive Care Conference in Toronto June 2016. The trust presented clinical audit and research outcomes across a range of topics including: Early unplanned readmission to paediatric intensive care unit, An "Examination of Nursing Requirements for PICU patients" and the "Application of Cohorting to free up Nursing Staff Resource and Accuracy of Cerebral Function Monitoring (CFM) for Seizure Detection in Paediatric Intensive Care (PICU)". There was a total of 10 topics presented demonstrating how the outcomes of the projects were used to improve quality of care in PICU.
- In the trust children's survey 2015 all the questions received the same response as other trusts, which looked at the care of the child and family whilst receiving care.
- PICANet data showed that there were unplanned admissions within 48 hours of discharge from this service. All unplanned emergency readmissions within 48-hours are reviewed routinely in the monthly PICU morbidity and mortality meeting.
- All such admissions are analysed for 'predictable' and/ or 'preventable' factors and lessons learnt if such modifiable risk factors were identified. There were 68 re-admissions during the last two years (an average of 2.8 readmissions <48h per month; which is approximately 2.3% of all admissions per month. The latest data available showed an England average of 1.8%.
- Of these, only four readmission episodes had predictable and potentially preventable factors identified. All were related to insufficient PICU capacity. No harm came to these patients because they were

being cared for outside PICU, by PICU trained staff who closely managed them with the PICU medical team. Readmission to PICU was facilitated once a PICU bed became available.

- Despite having the highest number of PICU admissions in the country and a consistently high occupancy ratio, the unplanned emergency readmission rate is within expected national levels (Ref: PICANet annual report 2014/15, figure 46c).
- The trust also observed that in five patients (seven episodes between these five patients) with life-limiting conditions, emergency PICU
 "readmission-within-48-hour" episodes were related to lack of consensus between families and medical team to re-orientate these patients towards palliative care. PEWS (paediatric early warning scores) in these five cases were not indicative of timing of readmission.
- The PICANet report 2014/15 is the most recent data available showed there were 285 unplanned admissions from other units. This accounted for 31.6% of all unplanned admissions to PICU.
- Recently introduced measures such as PICU consultant ward rounds in the 'high dependency areas' as part of the high dependency unit (HDU) initiative is expected to further reduce unplanned readmission rates.
- The proportion of out of hours discharges remains low and is in keeping with other England PICs.
- In 2015-16, PICU delivered 11,242 augmented care periods (ACP) against a target of 10,998 which was 549 ACPs more than the previous year (5% growth). This provided an average of 29 beds per day.
- The mortality ratios are in line with expected levels based on PICANET calculations for a unit of this size. The mortality rate was 6% for 2015, which equates to seven children each month. There were 77 deaths in 13/14, 87 in 14/15 and 73 this year to date (87 by end of year).
- Across the paediatric intensive care audit network this PICU had the most admissions to paediatric intensive care unit in 2014 with 1,352 with around 120 admissions each month consistently since April 2013, which is higher than normal and other units of this size.

Competent staff

• Staff employed across this service had completed the post registration qualification in critical care nursing and neonatal care with more than 50% of staff achieving this qualification.

- Staff confirmed that development opportunities were available and funded by the trust; an example given was a registered nurse who had started the neonatal intensive course.
- Whilst senior staff did twice weekly clinical shifts the manager and daily co-ordinator were supernumerary to support the development of skills. The PICU education team supported staff development and spoke about the bespoke neonatal programme that was currently under review to become an in house training opportunity away from the constraints of the academic terms.
- Managers have achieved the critical care course, and spoke of additional support gained from the trust relating to leadership development as well as further academic modules.
- A nurse from another trust's university group was working with the PICU team to increase their skills of working within PICU to then take those new skills back to their own trust. They spoke highly of the staff support they had received.
- Links with local universities included staff attending courses, facilitating or supporting modules, for example the critical care programme.
- Birmingham Woman's Hospital and KIDS had developed a working relationship through the neonatal transport team.
- The medical and nursing staff we spoke with stated they had participated in an annual appraisal. The Trust target was 85% April 2015-January 2016.
- The 16 staff we asked about leadership on PICU and HDU were able to tell us about the annual appraisal system. All staff had their personal development review this year and they were able to show us the reminder system posted on the staff board and advised that they were emailed with documentation in advance with a reminder of the date and time. The appraisal data submitted showed that the paediatric retrieval services team, medical and high dependency unit staff were 100% compliant. PICU health care assistants were 95% and PICU registered nursing staff 95% and admin and clerical staff were 87%. There was a plan to complete the staff who still required appraisals. Medical and nursing staff were offered revalidation support and all staff were compliant.

- A team of PICU staff rotated into the education team within PICU and maintained staff competencies and development with internal and external programmes and e-learning opportunities.
- Staff shared the nursing quality folders for each member of staff. The folders were sectioned into training types, performance and development review PDR records, certificates and feedback. It was very clear to see each person's development pathway.
- Staff had access to a range of internal and external training, simulation scenarios and e-learning opportunities.
- Succession planning was discussed during the inspection and we saw development programmes for staff and opportunities where staff worked in a supernumerary or shadowing capacity.
- Leadership development programmes were evidenced on staff electronic records and staff spoke proudly of the trust wide leadership support.
- Training records were seen for the advanced paediatric and neonatal life support training a rolling programme for staff development.
- The education team within PICU are now reviewing the university modules for the neonatal programme so that an in house training programme can be delivered to meet the needs of the service away from the restrictions of the academic year.
- The consultants we spoke with said that they provided and support for clinical supervision was and revalidation. There was a mentorship and preceptorship programme provided by the education team.
- Two student nurses on placement in PICU confirmed that they were supernumerary and well supported. Newly qualified staff were also supernumerary and supported by the PICU educational team in completing their required competencies.

Multidisciplinary working

- All staff stated that multidisciplinary working in this service was effective and staff were able to engage confidentially with each other which was witnessed on the daily ward round which was attended by a pharmacist, physiotherapist, dietician, breast feeding support worker, microbiologist and psychologist.
- The KIDS team members spoken to described a MDT approach to patient care and transport. We saw this approach working effectively when as child was handed over by the KIDS team during the inspection.

- We saw daily patient care reviews on across this service and that staff worked together to assess and plan on-going care and treatment.
- All children moved from PICU to HDU were supported and closely monitored by members of the medical team and hospital clinical site team.
- Handovers involved all the multidisciplinary team with a comprehensive handover sheet that was printed off and signed and dated by the receiving staff member in line with information governance practices.
- Members of the MDT attended conference meetings to discuss the child and the requirements from different members of the team.

Seven-day services

- The intensive care team and hospital clinical site team are part of the hospital at night service and hold responsibility for the children in this service twenty-four hours a day, seven days a week.
- The KIDS team are part of the hospital on call system and responsible for the children requiring transport twenty-four hours a day, seven days a week.
- There was twenty-four hours a day, seven days a week consultant cover with medical staff supported by advanced nurse practitioners who covered the medical rota.
- Availability for the out of hours service cover for physiotherapists, dieticians, emergency diagnostics and pharmacists were available seven days a week including on call service.

Access to information

- Patient records were available and staff reported that there were no delays or problems in accessing patient information.
- We saw information required to deliver effective care and treatment was available to all relevant staff but established that the electronic records system was not imminent.
- There was a secure environment within this service which meant that no confidentiality and security concerns were observed.
- We observed several transfers when children were moved between teams and other hospital services; all information needed for their on-going care was shared timely and appropriately.

Consent and Mental Capacity Act (include Deprivation of Liberty Safeguards if appropriate)

- All staff were aware of the trust's consent procedures, including Gillick competency among children.
- A child (anyone under 16 years old) can consent to treatment as long as they have enough understanding and intelligence to fully appreciate what is involved in their treatment. This is known as being "Gillick competent". Additional consent by a person with parental responsibility is not required.
- Parents told us staff always explained what treatment they were planning to give to their child and gained consent.
- If a parent did not have capacity to consent staff explained who they contacted in the social work department who then made arrangements for the parents to be supported and for the child to receive the appropriate care.

Are critical care services caring?

Outstanding

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Caring was rated as outstanding on the critical care units because:

- Feedback we received from children and their families was overwhelmingly positive. They told us and we saw that they were treated with compassion, dignity and respect.
- The high dependency unit (HDU),the Paediatric Intensive care Unit (PICU) and supporting services including the post-acute care enablement (PACE) team and the transport team staff all demonstrated that they were fully committed to delivering high quality individualised patient centred care.
- Parents felt involved and informed with children telling us of examples when staff communicated with them using innovative interactions. Which we also observed on the units. The children and their parents were able to ask questions and were provided with emotional support from a range of professionals, which enabled them to fully understand their treatment plans.
- Acting on feedback from young people and families, an alternative to the traditional backless hospital gown was

designed for the trust which preserves the child's dignity when wearing the dignity giving suit. The design was also suitable for cardiac patients with fasteners adapted for post-operative care and was used across this service.

Compassionate care

- Children observed during our inspection were being treated with compassion, dignity, and respect. We saw an example of staff seeing the person as a whole and adapting to their methods to meet the child's needs. We saw the Diabetes Nurse Specialist used play to describe something she was discussing with the child. The child chose the play activity and we clearly saw the caring way in which the nurse used this to get her message across so the child could clearly understand her.
- We also observed the delivery of personal care for a child who had a lowered level of consciousness on the high dependency unit. This demonstrated that the child's dignity was maintained and personal items were used to help normalise the experience. The curtains were drawn throughout and the nurses spoke to the child in a soothing and caring manner. The staff did not draw back the curtains until the child's personal care was fully completed. It was clear to see that the child had his own pyjamas on, his own throw over his covers, hair combed, and a clean and tidy bed with a de-cluttered surrounding bed area.
- We spoke with 18 parents who all confirmed that nurses were caring, calm, compassionate and sensitive with positive interactions observed between staff and children and young people across the services.
- Nurses and doctors were carrying out personal care, observations, examinations and ward rounds, all of which were carried out in a very caring manner. We were told by one parent they thought the care was, "remarkable" and went on to describe that the photograph her child had on his ward information pack (passport) was updated when her child had their nasogastric tube removed and how this had made her feel so much better. Another parent stated that the Lead Nurse for PICU was "amazing." as she noticed every child in detail.
- The caring nature of the team was valued by staff members. We spoke with 11doctors who stated that they felt the ward nursing staff were very caring and spoke highly of their approach to caring for the children.

- Thank you cards received from parents, for the PACE team from 1 January 2016 to May 2016. The results were all positive.
- The Friends and Family test results for critical care for the period October 2015 to January 2016 had 53 positive responses with very detailed comments highlighting the compassionate, high quality care received by the children. There were five neutral comments relating to communication and quality of care and five negative comments with only brief details. For example, not enough chairs for visitors and the chairs were not comfortable enough.
- Results of patient feedback for the KIDS transport team for April 2015 to April 2016 were all positive. One example stated the parent felt their child had been "well cared for." There were no complaints. Also dignity giving suits were developed and supplied as a result of feedback received from children and young people regarding how they felt they could not maintain their dignity in the traditional open gowns.

Understanding and involvement of patients and those close to them

- We saw that parents and children were active partners in their care.
- Six sets of parents spoken to about communication stated staff kept them informed and updated. The morning ward round on HDU we observed was attended by three sets of parents. The consultant leading the ward round spoke with all the parents present explaining next steps in treatment and encouraged questions. The follow up interaction between two sets of parents and the named nurse presented comprehensive detail of treatment and discharge arrangements were also discussed.
- There was evidence within 25 sets of patient records of discussions with parents which were documented.
- The parent information booklet for this service was reviewed. In HDU this was situated on the counter of the nurses' station, and contained very detailed general hospital information, such as café opening times, phone numbers, types of services; and specific critical care information, such as ward round frequency and visiting times.
- The three sets of parents on HDU had been involved in the care planning, medication and nutrition of their child. They were able to speak at length about the plans and felt fully informed and involved.

Emotional support

- The service had access to clinical nurse specialists and clinical psychologists, recently employing a staff support practitioner. Data gathered from a staff survey March 2015-January 2016, indicated that staff support represented 14% of band 5 staff, 12% of band 6 staff, 11% of band 7, 57% of administrative/clerical staff, 28% band 3 and 14% band 4 clinical staff. The top three primary reasons for seeking help were anxiety at work due to expectations, stress from personal life, and conflict with colleagues at work. Following this support 16% of staff left to work for another trust and 68% staff remain working on PICU.
- Schwartz rounds (a reflective session) had not yet been introduced but staff described a similar reflective process that had been completed following a difficult period on PICU.
- There was a clinical psychology service available for children, parents, and staff if required, in addition to a chaplaincy service that operated twenty-four hours, seven-days a week with an on-call rota.
- We observed the chapel in use by two parents and were shown the multi faith prayer room and Muslim prayer room by the Chaplain. The Chaplain told us he visited every ward and unit and described his support for children who were facing death. The chaplain gave an example of a young child in PICU who had recently passed away and his involvement with the child's parents.
- We observed the weekly schedule of services in the chapel across a range of faiths. This schedule was easily available at the entrance, and was clearly written.
- Staff on PICU advised us that a member of their team provided a lullaby service around the hospital; staff from other wards corroborated this.
- The Family Liaison Nurse told us there was a team comprised of two registered nurses and four nursery nurses. The team leader told us the team supported families with arrangement of accommodation, supply of food vouchers, sibling support, and the design of memory books.

Are critical care services responsive?

Outstanding

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Responsive was rated as outstanding on the critical care units because:

- The flow of children through PICU was managed effectively to avoid delays with discharges and manage capacity with the increased demands on this service. Safety huddles were held three times a day with extra huddles as demand necessitated.
- The individual needs of the children were met with the use of individualised patient photographic folders with clear instructions relating to their individual position preferences.
- An additional PICU individualised play passport outlined activities that would help the child's development and those preferred by the child such as getting messy, people singing or talking to them.
- Readmission rates within the expected national normal range. (Ref: PICANET annual report 2014-5 figure 46c).
- Any delays with discharge were escalated at the earliest opportunity and the capacity managed with support from the hospital operational clinical site team.
- Parents and families were supported during and after discharge from this service.
- Parents had access to a 21% discount from the restaurant after 3 days and drinks were available within the family room. Additional accommodation was available in the Ronald McDonald's building and a family room based within the PICU on the first floor.

Service planning and delivery to meet the needs of local people

- The unit provided intensive care to children from all areas of England and served the population of Birmingham and West Midlands.
- The trust had a service user strategy to inform service planning involved parents and children from the PICU. The PICU and HDU facilities were extended and designed to ensure they met the service requirements.
- The service used bank staff from their own nursing staff establishment when staff absence, sickness or increased capacity required additional staff this was viewed on the e-roster system for the past twelve weeks. There was no requirement to use agency staff.

- The PICU had a family room with parent facilities which included tea and coffee, fridges to store snacks and a microwave. Within the family room there was a sibling's play room and support was delivered by the family liaison team who provided evidence of how they supported bereaved family members including the sibling support group. There was also an expressing (breast milk) room with pumps available for mothers.
- We saw parents had a ward based competency book to complete prior to discharge home to ensure they were confident in their skills in providing the care required by their child.
- The figures from the last NHS Information Centre Infant Feeding Survey published in November 2012 showed the initial breastfeeding rates in the UK were 81% in 2010. This included all babies who were put to the breast at all, even if this was on one occasion only, and also includes giving expressed breast milk. The prevalence of breastfeeding fell from 81% at birth to 69% at one week, and to 55% at six weeks. At six months, just over a third of mothers (34%) were still breastfeeding.
- Breast feeding data of 87% for June 2015 and March 2016 demonstrated that national breastfeeding rates were exceeded. There was evidence that the trust had not registered their intent, held a certificate of commitment or received an accreditation with the United Nations International Children's Emergency Fund (UNICEF) Baby Friendly award.
- To support breastfeeding all mothers that are expressing or breast feeding are issued a 'Sodexo resident parent privilege pass' on the first day of their infant's admission. The pass entitled mothers to discounted food and drinks in the hospital's main restaurant and coffee shop. In addition to the privilege pass, all mothers with a child less than one year of age are offered free healthy start vitamins in accordance with Birmingham's Vitamin D campaign. Ward Managers are encouraged to make discretionary decisions on individual circumstances whether to provide mothers with free hospital meals.
- Feedback from patients and food choice was positive in HDU where there were protected mealtimes.
- Senior staff told us about the 'Baby Buddy Application' which was introduced as a free mobile phone application for parental support with personalised content approved by doctors and midwives in the first days of caring for a baby once home from hospital.

- Training facilitators consist of trust multidisciplinary staff. Members included a staff nurse (PAU), junior sister (PICU), Speech and Language Therapist, Senior Dietetics, as well as collaborative working with external specialist practitioners from West Midlands Maternity and New-born Network. The morning hospital operations centre (HOC) urgent and critical care handover was attended; discussion centred on safety, capacity, staffing and flow.
- The electronic bed data systems and the safer staffing tool were visible, so that all information was readily available for the meeting. 16 staff members were present including the service manager, heads of, deputy heads of, co-ordinators and the Pharmacist. A report from each clinical area was given and a red, amber or green rating developed for each area. Following this, actions were discussed to address any areas of concern. At the meeting it was noted that capacity was an issue with bed availability predicators for the end of the day. The end of day meeting showed a bed capacity improvement and that a pro-active approach had met the needs of the service.
- The results of completed analysis for the last year using the patient flow monitoring tool showed that staff under predicted discharges each day as there was an average of 15 more actual discharges which helped with flow and capability to admit to the units.

Meeting people's individual needs

- All children admitted to PICU had an individualised photographic treatment care plan developed by the multidisciplinary team including the support services to ensure best positions promote patient wellbeing.
- Staff dealing with patients with complex needs spoke of supportive services used and resources available such as contacting a family support network who finds a family with a child of a similar age with the same complexities.
- Staff were able to access interpreters either in person or via telephone. Skype or Facetime was available for families that were separated.
- Translation services were available and during the inspection a software digital flag system was introduced to the main reception desk which gave parents information about the ward in 15 different languages identified as those languages of the most frequently admitted patients and families.

- Staff confirmed they were aware of learning disabilities and additional resources available for those children. The trust had an identified a learning disabilities specialist nurse across the trust.
- KIDS confirmed that parents could travel in the ambulance or helicopter.
- Parents with a child admitted to this service were provided with a snack box, personal hygiene pack, toothpaste, water, shampoo and conditioner. The family liaison service showed us the additional resources available through "Sponsor a star" fund raising. This included an adolescent pampering trolley which contained eye masks, hairdryers, straighteners and curling tongs.
- The facilities for mums to express their milk included a private room with additional screening with expressing breast milk pumps. Breast feeding mums received a voucher for food in the restaurant with a 21% discount.
- A visitor's waiting room was available within the PICU area and outside of the HDU area.
- There was a parent's room with a separate quiet area for privacy and bad news.
- The hospital chaplaincy team were based near the PICU. There were facilities for a bereavement room away from the main PICU area to allow parents to stay with a deceased child on the ward.
- The hospital website had a range of information about critical care for parents, children and staff which was available in a variety of formats including written, visual, and audio and included a virtual tour guide.
- Psychological referrals were completed by the follow up of patients and families through the PICU family liaison team. The family liaison team distributed family and friends questionnaires upon discharge which highlighted areas of improvement and positive experiences.
- Play therapists had implemented a diversional therapy programme for children across this service and we saw distraction techniques used whilst children received treatment.
- Pull out beds at the bed space for each bed or cot were seen on HDU and there was accommodation in PICU for parents (allocated to those parents who needed to be as close as possible to their child). There was also accommodation at the hospital's Ronald McDonald House which is a purpose built accommodation facility. As well as providing 66 bedrooms, the house offers families the opportunity to cook and eat together and

share their experiences. The house also offers a lounge, kitchen and play area for families visiting the hospital for the day. The named nurse and consultant information was displayed above each child's cot or bed alongside a large wall mounted information board about the unit, restaurant, and complaints department. It was a large glass fronted board and the information was clear and easy to read.

- Family rooms observed were available for parents with children in both units. There were kitchen areas for making beverages and snack food, and there was a massage chair and a shower. We also observed there were large information posters available in the rooms; for example, the trust's 'We are Listening' poster which invites feedback from parents and involvement in their child's care.
- The yearly calendar was displayed at the entrance to the chapel showing multi-faith religious celebrations which were recognised by appropriate celebratory events.
- The Chaplain advised us where a particular staff member went the extra mile to support a set of parents. He described that the parents of a very sick child in PICU had a wedding anniversary and because the child was so poorly, they could not leave the hospital. One of the nurses arranged for a celebrity chef to prepare and bring the meal to a specially set up table for an anniversary dinner on the hospital site.
- Feedback from a mother from PICU stated that the "Parent Facilities and accommodation Expressing facilities were good."
- We saw mothers entering the dedicated privacy of an expressing room which was a small but functional area with screening, breast pumps and sterilising equipment.
- There was a parent's kitchen area within the family day room away from the ward area, with a separate quiet room used for difficult conversations.
- The hospital multi-faith room was situated opposite the PICU area.
- There was a dedicated playroom for siblings and schoolroom.
- The Ronald Macdonald house was available for families to stay to be near their child and booked through the family liaison team situated within PICU.

Access and flow

• The bed management policy provided guidance to the senior multiple disciplinary team supported by the hospital operations centre (HOC) which is responsible

for managing bed capacity. During the inspection, two operational site meetings were attended and PICU capacity and patient flow were discussed with the multidisciplinary team in attendance.

- All admissions seen by the PICU consultant at admission with KIDS transfers being brought in by the KIDS PICU consultant.
- The bed occupancy was 92% for January 2015-March 2016 which was higher than the England average and above average for children's trusts. There was a strategy in place to increase bed numbers to 33 by September 2016 confirmed by senior staff. This meant that the service was working to capacity and therefore management plans had been developed to support growth within the critical care services.
- In the previous 12 months, 68 % of admissions were unplanned to the PICU. This is higher than other critical care units.
- Documents supplied by the trust demonstrated that cancellations took place due to capacity. Over a twelve month period the unit had to redirect 79 patients to other intensive care units. There were 152 cancelled non-emergency operations in the same time period. (June 2015- May 2016)
- Patient flow was discussed at the three times a day HOC meeting as well as safety huddles on PICU. Additional safety huddles and or HOC meetings were held to meet the demands of the service across the seven-days a week.
- All admissions were discussed with the consultant in charge and senior nursing coordinator.
- There were 31 critical care beds for 316,000 head of population to meet the needs of the local population.
- There was a high rate of cancellation for elective cardiac surgery across the year due to lack of available PIC capacity. There were 488 cardiac surgical procedures in 2014-5 and 501 in 2015-16. The trust had four protected beds for short stay surgery in an attempt to reduce cancellations further. Evidence submitted included 83 cases (17%) cancelled on the day or day after admission for non-clinical reasons; for example, prioritising of more serious cases.
- We were informed that there were no out of hours discharge delays for non-clinical reasons, however the data provided by the trust showed that there were two cases in the last twelve months.

- We found a number of elective surgery was cancelled due to lack of critical care beds and the trust has confirmed 17% of cases were cancelled on the day or day after admissions, due to more serious cases prioritised.
- Skin integrity was assessed and monitored with the use of the 'gingerbread man figure' (outline of a figure included in the documentation) and the Tissue Viability team supported practice. We saw two hourly patient turns completed to reduce the breakdown of skin integrity.

Learning from complaints and concerns

- There was a complaints policy and procedure in place with 11 complaints received between January 2015 and February 2016. The attitude of nursing and medical staff was the most frequently mentioned complaint category.
- The total complaints for each department were KIDS received two and PICU received 10.
- One complaint was duplicated as referenced to both PICU and KIDS.
- Only one of the complaints had a resolved date. This complaint took 228 days to resolve which was excessive due to the complexities of the involvement of different specialities across different hospital sites.
- Parents and patients used an electronic application supported by the trust which prompted a live complaint and immediate responses were completed from the hospital operations centre out of hours.
- Parents were invited to a weekly critical care meeting to promote openness and communication.
- PALS (patient advice and liaison service) reported receiving three complaints or concerns from PICU in the last quarter. Changes in practice included offering a snack box to parents during transfers and phone chargers to allow parents to access partners or immediate relatives.
- Parents were encouraged to download the feedback app which gave positive and negative responses on the intranet with a clear response from the appropriate department manager in real time. All comments seen during the inspection praised this service.
- Of the parents spoken to on PICU, only one mother complained and received an apology which related to another area. She praised the PICU staff who she confirmed gave outstanding care and had nothing but praise for the team.

- Staff confirmed that lessons from complaints were identified and shared not just within the clinical service group but across the trust. The only critical comment offered was that sometimes the lessons learned were not delivered in a timely way which resulted from the complaint not being closed until the parents were satisfied with the feedback.
- A process at discharge was observed with a long term patient being introduced to their home carer to enable the patient to build up a relationship before being discharged.

Are critical care services well-led? Outstanding

Well-led was rated as outstanding on the critical care units because:

- This clinical service group had a vision and strategy for development of the service. All staff spoken to confirmed they were part of 'team BCH'. The vision was known by all team members who agreed they were involved in all development opportunities.
- Staff felt supported and were able to raise concerns which were acted upon in a timely manner.
- An effective risk register process was seen and dated actions were completed. Leadership was visible and there was a keen sense of team work and a positive culture. There was a strong sense of involving parents and children in feedback and developing services that met their needs. Staff spoke positively about the Chief Executive and the local leaders within this service.
- Research and implementation of findings was very strong with communication sheets contained within each patient family folder.
- The staff worked well in engaging with the children and their families and external groups to seek feedback and support for the service.

Vision and strategy for this service

• The trust launched its 'Next Generation' programme in 2014 in response to the challenges of an ageing estate, increasing demand, limits to available resources, and a changing workforce. Next generation is a flexible

programme of work, currently incorporating four strands that together enable the trust to respond to this growing need. The programme sets out the vision and strategy up to 2022.

- This details the vision for urgent and critical care, through the 'zoning' of the Steelhouse Lane site and investment in critical care and refurbishment of vacated clinical space. The PICU expansion has already been completed.
- Staff were aware of the programme and the plans for longer-term change, giving the example of the merger with Birmingham Women's' Hospital, which staff supported. Staff spoken with on PICU knew the trust and local vision and were able to express how they wanted to ensure they provided the best for the children and their families.
- Every patient folder in this service contained a list of the overview of current studies; for example acute paediatric traumatic brain injury and serial creatinine (a compound excreted in the urine) clearances in PICU.

Governance, risk management and quality measurement

- We reviewed five sets of minutes of the clinical risk and quality assurance committee and confirmed the attendance of the Clinical Lead for critical care and the Head of Nursing for urgent and critical care. A clear link was evident between this group and the directorate risk group as the top three risks for the directorate were discussed at both meetings.
- The PICU risk reports were escalated and presented at the directorate risk group. Evidence seen from the minutes of the March 2016 directorate risk management group confirmed that the capacity in PICU was reviewed in August 2013 and again in March 2016. This identified a daily monitoring requirement. The risk owner was the Head of Nursing who regularly led on the critical care handover.
- The team leaders for PICU, HDU and the PACE team were able to describe their departmental current risks. They were able to locate the risk register without hesitation alongside three staff nurses who worked on HDU.
- Staff in HDU showed the support plan that outlined the staff structure from the ward manager to the band six nurses then detailed the group of staff that each band

six was responsible for. Staff explained that this was so there was a clear structure for everyone and to assist in building relationships that would aid discussions on difficult topics.

