Alder Hey Children's NHS
NHS Foundation Trust

A SPECIALIST CHILDREN'S HOSPITAL

LEADING THE WAY IN RESEARCH, EDUCATION & INNOVATION

ALDER HEY

QUALITY REPORT

2017/18

CONTENTS

QUALITY REPORT 2017/18

"A HEALTHIER FUTURE FOR CHILDREN AND YOUNG PEOPLE"

PART 1: STATEMENT ON QUALITY FROM LOUISE SHEPHERD, CHIEF EXECUTIVE

I would like to use this year's statement on quality as an opportunity to pay tribute to the exceptional team of people that makes Alder Hey such a special place. This year marks my 10th as Chief Executive here and during that time it has been my privilege to work alongside so many outstanding colleagues, all of whom dedicate their lives to improving the health and wellbeing of children and young people. This report summarises some, although not all, of that effort.

A notable example of this incredible focus in the last year has been the drive to improve the early identification and treatment of deteriorating patients and in particular children with sepsis. The whole hospital effort to deliver our new clinical pathway for this life-threatening infection, which is notoriously difficult to detect early on in young children, has been superlative and has been shared and replicated across the country.

It also serves to illustrate the progress we have continued to make in cementing a quality improvement culture throughout the organisation. A key feature of this is a genuine willingness to learn from those occasions when things don't quite go according to plan. I am immensely proud of the way in which staff at Alder Hey demonstrate real openness and transparency, creating and nurturing the right environment for reflection and ultimately, improvements and innovation in practice.

The ambition we have to develop innovation in children's healthcare through technology has continued to gain momentum in the last year. In the summer our innovation team launched the Alder Play App, which aims to enhance the experience of our patients through distraction, reward and familiarisation with the hospital prior to their visit, using a medium which is already part of most children's everyday lives. The App was born from the vision of one of our amazing clinicians way back in 2012 and takes us one step closer to our dream of world leading, digitally enabled child-centred facilities.

In February 2018 the Trust underwent an inspection by the Care Quality Commission. The inspectors' feedback at the end of the visit included an observation about the respectful relationships they found everywhere between staff, patients and families, the pride that staff radiated when talking about their services and above all, the universal focus on the child from everyone they met. These qualities cannot be manufactured but lie at the heart of what it means to work at Alder Hey.

As Chief Executive, I commend our Quality Report for 2017/18 to you. I am confident that the information set out in the document is accurate and a fair reflection of the key issues and priorities that clinical teams have developed within their services. The Board remains fully committed to supporting those teams in every way they can to continuously improve care for our children and young people.

Signed:

Louise Shepherd

LOUISE SHEPHERD CBE
Chief Executive

PART 2: PRIORITIES FOR IMPROVEMENT AND STATEMENTS OF ASSURANCE FROM THE BOARD

2.1 PRIORITIES FOR IMPROVEMENT

This section of the report describes an overview of the Trust's plans for continuous quality improvement and specifically details the key quality improvement priorities for 2018/19, including the rationale for selection of the priorities.

2.1.1 Priorities for Improvement in 2018/19

The Trust's five year quality strategy, 'Inspiring Quality', maintains a strong focus on patient safety, patient experience and clinical effectiveness, plus recognises the significance of staff health and wellbeing and our environment in supporting the delivery of a high quality service.

The past year has included a refresh of the quality strategy with a view to further strengthening our approach to quality improvement. In doing so we have examined our performance over the past three years in which we adopted the Sign up to Safety pledge and delivered significant improvements in incident reporting, medication errors and hospital acquired infections. We will maintain a strong focus on these areas for further improvement in 2018/19. We have also consulted with our key stakeholders to gain their views on where our quality improvement efforts should lie in the coming year. This included discussions within the Trust through the Clinical Quality Assurance Committee (CQAC), Operational Delivery Group (ODG) and Divisional teams, as well as discussions with the Children & Young People's Forum, Parents' Forum, Council of Governors and Healthwatch organisations. A draft Quality Improvement Plan was constructed and this will be further developed in May 2018 through a Quality Summit, where we will invite staff from all departments and services to come together with patients and families to refine our Quality Improvement plan and strive to create a culture of quality improvement every day.

Details of the specific priorities for 2018/19, as identified in the draft Quality Improvement Plan are provided in the following tables. It should be noted that the fine detail of these priorities may be modified following further consultation with a wider group of staff and with patients and families at the Quality Summit in May 2018.

Priority 1	Children and Families First, Every Time
Rationale	The vast majority of patient feedback we receive is extremely positive, however there are some areas of dissatisfaction identified through engagement with children and families and through patient surveys. As an organisation we strive to ensure that we always put the children and families at the centre of everything we do, ensuring they are involved in decisions about the care they receive. We will seek to create more opportunities for children, young people and families to work in partnership with Trust staff in collaborative teams to co-design service improvements. In particular we plan to further improve our outpatient care and booking systems, ensuring we put children and families first, every time. The Trust Board agree that there should be specific focus on: • Improving outpatient care • Improving access to services through brilliant booking systems
Measuring	Successful delivery of this priority will be measured through patient survey feedback, including a focus on satisfaction with outpatient care and satisfaction with the booking system when given an appointment. Final metrics will be agreed following the Quality Summit in May 2018.
Monitoring & Reporting	Once metrics are confirmed, they will be monitored through the corporate report, which is available through the Trust's electronic information channel, Infofox, and is formally presented to Clinical Quality Steering Group, with exception reports being shared with Clinical Quality Assurance Committee and ultimately Trust Board.

Priority 2	No Preventable Harms or Deaths
Rationale	The Trust has made significant improvements in reducing the amount of harm being caused to patients, with medication errors causing harm being reduced by 75% and hospital acquired infections being reduced by over 45%. Patient safety remains a top priority for the Trust with the acknowledgement that there is always room for further improvement. Specific focus will be given to early intervention when patients begin to deteriorate unexpectedly, and to reducing the number of hospital acquired pressure ulcers. The Trust Board agree that there should be specific focus on: • Achieving zero preventable deaths in hospital • Early intervention for the deteriorating patient • Reduction in preventable pressure ulcers
Measuring	The number of preventable deaths will be taken as a high level proxy for this measure. Compliance with the national sepsis standards and the number of Grade 3 and 4 pressure ulcers will also be measured.
Monitoring & Reporting	The monthly corporate report will be used to monitor and report progress against these measures. This is reported through to Clinical Quality Assurance Committee and Trust Board. Sepsis standards are also reported nationally and form part of the quality contract with commissioners.

Priority 3	Outstanding Clinical Outcomes for Children
Rationale	The Trust is proud to be world leading in many areas of developing paediatric outcome measures and recognises there are further opportunities to develop and improve our monitoring of clinical outcomes. Part of this commitment links to the Trust's desire to reduce variation and to strengthen standardisation of clinical pathways, thereby ensuring the best evidence based pratice is embedded and spread across the organisation. As a Global Digital Exemplar, the Trust is already committed to digitising clinical pathways and standardising documentation, using best practice as evidenced in NICE guidance and National Standards. This will form part of our priority to deliver outstanding clinical outcomes for children. Specific focus will also be given to further reducing hospital acquired infections as a key measure of improved clinical outcome. The Trust Board agree that there should be specific focus on: • Developing digitised clinical pathways • Developing and improving outcomes in each specialty • Reduction in hospital acquired infections
Measuring	The Trust will track the number of standardised / digitised pathways, plus bespoke outcome measures in each specialty. The number of hospital infections will also be used to demonstrate improvement in clinical outcomes.
Monitoring & Reporting	Evidence based, digitised care pathways will continue to be monitored through the bespoke Global Digital Excellence Steering Group and reported to the Trust's Programme Board. Hospital Acquired Infections will be closely monitored by the Trust's Infection Prevention and Control team and tracked monthly through the Trust's corporate report, reporting ultimately to Clinical Quality Assurance Committee and Trust Board.

2.1.2 Quality Improvements in 2017/18 – Progress Update

The key priorities for improvement for 2017/18 were described in the 2016/17 Quality Account and focused on five priority areas each of which represented an improvement aim under the respective Quality domains as defined in the Quality Strategy, 'Inspiring Quality'. These were agreed by the Trust Board as:

1. Further embed a safety culture throughout the organisation
2. Increase engagement of children, young people and families in improving quality and developing services.
3. Increase number of defined clinical care pathways across our clinical specialties.
4. Provide support that will enable our staff to feel valued and respected by the organisation and actively contribute to the organisation's success
5. Continue to improve the environment to make it work for both patients and staff.