- PICU and HDU staff confirmed that they had regular team meetings. Staff particularly praised the ward manager on HDU who had been appointed in December 2015 regarding the structure of the meetings. They said that they were well informed regarding trust issues. Staff also said there was the opportunity to raise issues that they felt the team needed to develop. These topics for May were clearly displayed on the unit information board.
- We reviewed four sets of team meeting minutes for PICU, two sets for HDU and three newsletters for HDU between January and April 2016. All contained standing agenda items that linked with the trust objectives; for example, they all included an item on infection control with updates from corporate reports, or meetings, critical care board reports, and results from the balanced score card. There were also updates in all of the HDU newsletters regarding the recent changes the trust is making to handover called the 'handover time for change' project.

Leadership of service

- The five staff spoken with on HDU all knew who the Chief Executive, Director of Nursing and Head of Nursing for critical care were and confirmed that they had seen them across the hospital site.
- All staff members spoken to confirmed they thought very highly of the management team across urgent and critical care. They told us that they felt supported and were used to seeing the Clinical Lead and head of urgent and critical care on a frequent basis.
- The PICU director was the medical lead and identified by staff and inspectors as a responsive and effective leader. There is a non-hierarchical structure throughout the unit with junior staff empowered to raise their concerns in a timely manner.
- The five doctors on PICU we spoke with were positive about the care that they gave patients and described they proactively managed problems by holding problem solving sessions between them. They felt this facilitated shared learning and built relationships.

Culture within the service

• The PICU had an open, caring and supportive approach.

- Care was delivered as a team effort and there was effective MDT approach.
- All the staff we spoke with were positive about the care that they gave patients and stated that they had the correct resources.
- We were informed that there were effective relationships between nursing and medical staff.
- Communication was identified as being good across the wider trust. Focus group information that staff told by management only to answer questions in a set manner and refer inspectors to intranet was not founded within this service as staff gave inspectors above and beyond the information requested.
- The Critical Care Unit had an open, caring and supportive approach. Staff gave examples of a positive culture stating there was "no gossip" and a "strong supportive leader on HDU and PICU who staff could approach with any problems openly."
- The care delivered was a team effort and there was an effective MDT approach. Staff also advised inspectors they worked closely across the service and talked enthusiastically about how they cared for each other.
- Both nurses and doctors informed us there were effective relationships between nursing and medical staff.
- Staff on PICU described the consultants as "very approachable". One staff nurse told us they were relatively new and enjoyed the close relationships that had already been built. They went on to say that they had no concerns about speaking to consultants and asking any questions.

Public engagement

- The Annual report 2013-2014 details parent engagement with the Kids Intensive Care and Decision Support team (KIDS). The service had been working hard to engage with parents, who may only be with them for a few hours, to find out about their experience and what improvements could be made.
- Staff informed us how listening to parents tell their story, chatting to them in the ambulance and visiting them on PICU the next day, had really helped the team to get a fresh understanding of what the parents had gone through at such a worrying time. Staff found that simple things would make a big difference at this time,

such as providing phone chargers on-board the ambulance so they can keep in touch with their loved ones, and giving them a 'snack pack' to keep hunger at bay while they were travelling.

- KIDS had also undertaken a large-scale publicity programme to make sure all local hospital teams knew parents were welcome to travel in the KIDS ambulance with their child, so they can reassure parents that they will not be separated from their child. The team also loaned 'satellite-navigation' devices to families who were travelling by car to help them find their child's hospital quickly, with a freepost envelope to post it back to them once they get home. Parental feedback seen included: "It's made a huge difference," "I hadn't eaten for hours and hours, and I am 33 weeks pregnant. The snack pack was most appreciated." "Using the phone charger in the ambulance was great, my phone battery was flat and I was really worried how I would find my husband when we got to the other hospital."
- The critical care teams were active in gaining parents views as seen during this inspection. A number of parent feedback cards were seen and the PACE team had in excess of 50 cards between January 2016 and May 2016.
- All staff spoke about the parent app feedback tool and the quality display boards in the service gave parent and child feedback. The feedback app was displayed on the board in the hospital operations control room and we were told by a Head of Nursing and a co-ordinator that if feedback comes onto the board, they activate a response as soon as possible to rectify any issues immediately.
- Parents were asked their opinions and for feedback. The 'You said we did' was part of the poster at the entrance to the ward.

Staff engagement

- Of the eight staff spoken to specifically about engagement, all eight confirmed that they were actively engaged in the planning and delivery of services .
- All Staff spoken to confirmed that they were aware of, and in many cases had attended, the chief executive 'in-tent' annual event.
- Staff described the CEO as approachable, friendly and she cared about the children using the services.

- An annual award ceremony is held for staff who had won awards. Staff told us about the employee of the month star awards and we saw evidence of this on HDU. HDU had won the 'outstanding clinical team' award in December 2015.
- A number of staff advised us across this service that there was a staff wellbeing service which offers exercise, relaxation and staff counselling. We were advised by the Lead Nurse for PICU that staff sickness had reduced by 1.5% in 2015 which was assisted by the introduction of the staff counsellor.
- The 2015 staff survey had 11 positive results, and six within expectations out of 34 questions. The "from big to small: changing workforce culture" project: one year forward results were seen which supported the work with staff feedback.
- The introduction of the team names after kingdoms had been supported by managers following the introduction of the team makers and team player training which had increased teamwork and had led to outstanding care delivered to children, young people and families.

Innovation, improvement and sustainability

- Staff were involved in numerous research projects relating to urgent and critical care and how they influenced service development. The latest PICU research update May 2016 newsletter was seen across this service. There was a showcase of past, present and future research studies in the conservatory on the final day of inspection.
- Innovative improvements seen included a 'Voicera' activation surveillance system to alert people of an emergency and RAPID working with McLaren analysis of real time data to look at early warning systems.
- In November 2015 the trust was a finalist for the Health Service Journalist 'Trust of the Year' award'.
- KIDS and BCH PICU won a highly commended award at the Building Better Healthcare awards in November 2014 for the Openscape Xpert Telecommunication system used in KIDS operation centre.
- Staff were aware of the PICANET annual report November 2015. The staff confirmed that this annual report is used to inform change in relation to quality and sustainability. An example of this was that capacity within PICU is continually under review and that there

plans to create further capacity with the development of a new long term ventilation ward which would provide six additional beds which would take this pressure away from PICU.

- Staff in KIDS have developed a new system for call handling. The team relies on its 24/7 call centre systems to manage the assessment and triage of patients between KIDS consultants and other specialists, so to make the handling of referrals and unplanned emergency conference calls more efficient and speed up decision-making, the team has launched its teleconferencing and call handling system – Xpert. It is the first of its type in the NHS, and the team are confident it will really improve the service they provide.
- Staff on the PICU told us about the lead consultant for research and the implementation of a new model of learning called 'Learning from excellence in healthcare: a new approach to incident reporting' through appreciative inquiry. This research was published in the British Medical Journal in May 2016. This model involves reporting on positive outcomes from incident management using a form called IR2. A report on the evidence of its increased use over the period April 2015 from 11 forms per month to a peak in March 2016 of 80 forms submitted.
- KIDS team staff had used 'Productive Ward' principles to reduce the time it takes to mobilise their emergency children's transport team, and to increase parent and staff satisfaction. The report "productive KIDS case study" outlined the project which uses lean methodology. Lean is a way of simplifying working approaches.
- When KIDS did not have their own dedicated ambulances, a child would have to wait for an ambulance to arrive and then place the intensive care

stretcher on board before heading off to the referring hospital. However, when they moved to their new premises and were able to have ambulances on-site they decided to perform a three-month productive 'activity' when mobilising the team. The team learned how much time was being lost whilst loading the stretcher onto the ambulance and that there was no reason not to have their vehicle fully prepared (with the intensive care stretcher on board) 24 hours per day.

- The time to get their team 'on the road' fell to 20 minutes within a few days. They then set a new target response time of 15 minutes and have now been averaging 12 to 13 minutes to get the team on the 'road.'"
- BCH was named as the only UK hospital to receive the internationally renowned Excellence in Life Support award from the Extracorporeal Life support organisation (ELSO). This followed an assessment of its life support programme and patient outcomes. This award recognised the work of the hospital's specially trained extracorporeal life support team (ECLS). In addition to the extracorporeal life support (ECLS) programme, the hospital runs an internationally renowned training course which had trained over 100 doctors and nurses across the UK and Europe.
- The staff on PICU were able to tell us about the Real-time Adaptive & Predictive Indicator of Deterioration research project. This project was implemented to monitor vital signs continuously and there afford a more accurate benchmark of normal vital signs for the child. This then enabled staff to monitor deterioration more accurately.
- The infection control team released an audio children's book to promote hand hygiene and reduce infections, which was reviewed by the inspection team.

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

Information about the service

Neonatal services provided at Birmingham Children's hospital NHS Foundation trust, comprised mainly surgical care on the Neonatal Surgical Ward (NSW); however, neonates were cared for anywhere throughout the hospital. NSW was part of the surgical care clinical group however, as neonates were cared for in almost all areas of the hospital, all clinical groups had a care responsibility.

Although the hospital had a unit that they called the Neonatal Surgical Ward, neonates were admitted to the hospital for secondary conditions and not necessarily related to their neonatal status. However, neonatal patients as a cohort require additional needs during a critical developmental time in their life e.g. bonding and attachment and sensory needs.

The British Association of Perinatal Medicine's definition and criteria of a neonate is below 44 weeks corrected gestation (adjusted age is the age of the baby based on his/ her due date- this age is important to evaluate the baby's growth and development).

We focused our inspection mainly on NSW, as this was where the majority of neonates were cared for. This ward provided level one (special care) and two (higher dependency care required) care to babies requiring surgery. If level three care (ventilation support) was required, neonates were transferred to the paediatric intensive care unit (PICU).

NSW had 16 cots in total with four of these cots for babies requiring high dependency care.

A number of surgical specialities provided care to neonates, including neurosurgery, ear, nose and throat (ENT), and paediatric surgery and urology (PS&U), with 12 surgical consultants linked to NSW.

The trust provided a regional neonatal surgical outreach service for the West Midlands area specifically for paediatric surgery and urology neonates. The purpose of the service was to reduce the number of out of region transfers and improve the quality of care for surgical neonates both, in neonatal units and general hospital paediatric wards. NSW is part of the Southern West Midlands Maternity and New-born Network (SWMMNN).

During our inspection, we visited NSW, paediatric intensive care unit (PICU), the paediatric assessment unit (PAU), ward 11 (cardiology) and ward 2. In order to make our judgement on the care of neonates at this hospital, we observed ward areas and care delivery. We spoke with 29 members of staff including, managers, staff nurses, doctors, clinical support workers (CSW), housekeepers and other therapy staff from these various areas. We spoke with 18 parents of babies and viewed 12 records and 24 medication charts.

We conducted an unannounced inspection on Thursday 26th May, which included observation and interviews with staff. We spoke with 10 members of staff including senior managers, nurses, a clinical support worker and a ward clerk on NSW.

The trust provided data for the neonatal surgical ward but not for all areas where neonates were cared for and therefore data provided is for NSW unless otherwise stated.

The terms neonate and baby will be used interchangeably in this report. This is because parents and staff most commonly use the term 'baby' as opposed to the formal term 'neonate'.

Summary of findings

We rated this service as 'requires improvement' because we rated safe as inadequate. Effective and responsive and well led as requires improvement with caring rated as good.

- This service lacked clear identity, strategy and clinical leadership, which affected all aspects of care for neonates at this trust. Neonates could be cared for within any department of the hospital; we saw variation in the care babies received dependant on their location.
- This trust had two external reviews of their neonatal service dating back to January 2015 and January 2016 respectively.
- Nurse staffing levels did not meet national standards because of the increased number of babies on NSW requiring high dependency care.
- The trust did not collect adequate data on the quality and performance of neonatal care; this is a national standard. The trust was not fully using the gold standard of the neonatal network IT system to aid effective communication and care planning.
- This service did not always investigate serious incidents because of the lack of recognition of the severity or the potential harm to babies. Senior management lacked this understanding and therefore opportunities to learn from serious incidents were lost. Senior managers also lacked knowledge of risk register management.
- We found several concerns with the safety of the environment and equipment.
- The provision of neonatologists' from the local maternity unit was not meeting the service level agreement of four hours neonatologist presence Monday-Friday. Senior management described the relationship between surgical paediatricians and the neonatologists' as 'unengaged'. Following the inspection we had information from the trust to demonstrate that improvements had been made.
- Mandatory training for registered nurses on the neonatal surgical ward fell below the trust target.
- Safeguarding children training for both nursing and medical staff fell below the trust target.

- Nurses working in neonatal care services require specialist training. There was no clarity on the number of staff required or eligible to complete specialist training, or which course they would be required to complete.
- All levels of staff lacked awareness of the full duty of candour process. Staff did not always recognise the seriousness of incidents and therefore missed opportunities to learn. This increased the risk of them not recognising when duty of candour applied.
- Staff were not aware of a missing child policy. A baby was abducted from NSW in July 2015. The policy was not a standalone policy but since our inspection, the trust said it was addressing this.

However:

- The trust was responsive to the concerns we highlighted following our inspection with immediate actions taken to address leadership and service issues and a strategic plan was made.
- There was a date set for public involvement to discuss the future of the service and to influence improvements.
- The neonatal surgical outreach team was responsive to the individual needs of surgical neonates and provided cross-organisational boundary care to meet these needs. This service had a clear strategy and demonstrated effectiveness of reducing cot days at the trust and out of region transfers.
- Staff were aware of how to report incidents and received some feedback.
- We observed good multi-disciplinary working between professionals.
- Parents praised the care that staff gave their babies and this shown in parent feedback and nominations for local awards. Staff demonstrated the trust values and described the culture as 'team BCH'.
- The records we viewed met national standards for record keeping.
- The trust had a process in place for assessing and responding to deteriorating children with the provision of the PACE team.

Are neonatal services safe?

We have rated this service as 'inadequate' for the safe domain.

Inadequate

This is because:

- On a daily basis, more babies on NSW required a high level of dependency care based on the trusts' criteria than actual HDU capacity. This meant staffing levels were insufficient to provide safe care.
- There was a lack of recognition of serious incidents. Staff did not complete thorough investigations of incidents to identify learning. This lack of learning could mean similar incidents may reoccur and therefore not sufficiently protecting babies from potential harm.
- Main ward access to NSW was through another ward, which posed potential infection and safeguarding risks to patients of both wards.
- A service level agreement (SLA) with a local maternity hospital provided neonatologist cover but was not meeting the agreement of neonatologist physical presence Monday-Friday to provide face-face review of all neonates. Following our inspection this cover was being provided daily to all neonates in the hospital.
- NSW mandatory training compliance for registered nurses was low for all modules. Both nursing and medical staff were below the trust target for safeguarding children training.
- The medication room door was missing which meant there was unsafe access to equipment such as needles.
- Staff were unaware of some local policies such as for babies who go missing off the ward.
- We observed poor hand hygiene and unclean equipment on NSW.
- There was some unmaintained equipment in use on NSW.
- Managers showed limited knowledge of the duty of candour process.
- The service did not hold mortality and morbidity meetings specific to the care of neonates.

However we also found:

• There were safety-monitoring processes in place, which showed low levels of harm to patients.

- Paper records met national standards for good record keeping and were stored appropriately.
- The Paediatric Assessment Clinical intervention and Education (PACE) team were available 24 hours a day, seven days a week to support staff with deteriorating babies and assess whether transfer to intensive care was required.

Incidents

- There were no never events reported between March 2015 and May 2016 for the neonatal surgical ward. Never Events are serious incidents that are wholly preventable as guidance or safety recommendations that provide strong systemic protective barriers are available at a national level and should have been implemented by all healthcare providers.
- No serious incidents were reported involving neonates between May 2015 and April 2016. During our inspection, we identified two incidents that were not categorised as serious incidents that should have been. Staff did not investigate these incidents fully to understand how the incident occurred and learning how to prevent reoccurrence in the future did not occur.
- In July 2015, a family left NSW with their three-week old baby while the local authority was considering placing the baby on a child protection plan and therefore under the care of the local authority. Senior management told us that this was not investigated as a serious incident because the parents took their own baby. In not recognising that this incident required investigation, the baby was at risk of harm, the opportunity to learn was lost, and therefore the potential for the incident to reoccur is possible.
- Another incident, which resulted in harm to a baby, was not fully investigated. Although, the hospital took action to prevent this from reoccurring and changed practice as a result, they did not conduct an investigation to reach this conclusion. Since our inspection, the trust has decided to investigate this particular matter.
- For the neonatal surgical ward, there were 40 reported incidents between March 2015 and February 2016. The most common incidents were medication errors, delays in new-born bloodspot screening tests and poor documentation.
- Staff reported incidents on the intranet page and we observed this process. Staff told us that they were encouraged to report incidents and gave examples of recent reporting.

- NSW Staff told us that the main way they would receive feedback and learning from incidents would be through daily handover or the ward communication book. We saw the communication book but saw no evidence about incident feedback.
- In April 2016, the trust had introduced 'learning from excellence', which is a learning system that staff can access to report examples of excellent practice. NSW were not actively reporting good practice, however, in January; two members of staff from NSW received praise for their good teamwork and efficiency from other areas.
- Duty of Candour is regulatory duty that requires providers of health and social care services to notify patients (or relevant persons) of safety incidents involving their care. Providers are also required to provide reasonable support to those involved. During interviews, staff and management were able to describe their duty to be open and honest with parents , but not the trigger for when this duty would come into effect. Staff told us they had not received any duty of candour training. Following the inspection, the trust told us e-learning training was provided to all staff.
- On the neonatal surgical ward there were parent and carers information leaflets explaining the duty of candour process.
- The trust held monthly divisional morbidity and mortality meetings and therefore neonates were discussed at each of these. There was no overarching view to identify themes. Only doctors attended these meetings.

Safety monitoring

- The NHS Children and Young People's Services Safety Thermometer provides a method for surveying patient harms monthly and analysing results so that improvement can be measured and monitored with the aim of harm free care.
- As part of the safety thermometer, patient harms surveyed included:
 - The number of instances the Paediatric Early Warning system (PEWS) was not completed.
 - Where a PEWS was completed and required action but was not escalated.
 - Extravasations (tissue damage because of inadvertent administration of fluid intended for the vein).
 - Pain at the time of the survey.

- Pressure ulcers
- Moisture lesions.
- Safety thermometer results between April 2015 and March 2016:
 - One PEWS not completed (June 2015)
 - No instances of PEWS action required but not escalated.
 - One extravasation (August 2015).
 - Six instances where babies were in pain at the point of the survey.
 - No reported pressure ulcers.
 - Seven reported moisture lesions.
- Safety thermometer results were not visible on the ward for parents or carers to view but were visible for staff in the staff room.
- The trust participated in Nursing Care Quality Indicators (NCQIs) which are another measure of patient safety and quality of care. The indicators include cannula care, communication of care, medication charts, feeding and nutrition, patient hygiene, PEWS observations, pain assessment, and skin care. The ward manager undertook this 'snapshot' monthly.
- NCQI results for NSW from November 2015 to April 2016 were all above the target compliance of 95%.

Cleanliness, infection control and hygiene

- On entering NSW, there was an infection prevention and control (IPC) board which displayed recent audit results for April (100% compliance), information for parents about Methicillin-resistant Staphylococcus Aureus (MRSA) screening and who the IPC team were.
- NSW displayed the MRSA screening policy (screening within six hours of admission) on the IPC board. Audit results showed that compliance rates for MRSA screening was 92% in March 2016 and 98% in April 2016. The target rate was 95%.
- For NSW, there were no reported MRSA hospital acquired infections between May 2015 and May 2016. For Clostridium Difficile, (C.diff) no test is undertaken as children under 2 years of age are unlikely to be colonised due to normal flora. There was one reported case of a Methicillin Sensitive Staphylococcus Aureus (MSSA) bloodstream infection on NSW in March 2016.
- Audits showed that hand hygiene and staff compliance to the trusts' 'bare below the elbow' policy was above the target of 95% in January, February and March 2016.
- On NSW, there was a sign on entrance to the ward to use to hand gel on entrance and exit to the ward. During

observation at the entrance to the ward, we saw 10 members of staff entering the ward without using the hand gel during a 10-minute period. These staff members included nurses, doctors and managers.

- Following the inspection and feedback of our findings of poor hand hygiene on NSW, the trust carried out hand hygiene audits for the subsequent five working days. On one day (24th May), hand washing technique compliance was 23%, with doctors, nurses and clinical support workers contributing to this poor compliance. For the other four days, compliance was 96-100%. The ward had introduced daily cot-side cleaning checklists and staff had pocket sized hand gels given to them.
- We saw staff following trust policy of hand washing in between patients, 'bare below the elbow' and using aprons and gloves appropriately.
- On NSW, there were two trolleys used for total parenteral nutrition (TPN) (daily nutritional requirements supplied through the vein when oral feeding is not possible) that were visibly dirty even though 'I am clean' stickers were on them. We asked the ward manager about these; she confirmed that the trolleys should be cleaned post use ready for the next use. The manager cleaned these immediately. Routinely, the housekeeper carried out the cleaning schedule, overseen by the ward manager.

Environment and equipment

- The 'clean team' were responsible for performing six monthly environment cleanliness and general state inspections for all clinical areas. We saw evidence for the last one undertaken on NSW in November 2015, which showed overall an outcome of 'good', described as 'minor and infrequent issues that are not deemed to be putting patients at risk'. There was an action plan in place to address the issues with a responsible person and date for completion allocated.
- The main access to the neonatal surgical ward was through another ward (Ward 9) because of its location. This meant that babies transferred to and from NSW had to come through ward 9. This could potentially pose a cross-infection risk, in particular to the neonates. This also caused an increased flow of staff and 'traffic' through ward 9. There was an intercom system outside ward 9 for visitors to contact NSW directly for access.
- Parents and visitors were encouraged to use an alternative access route to the ward. The alternative

access for parental use did at times cause difficulty, especially when the lift was out of use and newly postnatal women would either have to use the stairs or access through ward 9 to see their baby.

- Following our inspection, the trust commissioned the director of estates to review physical access arrangements to the ward and look at alternative options to address this.
- Staff checked the resuscitation equipment daily and we saw a record of this, compliance target for daily checks was 100%. Audit results show that for January 2016, compliance was 95% but for February 2016-April 2016, the rate was 100%. The emergency equipment was easily accessible outside the high dependency cubicles.
- The door of the drug room on NSW was missing and staff told us it had been for several years. Staff told us the reason was that the room became too hot for medicines to be stored appropriately. This room stored medicines and needles, which could be accessible to visitors (including siblings) to the ward. Management did not recognise this as a risk and was therefore not on the local risk register.
- Storage space was limited which meant equipment was stored in corridors such as pushchairs, weighing scales, trolleys and cots. Emergency exits were clear.
- On NSW, we found several pieces of equipment with out of date maintenance checks. These included a cot (date lapsed March 2016), a medication pump (date lapsed January 2016) and a feed pump (lapsed January 2016). There were four other pieces of equipment with illegible labels. The ward manager stated that staff were expected to check equipment maintenance prior to use and that a monthly report was sent to each ward highlighting which items were due. There was a communication misunderstanding of who was responsible for maintaining which items.
- Immediate action was taken to understand why these items were out of date and it was found that the cot, was in date but the label was not obvious and the previous one had not been removed. The feed pumps were disposable and based on a manufacturers contract, replaced as required. Management were unaware of this arrangement until it was checked when we questioned the process in place.
- On our unannounced visit, we found that the trust had subsequently ensured all equipment was checked by the medical engineering department and unused or out of date equipment removed from the ward.

• There was appropriate management and segregation of clinical and domestic waste with clearly marked bins.

Medicines

- A clinical pharmacist visited NSW five days a week. They were involved in discussions with doctors and nurses about babies' individual medicine requirements and helped identify medicine issues.
- We saw appropriate arrangements were in place for recording the administration of medicines. The records showed babies were getting their medicines when they needed them.
- We looked at 24 neonatal medication charts from several wards. There were accurate recorded checks of any known allergies or sensitivities to medicines and were documented on baby's prescription charts within 24 hours of admission. This information is important to prevent a potential drug error and causing harm to a patient.
- Medication charts we saw also recorded the baby's weight, which is important for giving correct medication dosages.
- Staff knew how to report a medicine incident. Staff told us about a medicine incident that had occurred on the ward and the lessons learnt to prevent reoccurrence.
- Controlled drugs require special storage and documentation. Storage followed good guidance procedures including daily checks by two nurses of stock quantities and documented appropriately.
- NSW had a locked drug fridge for safe storage. Daily temperature checks were completed and records demonstrated completed checks.
- On the paediatric assessment unit, we noted on one medication chart that a baby had received an extra dose of a medication. We checked with the nurse caring for the baby who confirmed this was an undetected error. The nurse immediately informed the nurse in charge and got a doctor to review the baby. We saw evidence of the incident form submitted via the intranet.

Records

- Records used in neonatal services were mainly paper based. NSW used two electronic systems but they were unable to interface.
- The hospital did not use the standardised electronic system used within the neonatal network for all babies admitted to the trust. The system was developed to facilitate effective communication for when babies

cared for across a neonatal network. Both external reviews of the neonatal network (SWMMNN, 2015) and the West Midlands Quality Review Service (2016) (WMQRS) recommended the trust adopted this electronic system. We did see doctors using this system to generate discharge letters.

- On NSW, a folder at each cot side held notes of the current admission episode and other hospital records were stored in a locked cupboard at the nursing desk.
 We saw on several occasions during our inspection staff looking for the person who had the key. This seemed to take staff unnecessary time to locate the key.
- There was a newly developed and implemented neonatal checklist in care records to prompt staff of their unique needs including screening tests and multi-disciplinary input requirements during key milestone periods. An audit assessed the completion of this checklist for NSW, ward 11 (cardiology) and PICU and the combined percentage for April 2016 was 36%. Not all records we viewed had completed neonatal checklists.
- This audit also revealed that 88% of medical checklists were missing from care records. This shows that these checklists were not yet embedded in routine care. The target completion compliance rate was not provided.
- We viewed 12 sets of care records from NSW, ward 2, ward 11, PICU and PAU. The quality of documentation entries were legible, dated and signed with the designation of the staff member, which are compliant with record keeping national standards from the Nursing and Midwifery Council.
- Following the setup of a 'just do it' short term action group, as a result of the WMQRS report January 2016 recommendations, specific neonatal care plans were recently developed and were in use in all wards to begin to standardise the quality of care provided to neonates. These were in their early roll out so an audit had not yet taken place. Some care plan resources for staff were in development such as care of the neonate receiving phototherapy and kangaroo care but these were not yet in use.

Safeguarding

• The trust set a compliance rate of 95% for all levels of children's safeguarding training. We asked for the most

current compliance rates for safeguarding training for NSW (May 2016) and data provided showed 80% of RN's had level three training and 67% of clinical support staff had level two.

- Medical staff on NSW told us they had level three safeguarding children training. Data for February 2016 showed that 89% of surgical medical staff had this level of training. This meant both nursing staff and medical staff were below the trust target for safeguarding children training.
- Staff were aware of the safeguarding leads within the hospital and knew how to access the team for support.
- One staff nurse on NSW felt confident in dealing with safeguarding concerns because of her previous work experience in the community setting. This nurse felt able to contact children's social care directly however, she felt some of her colleagues did not feel as confident.
- The admission checklist in place for neonates had a question to check whether a baby was subject to a child protection plan and we saw evidence of completion in notes.
- All staff were aware of the general safeguarding policies and that they were accessible on the intranet.
- Staff and a senior manager that we spoke to were unaware whether a missing baby policy was available. We asked the trust about this and we were provided a policy for which missing children was within. Following the inspection, the trust have formalised a separate missing baby protocol as part of the neonatal improvement plan.
- Ward area access was with swipe cards authorised to staff. Parents and visitors to wards were required to use the intercom system outside the ward for security purposes.