Details of progress against these key priorities from 2017/18 is provided in Section 3 of this report.

2.2 STATEMENTS OF ASSURANCE FROM THE BOARD

2.2.1 Review of Services

During 2017/18 Alder Hey Children's NHS Foundation Trust provided 42 relevant health services. Alder Hey has reviewed all the data available to them on the quality of care in all of these relevant health services. The income generated by the relevant health services reviewed in 2017/18 represents 100% of the total income generated from the provision of relevant health services by Alder Hey for 2017/18.

2.2.2 Participation in Clinical Audits and National Confidential Enquiries

Clinical Audit is a key aspect of assuring and developing effective clinical pathways and outcomes.

National Clinical Audits are either funded by the Health Care Quality Improvement Partnership (HQIP) through the National Clinical Audit and Patient Outcomes Programme (NCAPOP) or funded through other means. Priorities for the NCAPOP are set by NHS England with advice from the National Clinical Audit Advisory Group (NCAAG).

During the reporting period 1st April 2017 to 31st March 2018, 10 National Clinical Audits and five National Confidential Enquiries covered NHS services that Alder Hey Children's NHS Foundation Trust provides.

During that period Alder Hey Children's NHS Foundation Trust participated in 100% (10 out of 10) National Clinical Audits and 100% (5 out of 5) National Confidential Enquiries of the National Clinical Audits and National Confidential Enquiries which it was eligible to participate in.

The National Clinical Audits and National Confidential Enquiries that Alder Hey Children's NHS Foundation Trust was eligible to participate in during the reporting period 1st April 2017 to 31st March 2018 are contained in the table below.

The National Clinical Audits and National Confidential Enquiries that Alder Hey Children's NHS Foundation Trust participated in, and for which data collection was completed during the reporting period 1st April 2017 to 31st March 2018, are listed below alongside the number of cases submitted to each audit or enquiry as a percentage of the number of registered cases required by the terms of that audit or enquiry.

National Audit	Participation	% Cases Submitted
Children		
Paediatric Intensive Care (PICANet)	Yes	Submitted 962 cases, which was 100% of cases available.
Potential Donor Audit (NHS Blood and Transplant)	Yes	Not available at time of publication.
Pain in Children (Royal College of Emergency Medicine)	Yes	Submitted 50 cases, which was 100% of cases available.
Acute Care		
Severe Trauma (Trauma Audit and Research Network)	Yes	Submitted 238 cases, which is 100% of cases available.
Cardiac		
Cardiac Arrest (National Cardiac Arrest Audit) (NCAA)	Yes	Submitted 14 cases which was 100% of cases available.
Paediatric Cardiac Surgery (National Institute for Cardiovascular Outcomes Research (NICOR Congenital Heart Disease Audit)	Yes	Submitted 816 cases, which was 100% of cases available. Data quality score 97.5%.
Cardiac Arrhythmia (Cardiac Rhythm Management (CRM)	Yes	Submitted 63 cases which was 100% of cases required for the audit sample.
Long Term Conditions		
Ulcerative Colitis and Crohn's Disease (National IBD Audit) Biological Therapies	Yes	Submitted 408 cases, which was 100% of cases available.
Renal Replacement Therapy (UK Renal Registry)	Yes	Data Collection Ongoing. The UKRR (United Kingdom Renal Registry) does not yet hold the final figures of patients for the 2017/2018 period as data are currently being submitted by units at different times.

National Confidential Enquiries	Participation	% Cases Submitted
Chronic Neurodisability - National Confidential Enquiry into Patient Outcome and Death (NCEPOD)	Yes	9 cases submitted which was 90% of cases available. Reported March 2018.
Young People's Mental Health - National Confidential Enquiry into Patient Outcome and Death (NCEPOD)	Yes	3 cases submitted which was 100% of cases available. Report expected April 2018
Cancer in Children, Teens and Young Adults	Yes	9 SACT (Systemic Anti Cancer Therapy) cases and 8 PICU (Paediatric Intensive Care Unit) cases submitted which was 100% of cases available. This study is ongoing into 2018. Report expected Autumn 2018.
Suicide in Children and Young People (CYP) - National Confidential Inquiry into Suicide and Homicide by People With Mental Illness (NCISH) University of Manchester	Yes	1 case included in the study which was 100% of cases available.
Perinatal Mortality and Morbidity Confidential Enquiries (Term Intrapartum Related Neonatal Deaths) - MBRRACE-UK - National Perinatal Epidemiology Unit (NPEU)	Yes	19 cases submitted which was 100% of cases available.

2.2.3 Actions arising from National Clinical Audits

The reports of 10 National Clinical Audits were reviewed by the provider in the reporting period April 1st 2017 to March 31st 2018 and Alder Hey Children's NHS Foundation Trust intends to take the following actions to improve the quality of healthcare provided.

National Clinical Audit	Actions
Paediatric Intensive Care (PICANet)	The national audit report was reviewed and discussed on the Paediatric Intensive Care Unit (PICU). We are always commended for the quality of the PICANET data set.
Potential Donor Audit (NHS Blood and Transplant)	Not available at time of publication.
Pain in Children Royal College of Emergency Medicine	No actions to date as the report due to be published on 20 April 2018.
Severe Trauma (Trauma Audit and Research Network)	For the period 2017/18 our data completeness and data quality are both 97%+. There are 238 applicable entries for this period an increase of 38% on the previous years number of 172.
Cardiac Arrest (National Cardiac Arrest Audit)	Not available at time of publication.
Paediatric Cardiac Surgery (NICOR Congenital Heart Disease Audit)	The Data Quality report showed that we have achieved an overall Data Quality Indicator of 97.5%. An action plan was not required as the audit standards are being met.

National Clinical Audit	Actions
National Cardiac Rhythm Management Audit (NICOR)	Recommendations and Actions specific to Alder Hey were as follows: • Address the ongoing challenges with developing or purchasing a Cardiac Information System that can be used at the point of service to capture data in real time. • More input is needed by Clinicians in the capturing/validation of the data. • More consistency capturing details of any devices used in the operations – i.e. manufacturer, model and serial number. • More specific descriptions of procedures done in theatre log books. • Making submissions by month.
Ulcerative Colitis and Crohn's Disease (National UK IBD (Inflammatory Bowel Disease) Audit) Biological Therapies	The UK Inflammatory Bowel Disease (IBD) audit has merged with the UK IBD Registry, moving towards an improved system for data capture and quality improvement in IBD On-going collection of our biological therapies data is now through the UK IBD Registry. We are now submitting our data to this component of the audit in line with the data submission deadlines for the IBD Biologics Audit during 2018 and 2019.
Diabetes (Royal College of Paediatrics and Child Health (RCPCH) National Paediatric Diabetes Audit)	Data collection for the audit has improved following our use of the "TWINKLE" system (diabetes specific data collection software) for data entry. Twinkle enables automated data capture and reporting for the Best Practice Tariff (BPT). Actions and recommendations from 2016/2017 audit are as follows; • We have implemented a new strategy for delivering annual review which includes: no separate annual review clinics, all annual review delivered by the team between April to July to increase delivery of care processes, annual review dashboard on Twinkle software to highlight patients with incomplete annual review. • Extensive work is ongoing to improve the interface between Meditech 6 (Hospital system) and Twinkle software as significant areas of activity not captured in the NPDA (National Paediatric Diabetes Audit) report such as urine ACR (albumin to creatinine ratio) testing due to lack of transfer of data between the 2 systems. • Median HbA1c (glycated haemoglobin) above national average – ongoing program of quality improvement activity to improve outcomes through improvements in delivering structured education and monthly monitoring of clinic HbA1c (measuring plasma glucose levels) • Percentage of patients receiving 4 or more HbA1c measurements is below national average – patient numbers have increased resulting in insufficient clinic capacity and high patient to staff ratios. Business case presented to increase staffing to meet this demand. • An action plan will be developed to address poor data regarding psychology support. • Emergency admission rate is below the national average – this was very good to see, however we will continue to work on improving this through developing and delivering a 'high HbA1c clinic' and structured education program.
Renal Replacement Therapy (UK Renal Registry)	Data are now being submitted through CyberRen. A Renal Information Technology System specifically for kidney services in the UK. It will enable safe clinical care in line with clinical governance and good medical practice; access to data for audit purposes at Trust, Regional and National levels and address Renal Association and National Service Framework standards. Informatics Merseyside is implementing CyberREN into all units on behalf of the Cheshire and Merseyside Kidney Care Network.

2.2.4 Actions arising from Local Clinical Audits

There were a total of 173 local audits registered in the reporting period 1st April 2017 to 31st March 2018. There are 39 (23%) local audits completed. There are 113 (66%) audits that will continue in 2018/19. There are three audits not yet started and 18 audits have been cancelled (11%).

The reports of the completed local clinical audits were reviewed by the provider in the reporting period April 1st 2017 to March 31st 2018 and examples of the outcomes are listed below.

Local Audit	Actions
Patient satisfaction survey for same day ENT pulse oximetry service	The project was discussed and presented at the Alder Hey ENT (Ear, Nose and Throat) Department Clinical Governance meeting in December 2017. **Action/Recommendation:** • This study was originally only conducted with one consultant's patients. We have now rolled out the same day pulse oximetry service to another consultant. • Re-audit in 12 months.
Audit to assess if appropriate radiographs are being sent upon referral to the Oral and maxillofacial surgery department for Orthodontic extraction cases.	The audit was presented at the Alder Hey Oral and maxillofacial surgery department post clinic meeting in June 2017. **Action/Recommendation:** • Ensure we write to all Orthodontic Practices and consultants audited with the results. Remind them of the importance of enclosing all necessary radiographs. • Set up a new trust email address which is verified so that orthodontic practices can directly email across the appropriate images to the department. • Contact the Alder Hey scanning department to see if it is possible to keep the radiographs sent with the referrals and provide them to the OMFS department to sort through so they are not only scanned on but also retained and can be referred to at the patient appointment. • Re-audit in 3 months.
Audit of surgical site infections in patients undergoing appendicectomy.	The audit data were submitted to the National Getting It Right First Time (GIRFT) Surgical site infection audit database. **Action/Recommendation:** • Data were submitted to the National database for Getting It Right First Time. • Data will be reviewed with similar data from other centres before presentation and change in practice decided. • Continuous data collection till August 2018.
Audit of Quality of Documentation for Paediatric Surgical Patients.	The audit was presented as departmental teaching in September 2017. **Action/Recommendation:** • Individuals were reminded about the standards required and advised that this would be re-audited. • Re-audit in 3 months.

Local Audit	Actions
Audit of Paediatric Difficult Airway Equipment Availability	The audit is due for presentation as a poster at the Association of Paediatric Anaesthetists Annual Scientific Meeting in May 2018. **Action/Recommendation:** • Networking with the airway and paediatric anaesthetic leads in each hospital in the region is required to understand the barriers to adopting a standardised paediatric airway equipment list and a standardised airway trolley layout. • Recommend the adoption of a standardised paediatric airway trolley with a standardised layout and contents list in every hospital in the region. • Re-audit in 12 months.
An audit to assess provision of information provided to patients prior to regional anaesthesia.	The audit was presented at the Alder Hey Anaesthetic department update meeting in September 2017. **Action/Recommendation:** • Improve the availability of current information leaflets. • Develop new information leaflet for peripheral nerve block. • Re-audit in 12 months.
Parents feedback of experience of breastfeeding support whilst in Alder Hey	The project was presented at the Alder Hey LiA (Listening into Action) meeting in July 2017. **Action/Recommendation:** • Trust policy has been updated with clear guidelines for staff on process to follow when feeding breastfeeding mums. Policy is awaiting ratification. • Also the parents information leaflet has been updated to include this information. • Re-audit in 12 months.
Audit of annual screening tests performed in children with complex nephrotic syndrome.	The audit was discussed in July 2017 and findings presented in the Alder Hey Surgery departmental audit meeting in October 2017. **Action/Recommendation:** • Improvement could be made in measuring a number of markers, including Vitamin D, Parathyroid hormone (PTH) and measles serology. • Rationalising blood tests and placing a robust system to ensure they are measured. • Develop Nephrotic syndrome guidance for annual screening. • Re-audit in 2 years.
Audit of MRI (Magnetic Resonance Imaging) Brain investigation ordering and results within the community paediatrics department.	The audit was presented at the Alder Hey Community Paediatrics Departmental meeting in October 2017. **Action/Recommendation:** • Update existing guideline. • Re-audit once new guidelines are in place.
Audit of renal biopsy in the renal transplant patient.	The audit was written up in July 2017 with a discussion and presentation at the Alder Hey Renal Unit meeting to be arranged. **Action/Recommendation:** • To continue current practice. • Audit confirmed that biopsy was performed for good clinical indication. • Re-audit in 4 years.

Local Audit	Actions
Retrospective Audit of Joint Paediatric Dermatology Gynaecology clinic over a two year period from December 2015 - December 2017.	The audit was presented at the Alder Hey Dermatology Department meeting in March 2018. **Action/Recommendation:** • To continue this Joint Dermatology Gynaecology service going forward. • To continue auditing the service going forward. • Audit to be presented at the Merseyside & Cheshire Vulval Society meeting in September 2018. • Re-audit in 12 months.
Evaluation of staff awareness of breastfeeding support needed to give to parents.	The audit was presented at the Alder Hey Listening into Action (LiA) meeting in July 2017. **Action/Recommendation:** • Improve staff knowledge with the development of a training programme. Plans being discussed around external training, and on E- learning module. • Policy updated with clear guidelines on storage, administration of breast milk. Awaiting ratification after decision made on implementation of waterless warmers. • Policy to be cascaded for staff to be aware of how to handle, prepare, store, administer and document breast milk. • Staff to be made aware of process for feeding mothers and to offer information leaflet on admission. • Re-audit in 12 months.
Surgical excision of cardiac tumours: 20 year experience at a single institution.	The audit was presented at the Alder Hey Cardiology, Cardiothoracic, and Cardiac anaesthetic team meeting in July 2017. **Action/Recommendation:** • No changes were required as it was an internal audit to monitor the cardiac tumour surgical excision. • No Re-audit was required as cardiac tumours are very rare.
Audit of Cardiac Arrests on PICU (Paediatric Intensive Care Unit).	The audit was presented to PICU consultants/trainees/nursing/cardiology at the weekly meeting in November 2017. **Action/Recommendation:** • Regular review of cardiac arrests. Aim to improve rates of documentation and standard of documentation in line with Utstein suggested criteria. • Production of PCAR form (Paediatric Cardiac Arrest Review) to be presented to consultant group. • Re-audit in 12 months.

Local Audit	Actions
Audit of the Burns Unit ward based clinic.	The audit was discussed with the ward manager and consultant and all Burns Unit staff have had a copy of results in December 2017. **Action/Recommendation:** • In addition to the patient information leaflet the parents receive we are producing a card to give to the parents. • The card we are producing details what will happen at the clinic appointment - where the clinic is held, what time to arrive, if they are given medication here, or if the parents administer their child's analgesia at home, when the medication becomes effective, length of time they may expect to spend at the hospital, contact number of clinic/nurses if they have any questions themselves, or to rearrange their child's appointment if they are unable to attend the date and time they have been given. • No Re-audit required as we feel the detailed cards/information will explain some of the reasons why some patients have a longer clinic time allocation.
Audit of unplanned admission after paediatric day case anaesthesia in UK. (PAPAYA) Paediatric Unplanned Daycase Admissions.	The audit is a part of the national PAPAYA project The data has been submitted to the audit in November 2017 and will have to wait for report/feedback from PATRN. (Paediatric Anaesthesia Trainee Research Network) part of (APA) Association of Paediatric Anaesthetists of Great Britain and Ireland. PAPAYA aim to complete analysis and write up by Autumn 2018. **Action/Recommendation:** • Will discuss in the anaesthetic department audit meeting and present to daycase services/specialties as indicated upon completion. • Re-audit in 12 months.
A Re-Audit of completion of Routine Outcome Measures, with comparison of results for children with ASD (autistic spectrum disorder) and Neuro-typical children (i.e. children not on the autistic spectrum).	The audit was presented at the Alder Hey CAMHS (Child and Adolescent Mental Health Service) Clinical Governance meeting in January 2018. **Action/Recommendation:** • Consider further study on the comparison of ROMS (Routine Outcome Measures) completion, for children/Young People with ASD and Neuro-typical children. • Consideration to create a specific ROMS aimed to meet the needs of children/ Young People with ASD. E.g. visual prompts, use of electronic devices and take core symptoms into consideration. • Dissemination of the results. Staff training on the importance of ROMS and how and when to administrate them in order to achieve >90% completion rate. • Recognition for staff who have achieved high ROMS completion rate. • Re-audit in 6 months.
Audit of the removal of metalwork from lower limb	The audit was presented at the Alder Hey Orthopaedic department meeting in September 2017. Previously presented at the anaesthetic meeting in March 2017. **Action/Recommendation:** • Daycase pathway in progress for patients not requiring much analgesia post-operation. • Daycase pathway written for removal of metalwork from lower limb. • Re-audit in 6 months.