Mandatory training

- The trust provided 22 mandatory training modules for staff. These included both face-to -face and e-learning courses. Mandatory training included basic life support, fire safety, infection control and information governance. The level of training was dependent to the individual staff member's role. There was a 95% compliance target set for all modules.
- We requested mandatory training rates several times because data previously received was incomplete and

appeared conflicting. During our unannounced inspection, interim management told us on NSW that they were looking at this data again because there were concerns previous data provided was inaccurate.

- Following the inspection, the trust provided us with their current data on training rates for NSW. All 13 modules for RN's were below the trust target of 95%, with a range of 73% (manual handling patient practical) to 93%. For clinical support workers, there was 100% completion rate for seven of the modules but the remaining five ranged from 66% (basic life support) to 87% (health and safety) completion.
- Breastfeeding training was not mandatory and no target compliance rate was stated. Data provided by the trust was current up to May 2016. For NSW, 67% of staff had undertaken the training. For the other wards where we saw neonates cared for such as PAU, ward 11 and PICU, breastfeeding training rates varied from 2% (PICU) to 49% (ward 11). This could mean variation in the level of support a breastfeeding mother and baby could receive dependent upon location across the hospital.

Assessing and responding to patient risk

- To assess deterioration of a neonate's condition, the trust used the paediatric early warning system (PEWS) of 0-1 year. There was a trust policy for the use of this and detailed the escalation process. We found one PEWS chart out of 22 records that triggered the need for escalation but had not been escalated.
- There was a standard operating procedure (SOP) for the high dependency area for NSW. The review of this SOP was out of date at the time of our visit and was due in 2010. At our unannounced inspection, managers told us this was under review.
- In the month of April 2016, there was a minimum of eight babies each day that required high dependency care and a maximum of 18 based on this criteria.
- The neonatal surgical outreach team assessed surgical neonates daily for progress and if they were in the best place for their care and arranged transfer accordingly.
- For deteriorating babies/children on wards, there was a dedicated team known as the PACE team to assess the level of dependency and if transfer to intensive care required. Paediatric intensivists were available 24 hours a day, seven days a week. We did not observe this process during our visit but staff told us it was a supportive resource for them.

Cubicle 9 on NSW was a single room at the end of the ward, out of sight of the nurse station. The original purpose of this room was to be for 'rooming in' meaning for baby and mother to stay together at all times. However, this cubicle was used as a routine ward cot due to capacity issues. This posed a safety risk because of the distance away from the nurse's station and of its position at the end of the ward. This was on the local ward risk register from April 2016 (for one month) however; there was no formal risk assessment for the babies cared for in this cubicle. At our unannounced visit, management told us this was going to be risk assessed on 1st June 2016.

Nursing staffing

N.B. The following data is relating to the neonatal surgical ward (NSW) and staffing levels are based on whole time equivalents (WTE). Nursing staffing for other areas where neonates may also be cared for are included in other core service reports.

- The ward had a funded establishment of 37.7 WTE including 1.0 WTE band 7 ward manager, a supervisory role five days per week, 8.40 WTE band 6 nurses, 20.44 WTE band 5 nurses, 4.60 WTE band 4 health care assistants, 1.44 WTE band 3 health care assistants, 1.8 WTE band 2 housekeepers and 1.0 WTE band 8 outreach nurse. There were no vacancies for this ward.
- In addition to the Band seven manager, on each shift there was an allocated nurse in charge; however, they were also required to care for a number of babies in addition to performing the leadership role. It is good practice for the nurse in charge to only perform the ward leadership role and not direct patient care responsibilities (Department of Health Toolkit for Neonatal Services, 2009). The ward manager and a nurse who was frequently the nurse in charge were concerned that this role was not supernumerary to the staffing levels. A nurse who had the responsibility to be in charge said that this affected their ability to oversee the ward in terms of assisting discharges and supporting junior staff.
- At our unannounced visit, the nurse in charge no longer had allocated patients. A nurse in charge on that day told us she now has more time to do her role. The newly appointed interim management was in the process of

assessing and reviewing staffing levels and the high dependency criteria based on national guidance (The British Association of Perinatal Medicine service standards, 2010).

- Staff and the ward manager said there had been times when nurses from NSW were moved to other wards to cover shifts. Senior management said they had recently protected NSW from this happening in view of the high acuity and dependency of babies on the ward. For the month of April 2016, there were eight staffing incidents.
 Management told us that the standardised acuity tool used by the trust was not suitable to assess the acuity and dependency levels of surgical babies. The ward manager had been collecting their own data daily since February 2016 but it did not capture all high
- dependency babies based on the NSW specific HDU criteria.
- Planned staffing levels required for NSW were a total of six with a composition of either five registered nurses (RNs) with one CSW or four RNs with two CSWs. The trust set the standard in line with national guidance of one nurse to two high dependency babies and set the rest of NSW as requiring one nurse to three babies. Based on these ratios, for NSW with four high dependency cots and 12 surgical care cots, there should be six registered nurses on every shift (based upon The British Association of Perinatal Medicine recommendations).
- Actual staffing levels for the month of April 2016 (29 days of data provided) showed that there were nine shifts (out of a possible 87) where there were six RNs and therefore met this standard. However, for the remaining 78 shifts, there was between three (two shifts) and five RNs (mean of 4) showing that the majority of the time, staffing levels were suboptimal.
- The trusts' NSW high dependency criteria states that babies requiring total parenteral nutrition (TPN) should be cared one nurse to two babies (1:2) and therefore should be in the high dependency room. For the month of April of 29 days of completed data, the minimum number of babies requiring high dependency care was eight (200% demand) and the highest number was 17 (425% demand). The average number of babies during April requiring a higher level of care was 13 (325% demand).
- Hospital Operations Centre (HOC) meetings took place part of its remit was to review staffing levels. The purpose of which was to allocate additional staff in areas of shortfall when able to do so.

- Following our inspection, we raised our concerns for patient safety because of the high acuity and dependency and inadequate staffing. The trust responded immediately, placing interim leadership on NSW and performing daily staffing and ward dependency assessments. Management are now seeking a suitable tool to benchmark safe staffing levels.
- The skill mix of registered nurses each day included those trained in advanced resuscitation, intravenous drug administration, parenteral feeding and care of tracheostomy's (a tracheostomy provides another way for oxygen-rich air to reach the lungs alternative to going the nose or mouth).
- In line with national guidance, there was always a registered children's nurse with a qualification in specialised neonatal care.
- A senior manager told us that the ward manager had informed them of concerns about increased NSW acuity and dependency about a month prior to our visit. The ward manager was to collect daily data for a few months to be able to escalate this to executive level. This concern had been on the local ward risk register since February 2016 and there was evidence of discussion in governance meeting minutes for February 2016. The senior manager told us that they reviewed staffing daily to assess the risk.
- The sickness rate on NSW was above the trust target of 3% consistently and was 15% for the month of April 2016. This included 4.0 WTE staff on long-term sick leave. The sickness level of the ward had been on the local ward risk register since February 2016.
- The hospital did not use nursing staff agencies but instead had an internal hospital 'bank' of staff. Data provided showed that bank usage for NSW was over budget but the trust did not provide us with the exact figures. During the month of April 2016, seven shifts were bank covered. The nurses that covered shifts on NSW as bank were usually permanent contracted staff of the ward.
- Nursing handovers of care occurred at each shift start. Shifts were a variety of 07.30-15.30 (early), 12.30-20.30 (late) and 20.00-08.00 (night) and staff were able to choose their preference.
- Some NSW staff told us that shifts were busy and would work over their shift with short or no breaks. There was no evidence of this through the incident reporting process.

Medical staffing

- On NSW, there were 14 different surgical specialty consultants responsible for the care of neonates admitted to the ward for surgery.
- We were unable to obtain a rota for the medical staffing on NSW although we requested this data twice. The trust told us the ward does not have a specific rota because of the many surgical specialities. This meant we were unable to establish if medical cover was adequate. A doctor told us the rota was 'OK but sometimes tight'.
- The primary care of babies transferred from regional neonatal units was the responsibility of the named consultant team.
- Senior paediatric surgery trainees were resident 24 hours a day, seven days a week and an on-call paediatric surgical consultant was available at short notice 24 hours a day, seven days a week. For night cover, there was a 'hospital @ night' junior trainee rota including access to a resident junior surgical trainee 24 hours a day, seven days a week.
- Neonatologists are paediatricians who specialise in the care of neonates who require extra care following birth. A service level agreement was in place to provide neonatologist cover Monday to Friday, for four hours per day. There were approximately 6.5 WTE neonatologists part of the rota for this cover. Staff told us that the reality was that if work commitments at the maternity hospital were greater; there were days where the neonatologist did not physically attend but the trust did not monitor this. A neonatologist could be contacted by telephone 24 hours a day, seven days a week.
- Following the inspection the trust made us aware that a neonatologist was reviewing all the neonates in the hospital every week day. With on call arrangements out of hours.
- The British Association for Perinatal Medicine provide service standards for hospitals providing neonatal care including neonatologist cover but due to BCH lacking a clear identity for neonatal care, it is unclear if they are following these standards.

Major incident awareness and training

 NSW had a business continuity plan in the event of a disruption to the service for up to a period of two weeks. This protocol included a risk assessment and an emergency assessment checklist. Junior staff were not aware of this protocol but a senior manager was able to tell us there was a major incident strategy and provided evidence of this document. Staff did not receive major incident training.

Are neonatal services effective?

Requires improvement

We rated neonatal services as 'requires improvement' for the effective domain because:

- Despite the two previously mentioned external source recommendations, the trust was not collecting meaningful and robust data on service performance and outcomes for neonates.
- The trust was not fully using the neonatal network IT system that captures the care of babies across the neonatal network. This provides continuity and communication between professionals wherever the baby is cared for within the network.
- There was not an audit programme for neonatal services and the trust was not assessing compliance of NICE guidance.
- The trust was not working towards UNICEF baby friendly status despite it being the gold standard for breastfeeding care delivery. Though it was noted that few specialist children's hospitals hold this accreditation in the country.
- Nursing quality indicator results showed poor pain management of surgical neonates.
- Due to a lack of identity of the neonatal surgical ward and the multi-location of neonates across the hospital, the trust was unable to benchmark the required qualifications in specialty and the percentage of nurses required having these courses.
- There was a lack of effective working and communication between surgical consultants and the neonatologist. Regular meetings did not occur as previously recommended by an external review.
- Staff lacked awareness and understanding around parental capacity to give consent. There was no mandatory training or trust guidance to support staff to recognise potential issues.

However, we also found:

• NSW used the local neonatal network guidelines to standardise care of neonates.

- The neonatal surgical outreach team demonstrated effectiveness of reducing the number of babies cared for outside of their home region and the number of cot days at BCH.
- The trust submitted data to the British Association of Paediatric Surgeons for the benefit of research trials.
- The health promotion team had improved the breastfeeding service provision and had successfully completed a Commissioning for Quality and Innovation (CQUIN).
- There was an effective process for reviewing the nutritional needs of babies on NSW with a daily review by the dietetic team.
- An evidence based pain assessment tool was in use for neonates.
- Overall, good multi-disciplinary team working on the neonatal surgical ward and staff felt colleagues were respectful and supportive.
- Routine use of the Personal Child Health Record (PCHR or red book) promoted effective communication along the 0-5 year's child health pathway.

Evidence-based care and treatment

- NSW used the joint Southern West Midlands Maternity and New-born Network (SWMMNN) and Staffordshire, Shropshire & Black Country New-born and Maternity Network (SBCNMN) neonatal guidelines (2015-2017). The aim of these is to standardise the care of neonates across the region. There were copies readily available for staff to refer to.
- Staff told us they used National Institute for health and Care Excellence (NICE) guidance to inform their practice however, they could not describe specific examples. Examples we would have expected would have been 'Specialist neonatal care' (QS4) and 'Antibiotics for neonatal infection' (QS75). The trust did not at the time of our inspection measure compliance with these relevant national guidelines.
- Management told us policies and procedures were based on national guidance such as British Association of Perinatal Medicine guidelines and the Department of Health 'Toolkit for high-quality neonatal services' however, the trust could not provide evidence of implementation compliance or monitoring.
- NSW did not have a dedicated clinical audit programme to monitor how guidance and policies were applied within the service.

 Bliss is a UK charity, which provides care standards that complement the focus on improving clinical care in neonatal units and established a scope of rights for babies treated under neonatal care. The trust used the Bliss Baby Charter Audit tool to assess their services in 2013 and identified a gap in the provision of breastfeeding facilities. The trust received a Bliss Baby Charter grants fund, which helped to improve breastfeeding facilities around the hospital. There has not been another assessment since 2013.

Nutrition and hydration

- The trust was not 'Baby Friendly' accredited. Level one is a common accreditation standard in maternity hospitals. The trust was comparable with other similar trusts with only a few specialist children's hospitals in the country achieving this accreditation.
- A 'breastfeeding champion' on PAU said the trust was aiming towards becoming 'Baby Friendly' accredited in the future. Since our inspection, the trust has demonstrated an early commitment by initiating the process to achieve and accredit to UNICEF Baby Friendly Level 1 standards.
- The trust had a 'breastfeeding and expressing breast milk policy' and a 'protocol for handling, storing and modifying expressed breast milk'. Both were in date at the time of inspection. The policies were accessible on the trust intranet and copies were available within breastfeeding resource folders, available on all wards.
- In June 2015, the trust introduced a new labelling system for expressed breast milk (EBM) to ensure safe storage and handling. The health promotion team undertook an audit in November 2015, which showed variations in the use of EBM labels across the wards. The team had scheduled another audit to check for improvements.
- On NSW, the milk fridge and freezer had temperature recorded daily to ensure safe milk storage. There was a process in which two staff members checked the milk label before storing it in the fridge/freezer to avoid errors. We saw one milk sample labelled incorrectly but had not been reported as an incident. The health promotion team confirmed no breast milk errors had been reported.
- NSW had a designated expressing room that mothers could use if privacy was required when expressing their breast milk. This facility was space restricted. There was

only room for one mother to use the facility at a time so was available on a first come first served basis. The rooms were equipped with electric breast pumps and a sink to clean equipment after use.

- A designated health promotion practitioner was the lead for developing training, policies and support around nutrition. Staff were able to access this practitioner for further support for mothers as required.
- On admission to NSW, the dietetic team reviewed all babies to assess nutritional needs for care planning. We observed records and saw dietetic care plans.

Pain relief

- The trust said they partially complied with the Faculty of Pain Medicine's Core Standards for Pain Management (2015) however, could not provide evidence of compliance assessment and monitoring.
- The hospital was using the Neonatal and Infant Pain Score (NIPS), which is a validated and gestational age relevant pain assessment tool.
- Pain assessment and management was part of the care plan and staff reviewed this on ward rounds.
- Pain assessment and management is a quality indicator on the nursing care quality indicators (NCQIs). The assessment and documentation of pain was part of this safety and quality check. For the month of April 2016, the compliance was 93.8% for NSW, which was below the target of 95%.
- A nurse on the paediatric intensive care unit said they promoted the use of breastfeeding/breast milk to provide pain relief during procedural pain in neonates. This is evidenced based practice and recommended by the World Health Organisation.

Patient outcomes

- Collection of activity and outcome data was poor for both the neonatal surgical ward and for neonates overall. The trust could not provide data on the number of neonates cared for within the past 12 months or figures for the number and type of surgical procedures performed at the trust. No systems were in place for this data collection.
- This trust prides itself on good outcomes and a centre of excellence for children however; there was little evidence of benchmarking or quality improvement activity. This is despite several national neonatal service requirement guidance's.

- The 2015 Southern West Midlands Maternity and New-born Network (SWMMNN) and the 2016 West Midlands Quality Review Service (WMQRS) external reviews highlighted a lack of data collection processes. Both reports recommended improvements however, during inspection we found no evidence of clinical and activity data collection. Senior management were unable to tell us what data they collected and confirmed activity data was not routinely generated or discussed at senior level meetings.
- The neonatal network SWMMNN in their 2015 service review recommended breastfeeding improvement at the trust. The trust took part in a Commissioning for Quality and Innovation (CQUIN) payment framework relating to the promotion and sustainment of breastfeeding for 12 months, April 2015-March 2016. Three departments took part including NSW, PICU and ward 11 and involved an audit of breastfeeding sustainability from admission to discharge and a trust wide breastfeeding quality improvement plan was developed.
- The breastfeeding audit assessed sustained breastfeeding during hospital admission on NSW, PICU and ward 11, which found 86% of babies continued to breastfeed (June 2015-March 2016). Although this figure exceeds national breastfeeding statistics (as measured by The NHS Information Centre Infant Feeding Survey), it is difficult to make direct comparisons unless age of the babies is considered.
- It is a requirement for revalidation to show that paediatric surgeons are actively contributing to national audits. The surgeons of NSW were submitting survey data to the British Association of Paediatric Surgeons (BAPS) regarding the surgical management for several rare congenital abnormalities such as Hirschsprung's disease, exomphalos and anorectal malformations. There was no surgical outcome data available.
- The trust partially used the neonatal network database, which collects, stores, and reports live perinatal patient data. This was despite external reviews recommendation of full use.
- All neonates in England are offered a new-born bloodspot screening test as part of a national screening programme. The trusts' laboratory was the regional screening centre for this test. During the reporting period of March 2015- February 2016, NSW reported seven babies who did not have this test taken on time. To ensure that no babies admitted to the trust missed

their new-born screening, the trust took part in the National New-born Screening Failsafe programme. This is a secure computer system that allows the transfer of data of any inpatient children under the age of 1 year, to prevent missed tests.

- The West Midlands Neonatal Transfer Service (WMNST) worked with the neonatal units in the SWMMNN and the Staffordshire, Shropshire and Black Country New-born Network (SSBCNN). The is a retrieval service for babies to ensure they are cared for in the right place and at the right time and where possible nearer to home; recommended by the Department of Health (2003).
- The neonatal surgical outreach team collected data on the effectiveness of their service by how many out of region transfers occurred. The aim of this service was to reduce the number of babies and their families having to travel and be cared for in units outside of the West Midlands region and save the number of bed days at the trust by supporting staff in other units. In 2015/2016, this service saved 1,298 bed days at the trust and saw a reduction of out of region transfers from previous years.

Competent staff

- Appraisal rates for NSW were 100% for the month of April 2016. Staff said they felt they got the opportunity to express and discuss their developmental needs and future opportunities. Annual appraisals included discussion of nursing revalidation requirements.
- Staff felt they had sufficient training and development opportunities.
- Clinical supervision was available but there were no formal arrangements for regular sessions for staff.
- The Department of Health national guidance for neonatal care (2009) recommended that nurses caring for sick neonates should hold a post-registration qualification in specialised neonatal care also known as qualified in speciality (QIS). Nurses working on the neonatal surgical ward are also required to have neonatal surgical skills; 20.5% (seven) of nurses on NSW held the 'caring for the surgical neonate' course. Nine nurses (26%) held the paediatric high dependency course.
- Other QIS courses such as the neonatal high dependency and intensive care and tracheostomy care were held however, we was not provided with accurate data on the number of nurses with these on three occasions. There is national guidance on the ratio for

how many nurses should have neonatal care qualifications however, because the trust did not have a set identity, we cannot say whether they are meeting these standards.

- The education and training department was undertaking a gap analysis of QIS for nurses because all paediatric nurses should have a qualification in neonatal care.
- Two junior doctors on NSW told us they felt supported by their senior colleagues and received training opportunities.

Multidisciplinary working (MDT)

- NSW held daily ward handover meetings, which are multi-disciplinary between nursing staff, surgeons, the outreach nurse, the pharmacist and dieticians. The neonatologist was also usually present.
- The multi-disciplinary nutritional support team and intestinal failure team supported babies who required parental nutrition.
- The trust-wide acute pain team composed of specialist nurses and anaesthetists for management of post-operative pain. This support was available for the pain management of neonates after surgical procedures and for the weaning of pain relief and sedation for neonates that had been on intensive care for a long period.
- Staff told us that the relationship between the neonatologists from the local maternity hospital could be better and a senior manager told us that NSW does not engage with the neonatologists effectively because of personality differences but did not say how this was being managed.
- Surgical paediatricians and the neonatologists did not meet to discuss care of neonates despite the recommendation by the WMQRS 2016 review.
- Nursing staff of NSW told us they felt they had a good working relationship with surgeons and felt able to challenge them if required.
- Access to neonatal pharmacy advice was available 24 hours a day, seven days a week.
- Since the set-up of the neonatal surgical outreach team in 2009, this service had improved multi-disciplinary working relationships across the neonatal network. The service lead facilitated this by visiting other local units to work with staff to provide the best possible care for surgical babies. An example given was the lead nurse

provided support to a local neonatal unit and empowered nurses to gain the skills to provide improved care to surgical babies. This reduced the need for transfer to BCH and improved NSW capacity.

- We saw a good example of multi-disciplinary working on a ward round of three microbiologists who attended NSW to review a baby on antibiotics. They discussed the care plan with the surgical junior doctor.
- A 'grand round' was undertaken weekly with all surgical speciality doctors, the outreach lead nurse, the nurse in charge of NSW and of ward 9 to discuss patient care.
- NSW liaised with the midwives and/or the health visitors of their patients as required during the baby's admission. This was particularly important prior to discharge home to ensure effective communication and handover of care.
- Staff from all wards we visited, told us teamwork was good and colleagues were supportive.

Seven-day services

- There was good access to support services such as imaging, phlebotomy, dietetics and speech and language therapy.
- There were no issues accessing theatres in emergencies.
- NSW could access surgical consultant support and review based on an on-call rota.
- The neonatal transfer service was available 24 hours a day, seven days a week to transfer babies to and from other units as required.
- Neonatologist input was week days only however, telephone support was available 24 hours a day, seven days a week. The WMQRS review (2016) recommended daily neonatologist attendance and highlighted this was not happening. Some days the neonatologist did not attend because of their commitments at their usual hospital. The neonatologist did not review all neonates within the hospital, only the ones nursing staff asked them to review.
- If a baby became unwell or deteriorated out of hours, the PACE team would stabilise and arrange transfer to the most appropriate department. The PACE team provided 24 hours support to ward staff in providing additional care to a deteriorating baby, in conjunction with the consultant in charge of the patient and the intensive care team.
- The paediatric pain team visited NSW daily to assess pain management. The on call anaesthetic team did this for out of working hours.

- The neonatal surgical outreach service operated Monday-Friday.
- Access to translation services was 24 hours a day, seven days a week via a telephone line. An interpreter could be booked in advance of admissions.

Access to information

- Staff were routinely using the Personal Child Health Record (red book) for each baby to record their care. This is a parent held record that they take home with them and follows the child until they reach school age. This record aids communication with health professionals such as midwives and health visitor's during the 0-5 years child health pathway.
- The partial use of the neonatal network electronic care record did not give consistent access to information for all neonates.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- Nurses on NSW told us they felt the discussion and information provided to parents from doctors to enable them to give informed consent for surgical procedures was good. We saw a doctor gaining informed consent from a parent.
- Staff did not routinely receive training on mental capacity assessment or about the Act; it was an optional module.
- Staff were unaware of any arrangements or guidance if there were concerns regarding parental capacity to provide consent for their babies. We could not find any guidance for staff regarding this in any of the trust policies or procedures and the trust confirmed there was none. Knowledge and understanding of parental capacity to give consent was lacking.

Are neonatal services caring?



We rated this service as 'good' for the caring domain because:

- Staff treated baby's, their parents and carers with dignity and respect.
- Staff were kind and showed a caring and compassionate attitude whilst encouraging positive relationships with the babies and their families.
- All staff groups communicated positively with parents and carers and provided good support to allay fears and anxieties about their baby's care and progress; recognising the emotional stress this time creates.
- All parents we spoke with felt informed, involved and able to ask questions about their baby's care.
- A parent had nominated NSW for an upcoming Pride of Birmingham award and a team member previously won a parent nominated award.

Compassionate care

- Staff treated babies and their parents with sensitivity, understanding and respect. We observed both the nursing and medical staff engaging with parents in a positive manner, ensuring as far as possible their participation and engagement.
- All staff were caring and compassionate to all babies. They talked to babies as individuals, addressing them by their name and handling them with care.
- Parents praised the care and devotion shown to their babies on all the wards we visited. One parent told us "I feel able to leave my baby to go home because of the staff. Another baby's parents said, "We trust them so much...the staff are wonderful".
- There was a display board on NSW called 'celebrating NSW' for parent thank you cards and letters. There was a patient experience display in the staff room. On one day of our inspection, parents had brought in a cake to say thank you.
- Children's hospitals began collecting data for the NHS 'friends and family test' (FFT) in May 2015. For NSW, between March 2015 and March 2016, 80% of parents would recommend the service of 83 responses. The response rate was 22%, below the England national average of 35.5%. Six out of the 11 months there were either no responses or just one.
- A member of the neonatal surgical team won the trust's Star of the Year award in 2015 for providing a moment of magic to families following a parent nomination.
- A parent nominated NSW for the regional 'Pride of Birmingham' award 2016.

Understanding and involvement of patients and those close to them

• Parents felt involved in the care of their babies and both nurses and doctors kept them informed of their babies care. Parents could tell us the names of their named nurse and surgeon.

- Other relatives were also encouraged to bond with the baby; we saw a grandparent caring for their grandchild, giving the parents a rest. Staff told us other designated family members could do this with parental consent.
- We observed a physiotherapist providing reassurance to one mother and explanation for what they were hoping to achieve in the baby's care. This staff member checked the mothers understanding.
- One baby's parents described the communication from staff as "excellent" and another said there was good communication from the whole team.
- One mother was happy her baby was going home fully breastfeeding which was facilitated by the staff.

Emotional support

- Staff recognised that for parents whose babies require surgery, it is an emotional and stressful time. There was access to a psychologist if parents required it. Staff told us that there were no issues in accessing this resource.
- One parent told us that the staff "gave me the confidence to care for my baby".
- The chaplain service provided spiritual and emotional comfort to parents and relatives when required and was available 24 hours a day, seven days a week.
- At our unannounced visit, a newly introduced parental support innovation from PICU was in place. This is where parents record their early day experiences to create a memory diary of their baby's stay in hospital.

Are neonatal services responsive?

Requires improvement

We have rated neonatal services as 'requires improvement' for the responsive domain because:

- Neonatal care at this hospital lacked a clear identity and service plan and as a result, was unresponsive to the unique needs of neonates.
- The trust had set up an innovation and improvement group for neonatal care in March 2016 but was not meeting the set milestones for agreed actions.
- The trust did not measure or monitor the access and flow of neonates across the whole trust.
- The care provided was not responsive to all the needs of neonates such as hearing screening, which was not available at this hospital.

- Babies were still on NSW beyond the neonatal period. This showed lack of care planning based on individual needs.
- Responses to parental feedback were not always in the best interest of the babies on NSW such as poor enforcement of 'quiet time' on NSW and visiting arrangements.

However,

- The neonatal surgical outreach team was responsive to the individual needs of surgical neonates and provided cross-organisation boundary care to best suit individual needs.
- NSW recognised the importance of developmental care needs of neonates; a champion nurse promoted this amongst staff and parents.
- There were parental provisions to support their stay whilst their baby was in hospital including kitchen/ shower facilities and on-site accommodation.
- There was appropriate language support for non-English speaking parents and carers.
- The executive management team were immediately responsive to our initial feedback and concerns about the neonatal service as a whole and implemented a rapid review.