Local Audit	Actions
How often are high ferritin levels associated with serious illness (a retrospective service evaluation of diagnosis in patients with ferritin >10,000 µg/L)	The audit was presented at the Rheumatology department academic meeting in October 2017. The audit will be presented in national meetings (British Society for Rheumatology (BSR) and Royal College of Paediatrics and Child Health (RCPCH) annual meetings) as part of a national audit. **Action/Recommendation:** • To contribute towards national guidelines. • To discuss with other specialities including cardiology to increase awareness and provide details of investigations to carry out when highly elevated ferritin level (HEF) is detected. • Update existing training to increase awareness about HEF and link with secondary HLH (a severe and potentially fatal inflammatory condition) and investigations needed. • Re-audit once the revised national guidance is in place.
Audit on the pathway for single ventricle hearts in Alder Hey Children's Hospital	The audit was presented at the Alder Hey Cardiology/Cardiothoracic Department Quality Assurance meeting in November 2017. **Action/Recommendation:** • A checklist has been created to be used alongside the current guideline. • Re-audit to compare compliance before and after the addition of the checklist in 12 months.
Audit of the referral pathway for prolonged neonatal jaundice	The audit was presented to the Alder Hey Community team and the Gastroenterology Consultant in January 2018. **Action/Recommendation:** • Designing a pathway for managing prolonged jaundice in the community and in hospital. • No Re-audit was required as this was a study to see the pattern of actions in the community - designed to help in making a pathway for jaundiced babies.
Audit of boys undergoing emergency scrotal exploration to assess outcome for testis and surgical technique	The audit was presented at the Alder Hey Department of Surgery audit meeting in January 2018. **Action/Recommendation:** • Possible implementation of a standard technique, pending further data collection. • Re-audit in 12 months.
A survey of patient use of social media for information about Clubfoot	The audit was sent for presentation at the EFORT congress (European Federation of National Associations of Orthopaedics and Traumatology) in January 2018. **Action/Recommendation:** • Parents should be encouraged to use social media to learn about clubfoot. • Re-audit in 12 months.
Treatment for radial club hand at Alder Hey Children's Hospital. A service evaluation.	The audit was presented at the British Society for Surgery of the Hand (BSSH) Autumn meeting in November 2017. **Action/Recommendation:** • To continue the use of this technique, and to consider its use a primary procedure in the future. • A Re-audit could be undertaken, but will require a time gap of 5-6 years.

Local Audit	Actions
ADHD (Attention Deficit Hyperactivity Disorder) prescription audit	The audit was presented at the Alder Hey Community Paediatrics Department meeting in October 2017. **Action/Recommendation:** • To update and disseminate ADHD guidelines, • Adhere to guidelines. • To ensure guidelines are readily available to all prescribers. • To facilitate regular case review and Multi disciplinary Team meetings. In complex cases discuss with the lead clinician for that patch. • To Re-audit at an agreed timescale with the team.
What is a post tonsillectomy bleed?	The audit was presented at the Alder Hey E.N.T. (Ear, Nose and Throat) Department weekly meeting in November 2017. **Action/Recommendation:** • Update to existing policy to include advice to give post operatively. • Follow up phone calls for four weeks then repeated after changes to policy. • Re-audit in 1 month.
Audit of blood loss during scoliosis correction in Duchenne Muscular Dystrophy.	The audit was discussed with the senior author in January 2018. A date for presentation is to be confirmed at the Alder Hey Department of Surgery local Mortality and Morbidity meeting. **Action/Recommendation:** • Continue current practice. • No changes to practice needed as there was no change in primary outcome measure. • Re-audit in 5-10 years (extremely low volume of patients make it difficult to obtain significant numbers for analysis).
Service Evaluation of Dental Treatment done as a 'piggyback'.	The audit was presented at the Alder Hey Department of Paediatric Dentistry governance meeting in March 2018. **Action/Recommendation:** • Appropriate radiographs to be obtained to aid assessment. Justification for absence of radiographs should be recorded. • Patients identified for piggyback should have the consent process started at the time of assessment and treatment planning. • All patients for piggyback dental treatment to be assessed by appropriate staff. • Follow up and preventative care arranged for all patients. • Prospective Re-audit in 3 months after dissemination of findings.

Local Audit	Actions
Emollient and bath pack re-audit	The audit was presented to the Regional Dermatology meeting in January 2018. **Action/Recommendation:** • Continue to produce emollient pack, evolve in line with new products/research where available. • Possibly add urea based cream. • Liaise with pharmacology to ensure cost effective prescribing where possible. • Reinforce education with patients/parents regarding emollient types, application technique and volumes to apply. • Ensure letters to GP (General Practitioner) detail the importance of keeping patients stocked with emollient that suits them, and outline how much they should need. • No Re-audit required.
Audit of the use of dexamethasone (a type of corticosteroid medication) for extubation on PICU. (Paediatric Intensive Care Unit).	The audit was presented to the educational supervisor in January 2018. Abstract submitted to conference. **Action/Recommendation:** • Development and implementation of an extubation pro-forma for use in PICU. • Completion of a further audit using the pro-forma. • Develop a guideline to rationalise the use of dexamethasone during extubation. • No Re-audit required until guideline developed.
Audit of plaster cast wedging for lower limb fractures	The audit was presented at the Alder Hey Orthopaedic departmental meeting in February 2018. **Action/Recommendation:** • Cast wedging should now not be performed after 10 days post injury due to lack of benefit. • Dissemination of information to plaster technicians and orthopaedic department to make them aware of new practice. • Guideline to be drawn up. • Re-audit in 2-3 years when sufficient numbers have been achieved.
Pattern of paediatric vestibular referrals and the use of the video head impulse test in the paediatric population (new tehnology which can be used to investigate dizziness and balance malfunction)	The audit was presented at the British Association of Audiovestibular Physicians National Audit meeting, Queen's Square, London in November 2017. **Action/Recommendation:** • Engage a wider audience for raising awareness about paediatric vestibular disorders and disseminate training in the video head impulse test. • More engagement with professional colleagues especially G.Ps (General Practitioners). • Continue with video head impulse test. • Re-audit in 18 months.
Audit of theatre turn over times.	The audit was presented at the Alder Hey Department of Surgery Quality Improvement meeting in November 2016. **Action/Recommendation:** • No action plan was required for this audit. • Re-audit in 6 months.

Local Audit	Actions
Retrospective audit looking at timing from clinician review to arrival in anaesthetic room in daycase, specifically comparing first patient on list to subsequent patients	The audit was presented at the Alder Hey Department of Surgery in December 2017. **Action/Recommendation:** • A pre 9 a.m. start for the first patient on the list should be possible if clinician review can be done in an expeditious manner. • Reduced pre-operative wait times have been maintained in the new daycase unit. These details will be fed back to the daycase departmental managers for circulation. • Re-audit in June 2018, following all medical student placements we will be able to re-audit daycase start times from September to June allowing us to look at seasonal variation.
Audit of aortopexy and vascular ring surgery in paediatric patients at Alder Hey	The audit was presented to the Alder Hey ENT (Ear, Nose & Throat) Department consultant and disseminated to the cardiothoracic consultants in January 2018. **Action/Recommendation:** • No significant issues arose from the audit. Results hold up well when viewed alongside those in published literature. • No changes were required as consolidated existing practice. • Re-audit in 5 years (infrequently performed procedure).
Audit of genetic testing in neonatal CHD. (Coronary heart disease)	The audit was presented at the Alder Hey monthly Cardiology and Cardiac surgery meeting in January 2018. **Action/Recommendation:** • Keep the same protocol for genetic testing, reinforce the guidelines. • Do not order microarray if not indicated by the protocol. • The consultants will be informed of the audit results and reminded to follow the protocol. No other action needed. • Re-audit in 12 months.
Post PEG insertion care - completeness of the PEG (Percutaneous endoscopic gastrostomy) pathway form.	The audit was presented to the Alder Hey Gastroenterology Department weekly meeting in March 2018. **Action/Recommendation:** • Digitisation of PEG pathway. Simplifying form as part of digitising process in GDE (Global Digital Excellence). • Specialist nurses to update risk register in regards to low levels of sign off for parents/guardians of PEGs. • Stoma nurse will continue to stress importance of parental sign off. • Discharging clinicians to ensure sign off is complete before discharge • To Re-audit digitised pathway once available (GDE will automatically do this so it will be an ongoing prospective audit.

Local Audit	Actions
Has the introduction of Plasmalyte as the routine IV (Intravenous) maintenance fluid therapy reduced the risk of iatrogenic metabolic disturbances? (Disruption to the normal metabolic processes following medical intervention)	The audit was presented to the Alder Hey Pharmacy Department lunchtime meeting in April 2018. **Action/Recommendation:** • Feed results back to a wider range of healthcare professionals involved in the switch to Plasmalyte. • Update existing training to emphasise the importance of using fluid guidelines. • No changes to practice are required as Plasmalyte has been well received by prescribers and patients and can continue to be prescribed. • Further audit required to look at other electrolytes as a result of the switch to Plasmalyte • Re-audit in 12 months.

2.2.5 Participation in Clinical Research 2017/18

The number of patients receiving NHS services provided or subcontracted by Alder Hey Children's NHS Foundation Trust in 2017/18 that were recruited to participate in NIHR Portfolio adopted clinical research was 9,184, the largest number in Alder Hey history.

All research is governed by the EU Clinical Trial Directive, UK ethics committees and the Trusts Clinical Research Division who carry out safety and quality checks to provide organisational permission. This is a highly robust mechanism that ensures oversight of every research study in the organisation.

International Research, Education and Innovation is one of the Trust's four strategic pillars and as such elicits full support of the Board of Directors. All three areas are undergoing expansion and the creation of the Alder Hey Academy will further link research with education. Furthermore, the Alder Hey/University of Liverpool refreshed ten year research strategy states that "Every child (should be) offered the opportunity to participate in a research study / clinical trial". The strategy is patient focused and supports research from all disciplines. The Trust is a member of Liverpool Health Partners (LHP), a consortium of seven hospitals, the University of Liverpool and the Liverpool School of Tropical Medicine working together to provide a world class environment for research and health education across a regional footprint. As a significant stakeholder in LHP, Alder Hey demonstrates a strong commitment to contributing to evidence-based, cutting edge healthcare aimed at improving quality of care whilst holding patient safety, dignity and respect at the centre of everything we do. A clinical research review for Liverpool Health Partners took place in 2018 that made several recommendations and Alder Hey has a strong influence over this and the emergent strategy for child health.

One of the main strengths of Liverpool is that of pharmacology – developing better safer medicines for children and young people and contributing to the personalised medicine agenda. LHP is developing an Industry Gateway Office that will boost the region's ability to conduct more research into new medicines. Being an organisation undertaking high quality patient centred research means that Alder Hey contributes to the health and wealth of Liverpool and the UK as a whole as well as having an international impact on treatments developed for children. The infrastructure of expertise available at Alder Hey for setting up and successfully delivering clinical research is led and managed by a dedicated team who form the Clinical Research Division (CRD). The CRD employs 40 research nurses, supports approximately 260 studies at any one time and rigorously manages performance to ensure high quality delivery to time and target. Alder Hey has an excellent track record of recruiting the first patient globally to clinical trials, demonstrating that the organisation is at the forefront of drug development in paediatrics. Over the last 10 years Alder Hey has achieved this for 16 of its patients.

Our clinical staff and associated academics lead and contribute to studies of the latest and newest treatment options, genetic profiling of diseases and research looking at drug safety including adverse drug reactions (side effects).

Alder Hey was involved in recruiting patients to 152 open, non-commercial NIHR portfolio adopted clinical research studies, 37 commercial trials and 29 non-portfolio studies during 2017/18, which is significant for a Trust of its size. Whilst some studies report outcomes fairly quickly most will not be ready for publication for a few years. The majority were research in the area of medical specialties reflecting the prevalence of available research studies locally and nationally.

01/04/2017 to 31/03/2018				
	NIHR Studies	Number of Participants	Non-NIHR Studies	Number of Participants
SG1 (Oncology, Haematology, Palliative Care)	33	118	9	2
SG2 Nephrology, Rheumatology, Gastroenterology, Endocrinology, Dietetics)	36	349	10	29
SG3 (Respiratory, Infectious Diseases, Allergy, Immunology, Metabolic Diseases)	24	7460	3	0
SG4 (A&E, General Paediatrics, Diabetes, Dermatology, CFS/ME)	10	568	3	0
SG5 (CAMHS Tier 3 & 4, Psychological Services and Dewi Jones)	6	34	1	0
SG6 (Community Child Health, Safeguarding, Social Work Dept., Community Clinics, Neurodisability Education, Fostering, Adoption, Audiology)	1	0	3	0
SG7 (PICU, HDU, Burns)	3	53	3	0
SG8 (Theatres, Daycase Unit, Anaesthetics, Pain Control)	1	0	0	0
SG9 (General Surgery, Urology, Gynaecology, Neonatal)	10	33	0	0
SG10 (Cardiology, Cardiac Surgery)	0	0	0	0
SG11 (Orthopaedics, Plastics)	3	132	3	0
SG12 (Neurology, Neurosurgery, Craniofacial, Long Term Ventilation)	20	90	6	0
SG13 (Specialist Surgery, Ear Nose and Throat, Cleft Lip and Palate, Ophthalmology, Maxillofacial, Dentistry, Orthodontics)	6	70	0	0
SS1 (Radiology)	0	0	0	0
SS2 (Pathology)	0	0	0	0
SS3 (Pharmacy)	0	0	0	0
SS4 (Therapies, EBME, Central Admissions, Bed Management, Medical Records, Generic Outpatients)	0	0	0	0
NON-CBU	3	0	2	0
CNRU	0	0	1	0
Non Classified	3	5	1	0
TOTAL	**169**	**9139**	**74**	**169**

The Quality Account deals with research activity during the 2017/18 period. In addition to this, the CRD published performance data on the Trust website indicating the time it takes to set up a study and the time taken to recruit the first patient once all permissions have been granted. Over 80% of studies conducted at Alder Hey recruit the agreed number of patients within a set timeframe (76% for commercial research).

In September 2012 Alder Hey opened a National Institute for Health Research Clinical Research Facility (CRF). This was a capital project supported with investment from the Trust and is a clinical area utilised purely for research patients providing a dedicated research environment. This resource helps facilitate research by providing a bespoke location for research on a day to day basis and has successfully been used to care for research participants overnight who need regular intervention or tests on a 24 hour basis. One of the many advantages of having a fully operational CRF is that it will enable investigators to not only undertake later phase research studies but also to undertake more complex and earlier phase studies (Experimental Medicine types of activity) dealing with developing new cutting edge medicines and technologies which are often lacking in children's healthcare. This has become the main focus of the CRF over the last few years. The CRF will lead to improvement in patient health outcomes in Alder Hey demonstrating a clear commitment to clinical research which will lead to better treatments for patients and excellence in patient experience. The CRF has been awarded a new five year contract to expand early phase and experimental research through to 2022. In 2017 the new award was triggered and the appointment of several new roles is underway that will increase the CRF's profile and capacity to attract more business.