Service planning and delivery to meet the needs of local people

- The Neonatal service lacked identity and benchmarking against national standards, this meant service planning had no clear direction.
- An arranged stakeholder event was due to take place to involve parents and families in the service planning of future neonatal services.
- The trust recognised that improvements were required to the locality of NSW within the hospital and planned to evaluate this as part of the planned overall neonatal strategic review.
- The neonatal outreach service worked across organisational boundaries to meet the needs of local babies who required specialist surgical care.

Access and flow

• Admitting pathways to NSW were usually from local neonatal or maternity units or babies could also come from home. Data relating to admitting source was patchy and the trust recognised this required improvement.

- The trust did not effectively monitor or manage access and flow to NSW. We requested data of admissions, cot occupancy, discharges, gestation at admission and number of refusals to NSW however; the trust confirmed it did not routinely collect this data. The neonatal network electronic system usually captured this data but the trust was not fully utilising this system.
- The neonatal outreach surgical team assessed and actively managed patient needs and therefore able to create capacity on NSW. The outreach lead nurse reviewed babies daily and liaised with relevant local units or professionals to manage appropriate access to the best place for the baby.

Meeting individual needs

- Neonates have unique needs particularly around development, nurture and bonding, which are even more critical when they are sick or require surgery. Two reports commissioned by the trust (SWNMM 2015 and WMQRS 2016) highlighted that the care of neonates at BCH required improvement and made several recommendations.
- A neonatal 'innovation and improvement' group was set up in March 2016, to improve neonatal care at BCH following the two external reviews. There were several action milestones not achieved at the time of our inspection.
- The trust supported breastfeeding by providing mothers who are breastfeeding or expressing their milk a resident parent privilege pass on the first day of their baby's admission. The pass entitled mothers to discounted food and drinks in the hospital's main restaurant and coffee shop. Ward managers made discretionary decisions on individual circumstances whether to provide mothers with free hospital meals.
- The trust had increased the number of expressing rooms available to mothers who were breastfeeding, a total of five with two available in the emergency department.
- NSW promoted the privacy of mothers who were breastfeeding or expressing by providing privacy signs for each cubicle. This also encouraged breastfeeding at the cot side as recommended by national guidance.
- Additional expressing pumps were available for loan to resident parents staying within the parent's accommodation and Ronald McDonald House. Non-resident mothers were signposted to loan pump services within their local communities.

- The neonatal surgical ward has a designated parent sitting room, which had kitchen and shower facilities. Parents were able to apply for free accommodation on site, based on a priority basis with waiting lists.
- Parents were encouraged to make use of the parent's sitting room with kitchen facilities to use each other as support.
- On the neonatal surgical ward, an infant of seven months of age (beyond the definition of a neonate) who was on NSW because the perception was nowhere else in the hospital could meet his needs. This was unsuitable for both this infant and their care pathway but it was also 'blocking' a cot for a surgical neonate that may require it. At our unannounced inspection, we learnt that this infant was discharged home within a few days of our inspection.
- The trust was unable to provide new-born hearing screening due to a lack of resource. New-born hearing screening is a national screening programme. If a baby had not received this screening test, a referral would be required externally.
- A weekly midwife clinic was available to postnatal mothers that required midwifery care or support. A local general hospital provided the midwife. Staff told us this support was insufficient for mother's needs.
- Staff could get information leaflets in other languages for parents by contacting the patient experience team.
 Staff avoided using family members as interpreters and only used staff as such for non-care related discussions or in emergencies.
- Developmental care is a term used to address the individual holistic needs of the neonate including physical, psychological and emotional needs and to reduce harmful hospital stressors (for example, bright lights or loud noises). NSW had a nurse who had a particular interest in this area and was the NSW champion. There was a developmental care board on display on the ward and a guide specifically designed for parents.

Learning from complaints and concerns

• There were no reported formal complaints for NSW from March 2015 up until the inspection date. Management told us that parents were encouraged to make complaints and we saw PALS leaflets were available.

- The trust collected informal complaints received through PALS. There were two NSW informal complaints recorded with PALS between September 2015 and April 2016.
- Following one recent informal complaint about restricted visiting times, senior management and the Patient Advice and Liaison Services changed the neonatal surgical ward visiting to be unrestricted. The staff of NSW developed a proposal to return to restricted visiting based upon their collected evidence that unrestricted visiting would affect the care of their patients. Managers were scheduled to hear this evidence.
- NSW displayed a parent information board on the ward, which included 'you said we did' feedback. A response to feedback that the ward was too noisy was that a daily quiet time had been introduced between 2-4pm. During our inspection, we found that the ward did not follow quiet time rules and the ward was noisy. Evidence suggests noise is a stressor for neonates and therefore quiet time is particularly important for this patient group. At our unannounced inspection, the ward had reintroduced quiet time and we observed its enforcement.

Are neonatal services well-led?

Requires improvement

We rated neonatal services as 'requires improvement' for the well-led domain.

This is because:

- There was no clear identity or strategy for neonatal care. This was evident from ward staff to senior management for the service.
- There was no clinical leadership with oversight and advocacy for neonates as a cohort of patients whom have unique needs.
- Governance processes lacked clear pathways for the discussion of neonates to drive improvement. We did not see any evidence of priority given to neonatal care in governance or mortality and morbidity meetings.
- Local and senior management lacked knowledge and understanding of neonatal standards and data collection processes. There was poor input into national and local audit.

- Neonates received different standards of care because they could be located in various departments within the hospital. Although improvement had begun, the effort lacked drive and priority.
- Due to poor leadership, NSW lacked a positive culture to improve quality and safety. Investigations of serious incidents did not occur because of the perceived low harm without considering the potential harm.
 Opportunities to learn and prevent future incidents were therefore lost.
- The NSW risk register did not reflect all potential risks. Senior managers did not recognise why some issues should be on the risk register.
- Two external reviews took place in 2015 and 2016 making many recommendations to improve neonatal care at the hospital. There was insufficient risk assessment and priority given to these recommendations.
- Senior management recognised that NSW management needed support and had been receiving that support for seven months prior to our visit. However, issues remained unresolved.

However:

- The trust took immediate action following our concerns with the service and placed interim leadership to drive improvement on NSW. An urgent improvement plan occurred within days of our visit describing the immediate, short, and long term plans to improve neonatal care.
- There was acceptance and recognition of the failings which were shared with staff. Subsequently staff were mobilised and anxious to make the improvements, this demonstrated high staff engagement.
- Staff lived the trust values through the care they provided and described a 'team BCH' culture. Staff felt respected and valued.
- There was a parent and public engagement meeting arranged to involve them in the improvement of neonatal care and the future of the service.
- The neonatal surgical outreach team was innovative and won several awards. The lead nurse for the service delivered a nationally recognised course to qualified nurses.

Leadership of service

- There was no designated clinical or operational lead for neonatal services as a collective. A manager, a lead nurse and a head of nursing formed the management structure for each ward such as NSW.
- Immediately following our feedback, we were aware that the trust executive called on the support of a neonatologist to attend the trust and support the changes and improvements required. In addition to this the PICU management was also utilised to support staff in the changes. With one member of the senior staff team redeployed from neonatal care. There was no clinical leadership to provide advocacy or oversight of the care of all neonates within the trust. Senior management acknowledged this was lacking and needed addressing. Both external reviews had previously recommended this to drive service improvement for neonates at the trust.
- There was strong leadership within the neonatal surgical outreach service.
- NSW staff felt supported by the ward manager but felt executive management lacked visibility.
- Senior management were supporting local level leadership to improve.
- All levels of management failed to recognise the level of priority needed to improve neonatal services at the trust.
- Although a neonatal 'improvement and innovation group' was set up in March 2016 following the WMQRS review, this action by the trust was untimely and slow in view of the neonatal network SWWMM in January 2015 also highlighting concerns for neonatal service provision. We saw following the inspection, that the trust was actively working on the implementation of a neonatal pathway. This meant that all neonates in the hospital received the same baseline care via a 'toolkit'. Although neonates were still not planned to be cohorted on one unit, the trust was restricting the number of areas they were cared for and increasing the competencies of the staff caring for them. This meant that a smaller group of staff would further develop expertise with this group of patients.
- There was evidence that the external review recommendations had been escalated to board level, however, there was insufficient priority given to the recommendations by the executive team and therefore appropriate risk assessment did not take place.
- Managers at local and senior level lacked understanding and awareness of what to include on the risk register.

• Middle management lacked awareness and knowledge of data collection requirements for outcomes and performance to improve service effectiveness.

Vision and strategy for this service

- Staff knew the trust core values and it was evident they lived by them in their care to patients. NSW had the trust core values displayed on the ward.
- The neonatal surgical outreach service had a clear vision and strategy.
- There was no clear vision or strategy for NSW or neonatal service as a whole at the trust. Following our inspection feedback, we saw that senior leaders accepted our findings and then demonstrated a great sense of purpose to address the shortfalls by implementing a plan with immediate, short and long term actions. During our inspection, staff told us NSW was not a traditional neonatal unit and therefore did not compare to such units. There was no clear identity and because of this, care pathways and standards for the care of neonates varied across the trust. Although there had been steps taken to improve, these were not fully embedded.
- Staff recognised that neonatal care lacked identity and clinical leadership.
- The trust did not have a neonatal care policy to describe the standards of care for all babies regardless of their location within the hospital. The WMQRS panel were concerned about the variation of neonatal care. The report published in January 2016 recommended a trust-wide policy for the care of all neonates. The trust had a draft policy in progress at the time of our inspection.
- Both external reviews reported the gold standard of care would be co-location of neonatal care with maternity care for the best patient pathway journey. Caring for neonates together concentrates resources, skills and knowledge. At the time of our inspection, this was not happening.
- Following our inspection, the executive team arranged an urgent neonatal service improvement plan, outlining short, medium and long-term actions. This involved a rapid strategic review of the service and recommendations for moving forward.
- Following our inspection we were made aware that the trust were implementing a process which meant that

neonates in the hospital would receive the same care pathway for a neonate. This is in addition to their diagnosed care pathway no matter where they are in the hospital.

Governance, risk management and quality measurement

- There was no clear governance structure for neonates as a cohort of patients. NSW is part of the surgical clinical group and therefore responsibility for these neonates came under the surgical group governance remit. Neonates could potentially be cared for within all clinical groups but there was no overall governance structure in place to quality check and monitor care quality.
- In the February 2016 surgical governance meetings minutes, there was evidence of discussion of the receipt of the WMQRS report, which acknowledged it made 26 improvement recommendations. There was no meeting minutes for March 2016 and for April 2016; under the heading of 'overview of neonatal review' it stated no discussion took place.
- The local management did not recognise the importance of grading, therefore serious incidents were not recognised as such and opportunities to learn from these were lost.
- The NSW risk register did not align between recorded risks and those on the 'worry list' of staff and managers. Managers did not recognise some that we identified as risks.
- There was no assurance system or service performance monitoring in place for neonatal services. This trust did not have clear quality indicators or clinical activity data because of a lack of identity and leadership. This made it difficult to benchmark against national standards.
- There was no clear systematic programme of clinical local or national audits to monitor the quality of neonatal care at the trust. Staff did not know what the outcomes were for their patients or where they benchmarked with other children's hospitals.
- There were no designated mortality or morbidity meetings specific to the care of neonates. Neonates were discussed across divisional meetings, which meant there was no overall clinical oversight.
- A new electronic system was in use since April 2016, which identified the number and location of all neonates across the trust. Senior management viewed this list daily. This was to improve management

awareness of neonate location within the trust. Managers provided us with this list each day of our inspection. The list did not correctly identify all neonates present on NSW and this was because an inconsistent definition of a neonate.

- Following our inspection the trust embarked on a neonatal improvement programme, seeking feedback via a stakeholder event that included both clinicians and review of parent comments received.
- A trust wide policy 'care of the neonate' was being produced. Some of the areas it was aimed to address were; the definition of a neonate and where they were to be cared for in the hospital. The requirement to identify the additional training requirements for staff, The need to strengthen multidisciplinary input, ensuring daily review by a neonatologist and having 24 hour on call access to a consultant neonatologist. Improvement of both breast feeding and psychological support for mothers and families.
- Data collection was to be strengthened to record activity and outcomes. The 'Badger Net' was to be utilised more widely within the service as part of this. This activity would help identify learning and improve quality outcomes for the neonates.
- The trust were acting on the recommendations of the external reviews by interacting with stakeholders to look at wider and future service provision, not only in the hospital but others, and continued dialogue with the reviewing bodies.

Culture within the service

- Staff described the culture of the trust as open and supportive; commonly using the term 'team BCH'.
- Neonatal staff culture was patient and family focused.
- Some staff felt respected and valued, whilst others felt more support and sharing of information was required.
- NSW lacked a safety and quality culture, which was evident in the lack of robust serious incident investigation and the lack of learning from incidents. Interim leaders brought into NSW following our inspection, related this to the ward leadership.
- There was limited understanding and knowledge of duty of candour from all levels of staff and managers. Staff were aware of the need to be open and honest but senior managers did not know requirements to fully meet the duty of candour regulation.

- NSW sought parent feedback prior to discharge. The ward displayed comments on ward boards. Parents could communicate their experiences using the trust website and via social media.
- As part of the neonatal improvement and innovation group, a neonatal family engagement event was due to take place to involve parents in the future planning of trust-wide neonatal care. There were leaflets advertising this event.
- Open door sessions for staff had been recently set up called 'mad, sad and glad'. This was an opportunity for staff to discuss any concerns or to share positive experiences with senior management. There was no formal record of these sessions and we were not given any examples of any changes because of these.
- Staff felt able to raise concerns and listened to by local management.
- Ward management for NSW did not hold monthly team meetings. Instead, there were eight away days however; there was no set agenda and no formal process for recording the discussions during these.
- Team communication was through a ward 'communication book' and a monthly NSW newsletter. We saw both of these and learning from incidents or complaints did not feature. One NSW nurse told us that regular ward meetings would have been beneficial to discuss issues and concerns.
- NSW response rate (22%) to the NHS Friends and Family test was below the England national average of 35.5%.
- Following our inspection as part of the immediate and short term actions Associate Medical Director who is a neonatologist from another hospital was more visible and available for support of children and staff.
- Staff demonstrated and were invited and engaged in the stakeholder event, which helped to identify and implement actions for improvement of the service.

Innovation, improvement and sustainability

- The neonatal surgical outreach service was an innovative service for the needs of surgical neonates at the trust and across the region. The team provided support, training and empowerment to the local neonatal units, reducing the need for babies requiring transfer to BCH.
- The neonatal surgical outreach lead nurse developed and delivered a university accredited neonatal surgical educational course for local and national candidates.

Public and staff engagement

- The outreach service won the All Party Parliamentary Group on Maternity 2011 award for the most marked improvement in services to address health inequalities/ improvement in outcomes for mothers and babies.
- There were good links with the local neonatal care networks and meetings occurred annually.

Safe	Good	
Effective	Outstanding	\Diamond
Caring	Good	
Responsive	Outstanding	\Diamond
Well-led	Outstanding	\Diamond
Overall	Outstanding	☆

Information about the service

In healthcare, transition services refer to the planning, preparing and moving young people from children's healthcare to adult healthcare.

Transition services for young people are managed by individual specialities within the hospital and provide both inpatient and outpatient services for young people over the age of 12 years and in some instances past the age of 18 years.

The Chief Nurse was the Executive Lead for transition and had 27 clinical leads, 26 transition champions and a Play Adolescent & Transition Lead. These were responsible for coordinating transitional care planning between specialties at the trust as well as liaising with other institutions/ agencies outside the trust for young people with a complex long term condition.

Between April 2015 and March 2016 there were 2,488 outpatient attendances of young people aged over 16 years forming 1.6% of the total out 184,331 patients attendances.

In the same period there were 468 inpatient spells (a spell refers to a continuous stay of a patient using a hospital bed) of young people aged over 16 years which was 1.8% of the total inpatient activity of 43,474.

During the inspection, and in order to make our judgements, we visited inpatient and outpatient areas. We talked with nine patients, eight parents, and 64 staff including nurses, doctors, physiotherapists, a play specialist, support staff and managers. We observed the care provided and interactions between patients and staff. We reviewed the environment and observed infection prevention and control practices. We reviewed 11 care records and other documentation and performance information supplied by the trust.

Summary of findings

Overall we rated the service as outstanding because:

- There was a holistic approach to planning patient's transition to other services, which fully reflected individual circumstances and preferences.
- We found there was a real passion and commitment across multidisciplinary teams to deliver a patient centred and high quality service for young people and adolescents (patients) transitioning to adult care.
- There was a transitional care policy for young people with long term conditions and/or disability (the policy) that encompassed the activities needed to support patients transitioning to adult care.
- The was an Adolescent and Transition Forum (A&TF) to ensure the policy was implemented and Young Person's Advisory Group (YPAG) which had the remit to support and monitor the use of the policy.
- The progress on implementing transition pathways for individual specialties was varied. There were 36 specialities where transition arrangements were either in place and well established or some in the earlier phases of development. Progress was dependent upon the complexity and rarity of individual medical conditions.
- There were a number of specialties participating in national research programs and used the outcome of these to develop innovative and pioneering approaches to high quality care for patients transitioning to adult care.
- Patients received treatment and care according to national guidelines. Transition services obtained good quality outcomes as evidenced by a range of national audits such as the Royal College of Paediatric and Child Health (RCPCH) and the National Institute of Health and Care Excellence (NICE) as a basis to quality assure its transition services.

- Transition services used the Department of Health 'You're Welcome' self-review tool, 'Quality criteria for young people friendly health services, 2011' to monitor standards via the Commissioning for Quality and Innovation framework (CQUIN).
- Feedback from patients and parents were positive, children and young people were treated with dignity, respect and kindness. Staff communicated with patients and their parents and provided information in a way that they could understand.
- Transition clinical leads and champions felt valued and supported by their managers and received the appropriate training and supervision to enable them to meet patients' individual needs.
- There were a range of examples of transition plans. Specialties used innovative and efficient ways to deliver more joined-up care to patients transitioning to adult care. There was a holistic approach to planning people's transition to other services.
- The service involved other organisations and there were examples of the local community being integral to how services were planned and ensured that services met patient's needs.
- Transition teams had reviewed its framework and processes for governance to support patients transitioning into adult care.
- Staff we spoke with, minutes of meetings, monitoring data and audit of transition pathways demonstrated the governance processes for transition services were in place for the majority of specialities.
- There was a YPAG which was proactive in ensuring patients were involved in the development, design and delivery of services for children and young people.
- There was an open, transparent culture with a clear vision and strategy for transition services which was led by a strong management team. Staff told us and we saw evidence that they were consulted and part of the development of the strategy, they were engaged and enthusiastic about the new developments within the transition service.

However we found:

- Not all specialities used the trust's documentation. Plans to support transition for the remaining 16 of the 36 specialities needing amending or further embedding.
- A centralised approach to how information was shared with other external providers when taking over the care of patients transitioning to adult care was in the process of being developed.
- Further work was needed to formalise governance processes so themes and areas of concerns specifically relating to transition could be identified and acted upon in a more timely and effective manner.
- Through conversations with transition clinical leads and champions there was a development opportunity to create a better understanding and appreciation of the needs of adolescents transitioning to adult care.

Are transitional services safe?

Overall we rated the service as good because:

• There was a policy in place for the transition of young people to adult services. Most specialities had appropriate core transition documents and templates in place to ensure young people transitioned safely to adult services.

Good

- We found reliable systems and processes in place to keep people safe and safeguarded from abuse.
- Risks to people who use services were appropriately assessed, and their safety monitored and maintained

However we found:

- Incidents relating to transition were not collected in a formalised manner. For example, the category of 'young people in transition' had not been added to the trust incident reporting system.
- Not all specialities used the trust's documentation. This was because in some specialities the transition pathway was in earlier phases of development.
- Plans to support transition for the remaining 16 of the 36 specialities needed amending or further embedding.

Incidents

- There were three incidents reported between February 2015 and February 2016. Two caused no harm and one caused minor harm. One related to communications concerns, another with inappropriate behaviour and the third related to concerns about the admission process. The three incidents had been reviewed using incident reports detailing the incident descriptions, action taken immediately following the incidents and outcome details.
- There were no never events related to transition services. Never events are serious wholly preventable patient safety incidents that should not occur if the available preventable measures have been implemented by healthcare providers (Serious Incident Framework, NHS England March 2015).
- There was a good reporting culture within the transition leads and champions. The majority of staff we spoke with fully understood their responsibilities to report incidents and near misses.

- Staff were aware of how to report incidents via the trusts electronic incident reporting system and staff told us that they received feedback in a timely manner.
- We observed a safety huddle on the one of the wards we visited and we were told that there were three huddles a day. These included a multi-disciplinary team of staff including nurses, doctors and clinical support workers. Safety huddles are typically short briefings to give frontline staff and bedside caregivers opportunities to stay informed , review events, make and share plans for ensuring well-coordinated patient care.
- Mortality and morbidity meetings took place across the specialties to review practice and share learning. From the documents we saw, these were well attended with a good skill mix of medical staff
- From November 2014, NHS providers were required to comply with the Duty of Candour Regulation 20 of the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014.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 the duty of candour was discussed as part of the incident reporting system and acted as a prompt for staff. Staff told us about being open and honest with patients and their relatives.
- We saw leaflets on the burns unit for patients explaining the trust's responsibilities within the duty of candour

Cleanliness, infection control and hygiene

- All wards and clinical areas we looked at were visibly clean and well maintained.
- There had been no cases of Methicillin Resistant Staphylococcus Aureus (MRSA) between August 2014 and January 2016 and one case of clostridium difficile (C-Diff) reported in October 2015.
- We saw there were hand gels inside and outside of ward areas and in reception areas. We saw staff using gels as needed
- We saw staff adhered to the bare below the elbows policy, as well as utilising appropriate protective equipment such as gloves and aprons to carry out procedures and personal care activities.

Environment and equipment

• The ward areas we visited had teenage rooms where patients could relax in age appropriate environments. We saw there we comfortable sofas, lap tops and a computer desk as well as WI-FI access a TV docking station and game consoles. These areas were bright and inviting for patients.

Medicines

- We found examples of patients being supported to manage medications for long term conditions such as, renal conditions and cystic fibrosis as part of the transition documentation. For example for 'Step 2 and 3' of the Transition documentation there is a check box to confirm "I understand what each of my medications are for, their side effects, how to take them and why."
- We saw evidence of appropriate prescribing, signing, safe storage and documentation around medications being administered.

Records

- The trust had completed a trust wide review on documentation used to support patients transitioning to adult care. This was used to develop transition documentation which supported this process.
- Some staff told us the transition pathway document was too large, time consuming to complete and too generic. Staff told us they were adapting the documentation to suite their patient's needs.
- We looked at 11 care records. We found medical records contained appropriate information regarding clinical care and treatment. Patient notes were laid out well and information was concise, clear and legible.
 Conversations were well documented and the discussions noted were clear to understand.
- Staff who used the documentation said the transition care records were easy to complete.
- In some specialities the transition pathway was in earlier phases of development. This was dependant on the complexity of the condition. Plans to support transition for the remaining 16 of the 36 specialities needing amending or further embedding. We were told the new documentation was being phased in.
- Identification cards were being used by patients aged 16 years or over who were still under the trust's care to enable ease of access to emergency care.

Safeguarding

- The executive lead for safeguarding was the chief nurse.
- The majority (22) of the clinical transition leads had received levels one, two and three safeguarding training with five out of the 27 clinical transition leads still needing to complete the level three training. Training sessions were in place to update the five remaining staff.
- The majority (20) of the transition champions had received safeguarding level one, two and three with six of the 26 having still requiring levels one and two training. This was due to some being new starters to the trust.

Mandatory training

• Overall the clinical transition leads and transition champions had received their mandatory training in line with the trust standard of 95%. The only two areas where this was not met were information governance and fire safety both 75%.

Assessing and responding to patient risk

- The Transitional Care Policy sets out that transition to adult services would normally take place at their sixteenth birthday (with the exception of those with a diagnosed learning disability at 19). Or the young person was under the care of multiple consultants at the trust. If the young person had any of the above, transition could be delayed up until the age of nineteen years and regularly reviewed.
- However, the ward manager had successfully identified an alternative service.
- We saw transition plans and patient's notes included risk assessments. These included discussions with the patients and parents.

Medical and nursing staffing

- There were 27 clinical transition leads and 26 transition champions to care for and treat patients transitioning into adult care. The majority of clinical leads were either doctors or senior nurses and the transition champions were nurse practitioners or speciality trained professionals.
- Doctors treating patients transitioning into adult care were attached to their own speciality and department.
- We observed that ward seven (medicines) which also cared for transition patients had increased staffing levels to meet their intense complex requirements.

Are transitional services effective?

Outstanding

Overall we rated the service as outstanding for effective because:

- Patients were treated according to national guidance, including those from the NICE and RCPCH. Policies and procedures were based on current national guidelines.
- The transition teams took part in national research programs and used the outcome of these to develop innovative approaches to high quality care.
- The service prided itself on meeting the transition needs of patients living with chronic conditions or disabilities through engagement with adult and community services to improve transition from children and young people's services to adult services.
- There was a holistic approach to planning patient's transition to other services, which fully reflected individual circumstances and preferences.
- There was a range of Clinical Nurse Specialists and Advanced Nurse Specialists who were transition clinical leads and champions. These staff supported patients, parents and staff in specific areas, bringing their own expertise and knowledge to develop innovative and individualistic ways of improving transition services.
- Transition teams were committed to working collaboratively and found innovative and efficient ways to deliver more joined-up and holistic care to patients. There were a range of examples of working collaboratively and the service used innovative and efficient ways to deliver more joined-up care to people who used services.

Evidence-based care and treatment

- The transition teams used the 'You're Welcome' standards: Quality criteria for young people friendly health services; Department of Health 2011 on which to base its transition services evidenced by the work with the CQUIN.
- This was an evidence based approach to ensure children had a voice in the NHS and included quality criteria that covered ten topic areas of accessibility, publicity, confidentiality and consent, environment, staff training, skills, attitudes and values, joined-up working, young people's involvement in monitoring and

evaluation of patient experience, health issues for young people, sexual and reproductive health services and specialist child and adolescent mental health services (CAMHS).

- Quarter four transition CQUIN data completed in April 2016 provided by 20 speciality areas in the trust showed that a mean average of 81% of young people aged 14 to16 years had a transition plan/pathway in place. The range was between 20% and 100%.
- Quarter four transition CQUIN data completed in April 2016 provided by 18 speciality areas in the trust showed that the mean average of 90% of young people aged 16 years and over had a transition plan/pathway in place. The range was between 33% and 100%. Plans were in place to increase the percentages in both age groups.
- A number of transition specialities participated in quantitative and qualitative research programmes in order to contribute to providing a stronger evidence base to their specialist transition services. These included medical conditions such as, osteogenesis imperfecta (brittle bone disease), diabetes (a blood sugar disorder), renal (kidney) transplantation, cleft palate conditions (a gap or split in the upper lip and mouth), hydrocephalus (a build-up of fluid on the brain), rheumatology (a condition affecting joints and soft tissue), inherited metabolic diseases and other genetic conditions.
- We were given an example where the rheumatology transition team met with their patients to discuss areas for research that would benefit the patients before embarking on research activities.
- The policy stated transition care arrangements should be audited annually by each individual specialty and the trust. This was due to be audited in December 2016.