There were over 350 members of clinical staff participating in research approved by a research ethics committee at Alder Hey during 2017/18. These included consultants, nurse specialists, pharmacists, scientists, clinical support staff and research nurses from across all Clinical Business Units.

Over the past four years the Trust has witnessed a growth in commercially sponsored studies. There are over 30 commercial studies open to recruitment at any one time and much focus on the use of novel monoclonal antibodies (mAbS) or disease modifiers. mAbS have been used primarily in Rheumatology and Oncology but are becoming available in other sub-specialties such as Respiratory Medicine and Diabetes. They work by acting on the immune system to overcome the cause of the disease rather than treating the symptoms. Significant quality of life improvements have been witnessed, particularly in rheumatology patients treated with mAbS leading to increased mobility and a reduction in pain and inflammation. These drugs are now being licensed for use in children for the first time ever. Duchenne Muscular Dystrophy research has grown significantly with new compounds being developed that address the root cause of the disease. Alder Hey has been selected as one of three centres of excellence in England for DMD research and two patients with DMD have been global firsts. The Trust has an established critical mass of research activity in Pharmacology, Oncology, Rheumatology, Infectious Diseases, Respiratory, Endocrinology/ Diabetes, Critical Care and Neurosciences but is witnessing a growth in research activity in Gastroenterology, General and Neuro Surgery, Nephrology, Emergency Medicine and Community Paediatrics. The Trust has recently been successful in its application to be a Cystic Fibrosis Clinical Trials Accelerator and will receive 3 years funding to employ a part time trial co-ordinator dedicated to CF research. Both of these initiatives are up and running.

Innovation projects such as those developing devices are also now supported by the CRBU. This is the beginning of research and innovation coming together to share expertise and to maximise engagement with small medium UK enterprises and large global companies. There are 3 devices under development and these will use the hospital environment and its patients to test prototypes.

For more information on the research portfolio at Alder Hey please visit **www.alderhey.nhs.uk/research**

2.2.6 Use of the Commissioning for Quality and Innovation (CQUIN) Payment Framework

A proportion of Alder Hey Children's NHS Foundation Trust's income in 2017/18 was conditional on achieving quality improvement and innovation (CQUIN) goals agreed between Alder Hey and any person or body they entered into a contract, agreement or arrangement with for the provision of relevant health services through the Commissioning for Quality and Innovation payment framework. During 2017/18, these commissioning bodies were Liverpool CCG and consortia North West CCG partners for non-specialist services and NHS England for specialist services.

For 2017/18 the baseline value of CQUIN was £3.4 million which was 2.0% of our NHS England and CCG contract. This means that if Alder Hey did not achieve an agreed quality goal, a percentage of the total CQUIN money would be withheld. For 2017/18, Alder Hey expects to receive 97.2% CCG contract CQUIN money, with the amount withheld reflective of failure to deliver full compliance with part 2b of the sepsis CQUIN for Quarters 1-4. The Trust has agreed a contract settlement with NHS England within which no money was withheld for CQUIN failed targets. However there are a number of NHS England CQUIN targets which carry significant risk that will need to be managed in 2018/19.

The tables below reflect the position as at Quarter 3, as the Quarter 4 position is not fully validated at the time of publication, although this is not expected to change in Quarter 4.

National / Local Commissioner CQUINs 2017/18

Indicator	Indicator Description	Target	Weighting	Financial Value	Quarter 3 Performance
Health & Wellbeing	a. Improvement of health & wellbeing of NHS staff	5% point improvement in 2 out of 3 staff survey questions	0.083%	£39,047	To be evaluated in Quarter 4
	b. Healthy food for NHS staff, visitors & patients	Introduce required healthy food changes	0.083%	£39,047	To be evaluated in Quarter 4
	c. Improving the uptake of flu vaccinations in frontline clinical staff	70% front line clinical staff vaccinated	0.083%	£39,047	To be evaluated in Quarter 4
AMR & Sepsis	a. Timely identification of sepsis in ED and acute inpatient setting	90%	0.063%	£29,285	Achieved
	b. Timely treatment of sepsis in ED and acute inpatient settings	90%	0.063%	£29,285	Partially achieved
	c. Antibiotic review	90% cases in review	0.063%	£29,285	Achieved
	d. Reduction in antibiotic consumption per 1,000 admissions	Reduction	0.063%	£29,285	Achieved
Advice & Guidance	Set up & operate A&G services for non-urgent GP referrals, allowing GPs to access consultant advice prior to referring patients in to secondary care	Submit reports	0.25%	£117,140	Achieved

Indicator	Indicator Description	Target	Weighting	Financial Value	Quarter 3 Performance
e-referrals	Make services and outpatient appointments for GP referrals to available on the NHS e-Referral Service.	Submit reports	0.25%	£117,140	Achieved
Improving services for people with mental health needs who present to A&E		Submit reports	0.25%	£117,140	Achieved
Transitions out of Children and Young People's Mental Health Services		Submit reports	0.25%	£117,140	Achieved

NHSE North West Specialist Commissioner CQUINs 2017/18

Indicator	Target	Weighting	Financial Value	Quarter 3 Performance
Clinical Utilisation Review	Submit quarterly report	0.94%	£945,000	Fully achieved
Haemtrack – Patient home monitoring	Patient Participation Submit reports	0.074%	£74,000	Fully achieved
Haemoglobinopathy Improving Pathways through Operational Delivery Networks	Participation in ODN	0.15%	£150,000	Fully achieved
Medicines Optimisation	Submit report	0.1%	£99,000	Fully achieved
Paediatric Networked Care	Assess compliance with minimum data set and submit report	0.21%	£210,000	To be assessed in Quarter 4
Planned Transition to Adult Services for patients with Complex Neurodisability	Submit report	0.37%	£371,258	Fully achieved
Locally priced Service Redesign and Clinical Practice Benchmarking	To be confirmed	0.15%	£150,000	To be assessed in Quarter 4

2.2.7 Statements from the Care Quality Commission (CQC)

Alder Hey is required to register with the Care Quality Commission and its current registration is in place for the following regulated activities: diagnostic and screening procedures, surgical procedures, treatment of disease, disorder or injury and assessment or medical treatment for persons detained under the 1983 Act. Alder Hey remains registered without conditions.

The Care Quality Commission has not taken any enforcement action against Alder Hey during 2017/18.

CQC undertook a national thematic review of CAMH services, focusing on 10 sites across the country, of which Liverpool was one. Alder Hey in collaboration with partner agencies took part in this review which found:

- Knowledge of the pathways amongst GPs and A&E Departments needs to be developed via the partnership
- The myriad of entry points to the pathway are not always clear to all referrers and it may be confusing what the role and function of each partner is
- All partners need to ensure their websites and published 'offers' are valid and current. There was evidence however of partnership agreements being developed.
- There are opportunities for more seamless contracting arrangements across the partnership
- Data sharing and multiple systems that don't speak to each other was seen as problematic although it was acknowledged that there is a commitment to develop this and evidence such as data sharing agreements in place
- Funding challenges were acknowledged and noted
- Website excellent source of information however needs more promotion across all partners in the city.

In response to the national report, Alder Hey has suggested strengthening the governance and contracting arrangements for the Liverpool partnership and is keen to play a lead role in this.

Alder Hey received an unannounced inspection of three of its core services in April 2017 – Community CAMHS, Surgical care and Medicine – together with a well led review. The reports resulting from this inspection were published in October 2017 and the Trust developed a detailed action plan in response to the recommendations. This plan has been monitored on a monthly basis by the Trust's Clinical Quality Assurance Committee and Integrated Governance Committee.

The Trust received a short notice inspection one core service – Community paediatrics – and an unannounced inspection of four other core services – Critical Care, End of Life, Outpatients and Diagnostics – in February 2018. It also underwent a comprehensive well led review. The outcome of this inspection is awaited.

Outstanding Care

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

2.2.8 Data Quality

Alder Hey Children's NHS Foundation Trust submitted records during 2017/18 to the Secondary Users Service for inclusion in the Hospital Episode Statistics which are included in the latest published data.

The percentage of records in the published data which included patient's valid NHS Number was:

- 99.9% for admitted patient care;
- 100 % for outpatient care;
- 99.7% for accident and emergency care.

The percentage of records in the published data which included patient's valid General Medical Registration Code was:

- 100% for admitted patient care
- 99.9% for outpatient care;
- 100% for accident and emergency care

Alder Hey Children's NHS Foundation Trust will be taking the following actions to improve data quality:

- A suite of data quality reports will continue to be run daily and weekly to ensure data is monitored and corrected where necessary.
- Ongoing work is monitored by the Data Quality Steering Group which meets monthly
- Continue to work closely with the Information Department to identify any data issues or areas of data weakness, which will be investigated and remedial action agreed.
- The Data Quality policy has been updated to include escalation process for "repeat offenders" who continue to make mistakes when recording data

- A Data Quality dashboard is embedded within our Data Quality Process which includes key data items from throughout the patient pathway, to monitor data quality and facilitate improvement
- Workshops and refresher training sessions arranged to ensure staff are fully aware of the importance of Data Quality and the integrity of the data is accurate at source
- The annual audit plan has covered a number of patient checks including
  - A&E waiting times
  - Demographic changes
  - Missing NHS numbers
  - 18 weeks Referral to Treatment (RTT) & Outcomes
  - Duplicate registrations
  - Ethnicity monitoring
  - Pathway starts
  - GP checks

2.2.9 Information Governance (IG) Toolkit Attainment Levels

Alder Hey's Information Governance Assessment Report overall score for 2017/18 was 76% and was graded as 'satisfactory' (green). Additionally, the Trust's internal auditors assessed compliance with the IG Toolkit and reported 'significant assurance'.

2.2.10 Clinical Coding Error Rate

Alder Hey Children's NHS Foundation Trust was required to undertake an Information Governance Toolkit audit during the reporting period; the error rates reported in the latest published audit for that period for diagnoses and treatment coding, i.e. clinical coding, were:

- Primary Diagnoses Incorrect 4.5%
- Secondary Diagnoses Incorrect 19%
- Primary Procedures Incorrect 7%
- Secondary Procedures Incorrect 10%

The results should not be extrapolated further than the actual sample audited and the services audited during this period included:

- 200 Random Finished consultant episodes

2.2.11 Learning from Deaths

During the period 1st April 2017 to 31st March 2018, 65 inpatients died. This comprised the following number of deaths which occurred in each quarter of that reporting period:

- 18 in the first quarter;
- 16 in the second quarter;
- 17 in the third quarter;
- 14 in the fourth quarter.

By 1st April 2018, 39 case record reviews and two investigations have been carried out in relation to the 65 deaths included in the previous paragraph. Whilst many adult trusts only conduct mortality reviews on cases where deaths are unexpected or flagged through an incident, it is the policy of Alder Hey that all inpatient deaths are reviewed.

In two cases a death was subject to both a case record review and an investigation. The number of deaths in each quarter for which a case record review or an investigation was carried out was:

- 18 in the first quarter;
- 14 in the second quarter;
- 7 in the third quarter;
- 0 in the fourth quarter (due to be completed in the coming period)

None (representing 0%) of the patient deaths during the reporting period are judged to be more likely than not to have been due to problems in the care provided to the patient.

These numbers have been estimated using the mortality review process established in Alder Hey Children's NHS Foundation Trust. Every child that dies in the Trust has a Hospital Mortality Group review (a group consisting of professionals from across the Trust and specialties) and usually at least one departmental review prior to this.

Although there were no avoidable deaths in the reporting period over this time, that have been reviewed so far, the Trust has continued to learn from our mortality process and instituted appropriate changes (even though the issue addressed by the change was not thought to have contributed to the patient's death). In our process, we also identify external factors impacting on the children who then die in the Trust. As part of its process, the Hospital Mortality Review Group identifies children who, with early intervention or education, may not have died. Of course, such factors are also examined by multi-agency Child Death Overview Panels (CDOP). External factors impacting on children that then die at Alder Hey include external traumatic incidents which could have been avoided (in which circumstances the conclusion of HMRG is that death could have been prevented). This is classed as an example of a 'potentially modifiable factor'. This is also highlighted by co–sleeping resulting in a SUDI (sudden unexplained death of an infant). There is currently a campaign ongoing in Merseyside highlighting the risks of co-sleeping that should impact on the SUDI presentations

One example was identifying a higher number of unstable neonates being transferred from one of our referring hospitals and concluding that some transfers did not benefit the patient, who could have remained in the local hospital with the family support network readily available. We communicated this to the regional neonatal network and to the surgical team to ensure all relevant questions are asked so that the family receives the best care in the right place, which might be in the local hospital.

We have ensured that our major focus on sepsis continued into the mortality reviews and that information was available to inform our quality improvement programme for sepsis. The early identification and treatment of sepsis is a Trust priority and we have established a sepsis working group to oversee the rollout of an electronic sepsis pathway across the Trust with associated teaching. The sepsis pathway is continually being reviewed and adapted to fulfill its aims. There are multiple prompts on the electronic system used in the Trust to ensure that sepsis is considered. The use of the sepsis pathway is audited monthly and any children that have been identified with sepsis with the pathway not completed are highlighted. Following feedback, the electronic system now ensures that all the vital signs must be recorded so the PEWS is automatically calculated identifying the more unwell children. This should result in a more rapid response to changes in the child's condition. There is clear guidance for escalating concerns and the nursing team is empowered to raise their concerns further if not receiving the required response from more junior members of the medical team.

We were also able to bolster senior clinical leadership on the High Dependency Unit for longer hours each day. The HDU clinical leadership is now clearly defined with the HDU consultant accepting and reviewing referrals between 0900 and1700 and the General Paediatric consultant between 1700-2200. Overnight, the senior medical doctor on site provides cover, with readily accessible phone advice from the consultant on call.

We also ensured that the early warning (PEWS) system was adapted more precisely for cardiac patients.

2.3 REPORTING AGAINST CORE INDICATORS

The Trust is required to report performance against a core set of indicators using data made available to the Trust by NHS Digital

For each indicator the number, percentage, value, score or rate (as applicable) is presented in the table at Appendix 1. In addition, where the required data is made available by NHS Digital, a comparison of the numbers, percentages, values, scores or rates of each indicator is made, with:

- The national average for the same
- Those NHS Trusts with the highest and lowest for the same

PART 3: OTHER INFORMATION – QUALITY PERFORMANCE IN 2017/18

3.1 QUALITY PERFORMANCE

This section provides an update on the Trust's quality performance during 2017/18, including progress against the priorities identified in the previous quality report, plus an update on specific indicators under patient safety, clinical effectiveness and patient experience.

The Medical Director and Chief Nurse are jointly responsible at Board level for leading the quality agenda within the Trust, supported by the Director of Nursing, Deputy Director of Nursing and Associate Director of Risk and Governance. In addition, the Board appointed two Directors of Transformation and Clinical Effectiveness from among the consultant body during the year to strengthen the team leading the Trust's Quality Improvement agenda.

The Trust continues to maintain a strong focus on the delivery of the highest quality care with outstanding examples of clinical and non-clinical excellence. In 2017/18 we reviewed our overall Trust strategy and captured the outputs in a clear, simplified, eye-catching way, which is now extensively displayed throughout the Trust and is widely recognised by staff, thereby ensuring clarity of the Trust vision to deliver 'a healthier future for children and young people' (see Appendix 2). In addition, whilst maintaining the underpinning principles of the quality strategy that 'patients will not suffer harm in our care', 'patients will receive the most effective evidence based care', and 'patients will have the best possible experience', we have re-appraised our quality strategy and developed an updated draft quality improvement plan which forms the focus of the quality priorities for the coming year and will be the focus of a Quality Summit in May 2018, where teams of staff and parents / patients will work together to finalise our quality improvement plans for 2018/19.

2017/18 has been a strong year in terms of quality performance with the strengthening of governance arrangements, including a further embedding of the model of devolved governance giving greater ownership of local quality related matters and resulting

in improved ward to board reporting of risk, incident reporting, and shared learning.

Staff are well settled into the new hospital building and are becoming increasingly satisfied with their working life which is reflected in the 2017 staff survey, which shows many areas of significant improvement compared to the previous year. We have continued to employ Listening into Action as a key enabler for staff involvement in resolving local issues and making local improvements, with excellent results in many areas. We have also maintained other avenues for staff to raise any issues or areas of concern they may have through our 'Raise it, Change it' mechanism or through direct contact with one of our 'Freedom To Speak Up' champions.