Nutrition and hydration

- The minutes of the A&TF March 2016 noted that food could be improved for patients. Staff were working on reviewing menus with the trust's catering company to improve the quality and type of food children preferred.
- The minutes noted snacks were being trialled on the wards as older patients had told them they were getting hungry in between meal times. We saw wards were now offering all patients two snacks and a finger food, for example carrot sticks at lunchtime in addition to their light lunch and providing a 'fruit bowl' to each ward every day.

- The portions of food varied depending upon the age of each patient. We observed two lunch time periods and saw individual patients received different portions of meals dependent upon their age and nutritional needs.
- We saw the concept of protected meal times for all children was enhanced by the ringing of a bell at the start of the meal period, music chosen by the patients would be played and specially developed plates were used to reinforce the quiet and concentration of meal times.
- Dieticians told us they were allocated to specific transition specialities who were experienced in treating patients with complex medical conditions and would be part of the multi-disciplinary meetings for individual patients.
- The trust had nutritional care coffee mornings which met monthly where there were discussions around transition and tips for parents and young people who are going home and are new to TPN.

Patient outcomes

- Patients we spoke with had a key worker both in younger people and adolescent services.
- As part of the transition CQUIN for quarter three 2015/16 the trust were required to audit the percentage of individualised transition plans in place for patients with two specific long term conditions with a minimum expected number of more than 20%. The trust audited patients living with a rheumatology condition and another living with epidermolysis bullosa (EB). Rheumatology is the study of rheumatism, arthritis, and other disorders of the joints, muscles, and ligaments. EB is a skin condition that cause blisters in the skin and mucosal membranes.
- The audit showed that 100% of the150 patients living with a rheumatology condition aged 14 and over who were audited had evidence of an individualised transition plan.
- Of the 32 patients audited with EB aged14 and over there was evidence of 41% having an individualised transition plan in place. Plans were in place to increase the number of individual plans.
- Staff told us and we saw there were qualitative studies into the benefits of group work for patients transitioning into adult care which resulted in a greater understanding of what healthcare professionals can do to support patients transitioning to adult care such as career advice and work experience.

- Staff told us and we saw data to support that due to transition planning in renal services the return for dialysis had reduced from 33.3% in 2004 to 16.7% in 2014.
- We saw information from irritable bowel disease (IBD) patient panels had resulted in improved psychology input, the development of nurse led pre-transition and health promotion clinics and the formation of an IBD youth club.

Pain relief

- We saw there were two types of pain scoring tools used for patients transitioning to adult care, a face, legs activity, cry and consolation (FLACC) and the Wong's face tool of 0-10 faces.
- Staff told us of a patient who needed pain control at home where a small PCA was used for them to take home. PCA is a method of allowing a person in pain to administer their own pain relief.

Competent staff

- Between April 2015 and March 2016, 100% of clinical transition leads had received an appraisal.
- There were three transition champions out of the 26 who did not receive an appraisal in the same period. This was due to two being new starters to the trust and as such their appraisals were booked for later in 2016. The other transition champion was not being directly employed by the trust and as such would have had their appraisal arranged with their own employer.
- Transition clinical leads and champions were qualified and had the right experience and skills to do their job. For example, all clinical leads had additional training specific to their speciality and were clinical nurse specialists.
- Transition clinical leads and champions told us they attended national conferences on their specific specialities in order to keep up to date with their practice.

Multidisciplinary working

- Specialty specific pathways where developed and there was a requirement for a young person to receive healthcare at the trust beyond their 16th birthday or 16th to19th birthday for a young person living with a learning disability and/or additional needs.
- Of the 36 transition medical specialities across the trust, 20 held formalised joint transition clinics with other

organisations. The remaining 16 specialities were planning to hold joint clinics in the near future or were holding joint clinics but these were 'one off' due to their rarity or complexity.

- We spoke with a number of clinical transition leads and champions and we saw evidence to demonstrate joint transition clinics and pathways had been in place for a number of years. The recent initiative for the trust to formalise these plans had been seen as a positive move for those already working across child and adult services.
- Transition leads were also responsible for liaising with colleagues within the speciality to adhere to the Transition Care Policy for Young People with Long Term Conditions and / or Disability V3 (2015).
- Staff told us that working across a variety of health and social care agencies was complex and time consuming. Being able to demonstrate how transition improved the outcomes for patients was difficult. However, we were given a number of examples where specialities could demonstrate improvements.
- A study undertaken in 2014 to ascertain whether group work in the transition period was of benefit to patients with BBD showed that patients found it a positive experience. It raised issues about how they could improve on sharing information about housing, benefits, and work experience and career advice.
- There was a joint audit taking place with a local hospital to look at the impact of transition services for patents living with IBD. This audit was in progress at the time of the inspection.
- There were numerous examples where transition clinics included staff from child and adult care, social care, youth workers, physiotherapists, school nurses and teachers, occupational therapists and psychologists.
- Staff on the burns unit told us staff worked closely with another local hospital and consultants looked after patients at both sites. They told us they were 'one team, two sites'.
- Staff told us they were identifying areas such as wider health, well-being and social needs of the patients. For example, joint rheumatology and BBD sessions held in the summer holidays called 'Moving on Up' for patients getting ready to move from primary to secondary school.
- Staff told us and we saw adolescent clinic consultations were used to facilitate a transition discussion and documented with trust transition documents.

Seven-day services

- The pain service was available seven days a week with a senior anaesthetist on call at weekends if needed for those patients transitioning into adult care.
- Dietetic services were available Monday to Saturday with on call arrangements for the Sunday where needed for patients transitioning to adult care.

Access to information

- Staff told us, records showed and we saw staff followed NICE guidance QS15 Statement 12: Patients experience coordinated care with clear and accurate information exchange between relevant health and social care professionals.
- The service had a database that had an active list of 12 to14 year olds; 14 to 16 year olds and those over 16 years of age. These ensured patients could be followed up in an effective and timely manner.

Consent

- There was a trust policy for consent to examination or treatment dated September 2015 which included 'children under 16 – the concept of Gillick competence. Gillick competence is a term used in medical law to decide whether a child (16 years or younger) is able to consent to his or her own, medical treatment, without the need for parental permission or knowledge.
- The lack of audit for obtaining consent meant the trust would not be able to benchmark its performance around the consent processes and could not be assured patients always understood the procedures they were undergoing.
- However, staff told us and we saw patients with their parents recruited into clinical trials and national clinical data collections. For example, whilst we were visiting the outpatients department we saw two families being approached to enter a study. We saw the nurse go through the reason for the study, what the study entailed, the drawbacks and benefits to the study and information to support what they had been told. The nurse left both families and gave them time to go through the information before making a decision as to whether they would take part in the study.
- We spoke with one child and saw documentation about participating in an international research study. Both the patient and the parent could explain about the

study and the importance of being part of this particular study. They carried a card which explained about the study just in case the patient was involved in an emergency situation.

- We were told 29 out of the 53 transition clinical leads and champions undertook Good Clinical Practice Research Guidance (GCP) training. This information was gained from a combination of the trust's central record of in-house training, and direct confirmation from individuals who had undergone this training externally or in recent previous employment. The 14 remaining staff did not respond to the trust's request.
- However this did not mean all transition clinical leads and champions undertook clinical research, so the figures were an indication of the level of GCP training.
- GCP is the international ethical, scientific and practical standard to which all clinical research is conducted. Compliance with GCP provides public assurance that the rights, safety and wellbeing of research participants are protected and that research data are reliable.

Are transitional services caring?

Good

We found caring to be good because;

- Patients and relatives told us they received good care and they felt well looked after by staff.
- All people we spoke with were positive about their child's care even when the outcome was not a good one. Cards and comments displayed across the ward, without exception, told of the kindness and care their children had received.
- Information for patients and parents about their care was shared and they were able to ask questions when necessary.

Compassionate care

• We observed patients being communicated with by nursing and medical staff in a respectful and compassionate manner. Curtains were drawn around patients to ensure privacy and dignity and voices were lowered to avoid private and confidential information being overheard.

• The atmosphere on the wards we visited was busy and professional and nurses were observed talking to patients and explaining their care and taking their time to ensure parents understood what was happening to their child.

Understanding and involvement of patients and those close to them

- Patients and their parents were involved with their care and decisions taken. We saw evidence in the clinical notes that patients were involved in making decisions about care and treatment and were involved through their care planning processes which included their parents.
- In the outpatients clinics we visited we saw transition clinical leads and champions took the time to interact with patients in a considerate manner.
- The findings of patient engagement showed they preferred their own space and would like more age related equipment and the adolescent room on ward seven was well liked.
- Transition clinical leads and champions told us that at a point during the transition process a patient would talk with a clinician without a parent present. We were told this would depend on the individual and the complexity of the medical condition and the level of the patient's understanding of their condition. We spoke with two patients who confirmed this was the case.
- Care plans we saw demonstrated that consideration was taken about patient's choices around the time of transition. We spoke with one patient who told us they were not ready to be transferred to adult care as they had recently undergone surgery. The patient told us they were told their transfer would not take place until they had settled after their surgery.
- We spoke with play specialists and patients who told us play specialists were involved in preparing them for transition to adult care and play specialists would attend at transition clinics when needed.
- Youth workers were also involved jointly in preparing patients for transition across a number of specialities and some were joint appointments (for example in oncology) with other hospitals.

Emotional support

• Parents told us and we saw children's privacy and dignity had been maintained throughout their stay on the wards.

- Transition clinical leads and champions had an overwhelming awareness of their patients and those patients who may require additional support should they display anxious or challenging behaviours.
- There was access to volunteers, local and national advisory groups to offer both practical advice and emotional support to both children and parents.
- Saturday clubs, annual disease specific events and coffee mornings were used to engage patients and parents in understanding their conditions. These gave opportunities for patients and parents to discuss their individual anxieties. Often these events were held so patients could speak about their concerns whilst their parents were meeting in another area to discuss their concerns.
- There was a holistic approach to planning patient's transition to other services, which fully reflected individual circumstances and preferences.
- We spoke with staff and we saw there was access to child psychologists to support patients with long term or complex conditions and through transition to adult services. Staff were every positive about the level of support they received from the psychologists especially when dealing with adolescent patients which helped to understand and care these individuals needed.

Are transitional services responsive?

Outstanding

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We rated responsive as outstanding because:

- There were innovative approaches to providing integrated person-centred pathways of care through transition that involved other service providers, particularly for patients with multiple and complex needs.
- The use of open access passports were examples where patients could gain access to services when they were over the age of 16 years in a way and at a time that suited them.
- The service involved other organisations and there were examples of local community being integral to how services were planned and ensured that services met patient's needs.

- The service had experienced a year on year increase in the number of young people who transferred from children services to adult services. In 2013/14 64 young people transitioned, in 2014/1577 young people transitioned and in 2015/16 105 young people transitioned.
- Some patients were still supported by the trust after the age of 18 years because there was a lack of availability of services elsewhere for young people with complex medical conditions when they reached adulthood. For some of these medical conditions staff were looking for alternative hospitals to provide this care.

Service planning and delivery to meet the needs of local people

- There was a YPAG which was proactive in ensuring patients were involved in the development, design and delivery of services for children and young people.
- The service was working with the CCGs to develop transition arrangements across the trust and had action plans in place with timescales for achieving the monitoring standards set by the CCG.
- The Transitional Care Policy sets out that transition to adult services would normally take place at their sixteenth birthday (with the exception of those with a diagnosed learning disability at 19). Or the young person was under the care of multiple consultants at the trust. If the young person had any of the above, transition could be delayed up until the age of nineteen years and regularly reviewed.
- The October 2015 board minutes discussed transition arrangements and the strategic implications of the trust regularly treating young adults over the age of 18 years. There was a discussion around the development of a transition unit to ensure the support needed was provided in line with a strategy, rather than on an individual basis. This was being debated at all levels across the trust.
- The service told us they were developing a process by which the trust could gain assurance as to the appropriate management of patients aged 16 years and over, balancing their privacy and dignity needs with those of the children and young people around them and with their clinical needs

- Transition pathways were driven by the patient's health needs. Speaking with patients, parents and staff and reviewing transition pathways it was clear that strong relationships with other providers was key to the success of transition into adult care.
- The trust had developed a Play & Admissions Centre that enabled the patient's first contact with the trust to be a 'play' contact which would reinforce to all patients and their families attending that play services were an integral role to the trusts core services. We saw patients transitioning into adult care had access to this facility.
- The trust contributed to a Children and Young People's West Midlands Diabetes Network Transition Booklet which contained information about the services that were available in the West Midlands region. This included information about hospital transition clinics, the date and time of the clinics and the doctors and nurses running the clinics.

Access and flow

- Staff told us and we saw that patients transitioning to adult care were planned on an individual basis. Clinical transition leads and champions told us for the majority of patients, transition planning started at the age of the young person moving from primary into secondary school education.
- Delays in planning for transition was dependent upon the complexity of the medical condition, the stage at which the patient had been admitted to the hospital, the stage of the treatment for a medical condition and the patient's ability to understand their care and treatment. We saw documentation and we spoke with parents which demonstrated these were the reasons for delaying transition into adult care.
- The trust undertook a review of patient activity over June, July and August 2015 to identify the number of outpatient and inpatient attendances of young people age 16 years and over. The results identified there was a total of 2,043 outpatient attendees which was 6.1% of the total outpatient attendances of 36,000.
- The age breakdown was 59% (1,196) 16 years, 25% (515)17 years, 9% (189) 18 years, 2% (38) 19 years and 5% (105) 20 to 60 years.

- In-patient episodes between June and August 2015 for children over 16 years of age were 249 which were 3.3% of the total episodes 8,300.
- The age breakdown was 60% (150) 16 years, 29% (72) 17 years, 8% (19) 18 years. 1% (3) 19 years and 2% (5) 20 to 34 years.
- Staff told us there was a lack of spinal rehabilitation services for patients with complex conditions for example following road traffic accidents. The trust had difficulties in providing services for these patients transitioning to adult care in the region.

Meeting people's individual needs

- We saw a variety of information provided to patients across a range of specialities which were produced in different formats. For example some were professionally produced whilst others had been printed off on A4 paper. Even so, the information was understandable and at a level patients and parents would understand.
- Patients and parents we spoke with could tell us about the three stages of transition which were 'setup/getup/ go'. We saw examples of the documentation to support these three stages in practice.
- We saw the transition leads and champions also used 'early teenage plan', 'mid teenage plan' and' late teenage plan' documents which reflected the age of the patient and was adapted as they travelled though the transition pathway. Patients were involved in developing these plans.
- IBD was the commonest chronic gastrointestinal condition managed in the trust and the largest paediatric IBD centre in the UK. There were approximately 474 patients with IBD under the trust's care which was more than the national average 150. Between 80 and 90 new patients were seen every year with IBD which was more than the national average of 35 and a median average age of 13 years. Transition planning was started when the disease was in remission.
- There were numerous activities arranged for patients who were transitioning to adult care such as, workshops for patients living with specific diseases, rock climbing days, short break holidays, trips to a safari park and Saturday clubs.
- Other examples of events were, an annual spinal cord injury day, intensive therapy sessions during school holidays for BBD who need focused opportunity to try

out independent mobility, rheumatology breakaway residential weeks in July and August each year to build independence and prepare young people for transition and career trips to the local conference centre's job fair day to encourage young people to think about career options.

- There were tours of the hospitals where patients were being transitioned to and were accompanied by a transition champion and /or their youth worker so patients could acclimatise themselves to their prospective environment.
- There was a learning disability transition pack that included areas around daily skills, health needs and lifestyle preferences. The first disability transition pack had been used for the first time a week before our inspection.
- CQC's publication 'From the pond into the sea' Children's transition to adult health services (June 2014) states: Existing good practice guidance must be followed to ensure young people are properly supported through transition. A communication or 'health passport' to ensure relevant professionals have access to essential information about the young person should be in place.
- We were told the transition teams had no passports in place for those patients transitioning to adult care. However there was an identification access card for those patients over the age of 16 years who were being treated at the hospital and were attending the Emergency Department (ED) so they could be treated even though they were over 16 years.
- A hospital passport was used for those patients over 19 years living with a learning disability who were transitioning to adult care with other medical conditions. The passport was taken with them when they were transferred to adult care and the specialist service was informed of the patient.
- The new Play and Admissions Centre opened at the end of April 2016, with a new, improved sensory den, more space and a more child-friendly environment with all day play provision. It was able to accommodate those children and young people who were having elective operations prior to surgery and included patients who were in the transition period.
- Wi-Fi issues came up as the connection was not strong enough in the hospital and gifts donated such as x boxes struggled with the connection. Plans were in place to respond and make improvements.

- The YPAG group along with the patient experience team organised a walk about across some wards in December 2015. The group asked adolescent patients to tell them one thing they would change and one thing they would keep.
- Patients and their parents had access to individual specialities information leaflets on clinical conditions which were widely available throughout the service.

Learning from complaints and concerns

- The Participation and Patient Experience Strategy 2014 to 2016 noted it would develop a robust analysis and triangulation of complaints to inform improvement to adolescent care and patients in the transition period. There was no evidence that this was happening at the time of the inspection.
- We found there were no complaints relating directly to transition services. This was because the specialities going through transition did not have an individual identity within the performance management system. However transition staff were aware of any complaint relating to their patients.

Are transitional services well-led?

Outstanding

We found the service was outstanding for well led because:

- There was a clear vision and policy for the transition services which was led by a strong management team. The policy and supporting terms of reference were stretching and challenging while remaining achievable.
- Staff we spoke with, minutes of meetings, monitoring data and audit of transition pathways demonstrated the governance processes for transition services were in place but needed further embedding. In January 2016 the service had reviewed its framework and governance processes to support young people transitioning into adult care.
- Executive leaders and senior clinical staff had been identified to champion the service and take forward the implementation of their policy.
- Risks for transition had been identified and were reviewed monthly with evidence of actions taken and risks reduced.

- We saw strong partnership working to support the functions of the service and continually learn and improve the service.
- Transition services regularly took part in national research programmes which resulted in developing innovative and new ways of working and improving standards of care for young people and adolescents.
- Staff were supported by their leaders and managers. There was a very high level of satisfaction with staff telling us they were proud of the organisation and enjoyed working within their teams.
- Young people were engaged in developing transition arrangements and attended regular meetings with the service.

Leadership of service

- There was no designated clinical or operational lead for neonatal services as a collective. A manager, a lead nurse and a head of nursing formed the management structure for each ward such as NSW.
- Immediately following our feedback, we were aware that the trust executive called on the support of a neonatologist to attend the trust and support the changes and improvements required. In addition to this the PICU management was also utilised to support staff in the changes. With one member of the senior staff team redeployed from neonatal care. There was no clinical leadership to provide advocacy or oversight of the care of all neonates within the trust. Senior management acknowledged this was lacking and needed addressing. Both external reviews had previously recommended this to drive service improvement for neonates at the trust.
- There was strong leadership within the neonatal surgical outreach service.
- NSW staff felt supported by the ward manager but felt executive management lacked visibility.
- Senior management were supporting local level leadership to improve.
- All levels of management failed to recognise the level of priority needed to improve neonatal services at the trust.
- Although a neonatal 'improvement and innovation group' was set up in March 2016 following the WMQRS review, this action by the trust was untimely and slow in view of the neonatal network SWWMM in January 2015

also highlighting concerns for neonatal service provision. We viewed meeting minutes for this group that demonstrated action milestones had been missed, which further evidenced that action was untimely.

- We saw following the inspection, that the trust was actively working on the implementation of a neonatal pathway. This meant that all neonates in the hospital received the same baseline care via a 'toolkit'. Although neonates were still not planned to be cohorted on one unit, the trust was restricting the number of areas they were cared for and increasing the competencies of the staff caring for them. This meant that a smaller group of staff would further develop expertise with this group of patients.
- There was evidence that the external review recommendations had been escalated to board level, however, there was insufficient priority given to the recommendations by the executive team and therefore appropriate risk assessment did not take place.
- Managers at local and senior level lacked understanding and awareness of what to include on the risk register.
- Middle management lacked awareness and knowledge of data collection requirements for outcomes and performance to improve service effectiveness.

Vision and strategy for this service

- There was a policy which described the trust's approach to transition. Core transition documents and templates to be used for individual transition of young people into adult care were contained in the policy to ensure a consistent approach to transition.
- The policy included the aims of transition which were to provide high quality, co-ordinated, uninterrupted health-care that is patient-centred, age and developmentally appropriate and culturally competent, flexible, responsive and comprehensive with respect to all persons involved.
- Other aims were to promote skills in communication, decision-making, assertiveness and self-care, self-determination and self-advocacy, enhance the young person's sense of control and interdependence, provide support for the parent(s) /guardian(s) of the young person during this process and to maximise lifelong functioning and potential.
- The policy was launched in December 2015 and an audit programme had yet to be established to enable formal evaluation of its effectiveness.

- The service was working with the CCGs to develop transition arrangements across the trust and had action plans in place with timescales for achieving the monitoring standards set by the CCG. Such as:
- Developing transition pathways across the trust, developing agreed methods of tracking completed transition assessments, achieving 15% of eligible patients under 16 years having a completed transition assessment in place, achieving 30% of eligible patients over 16 years having a completed transition assessment in place, achieving 50% of individualised transition plans in place for young people with all commissioned long term conditions and to develop an infrastructure to support implementation across all patient groups.
- The trust treated significant numbers of 16 to18 year olds who were waiting to transition to adult services for a variety of reasons and also treated other adults where the hospital was considered to be the safest or most appropriate place for treatment. This was not part of the trust's strategy.
- The trust told us they had considered the potential of increasing the general age limit up to 18, recognising the benefits for some young people. However, this would not benefit all, as many young people were clear they wanted to move on to adult services at 16, or have conditions better looked after by adult teams.

Governance, risk management and quality measurement

- There was a newly formed A&TF which had responsibility for rolling out the Transitional Care Policy for Young People with Long Term Conditions and/or Disability, ensuring the 'You're Welcome' standards were used as best practice guidance across the trust. This was also to ensure there were communication links with clinicians across the organisation and ensured staff training was delivered.
- The Chief Nurse was a member of this forum and reports from the forum were sent to the Patient Experience and Participation Committee (PEaPC).
- As Chair of the PEaPC the Chief Nurse would raise any concerns relating to transition to the Quality Committee.
- The Quality Committee reported to the trust board and was responsible for receiving reports from the PEaPC. It had responsibility for taking action on any non-compliance from the identified measurement tools that monitor compliance against the policy.

- The minutes from the Quality Committee meeting in January 2016 noted an action to provide updates on the progress of the new systematic approach to transitional care.
- We were told and we saw the trust board received three monthly reports on transition issues and patient's stories relating to transition were presented and discussed. For example, one patient's story raised concerns relating to commissioning and funding arrangements that were preventing the transition to adult services and the patient experience for young adults treated by the trust.
- Whilst commissioning arrangements via the CQUIN were clear and monitoring arrangements were in place this patient's story raised discussions about their wider commissioning arrangements.
- The Participation and Patient Experience Strategy 2014 to 2016 set out the work for transition and noted CQUIN work for 2016 would focus on transition with the analysis of the numbers of young people per speciality and the audit of transition care plans in place.
- Action plans and monitoring data via the CQUIN March 2016 noted the majority of work in order to embed transition services into the trust's core business would be completed by April 2016. Further work would need to be completed in order for transition services to be fully embedded in the trust's core business. Such as: ensuring all specialities had transition plans in place and auditing of the new governance systems to ensure evidence based practice was adhered to.
- The service had four risks on the trust's risk register, two were related to funding and contracting of services, one raised concerns about losing a consultant in a specific area which could lead to increased waiting times and the transition team not able to spend as much time on transition work. The fourth risk raised concerns about the lack of robust plans when transferring those patients transitioning to another hospital.
- These risks were reviewed monthly and there were robust action plans in place to reduce the risks. Such as targeted meetings with commissioners and other NHS providers, administration support to focus the patients transition to another hospital, redesign of transition leaflets and the introduction of the transition champions to maintain the links with external providers and NHS trusts.

- There was a strong culture of teamwork and staff spoke of being proud of their service.
- Staff were motivated and driven to enhance the standard of care that was provided across the service. All staff we spoke with were positive about their work. There was an open and friendly approach and staff told us they worked well as a team.
- We were approached by a range of staff across the transition specialities wanting to share their work and their specific area of expertise with us. Staff were passionate and proud about their work and wanted to make sure they could showcase their team working and high standards of care they delivered on a daily basis.
- Staff told us clinicians were engaged with transition and were the drivers for moving transition services forward. We were told anecdotally that more conversations could be heard on the wards about transition and clinicians would bring issues about transition to their monthly specialist meetings.

Staff engagement

- Transition leaflets for staff had been redeveloped at the trust and external NHS providers were in the process of redeveloping their transition leaflets to be in line the trusts leaflets to ensure a more consistent approach to working across NHS providers.
- We saw posters and leaflets for staff across the trust reminding staff about transition and its importance for patients.
- Posters included the 'set up/get up/go' philosophy of transition so staff could understand how they would be involved in the processes.

Public engagement

- There was a Participation and Patient Experience Strategy 2014 to 2016 setting out its aims, mechanisms and processes to develop design and deliver services for children and young people. NHS staff, children, young people and families, YPAG and members of the public had been involved in the development of this strategy.
- The trust had a YPAG which had the remit to support the monitoring of the use of the policy and would highlight any concerns around the use (or non-use) of the policy and escalate appropriately.
- The service was due to undertake adolescent awareness events in January, February and March 2016. The events planned by the A&TF did not go ahead due to clinical

Culture within the service

demands and the development of the new play centre. A decision to postpone the events until the summer months was made allowing more planning time to ensure the events met the needs voiced by the forum.

- There had been other awareness raising work, including the re-launch of the transitional care policy and awareness events facilitated by the safeguarding team on child sexual exploitation.
- A number of specialities held regular adolescent away days and weekends to help develop their patient's independence.
- The newly defined role of the transition champion was helping to raise the profile of transitional care and strengthening the A&TF.
- Staff told us that YPAG representatives were used to interview NHS staff and we were told by a patient they had interviewed a doctor for his job at the trust.
- Examples of individual patient groups included two hour meetings on Saturdays every three to four months for patients living with Irritable Bowel Disease (IBD). This was open to children of all ages and their parents and siblings where there was informal and interactive forum education about IBD by doctors, nurses, dieticians and psychologists.
- Topics included nutrition, transition, medications, self-management, research and psychological issues and patient and parent's talks on their experiences.

Innovation improvement and sustainability

- An approach to enhance the medical annual reviews for cystic fibrosis was innovative as it was an in depth educational key stage review starting at age two to three (Start), then at age six to seven(Get Ready), nine to ten(Set up), 12 to13 (Get up) and 14-16yrs(Go).
- This mirrored the trust transition stages and was incorporated as building blocks to transition at an earlier stage in life. The aim was to enable the parents to

teach their children about cystic fibrosis and support them to ensure by the time of transition they had a good knowledge and understanding of their cystic fibrosis and its treatment.

- The key stage review was agreed & finalised at the team multi-disciplinary meeting, a written summary including sign posting to other services and any cystic fibrosis doctor opinion was sent to the patient and family following the review.
- The clinic was wholly nurse led with two nurse prescribers who undertook a role that was traditionally that of a doctor. It replaced a medical appointment rather than being in addition to it and set the health goals for the coming two years. The team included a dietician, physiotherapist, pharmacist, psychologist and a social worker.
- The IBD team received a special commendation from the IBD Quality Improvement Programme (IBDQIP), a national initiative to improve IBD services in the United Kingdom.
- The YPAG hosted 'The Big Discussion' was supported by the RCPCH, the National Children's Bureau and Healthwatch Birmingham which brought together local youngsters and healthcare professionals from all over the UK, to discuss important health topics.
- It welcomed health professionals from hospitals and councils across the country to hear about the important areas faced by young people in the NHS.
- Hosted by BBC Radio 1's Aled Haydn-Jones, there were also keynote speeches from the Children's Commissioner of England and the NHS England Head of Patient Experience. The four key topics of the day were transition from paediatric to adult care, mental health, health education/health promotion and communication between healthcare professionals and young people.

Safe	Good	
Effective	Good	
Caring	Outstanding	公
Responsive	Outstanding	\Diamond
Well-led	Good	
Overall	Outstanding	

Information about the service

Medical care at Birmingham Children's Hospital is provided across eight wards and units, covering oncology, haematology, hepatology, cardiology, general paediatrics, paediatric assessment, complex care, and nephrology, and in patients' homes by a team of community staff. The hospital treated patients from birth to 17 years of age.

End of life care was provided across the trust, wherever it was needed regardless of specialty, although mainly on medical wards.

There were two specialist teams involved in palliative and end of life care. One was oncology specific caring for those with a diagnosis of cancer. The other was all other diagnosis for which patients required palliative or end of life care.

We spoke with operational staff including managers and reviewed documents relied upon to deliver the service. This overlapped with the medical report as the vast majority of care was delivered on medical wards. Please note at the time of the inspection there were no patients receiving end of life care in the hospital.

Summary of findings

During our inspection there were no patients at the hospital requiring end of life care, although there were some palliative care patients, therefore we have gained assurance from documents and interviews with staff.

Overall, we rated end of life care at Birmingham Children's Hospital as outstanding, having safe, effective and well led as good.

- There was a positive, transparent culture of incident reporting and learning from incidents. Sufficient numbers of appropriately qualified and trained staff were on duty to ensure patients were kept safe.
- Staff used national guidelines and evidence-based treatment when looking after patients. The hospital took part in several national audits and staff were encouraged to carry out local audits. Results of audits were used to improve patients' experiences and care.
- Feedback from parents and patients about the care they received was consistently excellent. Parents, carers and patients we spoke with said staff "went the extra mile" and were "brilliant" or "excellent" and the care given was much more than they expected.
- Patients and their families were treated with respect, dignity and compassion, particularly at the most difficult times, and bereaved parents were given genuine, compassionate care with clear emotional support if a child died. Staff displayed a great sense

of pride in the end of life care provided at the hospital. Patients' needs and those of families and other representatives of patients were considered throughout the process and following death. Parents were involved at every stage and were treated as individuals.

- Patients were treated as individuals and different approaches were taken, when needed, to care for them in the most appropriate way. People from different cultures, backgrounds and religions were supported by staff and adjustments were made to accommodate their needs.
- Leaders had an inspiring purpose and common focus to deliver the best possible care to the children in their care, and this attitude was shared by staff at all levels. Staff across all groups were proud of the organisation as a place to work and spoke highly of the culture. Many staff told us the hospital was "the best place they had ever worked" and said they "couldn't imagine working anywhere else".

Are end of life care services safe?



We rated end of life care services as good for safety. This is because:

- Openness and transparency about safety was encouraged. Staff understood their responsibilities to raise incidents and were positively supported to do so.
- Staff had received or were scheduled to receive training in all areas of personal and patient safety
- Staffing levels and skill mix were planned and implemented to keep patients safe. Vacant shifts were covered by bank staff who were familiar with the hospital and its processes. Agency staff were not used.
- Risks to patients and to service provision were anticipated and plans were in place to mitigate them.

However we also saw:

- Nurses completing medicine administration rounds did not always change their disposable aprons between patients, which may have caused a risk of cross-infection.
- Medicine charts did not encourage staff to record administration times accurately.

Incidents

- Between March 2015 and February 2016, staff recorded 13 incidents involving patients receiving end of life care. Eight of these had been graded as 'no harm'.
- The remaining five incidents consisted of three 'minor', one 'moderate' and one 'severe' harm. The 'moderate' harm incident involved an unexpected reaction to treatment, and the subsequent investigation showed staff could not have anticipated the reaction, and had acted quickly and appropriately to treat the patient.
- The 'severe' incident related to an error in treatment leading to a patient who was being cared for at the end of their life becoming acutely critically unwell. The trust had completed a serious incident investigation and a root cause analysis of the incident. We were given a copy of the report on the root cause analysis, which evidenced a thorough and detailed investigation of the incident. The report showed an emphasis on organisational learning rather than allocation of blame. It made a number of recommendations including:

advice about equipment use; re-writing some of the department's guidelines; and updating the hospital's records about staff trained to perform certain procedures. Throughout the incident report and the root cause analysis investigation, the trust had demonstrated an open and transparent approach to the incident and an attitude of learning from the event to improve practice.

• Key clinicians who were directly involved in care held mortality reviews after every child death. Outcomes and learning from mortality reviews were fed back to nurses via ward managers and to junior doctors through mortality and morbidity meetings.

Duty of Candour

- At ward level, managers we spoke with were aware of Duty of Candour but could not tell us the types of incident that would trigger the process.
- We saw references to Duty of Candour in incident investigation reports, where the level of patient harm had been graded as 'moderate' or higher. We were reassured that managers responsible for incident review and investigation had a good understanding of the trust's responsibilities under this duty.

Environment and equipment

- Access to the mortuary and the 'Rainbow Suite', where bereaved families could spend time with their child after they had died, was controlled by an intercom system. This meant only authorised people could access these areas.
- We inspected the two mortuary refrigerators and saw they were in good working order, clean, and well maintained.

Medicines

- Staff had access to documents identifying the process for symptom management. However we did not see this in practice as there were no patients requiring the service.
- We saw prescriptions for anticipatory medicines for the relief of pain and other symptoms in advanced care plans for patients being cared for at the end of their lives.
- Each ward or unit had a 'red box', containing documentation relevant to end of life care. One of the documents in this pack was guidelines for medicine prescribing and administration for end of life care.

- A ward manager told us staff had agreed to a 'medicines pledge' following an incident involving medicines. We saw nurses wearing disposable red aprons which had "do not disturb" printed on them while preparing and administering medicines. All staff now understood they should not speak to nurses wearing the red aprons. These procedures were followed for all patients, including those being cared for at the end of their lives.
- We checked medicines refrigerators on every ward we visited. We saw staff checked and recorded refrigerator temperatures twice a day, and we saw guidance displayed about what action they should take if a temperature fell outside the normal range. We saw instances where temperatures had been found to be elevated into the 'amber' range, and appropriate action and further checks had been completed to ensure medicines were stored safely.
- Staff on each ward kept keys for medicines storage cupboards in a key-coded safe in a swipe-card controlled room.
- Pharmacists checked pharmacy stock folders on each ward twice a week. This meant sufficient quantities of commonly-used medicines, and anticipatory medicines prescribed for children receiving end of life care were available and expiry dates were regularly monitored.
- A clinical pharmacist visited each ward five days a week. They were involved in discussions with doctors and nurses about patients' individual medicine requirements and helped identify medicine safety issues which could be dealt with immediately.
- Staff recorded checks to ensure any known allergies or sensitivities to medicines accurately on patients' prescription charts within 24 hours of admission. This information is important to prevent the potential of a medicine being given in error and causing harm to a patient. We checked two prescription charts which had been correctly documented, signed and dated by the doctor. This followed trust policy.
- We were told about a medicine incident that had recently occurred on a ward and how practice had been changed in order to ensure it did not happen again. We were shown the new arrangements in place which we were told were working effectively. However, this innovative idea had not yet been shared on the new 'learning from excellence' reporting system.

- Access to medicine storerooms on all the wards and units we visited was controlled with an electronic lock. Only staff with appropriate access permission on their swipe cards were able to unlock the doors.
- Controlled drugs, which require special storage and records, were stored following good guidance procedures including daily checks of quantities and records, carried out by two nurses.

Records

- Mortuary records were complete and accurate and included information about the release of children to undertakers or bereaved families according to the families' wishes.
- We requested and reviewed at six advanced care plans for children being cared for at the end of their lives. All were properly completed and in date.
- The specialist palliative care team included an advanced care plan co-ordinator, who was responsible for checking plans and ensuring they were held in the right section of patient's notes.
- On the paediatric assessment unit, patient records were kept in locked boxes outside patients' rooms. The boxes could only be opened with staff members' swipe cards. This ensured records were kept secure and patient privacy was maintained.
- Nursing notes on Ocean Ward were kept in a locked cabinet. The nurse in charge held the key and ensured only authorised people had access. However, on ward 2, we found nursing notes stored in open containers on the walls outside patients' rooms. This meant unauthorised people could read other people's notes if they wanted to.
- We looked at 42 sets of patient notes, including some for patients being cared for at the end of their lives, during our inspection. We saw nursing and medical notes were kept together and all entries were legible, complete and properly signed and dated. Conversations with patients' parents and carers were documented and within the care plan we saw a 'play plan' which allowed input from play facilitators and play specialists.
- Staff told us they felt the trust had made a positive change in reducing the volume of paperwork they used to allow more time for staff to provide individual care for patients.
- Medical notes were held on a computerised system. This ensured records were secure, up to date and available to all staff who required them.

Safeguarding

• Please see medical report here; there was no palliative or end of life ward, patients were cared for on medical wards, therefore this information is the same as in the medical report.

Assessing and responding to patient risk

Nursing and medical staff told us they used a nationally recognised tool, the 'paediatric early warning score' (PEWS) to identify children whose condition was deteriorating. Children whose clinical observations or PEWS indicated they were deteriorating would automatically trigger a referral to the Paediatric Assessment Clinical intervention and Education team, however staff could refer any patient they were worried about regardless of clinical observations.

Staffing

- A team of eight paediatric oncology outreach support nurses provided 24-hour, seven-day end of life care for patients being treated for cancer, when they needed it.
- A team of 1.4 whole time equivalent palliative care nurses provided care for patients being treated for conditions other than cancer, at the end of their lives. The team worked Monday to Friday, and at other times the hospital's on-call team supported patients' palliative care needs.

End of life care services did not use any agency nursing staff. The hospital's bank staff, all of whom were familiar with policies, procedures and working practices on the wards covered any shift shortfalls.

• The trust was trying to fund a full time medical consultant for palliative care and had a business plan and strategy in place. However, a senior doctor told us they were frustrated by how long this was taking to progress.

Major incident awareness and training

• The trust's major and critical incident plan identified an area of the hospital to be used as a temporary mortuary, if the hospital's own mortuary was unable to cope. The plan identified actions for security staff and one department manager in relation to the temporary mortuary.

Are end of life care services effective?



We rated end of life care services as outstanding for effective. Because:

- Children's care and treatment was planned and delivered using current evidence-based guidance, standards and best practice.
- The trust participated in national audits to improve patient care, and staff were encouraged to undertake local audits to enhance their own professional development and to improve care for patients on their wards.
- Staff were qualified and had the skills to carry out their roles effectively, and were supported to maintain and develop their skills and knowledge.
- Staff were able to access the information they needed to assess, plan and deliver care easily and quickly.
- Staff understood consent to care and treatment and its particular interpretation when children were involved.

However we also saw:

• On some occasions, teams from different specialties who were involved with the same patient's care, did not communicate effectively and patients sometimes suffered discomfort as a result.

Evidence-based care and treatment

• The palliative care team carried out audits of advanced care plans, using an audit tool from the NHS's 'Child's and Young Person's Advanced Care Plans Collaborative'. We were shown audits from July 2015 of in-patients and those being treated in the emergency department. The audits looked at completeness of the plans, evidence of respect for the child's and their family's wishes, multidisciplinary team involvement and appropriate reviews of the plan. The audits demonstrated good quality advanced care planning, and the palliative care team fed back areas for improvement to individuals or teams involved.

Pain relief

• A senior manager told us the senior team were aware of a gap in their service caused by the lack of a chronic

pain team, and they were looking into options to provide this facility. In the meantime, the hospital's acute pain team provided pain relief for patients with chronic pain.

• Prescriptions for pain relief medicines were included in advanced care plans for patients at the end of their lives, and staff had ready access to pain management guidelines in the palliative care team's 'red boxes' held on all wards and units.

Nutrition and hydration

• Medical wards operated a 'protected mealtimes' system. During patients' mealtimes doctors and nurses did not carry out any assessments or treatments (unless essential). Nurses did not take breaks during patients' mealtimes so they were available to assist with feeding those patients who needed help, and to ensure other patients were eating well.

Patient outcomes

• We were given a copy of an audit of the hospital's palliative care team, completed in April 2015. Respondents to the audit were drawn from the trust's doctors and nurses, from hospices and from community nurses. The audit asked about how helpful the palliative care service had been, and for examples of what had been helpful or unhelpful. The response was overwhelmingly positive: the only negative comments related to the team's small number and their availability on weekends.

Competent staff

 The specialist palliative care team held training days for nursing and medical staff. Subjects covered on these days included syringe drivers and subcutaneous devices, discussions about resuscitation and 'do not attempt cardiopulmonary resuscitation' decisions, advanced care planning and discharge for end of life care. We were shown evaluations of two training days, made up of end-of-course feedback from delegates. The vast majority of delegates' comments were positive, or offered constructive suggestions for improvements. The specialist palliative care team used the feedback to improve their training days.

Multidisciplinary working

- The trust's palliative care team attended multidisciplinary team meetings on the paediatric intensive care unit and neurology, cardiology, gastroenterology and liver wards.
- Externally, the trust's palliative care team were involved with the West Midlands paediatric palliative care network. The hospital's lead nurse for palliative care and bereavement services was the current chair of the network. Through the network, the trust's team had assisted in developing the 'West Midlands Children and Young People's Palliative Care Toolkit' which was written from nationally recommended sources and local best practice.

Seven-day services

- The trust's cancer team provided an on call service for palliative cancer patients 24 hours a day, seven days a week.
- During normal working hours, the hospital's Bereavement Officer made arrangements for bereaved families to view their child in the hospital mortuary. Out of hours, the on-call clinical co-ordinator arranged facilities for viewings.

Access to information

- Each ward kept a red box containing all the paperwork needed for a child on palliative care. Information in the box included details of the palliative care team and how to contact them, the 'West Midlands Children and Young People's Palliative Care Toolkit' and guidance on how to use it effectively. It also contained a medicine prescribing and administration document for end of life care and a copy of the hospital's 'faith matters' belief grid giving staff clear end of life guidance for different faiths. Staff told us they liked the system because it was the same everywhere in the hospital so they knew where to find this information when they needed it, wherever they were.
- The red boxes also contained information on what to do following the death of a child. It included all the paperwork that staff needed in the event of a death and a 'bereavement care pathway flowchart', which clearly explained which deaths needed to be referred to the Coroner. They also contained booklets for parents entitled 'When your child has died at BCH' and information on the trust's bereavement photography service.

• Staff had access to the trust's bereavement care policy and bereavement care pathway flowchart through the trust's intranet. We were shown copies of the documents, which provided a clear, step-by-step guide for staff to follow in the event of a child dying while under the hospital's care.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

• All staff we spoke with demonstrated a good understanding of consent, capacity and deprivation of liberty safeguards. They clearly explained how they would assess whether a patient was able to consent to their own treatment and the process they followed if that was not possible.

Are end of life care services caring?

Outstanding

1

We rated end of life services as outstanding for caring. Because:

- Feedback from parents and patients about the care they received was consistently excellent.
- Parents, carers and patients we spoke with said staff "went the extra mile" and were "brilliant" or "excellent" and the care given was much more than they expected.
- Staff were visibly motivated and keen to provide high quality care to patients and went out of their way to make patients, families and carers feel part of care planning.
- Patients', parents' and carers' views were valued and used in all discussions regarding patient care and the patient was always at the centre of care plans.
- Patients and their families were treated with respect, dignity and compassion, particularly at the most difficult times, and bereaved parents were given genuine, compassionate care with clear emotional support if a child died.
- Staff displayed a great sense of pride in the end of life care provided at the hospital. Patients' needs and those of families and other representatives of patients were considered throughout the process and following death. Parents were involved at every stage and were treated as individuals.

Compassionate care

- One parent of a patient told us that the palliative care team were "on their side and their child's side, and saw things from their point of view". They said the team "thought about them as a parent". The parent told us the palliative care team "offered another level of support".
- The 'Rainbow suite' was the viewing room within the mortuary, music was played when a deceased child was left on their own.

Understanding and involvement of patients and those close to them

- One parent told us the palliative care team had been very caring and supportive and helped to explain this difficult subject, allowing them to "get it right for them as a family".
- The hospital held feedback meetings with parents of children who had died. These normally took place six to eight weeks after the death unless families requested it sooner or it was related to a serious incident.
- The palliative care team had arranged for a specialist storytelling therapist to help a child who was frightened and anxious about their treatment. In the days following the therapy session, staff said the child was calmer and in a better mood, and had not required as much pain relief as they had needed before the therapy.

Emotional support

- The trust provided counselling services to guide families through treatment choices and help them make difficult decisions. Parents told us they knew how to access these but were happy to talk to any of the staff about these issues.
- Every year, the trust held a memorial service at St Chad's Cathedral in Birmingham and a memorial walk and picnic at the National Memorial Arboretum in Alrewas, for bereaved families and carers of children who had been treated at the hospital. These events were facilitated by the hospital's chaplaincy department and allowed families in similar situations to exchange stories and form informal support networks for each other.
- The specialist palliative care team had arranged a free training day on advanced communication skills training. The day was aimed at senior medical and nursing staff and focused on supporting them to develop communication strategies and to deliver difficult and emotional information in stressful situations.

Are end of life care services responsive?

Outstanding

We rated end of life care as 'good' for responsiveness. This is because:

- Services were planned and delivered to meet the needs of the local, and national population
- Patients were treated as individuals and different approaches were taken, when needed, to care for them in the most appropriate way.
- Parents' and carers' requests were listened to and where possible changes were made to care plans to meet those requests.
- Care and treatment was co-ordinated between other NHS trusts and partner agencies such as local authorities.
- People from different cultures, backgrounds and religions were supported by staff and adjustments were made to accommodate their needs.
- Staff displayed a great deal of pride in working for the hospital and worked together to give the best care possible.

Service planning and delivery to meet the needs of local people

• The trust used a document to plan discharge for end of life care based on the recommendations of the West Midlands Paediatric Palliative Care Network. The document included details of the child's religious beliefs, plans for place of discharge, contact details for key hospital staff, details of discussions about discharge, communication with family members, tissue donation preferences, and transport and equipment requirements.

Access and flow

- Ward staff and the palliative care team had a close working relationship. The palliative care team saw all patients referred to them within 24 hours of referral.
- Mortuary rooms were kept to a high standard and were clean and tidy. Bedding and clothing were organised and stored in a well-stocked cupboard.
- Together with other trust healthcare professionals and partner organisations, the specialist palliative care team offered a rapid discharge service to support choices for

children being cared for at the end of their lives, and their families and carers. When appropriate, the team were able to arrange for children to be discharged to their homes, hospices or, if the family were from outside the West Midlands area, a local hospital in the last hours, days or weeks of their lives. Discharges such as this took place within 24 hours of the child or family deciding they wanted it.

Meeting people's individual needs

- The mortuary area provided a quiet and respectful place for families to be with their child. A special viewing area, called the 'Rainbow Suite', was available for bereaved families to spend time with their child. The suite provided a peaceful, comfortable environment and included a waiting room, a viewing room and bathroom facilities.
- There was a good supply of equipment, clothing and literature available in the mortuary for parents and families of every faith and cultural background.
- Feedback meetings following a child's death were held wherever was best for the family. Normally, staff went to the family's home, especially if the family lived outside Birmingham. If the child was well known in a particular part of the hospital staff sometimes held the meeting in that area, or in the patient's GP surgery or community paediatric clinic if the family expressed a preference for that location.
- We were shown a booklet produced by the hospital, entitled "Support for Muslim Families who have been told their child is no longer curable", which contained information and guidance specifically aimed at families from the Islamic community. The palliative care team had also published a booklet called 'Multifaith Care for Sick & Dying Children and their Families' covering the needs of a range of other religions.

Learning from complaints and concerns

- We saw notice boards on the wards and staff office that gave information following complaints and incidents. Staff told us following one concern new practice had been introduced to improve the use of cannulas.
- On every ward and unit we visited we saw leaflets about how to make a complaint and the trust's patient advice and liaison team.
- hospital's patient advice and liaison team prominently displayed in areas accessible to patients, families and other visitors.

• Parents and carers of children being treated on medical wards were able to use simple forms to record any worries they had about their child's care. The forms had space for parents and carers to write down what they wanted staff to know and what they would like staff to do. They could be used in discussions with staff or left for staff to read, as preferred.

Are end of life care services well-led?

Good 🔴

We rated end of life care services as 'good' for well-led. This is because:

- Leaders had an inspiring purpose and common focus to deliver the best possible care to the children in their care, and this attitude was shared by staff at all levels.
- Staff across all groups were proud of the organisation as a place to work and spoke highly of the culture. Many staff told us the hospital was "the best place they had ever worked" and said they "couldn't imagine working anywhere else".
- Governance and quality management processes were robust and regularly reviewed to ensure they were effective.
- Staff at all levels were encouraged to suggest improvements and challenge areas of practice they considered to be inefficient. Managers had a culture of accepting ideas and challenges from staff and implementing them where possible.
- Quality of patient care was paramount in governance meetings and at ward level.
- The service was transparent and open about performance and patient satisfaction issues, and was receptive to constructive criticism and open to change.
- Directors and managers engendered a 'family' feeling amongst the workforce. The ethos of 'team BCH' was embedded and well-received by staff.

Leadership of service

- The team of 1.4WTE palliative care nurse staff worked within the service. A consultant was being sought to add to the team.
- We found the leadership enabled staff to feel inspired to provide high quality care to those referred to the service.

- We found that staff delivering care on the medical wards felt supported by the team to deliver the specific care palliative and end of life patients required.
- The hospital's lead nurse for palliative care and bereavement services was the current chair of the West Midlands Paediatric Palliative Care Network. This meant they had an opportunity to share and receive best practice initiatives and implement them appropriately.

Vision and strategy for this service

- The hospital wide vision was 'To be the leading provider of healthcare for children and young people, giving them care and support – whatever treatment they need – in a hospital without walls.'
- A strategy was in place to achieve this which outlined six objectives.

Governance, risk management and quality measurement

- We saw that governance was robust and in place to ensure quality patient care which fed through to ward level.
- The bereavement steering group, made up of representatives from the palliative care team, every department of the hospital and West Midlands Police, met monthly to review any children who had died while under the care of the hospital, and to discuss staff training and awareness and facilities for children and their families. We were shown minutes of meetings from three months preceding our inspection. The minutes demonstrated a genuine desire among staff to improve care for patients and their loved ones.
- The paediatric palliative care steering group met quarterly, and was attended by members of the palliative care team, the acute pain team, the hospital's play service, the chaplaincy team and therapy staff. We were shown minutes of two meetings, which included discussions about premises refurbishment and development, discussions with the local clinical commissioning groups and education and study days.
 Due to there being no palliative care ward the governance was the same as within the medical wards where monthly cross-department governance meetings to share risks, mortality and morbidity findings, good

practice and learning from incidents were reviewed. We were shown minutes of these meetings, during which managers discussed activity, succession planning, developments in clinical practice, risks, governance and personnel.

Culture within the service

• We found the culture of staff to be very good. They freely expressed to us the pride they felt in their work and the organisation as a good place to work.

Public engagement

• We saw 'Welcome' booklets on all the wards we visited, giving patients and their families details about staff uniforms, contact telephone numbers for the ward, guidelines about visiting and infection control, information about facilities and food and how to give feedback.

Staff engagement

• See medical report here as the staff caring for palliative and end of life patients worked predominantly on the medical wards.

Innovation, improvement and sustainability

- Key clinicians who were directly involved in care held mortality reviews after every child death. Outcomes and learning from mortality reviews were fed back to nurses via ward managers and to junior doctors through mortality and morbidity meetings.
- The hospital, in partnership with the Birmingham Children's Hospital Charity, was in the process of building a specially designed facility for staff to use when breaking bad news to patients, their families and carers. The facility was designed to look and feel different from wards and clinics and would provide a peaceful environment where patients and their loved ones could stay as long as they needed to after the conversation with staff was over.
- The hospital's end of life care lead was also chair of the regional end of life care network. Through this they were able to share best practice and learn from other professionals' experience.

Safe	Good	
Effective	Not sufficient evidence to rate	
Caring	Outstanding	公
Responsive	Good	
Well-led	Requires improvement	
Overall	Good	

Information about the service

Outpatient services are provided in various settings throughout the main hospital site. The main Outpatients Department provides a service for children and their families from birth to 16 years old and consists of a 22 roomed consulting suite with a 7 roomed annexe. Oncology and Haematology, the Eye Department, Haemoglobinopathy and Neurophysiology have their own outpatient facilities in other parts of the hospital.

Birmingham Children's Hospital (BCH) provides a full range of diagnostic imaging, including general radiography, computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine and interventional radiology. They perform approximately 4000 examinations each month. Inspectors visited the main X-ray department and spoke to a wide range of people, including radiologists, radiographers, patients and their families. Inspectors also visited the radiology services located in A&E.

Radiology staff members rotate through both the main and A&E radiology departments to aid flexible working. Radiology services are managed within the Urgent and Critical Care Clinical Group.

There were approximately 221,000 attendances across both outpatient and diagnostic imaging departments between March 2015 and February 2016.

During the inspection, and in order to make our judgements we visited a number of outpatient clinics and treatment areas. We spoke with 52 patients, families or carers about their experiences at the hospital. We spoke with 99 staff regarding their work and the hospital in general. We reviewed documentation in relation to the general running of the services, maintenance of equipment and buildings; we also reviewed 42 patient records and reviewed information provided to us prior to and during inspection.

Summary of findings

We rated outpatient and diagnostic imaging services as good.

The safety and responsiveness of the service was good because:

- There were clear processes for the reporting of incidents.
- Staff were encouraged to report incidents using the electronic incident reporting system.
- We observed staff using appropriate hand washing techniques and personal protective equipment, such as gloves and aprons whilst delivering care.
- Care was provided at flexible times to increase the accessibility of the service being provided.
- The trust involved the Young Person's Advisory Group when planning the delivery of outpatient and diagnostic imaging services.

There was an outstanding level of caring across all outpatient and diagnostic imaging services because:

- When speaking to children, parents and carers they were continually positive about the care that was provided and the way that staff treated them.
- People told us and we saw that staff made an extra special effort when they provided care. Staff were committed to empowering young people through providing them with appropriate information and support to enable them to make decisions around the care they received.
- Children, young people and their carers told us that they were treated with compassion, dignity and respect.
- We saw numerous examples of staff going beyond the remits of their role to overcome obstacles to ensure the needs of the child, family and carers were met.
- We found strong local leadership in outpatient departments.

However, we also found areas requiring improvement in the well led domain, relating mostly to diagnostic imaging services:

• We observed and staff told us that radiographers and radiologists did not work as a cohesive team.

- The on call system for radiographers was not in line with trust policy with regard to compensatory rest for staff called out during on call shifts.
- The trust wide appointment scheduling system had not been fully implemented in radiology.
- Clinical staff in outpatient departments were performing administrative tasks due to a lack of administrative and clerical support. We observed that this was adding to the delays experienced by patients in the ENT clinic.

Are outpatient and diagnostic imaging services safe?

Good

We rated outpatients and diagnostic imaging services as good for safe.

This is because:

- Staff were encouraged to report incidents using the electronic incident reporting system. Staff were made aware of trust wide incidents in various formats, for example, through team meetings, governance meetings and emails from line managers to share lessons learned.
- There was a clear process for the reporting of radiation incidents.
- Local rules were evidenced and implemented as required to adhere to the Ionising Radiation Regulations 1999.
- Hand washing facilities, including hand gel were readily available in prominent positions on entry to each clinical area. We observed staff using appropriate hand washing techniques and personal protective equipment, such as gloves and aprons whilst delivering care.

Incidents

Outpatients

- The trust had an electronic incident reporting system. Policies were available to staff to enable them to identify when they needed to report incidents, and how to do so. Staff graded incidents according to their severity and impact on individuals or services. Never Events as serious incidents that are wholly preventable as guidance or safety recommendations that provide strong systemic protective barriers are available at a national level and should have been implemented by all healthcare providers.
- There were no never events reported between March 2015 and February 2016.
- The outpatients department reported one serious incident between March 2015 and February 2016, which was a confidential information leak where staff disclosed patient information in error. A full root cause

analysis had taken place following the incident. The trust had developed and carried out an action plan embedding the learning from the incident to prevent future occurrences.

- Between March 2015 and February 2016 outpatients and diagnostic imaging departments reported 281 incidents via the National Reporting and Learning System. Ninety-five (34%) of these incidents were related to documentation errors including electronic and paper patient records, identification and drug charts. There were 50 (18%) incidents relating to patients' treatment or procedure.
- During this period the main outpatients department and outpatient clinics reported 172 incidents on the trust's incident reporting system. 114 (66%) were minor incidents, 31 (18%) were moderate incidents, 27 (16%) were unclassified or insignificant.
- Staff told us that they were encouraged to report incidents and were aware of the need to do so. Staff had access to the electronic incident reporting system, which was available through the trust's intranet site.
- Staff were made aware of trust wide incidents in various formats, for example, through team meetings, governance meetings and emails from line managers to share lessons learned.
- Duty of Candour is regulatory duty that is related to openness and transparency and requires providers of health and social care services to notify patients (or relevant persons) of 'certain notifiable safety incidents' and provide reasonable support to the person.
- During interviews, staff described their obligations under Duty of Candour and were aware of when this would come into effect.

Diagnostic Imaging

- NHS trusts are required to report any unnecessary exposure of radiation to patients under the Ionising Radiation (Medical Exposure) Regulations 2000 IR(ME)R. Diagnostic imaging services had procedures to report incidents to the correct organisations, including CQC. There were 5 reportable incidents since July 2014, all were fully investigated and closed by the IR(ME)R investigation team.
- There was a flow diagram in place to clarify the process for reporting radiation incidents. Inspectors saw this flow diagram in the CT control room and 'viewing area' in the main radiology department.

- The radiographers that we spoke to knew where to find the flow diagram and how to report an incident
- Incidents are presented at monthly radiology governance meetings. Actions from these meetings feed into the radiation protection committee, which meets twice a year.
- Staff told us that feedback and learning from incident investigations was shared during the monthly staff meetings.
- Local rules were evidenced as required under Ionising Radiations Regulations 1999 (IRR99) and were within review dates. IRR99 are a statutory instrument, which form the main legal requirements for the use and control of ionising radiation in the United Kingdom.
- The Ionising Radiation (Medical Exposure) Regulations 2000 (IR(ME)R) procedures were in place and all documentation was available on a shared drive. This ensured only the most recent versions were available for staff to reference. All staff spoken with were aware of how to access the information.

Cleanliness, infection control and hygiene

Outpatients

- Staff that we spoke to were aware of the trust policy on infection control and were able to access it via the trust intranet.
- Hand washing facilities, including hand gel were readily available in prominent positions on entry to each clinical area. We observed staff using appropriate hand washing techniques and personal protective equipment, such as gloves and aprons whilst delivering care. Staff were also seen to be bare below the elbow.
- Data provided by the hospital showed that the Outpatients Department had achieved 100% compliance against hand washing standards between April 2015 and January 2016.
- The areas visited during inspection were visibly clean and tidy. Staff completed cleaning schedule checklists, which were up to date at the time of inspection.
- The directorate reported cleanliness, infection control and hygiene standards on a quarterly basis to the Infection Prevention and Control Committee. Action plans were implemented to address any areas in which there was less than 95% achievement of the standard.

For example, it was identified that patient equipment was not being routinely cleaned after every patient, a system of labelling equipment once it had been cleaned was introduced to mitigate this.

• Outpatient clinics had isolation rooms where patients with any suspected communicable disease were seen.

Diagnostic Imaging

- All areas within the radiology department appeared clean although the CT scan room was cluttered with equipment, however this did not cause a safety issue.
- Staff of all specialties and professions were 'bare below the elbow' and seen washing their hands or using sanitising gel between patients. We saw results of a hand hygiene audit in radiology that showed that 100% of staff observed were compliant with trust policy.
- We saw departmental cleaning schedules in CT, general radiology, ultrasound and nuclear medicine that were all completed and up to date. We also saw the use of 'I am clean' stickers in nuclear medicine.
- We saw up to date daily disposal and contamination monitoring records in nuclear medicine.

Environment and equipment

Outpatients

- The outpatient departments were child friendly, decorated in bright colour schemes that made them more appealing and less intimidating to children and young people.
- We observed that some waiting areas were at risk of overcrowding. Staff told us during the inspection of plans in place to help improve the smaller waiting areas.
 For example, the Ophthalmology Department had gained funding approved to refurbish and extend its waiting area.
- Emergency resuscitation equipment was regularly checked, and documented as complete and ready for use. Resuscitation trolleys were secured with tags that were removed daily to check the trolley and contents were in date. We saw one resuscitation trolley in Cardiology Outpatients was obstructed; the inspection team informed staff who removed the obstruction immediately.
- The main outpatients department was included within a, "Clean Team Audit." The audit assessed the general environment and equipment for cleanliness. Issues

identified within the audit were included on an action plan to be addressed. We saw that the action plan documented the actions to be taken, responsible person and the date that the action was taken.

• All equipment seen during the inspection was appropriately checked, cleaned and maintained. Staff completed checklists that showed that daily checks such as calibration and physical cleanliness had been completed. Trust provided data however showed that there were 78 pieces of equipment out of 170 across the outpatient departments that were overdue planned preventative maintenance. The overdue equipment included items such as urine analysers and reclining couches.

Diagnostic Imaging

- Within radiology, a quality assurance (QA) programme was in place. We saw evidence from a radiation protection audit performed in May 2016 that testing of all equipment is undertaken regularly.
- X-ray equipment had regular servicing carried out by manufacturer engineers. We saw evidence of the manufacturers completed service reports. We also saw evidence of routine surveys of all X-ray equipment.
- A capital replacement programme within radiology was in place. Radiology management oversaw procurement along with clinical leads for the specific type of imaging and medical physics.
- There was a resuscitation trolley in the interventional room (room 4) in the main radiology department. There was a rota for checking the resuscitation trolley; however, there were inconsistencies in the checking process with frequent omissions. We also saw an anaesthetic trolley in MRI that had not been recently checked and which also had an over-flowing sharps bin. We raised this with the radiographers working in the area and they immediately addressed all issues relating to the trolley in MRI at the time of the inspection.

Medicines

Outpatients

• The inspection team checked emergency drugs cabinets in outpatient departments and clinics. We found that medicines were stored securely in locked medicine cupboards. Staff had completed and recorded temperature check records.

- We found that all emergency drugs checked were in date with the exception of two drugs in the plaster room drugs cabinet that had expired. The inspection team rose this immediately with staff and the expired drugs were removed from the cabinet and replaced.
- In the Ear Nose and Throat (ENT) clinic, the inspection team observed that a lock on a drugs fridge was not working correctly. This was raised immediately with staff who removed the drugs from the fridge to another within the department and arranged for the lock to be replaced.

Diagnostic Imaging

- We checked the contrast warmer in CT and all bottles of contrast were found to be in date.
- The emergency drugs in A&E X-ray were checked and found to be in date.

Records

Outpatients

- We reviewed 42 patients' medical records in the main outpatients department and outpatient clinics.
- Medical records were stored in secure areas of reception within clinics and were stored in secure cabinets in clinical areas.
- Records included completed risk assessments, treatment plans, consent forms and records of therapies provided.
- Records reviewed were legible, accurate and up to date.
- Patient records were readily available in outpatient clinics. Data provided by the hospital showed that between April 2015 and December 2015 the average availability of patient records was 99.9%.

Diagnostic Imaging

- The Trust used a radiology information system (RIS) and picture archiving and communication system (PACS) this meant patients radiological images and records were stored securely and access was password protected.
- The RIS and PACS systems interface well with one another and there was rapid access to stored data. A radiologist told us that the reporting system for cardiology studies does not automatically transfer reports to RIS at present however, we were told that this issue would be addressed in July 2016.
- We saw evidence that staff in radiology completed an incident form every time they received an incomplete referral for a radiology examination to reduce the likelihood of a radiation incident.
- We reviewed five patient safety checklists undergoing a cardiac procedure. These checklists had been completed and signed by a cardiologist

Safeguarding

Outpatients

- The hospital had safeguarding policies and procedures available to staff on the intranet, including out of hours contact details.
- Safeguarding has three levels of training; level one for non-clinical staff, level two for all clinical staff and level three for staff working directly with children and young people. Level 2 training at BCH was delivered on-line and staff were responsible for accessing this.
- Data provided by the hospital showed that 100% of staff eligible for safeguarding training at level one, level two and level three had completed the training.
- Staff we spoke to were able to demonstrate their awareness of safeguarding policies and procedures.

Diagnostic Imaging

- All staff that we spoke told us that they had completed level two training only, however records seen by us showed that all radiographers had completed level 3 training.
- All radiographers that we spoke to knew who the safeguarding lead for radiology was.

Mandatory training

Outpatients

- Mandatory and statutory training was provided by a combination of e-learning and face to face training sessions. Staff were able to access e-learning through the trust intranet site.
- Mandatory and statutory training was made up of 16 modules including adult and child safeguarding, equality and diversity, manual handling, infection control and information governance.
- All mandatory training had a target of 95% completion.
 Data provided by the hospital showed that in May 2016, 86% of staff in the outpatients department had completed the information governance training, 89%

had completed fire safety, 92% had completed manual handling load training and 94% had completed infection prevention and control. Completion rates for all other mandatory training were above the target.

Diagnostic Imaging

- We saw evidence that 97% of radiographers and 95% of radiologists were up to date with mandatory training. Records from February 2016 indicated that 100% of staff had completed manual handling training and 98% of radiographers and 100% of radiologists had completed infection control training
- All staff that we spoke to confirmed that they were up to date with mandatory training.
- We saw evidence of a detailed equipment training programme for radiographers. A supervisor signed off each radiographer once considered competent to use a piece of equipment. On completion of the training programme, a final meeting was held between the trainee and a senior radiographer where the trainee was signed off as competent. A record of this meeting was saved in a training record matrix.

Assessing and responding to patient risk

Outpatients

- There were procedures in place for the care of children who became acutely unwell. Staff we spoke with were aware of the emergency procedures that they should follow.
- The outpatient departments inspected had fully equipped resuscitation trolleys that were regularly checked by staff.
- Staff in the Neurophysiology Outpatient clinic told us that resuscitation drills took place regularly within the department to ensure efficient response times should the need arise.

- The Radiation Protection Service (RRPS) at a neighbouring trust led the radiation protection service at BCH. They provided the radiation protection advisor (RPA), radiation waste advisor (RWA), medical physics expert (MPE), for diagnostic imaging, nuclear medicine, and provided support for lasers and magnet use within diagnostics throughout the trust.
- There were radiation protection supervisors (RPS) for each controlled radiation area. Their role met the

Ionising Radiation Regulations. The only exception to this was the RPS for theatres. This individual was also the RPS for nuclear medicine and they informed us that they had told management that they did not feel that they were the appropriate person to carry out the task of RPS in theatre, as they were rarely involved in theatre procedures. The role of the RPS is described within the Ionising Radiation Regulations 1999 (IR1999). RPSs are supposed to be available for staff in the areas they supervise to raise concerns. They are also expected to have a good understanding of the procedures being performed in those areas. As the RPS for theatre rarely visited theatre there is a risk that they are not able to appropriately supervise staff working with ionising radiation in theatres. This is significant since the RPS's role is to supervise areas where radiation is used, which cannot be fulfilled if they do not physically work within the area.

- We saw evidence that senior radiographers, with advice from the radiation protection advisor, carried out risk assessments for all new equipment or procedures.
- Radiology management told us that the medical physics service was reviewing doses for head CT scans to investigate whether the radiation doses could be further reduced.

Staffing

Outpatients

- The trust provided a responsive staffing model to reflect the real time activity of main outpatients. Clinic numbers were reviewed each Monday to allow staffing levels to be reviewed, ensuring that staff resources were used to maximum benefit.
- The trust advised that the current nursing skill mix within outpatients was 45% registered nurses and 55% care support workers with a minimum of two registered nurses within main outpatients at all times.
- Staff we spoke with confirmed that there were sufficient members of staff on duty. Data provided by the trust showed that there were no vacancies across all levels of nursing staff in the outpatients department.
- The target sickness absence rate was 3.5%. Data provided by the trust showed that this was met in all outpatient departments with the exception of Phlebotomy (20.1%) and the Plaster Room (11.8%).

Diagnostic Imaging

- There were 10.8 WTE radiographers in CT and MRI with an additional vacancy being advertised. There were 19 WTE radiographers for general and interventional radiology, with an additional five band 5 radiographers due to start working for BCH in the summer.
- There were 3.4 WTE sonographers in ultrasound as well as a band 6 trainee sonographer.
- There were 10.4 WTE radiologists in post. Radiology had advertised two vacancies and the trust had allocated additional funding for an interventional radiologist.
- Staffing levels within diagnostic imaging were safe and met the needs of the patient.
- An out of hours (OOH) interventional radiology service was provided in conjunction with radiologists from a neighbouring trust via a service level agreement (SLA).
- An interventional radiologist told us that despite the SLA, the OOH interventional service was mostly run on a 'good will' basis, as radiologists from Queen Elizabeth Hospital do not cover BCH when their hospital is busy.
- Queen Elizabeth Hospital provided staff for nuclear medicine under an SLA.

Major incident awareness and training

• The trust had a Major and Critical Incident Plan dated November 2015. Staff we spoke with knew about the plan and could describe what they would do in the event of a major incident or fire episode.

Are outpatient and diagnostic imaging services effective?

Not sufficient evidence to rate

During the inspection, we inspected the effectiveness of the Outpatients and Diagnostic Imaging Departments. Whilst we have not rated this domain, we saw positive examples of effectiveness throughout the departments.

The service participated in audits and provided care and treatment in line with professional guidance. Care was delivered by staff who had access to a range of professional development training and who had participated in annual appraisals.

The outpatients and diagnostic imaging departments took a multi-disciplinary team approach across all services.

Radiology services were available 24 hours a day, seven days a week.

Evidence-based care and treatment

- In both outpatient and diagnostic imaging services, policies and guidelines were available through the trust's intranet. Staff told us and we saw that they had opportunities to access computers to view these.
- The interventional radiology checklist adopted from the World Health Organization (WHO) surgical checklist was used within interventional radiography. We saw evidence of completed documentation.
- The Trust had a radiation safety policy. The head of specialty for radiology ratified and signed off all new documentation and revised procedures.
- Clinical staff we spoke to had a sound knowledge of Ionising Radiation (Medical Exposure) Regulations 2000 IR(ME)R relevant to their area
- Local Diagnostic Reference Levels had been established and were reviewed by the medical physics service twice in 2015.
- BCH had adopted a mixture of European and UK scaling factors to ensure that nuclear medicine scans were optimised appropriately. Scaling factors are used to calculate the activity that each child should be given based on their weight.
- Referrers could access i-refer (a guidance tool written by the Royal College of Radiologists) via the BCH intranet. We were told that BCH staff were in the process of writing local referral criteria however this work had not yet been completed.
- Exposure charts were not available in the x-ray rooms visited however, exposure parameters were pre-programmed on the equipment.
- Staff in radiology told us that, following the installation of a new digital X-ray room in A&E, they were reviewing the exposure factors used. This was due to the new equipment being capable of using very different exposure parameters to those normally used, potentially resulting in lower patient doses which would minimise any harmful effects of radiation to the patient.
- Radiology management told us that they benchmarked their service against other paediatric hospitals. This benchmarking process showed that BCH was the busiest paediatric radiology department in the UK.
 The Research Lead Radiographer told us how, in the last year, they had introduced a robust process for all research studies that require radiology examinations,

supported by the lead radiologist. There were now research protocols and guidelines available to radiology staff and we saw staff access these protocols when arranging for an inpatient to have a research procedure.

• The Research Lead Radiographer had introduced new, easily identifiable referral forms for all research examinations.

Pain relief

- Children and young people had access to appropriate pain relief and local anaesthetic where necessary. Staff and parents told us that children never experienced delays in obtaining this and they had access to the type of pain relief most appropriate for the age and condition, such as breathable pain relief.
- Staff used an evidence based pain scoring tool to assess the impact of pain when this was needed.

Patient outcomes

- A patient and family survey between April 2015 and February 2016 showed that 80% of respondents gave positive feedback as to how they would rate the facilities in the main outpatient department. When asked to rate the waiting times in the outpatients department, only 50% of respondents provided positive feedback.
- A Health Promotion Champion was in place within the main outpatient department, providing information to children, young people and their families to encourage healthier living.
- The radiology management team told us that they were investigating the possibility of working towards achieving Imaging Services Accreditation (ISAS). Staff from radiology had visited another paediatric hospital to learn from a department that had been through the ISAS programme. Staff told us that, at present, there were insufficient resources to begin the accreditation process.
- BCH is part of a regional trauma network in which trusts across the region share best practice, helping to improve patient outcomes.

Competent staff

• There were formal processes in place to ensure staff had received training and an annual appraisal.

- Records showed that 100% of outpatient department staff had received an annual appraisal last year. We checked individual staff records which showed staff had received a documented appraisal and this was confirmed by members of staff we talked with.
- The appraisal rate for radiologists was 100%.
- Members of staff gave positive feedback about the individual support they received regarding their personal development.
- We saw evidence of role development for sonographers. A consultant sonographer leads the ultrasound service at BCH and work was underway to move some of the musculoskeletal referrals from MRI to ultrasound to reduce the waiting lists in MRI.
- Radiographers in CT had been trained to deliver contrast via Hickman lines and maintain their competencies through annual re-fresher. Radiologists hold quarterly discrepancy meetings to discuss radiology cases. We were also told that the radiographers are allowed to attend these meetings
- Continual professional development (CPD) within imaging was encouraged. Radiographers were given six days per year for CPD activities.
- We were shown a study room in the A&E X-ray department that staff use to undertake CPD activities.
- Two radiologists we spoke with said that they were able to attend courses and that funding was available to support CPD activities.
- We saw evidence of sonographer peer-review of ultrasound images and reports.

Multidisciplinary working

- Outpatients and diagnostic imaging departments supported multiple specialty clinics, staff told us that effective multidisciplinary working assisted with communication when transferring children between imaging services and main outpatients.
- Radiologists support all multidisciplinary team meetings (MDTs) that require their input. We heard that radiology had recently started supporting the MDTs for cardiology and research as well.
- Radiologists told us that radiology had good links with another paediatric hospital for tracheal and renal vascular national MDT requirements.

- The General Imaging Modality Lead has 6-monthly meetings with the fracture clinic to discuss service requirements and issues that have arisen.
- Radiographers told us that there was not always a named radiologist available to discuss queries related to patients attending for CT and MRI examinations. They also told us that the duty radiologist is not always available either.

Seven-day services

- Outpatient clinics for various medical and surgical specialities had extended working days, this included some clinics being offered at weekends.
- Radiology had extended the working day to provide MRI appointments every Saturday 8.45am-5pm
- The radiology service provided emergency cover 24/7 across CT, Ultrasound and interventional radiology as well as plain film imaging.

Access to information

- Staff had access to policies, procedures, guidance and the hospital's intranet.
- BCH staff accessed radiology images through the PACS (picture archiving and communication system).
- Radiologists we spoke to told us that most ultrasound scans were reported at the time of the examination. They also told us that most CT scans were reported on the day of the examination and that most X-rays were reported within 24 hours. Reporting times for MRI had been good but that due to staff working hard to reduce the waiting list for MRI a backlog had developed, with around 30-40 examinations waiting for more than 10 days for a report.

Are outpatient and diagnostic imaging services caring?

Outstanding

☆

We rated the service as outstanding for caring.

This was because:

• The feedback we received for outpatients and diagnostic imaging services was excellent. Children,

parents and carers were continually positive about the care that the services provided and the way that staff treated them. People told us that they felt that staff went the extra mile when they provided care.

- We saw numerous examples of staff going beyond the remits of their role to overcome obstacles to ensure the needs of the child, family and carers were met.
- Children, young people and their carers told us that staff treated them with compassion, dignity and respect. They were involved in discussions about treatment and care options and able to make decisions.
- Staff provided information to children and their families or carers in a number of formats to enable young people to understand the care available to them, and help them to make decisions about the care they wanted to receive.
- Staff were committed to empowering young people through providing them with appropriate information and support to enable them to make decisions around the care they received.

Compassionate care

Outpatients

- Feedback from patients was continually positive in relation to the way staff treated people.
- Patients and carers advised us that staff were always friendly, courteous, and helpful. We observed staff speaking politely, introducing themselves, and providing detailed explanations prior to, during and following any interventions or treatment.
- We observed a staff member in main outpatient department display strong and supportive care. The staff member, who was working in a different outpatient clinic, recognised that a child waiting for their appointment was becoming distressed by the noise in the main outpatients waiting area. The staff member moved the child and their parents to another waiting area which was soundproofed and liaised with the clinic that the child was waiting to be seen by, in order that they could be collected from the quiet waiting area when they were due to be seen. This significantly reduced the child's distress.
- One parent we spoke with said they were happy to drive for one hour to attend the appointment, as the staff would go the extra mile when delivering care to their child. Another advised that staff go out of their way to chase things up for you, even if they are busy.

- During the inspection, we viewed patient comment cards. Comments included "Great interaction with children, good at explaining things" and "great explanations of the exercises needed and putting patients at ease".
- The physiotherapy and occupational therapy department were involved in arranging a sports day for children with Osteogenesis Imperfecta (a bone disorder characterised by brittle bones).The activities were adapted to enable children with the disorder to participate in wheelchair races and play on inflatables.
- We witnessed staff respecting confidentiality at all times. We observed patients treated in private treatment areas with closed doors or behind curtains .Patients and carers told us staff respected confidentiality during consultations

Diagnostic Imaging

- We met a nurse that makes origami pets for the patients to take home after radiology examinations requiring a general anaesthetic.
- We also met an ODP who makes theatre hats and tops in 'child-friendly' patterned material to make staff appear less intimidating to patients.

Understanding and involvement of patients and those close to them

Outpatients

- We looked at how patients were being supported in a child focused way. We found that staff used language that was jargon free and easy to understand whilst positioning themselves at the patient's level.
- Staff used play, toys and nursery rhymes to maintain engagement. One patient advised us that staff used words they could understand.
- We observed staff discuss with patients and their carers treatment options, including the benefits and risks of treatment. Additionally they advised of any follow up procedures, and when these were likely to take place.
- Staff continually assessed levels of understanding. We observed patients asked to relay information, this ensured the patient had understood the information given. Staff used pictures, diagrams and play to assist in understanding and make treatment fun.

- We saw patients and their carers being fully involved in physiotherapy and occupational therapy. For example, encouraging carers and siblings to do exercises with the patient at home. Staff demonstrated exercises with toys and play.
- Staff within the speech and language therapy department advised us that the trust recently held a 15 year cleft birthday party; one of the aims of this was to promote families linking with other families.

Diagnostic Imaging

• We spoke to one family who told us that the staff in radiology provided them with very helpful information on where to park close to the hospital, which reduced their concerns about finding a parking space.

Emotional support

Outpatients

- Staff provided emotional support. We observed staff reassuring a patient who was having occupational therapy that they would go at a pace suitable for them.
- In the Burns Outpatient clinic, we observed a young girl attend their first appointment for the application of camouflage make up to cover a burn scar. The staff member took time to speak with the patient explaining clearly how to apply and remove the makeup, providing constant reassurance and empowering the child to be able to apply the makeup by itself. Following the consultation the young girl's confidence was visibly improved. We spoke to the patient who said that they, "Could not wait to get back to school to show off their new makeup."

Diagnostic Imaging

- Radiology staff told us that while there was no dedicated play specialist for radiology they were sometimes able to arrange for one to accompany patients when it was felt that the patient would benefit from this service.
- Radiology staff told us that they had arranged for patients to visit the department ahead of their appointment so that they could get used to the equipment and become familiar with what the examination would involve.
- The radiographers in the A&E X-ray department showed us a wide range of stickers and certificates that they gave to patients having an X-ray.

Are outpatient and diagnostic imaging services responsive?

Good

We have rated this service as good for responsiveness.

This was because:

- The main outpatients department ran clinics until 8pm twice weekly to enable parents and carers to attend the clinic with their child outside of school and working hours.
- Radiology had extended working hours, to include Saturdays to meet the demand for imaging services.
- All staff who treated children and young people in the outpatient setting had undertaken training from an external provider in how to deliver exceptional customer service.

Service planning and delivery to meet the needs of local people

Outpatients

- There were specialist outpatient clinics running within main outpatients and across the main hospital site that included audiology, dermatology, neurophysiology, oncology and cardiology.
- The outpatient departments had an on-going system of monitoring and improving service delivery. To respond to growing demands on outpatient services a number of improvement programmes were underway. For example, the Ophthalmology Department had gained funding approved to refurbish and extend its waiting area; in addition, at the time of inspection an extra consultation room was being made available within the department to increase capacity.
- The main outpatients department ran clinics until 8pm twice weekly to enable parents and carers to attend the clinic with their child outside of school and working hours.

- Radiology had extended working hours, to include Saturdays to meet the demand for imaging services.
- The department has offered an 'express' MRI service since 2009. When patients attend their appointment they are admitted into radiology by a nurse, they are

then anaesthetised, scanned, woken up, given a drink and then allowed to go home once medically fit. Patients spend a maximum of 2½ hours in radiology, the Research Lead Radiographer told us that this service has freed up seven beds per day. The service has won an innovation award as part of the BCH staff awards in 2009.

- Radiology management told us that they had involved the Young Persons' Advisory Group in choosing the decoration for the ultrasound rooms.
- We were told that the department had considered adopting a 'stand-by' appointment system however, in discussions with patients and their families at the time of booking appointments, the service identified that they were not receptive to the idea. Radiology management told us that they planned to revisit this idea to improve access to imaging services.
- An interventional radiologist told us that despite the SLA, the out of hours (OOH) interventional service was mostly run on a 'good will' basis, as radiologists from a neighbouring trust do not cover BCH when their hospital is busy. This meant that if no radiologist was available OOH the patient may need to be transferred to another trust for imaging and intervention.

Access and flow

Outpatients

- Data provided by the trust showed that in February 2016, 97% of children and young people requiring planned diagnostic tests or procedures were seen within 6 weeks of referral. This was consistently achieved by the trust.
- Between February 2015 and January 2016 the trust performed better than other children's trusts in relation to the number of patients on incomplete pathways who started consultant led treatment within 18 weeks of referral. NHS England sets a target of 92% for this performance measure, the trust were in line with the target level.
- NHS England set targets for cancer waiting times. Oncology Outpatients met all of the targets for non –admitted patients. The most current data available showed that 100% of children with suspected cancer attended outpatient appointments within 2 weeks of referral from their GP. First treatment was provided to 100% of children within 31 days of referral.

- We observed an ENT clinic over running by 1.5 hours. Staff told us that this was a regular occurrence and had been escalated to senior management level. Staff told us that they attempt to resolve over running clinics by using available resources. In the case of the ENT clinic an additional consultant was made available to help reduce the waiting time.
- The parents or carers of all children who were affected by the delay were offered an alternative appointment and car parking extensions as required. It was observed that a consultant within the clinic was writing letters to the patients' GPs at the end of the consultation, a task that would normally be performed by administrative staff. Upon questioning, the consultant stated that they did not have administrative support. This was adding to the delay experienced by patients within the clinic.
- Trust provided data showed that in January 2016 the percentage of outpatient clinic sessions which were cancelled within six weeks of the date of the clinic was 1.7%. Clinic sessions cancelled over six weeks from the date of the clinic was 9.2%. The main reasons for cancellation were given as clinicians being required to attend training courses or being on annual leave.

- Radiology staff told us that all inpatient referrals for ultrasound were done on the day the referral was made and that staff would slot the inpatient referrals in to booked lists.
- The divisional leads told us that many non-general anaesthetic (GA) appointment slots for MRI had been changed to GA appointments in order to reduce waiting times.
- We saw evidence from February 2016 that showed that 100% of ultrasound referrals and 98% of CT referrals waited no longer than 6 weeks. This evidence also showed that 93% of patients needing an MRI scan were seen within 6 weeks. Radiology management told us that as of March 2016 there were no patients waiting longer than 6 weeks for an MRI as a result of the additional appointments being offered on Saturdays.
- Radiologists told us that cardiac MRI reports were severely delayed because of the cardiologist only reporting cases when reminded to do so. This meant that there was the potential for patients to receive delayed treatment. The trust were in the process of

upgrading their reporting systems to allow the direct import of cardiology reports onto the RIS system used by radiologists to minimise the occurrence of delays in future.

- Radiologists told us that while MRI examinations were becoming increasingly complex due to the specialist work undertaken at BCH the length of each appointment slot had not increased. This meant that lists were very busy and likely to overrun.
- We were told that one of the MRI scanners was used for research cases one day each week however, a system had been put in place where the research team would tell radiology if they were not going to be using the scanner. This allowed radiology to use the available appointments to reduce the waiting list.

Meeting people's individual needs

Outpatients

- Staff had access to translation services in person or via the telephone system. We observed a consultation in which the patient's mother did not speak English. An interpreter was available in person and we saw the consultant explain through the interpreter to the parent and child the treatment that would take place, ensuring that the child was engaged throughout the discussion.
- All staff who treated children and young people in the outpatient setting had undertaken training from an external provider in how to deliver exceptional customer service. Staff told us that this formed part of the outpatient promise to make every child and young person's outpatient experience the best that it could be.
- There was a sensory garden, specifically for children with additional needs, which provided a calm and quiet space for both pre and post consultation. Parents and carers that we spoke to told us that this area had helped to make appointments less challenging.
- There were separate sections within waiting areas aimed towards both children and young adults with age appropriate toys and activities available in each.
- In the ear nose and throat department, we observed that representatives from the deaf society were an integral part of the multi-disciplinary team, providing advocacy and unbiased information to children and their carers.
- Staff demonstrated an understanding of peoples' personal, cultural, social and religious needs. We saw the use of an interpreter where the carer's first language

was not English. Staff informed us that they received daily bulletins to advise of religious festivals and were able to provide an example of when they had considered a religious festival in their work to ensure that the child they were treating felt included.

- Staff in the physiotherapy and occupational therapy departments told us they hold multi-disciplinary clinics. This enables patients to present in one visit causing less disruption for the child.
- The speech and language therapy department are currently trialling a questionnaire on how patients view their own speech. This helps therapists identify how impairment is impacting on the child and to identify what further emotional support may be required.
- Sensory areas were available in outpatient areas that provided quiet spaces and support for those who find it difficult to wait in busy waiting areas.
- Staff in the occupational therapy department advised that they recently held a residential weekend for 12 young people. The aim of the weekend was to promote independence, provide support and increase self confidence in areas such as daily living, managing difficult questions and in relation to identity.

Diagnostic Imaging

- One patient we spoke to said that they felt that the radiology waiting area was not very 'teenager friendly' and was designed to meet the needs of younger patients.
- Radiographers told us that there were no patient information leaflets in languages other than English.
- Radiographers told us that they rarely knew in advance if a patient with learning difficulties was due to attend radiology. However, they told us that if a patient with learning difficulties did attend they would try to see the patient as soon as possible to avoid distressing them. They would also make sure that they explained the procedure in a way the patient would understand and would ensure that they involved the parents in the procedure.
- We saw a patient arrive for a scan who required a translator, however no translator had been booked as radiology had not been told that one was required. We saw staff trying hard to locate a translator however, we were told that the delay might lead to the patient being cancelled.

Learning from complaints and concerns

Outpatients

- Staff handled reported complaints in line with the trust's policy. Staff directed patients to the patient advice and liaison service (PALS) if they were unable to deal with their concerns directly.
- Between January 2015 and January 2016 there were 48 complaints aligned to outpatient services. The total number of complaints received trust wide for the same period was 124.
- Information was available to patients on how to make a complaint in the main outpatient areas. The PALS provided support to patients and relatives who wished to make a complaint, however, we noted during inspection that the PALS office was not easy to locate.
- Learning from complaints was shared locally to staff at team meetings, which we saw was evidenced through minutes of meetings.

Diagnostic Imaging

- The lead radiologist told us that the way they managed complaints had recently changed. They told us that they always respond to complaints if the individual leaves contact information. They also told us that they hold face-to-face meetings with the individual wherever possible.
- A copy of the safety dashboard extracted on 16 May 2016 showed that no complaints had been received for the previous 3 months for diagnostic imaging services.

Are outpatient and diagnostic imaging services well-led?

Requires improvement

We rated the service as requires improvement for well led.

This was because:

- We observed and staff told us that radiographers and radiologists did not work as a cohesive team.
- The on call system for radiographers was not in line with trust policy with regard to compensatory rest for staff called out during on call shifts.
- The trust wide appointment scheduling system had not been fully implemented in radiology.

• Clinical staff in outpatient departments were performing administrative tasks due to a lack of administrative and clerical support. We observed that this was adding to the delays experienced by patients in the ENT clinic.

However we also saw:

- Staff committed to the trust's values and displaying them in their day to day work in both outpatient and diagnostic imaging departments.
- Strong local leadership in all outpatient departments.
- Visible senior management in all outpatient departments which staff told us were approachable and supportive.

Leadership of service

Outpatients

- We saw strong local leadership in outpatient departments.
- Nursing staff and allied health professionals told us that they felt supported by their direct line management and were able to raise any issues or concerns with them directly.
- Staff told us that the senior management team were visible and approachable. During inspection, we saw a Clinical Service Director speaking with staff in an outpatient clinic.

- The radiology professional manager had been in post since January 2016. Radiographers described them as a strong leader and they appreciated the fact that they still spent some time working clinically.
- Radiographers told us that the radiology professional manager was approachable and that their "office was always open".
- The radiology professional manager was extremely proud of the staff. They were described as being fantastic, hardworking, and flexible and that they offered excellent patient care.
- Radiographers told us that the division heads attended a recent staff meeting and brought them cakes as a reward for reducing the waiting list for MRI examinations.
- We were told that some of the radiographers had met with the chief operating officer to discuss some issues. The radiographers told us that they felt 'listened to'.

• One of the radiographers told us how radiology management had been extremely accommodating and had made many adjustments to their working pattern when a family member was seriously ill and the staff member needed to take on additional carer responsibilities.

Vision and strategy for this service

Outpatients

- The trust's values included, "Trust," "Commitment," "Compassion," "Courage," and, "Respect." Staff we spoke to were aware of the values and we saw them displayed within outpatient areas.
- Staff we spoke to within outpatient departments had been included in the development of the trust values.
- There was an outpatients action plan in place with the aim to improve patient care, delivery of treatment and efficiency across the service.

Diagnostic Imaging

- Because of organisational change 12 months ago, radiology was now part of the urgent and critical care division because of the close links between radiology and A&E and trauma pathways. The divisional leads told us that this new structure was working well compared with when radiology was in a different division.
- Radiographers told us that they feel that radiology is not as proactive as the rest of the hospital. They told us that while other departments stopped for a monthly audit day, radiology was too busy to accommodate this.

Governance, risk management and quality measurement

Outpatients

- A governance framework was in place to monitor performance and risks and to inform the executive board of key variance. Staff we spoke to told us that they felt that the outpatient departments were listened to at senior management level.
- The risk registers for outpatient departments reflected the risks we identified within the service. We saw that recorded risks had mitigation and control measures documented.

• There were monthly Divisional Management Team meetings that were attended by clinical leads, consultants and clinical nurse specialists. Agenda items discussed at the meetings included incidents, complaints, national and local audits and risk registers.

Diagnostic Imaging

- We evidenced the Urgent and Critical Care risk. At the time of the inspection there were radiology risks around the out of hours interventional radiology service, a 10 year old MRI scanner that has broken down on a number of occasions resulting in cancelled appointments, the replacement of the aging gamma camera in nuclear medicine and a concern relating to staff receiving and acting on radiology reports.
- Radiology management told us that the department was overspent last year however, they felt that this was due to the budget not having been set at the right level; for example, the routine maintenance of equipment had not been included. The Radiology management team had prioritised addressing the 6 week waiting list for MRI at the known risk that the service would exceed its budget.
- We were told that monthly staff meetings were held. The minutes from meetings were emailed to all staff to ensure that any staff members unable to attend were aware of items discussed.

Culture within the service

Outpatients

- We observed that there was open communication within outpatient departments with staff of all grades of medical, nursing and allied health disciplines able to provide feedback and raise concerns where required.
- Senior managers told us that they felt well supported by the executive team, however felt that on some occasions there were delays in actions being implemented during change processes across the trust.
- Staff that we spoke to were enthusiastic about working for the trust and how they were treated. They also felt respected and valued.

Diagnostic Imaging

• While visiting the CT department we saw a briefing between an advanced practice paediatric radiographer

and a radiographer being trained in CT. The trainer provided clear instructions about what was needed and in what order and confirmed with the trainee that they understood.

- Both radiology management and the radiographers told us that the extra Saturday MRI lists were part of their normal working week; however, the ODPs that worked to assist with the general anaesthetics were receiving waiting list initiative pay resulting in a large financial difference between radiographers and ODPs working the same shift. The radiographers and ODPs told us that this had had a negative impact on the working relationship between the two groups, which was demonstrated by low morale.
- Radiographers told us that the consultation process for the introduction of the Saturday MRI shifts had not been carried out well and that, in the end, the radiographers had developed their own suggestion for extending the MRI service as they felt that the proposal from management was unworkable with the available staff.
- Radiographers told us of local agreements relating to time off after being on-call. We were told that when radiographers were called in after midnight for a short period they were given the morning off to comply with the European Working Time directive (EWTD). However when staff are called in for a prolonged period after midnight they are given the morning off as normal but are told to take the afternoon as annual leave in order to comply with the EWTD. This means that staff have no certainty as to how much annual leave they will have for holidays. This arrangement is different to that described in the trust on-call policy.
- Radiographers told us that the radiologists are not always a cohesive team. They told us of difficulties getting radiologists to accept referrals. They also told us that they have to argue with radiologists occasionally about who will protocol a scan.
- We were told of a number of support services available to staff. These included counselling, access to a slimming club and, Pilates and fitness classes.

Public engagement

• We observed that clinical and non-clinical staff were skilled in engaging with children, young people and their families or carers. Engaging them and listening to their views and concerns, and taking action as appropriate.

- Patients were encouraged to give their views on the services provided to help improvement and with the planning and shaping of future services. The trust had developed a mobile application where feedback could be left at the time of the consultation via mobile phone.
- There was an outpatient department survey for completion by patients and their families in which 85% of respondents provided positive feedback in relation to how they would rate the facilities in the main outpatients department; however, only 50% provided positive feedback in relation to the waiting times experienced with the department.
- The NHS Friends and Family Test data between April 2015 and February 2016 showed that 97.2% of respondents would recommend the trust. This was higher than the England averages for both children's specialist trusts (94.5%) and all NHS trusts (92%).

Staff engagement

Outpatients

- Staff told us that they felt proud to work for the trust.
- In the NHS Staff Survey, 47% or respondents agreed or strongly agreed that communication between senior management and staff was effective. This was above the England average for specialist trusts of 42%.
- In the NHS Staff survey, 71% of respondents agreed or strongly agreed that they would recommend the trust as a place to work. This was above the England average for specialist trusts of 70%.

Diagnostic Imaging

- All staff that we spoke to told us that BCH was a friendly hospital and, despite the issues, they would not leave. They told us that they loved the patients, diverse workload and the fact that lots of research was undertaken.
- Both radiology management and radiographers told us that they felt that radiology was more visible since moving to the Urgent and Critical Care division.
- Radiographers told us that the department works cohesively due to the goodwill of staff.
- Radiographers told us they felt that trust level management now seemed to be listening to radiology, although they said that this might be related to the fines being paid by the trust for waiting time breeches.

Innovation, improvement and sustainability

Outpatients

- Staff were encouraged to help with the continuous improvement and sustainability of the trust.
- The trust has implemented a training programme for care support workers to equip them with phlebotomy skills.
- A play facilitator works with volunteers in the outpatient department to provide children and young people with access to normalised play, recreational activities and leisure time.
- The trust has implemented a Rare Diseases Strategy, which will deliver an innovative approach for children who due to their rare or undiagnosed condition would be required to attend multiple outpatient appointments with a variety of specialities. The Rare Disease Centre will enable all clinicians involved in the care of the child to be present to provide a holistic approach in one appointment.

- The trust had appointed a research radiographer to coordinate all research exposures at BCH.
- The research radiographer audited, tracked and crosschecked all research examinations with the finance department to ensure that radiology received the correct funding.

- Radiologists told us that one of their colleagues had enrolled in a consultant development course, which the radiologists felt to be very useful.
- Radiology management told us that there was a 'Learning beyond registration' fund available for radiographers. We were told that radiographers had been asked to highlight what training they feel would be beneficial and then all requests were considered on an individual basis.
- We saw evidence that radiology, in conjunction with the finance director, were reviewing the tariffs paid for CT and MRI examinations as they were not adequately costed at present.
- The trust had started the implementation of new scheduling software. Most staff had been trained but required additional support. Staff had also identified some areas of improvement for the new system, which at the time of the inspection was being addressed. This meant during the inspection staff were having to use the older scheduling programme, which was not fully integrated into other hospital departments, until the staff were confident in the use of the new system and the additional functionality they wanted was in place.

Outstanding practice

Trust wide

• Excellence reporting was newly being rolled out in to all areas of the hospital, however, research and piloting had been undertaking in the PICU.The staff were raising alternative incident reports to demonstrate when things went well.The results were that learning was shared about best behaviours and procedures followed, to encourage best practice in activities.

ED

• Every relative, carer or patient we spoke with told us that they were thankful to be seen at BCH and praised the staff for the care and attention once in the department. A few relatives told us they may be anxious about the long wait in a crowded, warm waiting area but they knew they were in safe hands, so it was worth it. They told us they felt relieved when their child had been through the triage process and they knew they would be seen.

End of life care

- The complex care team had planned a holiday to Disneyland and a cruise for two of their long term ventilated patients and had arranged for carers to accompany the patients who would otherwise have been unable to go on the trips.
- We saw outstanding use of storytelling therapists to help with children's emotions, anxiety and distress during their stay in hospital, and to help to explain treatment processes to them. Following a session of storytelling therapy, one parent reported their child had not asked for their usual pain relief overnight.
- The provision of a 'party cupboard' demonstrated outstanding forethought and a genuine desire to make children's stay in the hospital as pleasant as possible.

Surgery

• Staff went the extra mile to provide outstanding personalised care to learning disability patients.A Learning disability patient had a phobia of wearing a name tag so staff took a photograph of the patient to identify him, which staff put above his bed.

PICU

- A safety huddle (a safety briefing meeting) is held three times throughout the day to review patients and the PICU patient flow. An additional safety huddle was held at 4.30pm during the inspection as patient demand was greater than capacity which was attended by the Medical Director who was on call that evening. This was outstanding practice with team involvement for safety.
- Long term children (in hospital more than 3 months) were allocated a small team of staff to care for them who worked with the multidisciplinary team including the child's local authority. We saw strong relationship bonds between the staff and the children in their care. In addition continuity of care developed and staff described individual staff preferences which they had learnt from caring for the child and working with the families.
- Parents praised the PICU staff for the outstanding care and had nothing but praise for the team.
- Staff proudly informed us that the HDU had won the 'outstanding clinical team' award in December 2015.
- The introduction of the team names after kingdoms had been supportedby mangers following the introduction of the team makers and team player training which had increased teamwork and had led to outstanding care delivered to children, young people and families.

Neonatal Services

• The neonatal surgical outreach team provided support, training an empowerment to staff in the local neonatal units, facilitating the right care at the right place for each surgical baby. The lead nurse was delivering a university-accredited course for nurses to gain neonatal surgical skills.

Transition Services

- The Transitional Care Policy sets out that transition to adult services would normally take place at their sixteenth birthday (with the exception of those with a diagnosed learning disability at 19). Or the young person was under the care of multiple consultants at the trust. If the young person had any of the above, transition could be delayed up until the age of nineteen years and regularly reviewed.
- The YPAG hosted 'The Big Discussion' was supported by the RCPCH, the National Children's Bureau and Healthwatch Birmingham which brought together local youngsters and healthcare professionals from all over the UK, to discuss important health topics.

Outpatients Diagnostic Imaging

• We observed that clinical and non-clinical staff were skilled in engaging with children, young people and their families or carers. Engaging them and listening to their views and concerns, and taking action as appropriate.

- The trust has implemented a Rare Diseases Strategy, which will delivered an innovative approach for children who due to their rare or undiagnosed condition would be required to attend multiple outpatient appointments with a variety of specialities. The Rare Disease Centre will enable all clinicians involved in the care of the child to be present to provide a holistic approach in one appointment.
- Introduction of new easily identifiable referral forms for all research examinations, including the introduction of research protocols and guidelines available to radiology staff when arranging for a patient to have a research procedure.
- The radiology department has offered an 'express' MRI service since 2009. When patients attend their appointment they are admitted into radiology by a nurse, they are then anaesthetised, scanned, woken up, given a drink and then allowed to go home once medically fit. Patients spend a maximum of 2½ hours in radiology and this service has freed up seven beds per day. This service has won an innovation award.

Areas for improvement

Action the hospital MUST take to improve ED

- The observation unit must have staff in attendance at all times and staff must ensure that all patients have name bands in place to maintain their safety.
- The trust must review the risk register for ED to ensure all registered risks correspond with all risks and concerns in the department.

Medicine and End of life care

- The hospital must ensure checks on emergency trolleys are carried out daily.
- The hospital must ensure staff record times of medicine administration accurately.
- The hospital must ensure patients' paper notes are stored securely on all wards and units.

Neonates

- Review the categorisation of clinical incidents based upon the potential harm to ensure serious incidents are sufficiently investigated, and learning shared consistently across the trust.
- Take swift action against the recommendations of commissioned external reviews.
- Review governance processes to ensure neonatal services assess, monitor and mitigate risks to all neonates across the trust. This should include reviewing the neonatal governance structure and inclusion in morbidity and mortality meetings.
- Establish a local and national audit programme to assess and monitor care quality and performance against national standards including neonatal outcomes.
- Risk registers must reflect neonatal risks.

- Review the service level agreement for neonatologist cover in line with national guidance. Review nursing and medical cover for neonatal services in line with national guidance.
- Ensure there is a robust system in place to flag when medical equipment requires maintenance and establish clear lines of responsibility of this.
- Perform a risk assessment of the clinical care suitability of cubicle 9 on the neonatal surgical ward. Reinstate the door of the drug room on the neonatal surgical ward and ensure the room temperature is appropriately controlled for the medicines stored in that room.
- Ensure that staff are adhering to the trust's infection control policies in terms of hand sanitisation.
- Review and establish the quality in specialty training requirements for neonatal nurses.
- Identify and establish an appropriate acuity and dependency tool to ensure safe staffing levels.
- Review the missing child policy and ensure all staff are familiar with both the policy and the process.
- Establish a clear identity and strategy for neonatal services for the trust.

Outpatients Diagnostic Imaging

• Radiology must ensure that a radiologist is always available for advice and for protocolling CT and MRI examinations.

Action the hospital SHOULD take to improve ED

- The trust must review arrangements for incidents involving other emergency services to ensure working arrangements are agreed and fully understood.
- The trust should review the space for medication preparation in the resuscitation area to minimise the likelihood of medication errors.
- The trust should ensure that information regarding the trust complaints process is adequately provided.
- The trust should review the waiting areas and ensure that adequate provision is made to maintain levels of cleanliness at all times.

Medicine and End of life care

- The hospital should improve awareness of 'Duty of Candour' among ward managers and nurses
- The hospital should ensure nurses on medicine rounds change their red 'do not disturb' aprons between patients.

Neonates

- Develop a neonatal care trust-wide policy based on external review recommendations.
- Appoint an appropriate clinical lead to oversee neonatal service improvement.
- Establish a clear admission and discharge criteria to the neonatal surgical ward.
- Develop and implement a trust-wide definition of a neonate.
- Review ward access to both ward 9 and the neonatal surgical ward.
- The trust should consider the promotion of a learning culture across neonatal services.
- The trust should consider the involvement of staff and families in the future shaping of neonatal services.
- The trust should consider its use of the neonatal network IT system as recommended by the WMQRS review.
- Establish systems and processes to collect access and flow data for neonates admitted to the trust.
- Improve mandatory training compliance rates.
- The trust should display neonatal outcomes for staff to see.
- Review the neonatal surgical ward high dependency criteria.
 - Set up regular meetings between BCH neonatal staff and SLA neonatologists.
 - Explore neonatal hearing screening provision at the trust.

- The trust should consider reviewing safeguarding policies to include the impact of parental mental capacity to provide consent. Provide training to staff on mental capacity assessment.
- Assess and monitor compliance of neonatal care checklists completion
- Assess and monitor compliance of neonatal care checklists completion.
- The provider should provide training to support staff who are involved in a notifiable safety incident, in line with the duty of candour regulation.

Transition Services

- There was no centralised approach to how information was shared with other external providers when taking over the care of young people transitioning to adult care.
- We saw a variety of information provided to patients across a range of specialities which were produced in different formats.

Outpatients

• The trust should ensure that there is sufficient administrative and clerical support to outpatient clinics.

• Radiology management must take steps to improve the working relationships between the staff groups working on Saturday MRI lists. Efforts should also be made to ensure that the radiographers and radiologists work as a cohesive team.

- Staff should ensure that resuscitation and anaesthetic trollies in radiology are checked on a regular basis.
- Radiology management should clarify with staff the level of safeguarding training they have received.
- Radiology management should appoint an appropriate member of staff as the radiation protection supervisor for theatres.
- Cardiac MRI images should be reported promptly.
- The trust should ensure that the out-of-hours interventional radiology service is robust.
- Radiology management should ensure that the on-call system for radiographers is in line with trust policy, especially with regard to compensatory rest and the fact that employees are not expected to make good the hours lost when called in for a prolonged period after midnight.

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 12 HSCA (RA) Regulations 2014 Safe care and treatment
	Regulation $12(2)(a)(b)(c)(e)(g)(h)$
	(a) assessing the risks to the health and safety of service users of receiving the care or treatment;
	(b) doing all that is reasonably practicable to mitigate any such risks;
	(c) ensuring that persons providing care or treatment to service users have the qualifications, competence, skills and experience to do so safely;
	(e) ensuring that the equipment used by the service provider for providing care or treatment to a service user is safe for such use and is used in a
	safe way;
	(g) the proper and safe management of medicines;
	(h) assessing the risk of, and preventing, detecting and controlling the spread of, infections, including those that are health care associated;
	How this regulation was not being met;
	For Emergency Department:
	The observation unit did not have staff in attendance at all times. Staff did not ensure that all patients had name bands in place to maintain their safety.
	For Medicine and End of Life Care:
	The hospital did not ensure staff carried out checks on emergency trolleys each day.
	The hospital did not ensure staff accurately recorded times of medicine administration.
	For Neonatal services:

The neonatal service did not ensure there was a robust system in place to flag when medical equipment required maintenance and did not establish clear lines of responsibility of this.

The neonatal service did not ensure risk assessments were conducted of the suitability of cubicle nine for clinical care on the neonatal surgical ward.

The service did not ensure the door of the drug room on the neonatal surgical ward was reinstated and the room temperature was appropriately controlled for the medicines stored in that room.

The service did not ensure staff adhered to the trust's infection control policies in terms of hand sanitisation.

The service did not review and establish the quality of specialty training requirements for neonatal nurses.

For Outpatients and Diagnostic Imaging:

The radiology department did not ensure that a radiologist was always available for advice and for protocolling CT and MRI examinations.

Regulated activity

Treatment of disease, disorder or injury

Regulation

Regulation 17 HSCA 2008 (Regulated Activities) Regulations 2010 Respecting and involving people who use services

Regulation 17(2)(a, b, c)(d) i, ii))

How this regulation was not being met;

(a) assess, monitor and improve the quality and safety of the services provided in the carrying on of the regulated activity (including the quality of

the experience of service users in receiving those services);

(b) assess, monitor and mitigate the risks relating to the health, safety and welfare of service users and others who may be at risk which arise from

the carrying on of the regulated activity;

(c) maintain securely an accurate, complete and contemporaneous record in respect of each service user, including a record of the care and

treatment provided to the service user and of decisions taken in relation to the care and treatment provided;

(d) maintain securely such other records as are necessary to be kept in relation to—

(i) persons employed in the carrying on of the regulated activity, and

(ii) the management of the regulated activity;

For Emergency Department:

The trust had not reviewed the risk register for ED to ensure all registered risks corresponded with all risks and concerns in the department.

Medicine and End of Life Care:

The hospital did not ensure patients' paper notes were stored securely on all wards and units.

Neonatal services

The neonatal service did not review the service level agreement for neonatologist cover in line with national guidance.

The service did not review nursing and medical cover for neonatal services in line with national guidance.

The service did not review the categorisation of clinical incidents based upon the potential harm to ensure serious incidents were sufficiently investigated, and learning shared consistently across the trust.

The service did not take swift action against the recommendations of commissioned external reviews.

The service did not review governance processes to ensure neonatal services assessed, monitored and mitigated risks to all neonates across the trust. This should have included reviewing the neonatal governance structure and inclusion in morbidity and mortality meetings.

The service did not establish a local and national audit programme to assess and monitor care quality and performance against national standards including neonatal outcomes.

The service's risk register did not reflect neonatal risks.

The service had not established a clear identity and strategy for neonatal services for the trust.

The service had not reviewed the missing child policy and did not ensure all staff were familiar with both the policy and the process.

Regulated activity

remotely

Transport services, triage and medical advice provided

Regulation 18 HSCA (RA) Regulations 2014 Staffing

Regulation 18 (1): Staffing

18.—(1) Sufficient numbers of suitably qualified, competent, skilled and experienced persons must be deployed in order to meet the requirements of

this Part.

Regulation

How this regulation was not being met;

For Neonatal Services

The service had not identified and established an appropriate acuity and dependency tool to ensure safe staffing levels.