We continue to work closely with children and families to make ongoing improvements and will place a particular focus during the coming year on further developing a culture of continuous quality improvement and on involving children and families in the co-design of improvements.

3.2 SIGN UP TO SAFETY

Sign up to Safety is a national patient safety campaign whose vision is for the whole NHS to become the safest healthcare system in the world, aiming to deliver harm free care for every, patient every time. The campaign was launched on 24th June 2014 with an ambition of halving avoidable harm in the NHS over a three year period and saving 6,000 lives as a result.
As an organisation committed to improving patient safety, Alder Hey Children's NHS Foundation Trust joined the Sign up to Safety campaign and developed a Trust Wide Safety Improvement Plan with specific improvement outcomes as highlighted in the previous quality report. The aim is that by March 2018, against a 2014/15 baseline, we will:

- Achieve no never events year on year
- Reduce all avoidable harm by 30%
- Reduce avoidable moderate, severe harm or death by 50%
- Achieve a 95% patient satisfaction score

In this final year of the Sign up to Safety campaign, the Trust has shown great progress against most of the extremely challenging targets declared in our Safety Improvement Plan. We are proud to be able to demonstrate improvements and contribute to saving lives over the three years of the campaign. Progress against each of the individual elements of the Sign up to Safety campaign is reflected in separate sections below as part of the Trust's quality performance declarations.

3.3 KEY PRIORITIES FOR IMPROVEMENT IN QUALITY 2017/18

The key quality priorities set out for 2017/18 are summarised in the table below. The following sections describe the progress made in these areas throughout the year.

	Quality Domain	Priority Area
Aim 1	Patients will not suffer harm in our care	*Further embed a safety culture throughout the organisation*
Aim 2	Patients will have the best possible experience	*Increase engagement of children, young people & families in improving quality and developing services*
Aim 3	Patients will receive the most effective evidence based care	*Increase number of defined clinical care pathways across our clinical specialties*
Aim 4	Improve workforce health & wellbeing	*Provide support that will enable our staff to feel valued and respected by the organisation and actively contribute to the organisation's success*
Aim 5	Our environment will enable us to deliver an excellent service	*Continue to improve the environment to make it work for both patients and staff*

3.3.1 PRIORITY 1 – Further Embed a Safety Culture throughout the Organisation

The Trust identified a specific priority to maintain our strong and growing safety culture by putting specific attention into prompt recognition and treatment of deteriorating patients, including implementation of the sepsis pathway and into reducing hospital acquired infections. A high level of incident reporting to the National Reporting and Learning System (NRLS) is also recognised as an indicator of a high safety culture

In striving to deliver this priority, the Trust agreed to place a specific focus on:

- Remain in top quartile of number of incidents reported through NRLS compared with peer trusts
- Prompt recognition and treatment of deteriorating patients including implementation of the sepsis pathway
- Reducing hospital acquired infections

Remain in top quartile of number of incidents reported through NRLS compared with peer trusts

Aim: To maintain a high level of incident reporting in a culture of openness and willingness to learn

Targets:

1. Remain in the top quartile of number of incidents reported compared with acute specialist trusts.

Outcomes - 2017/18:

1. Alder Hey is the third highest reporter of incidents maintaining its position in the top quartile.
2. Further increase in reported incidents in 2017/18.

Data source: NRLS website – March 2018

A high degree of focus has been placed on incident reporting within the Trust, with a higher reporting of incidents, particularly no harm and near miss incidents, being indicative of a strong safety culture, with a willingness to be open and learn from mistakes.
The latest report from National Reporting and Learning System (NRLS) shows that for the period 1st April 2017 to 30th September 2017, Alder Hey was the third highest reporter of incidents amongst its peer group of acute specialist trusts. We are also the highest reporter of incidents amongst all paediatric trusts.

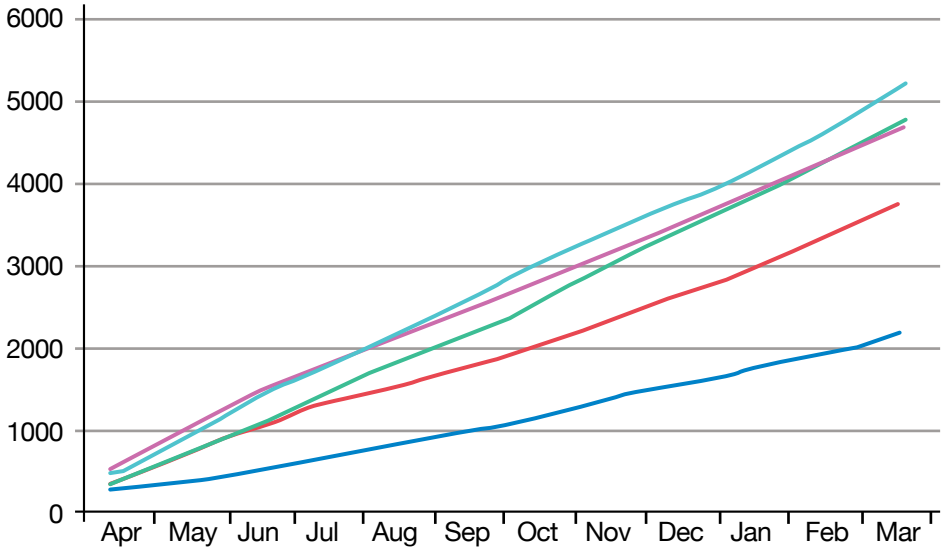
Improvements

- Weekly meeting of harm assurance action log, demonstrating assurance of patient safety improvements.
- Governance and Quality assurance intranet site now available for all staff which includes, national and local guidance on management of incidents including serious incidents, sharing lessons learned from incidents, investigation reports and action for improvement, safety notices etc.
- Development of 'Step by step guides' for the management of incidents via the electronic risk management system.
- Safety alerts shared Trust wide to ensure learning and minimise patient safety risks.
- Lessons learned bulletins shared with all staff promoting learning and continuous improvements in patient safety.
- Human factors training in theatres.
- Maintained mechanisms of feeding back reports to staff, for example see 'theatre monthly incident' summary sheet (overleaf).

Future Plans

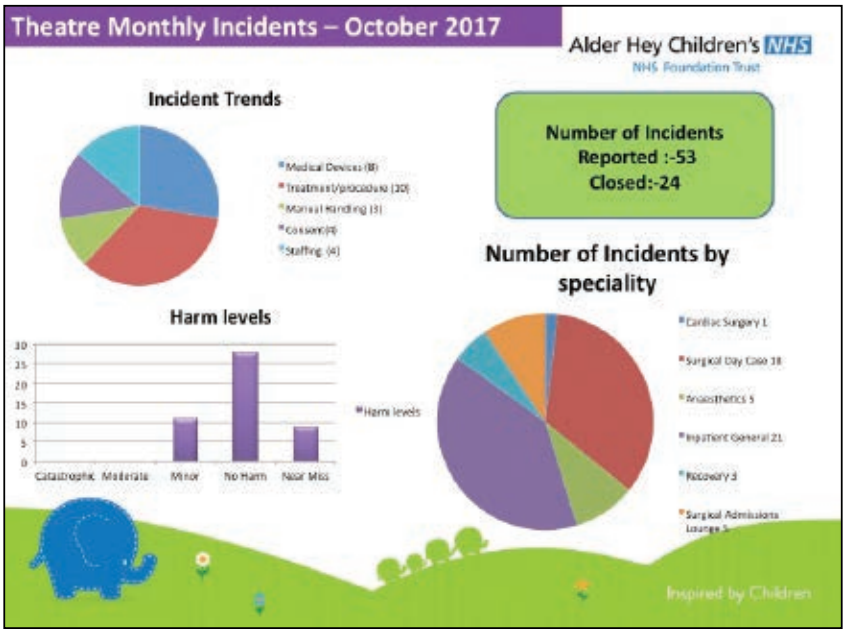
- Multidisciplinary half day 'lessons learned' events
- Combined RCA and Human Factors training
- E-learning incident management training package

Clinical Incidents Reported 2013/14 to 2017/18



Graph shows year on year increase in incident reporting 2017/18

- 2013/14
- 2014/15
- 2015/16
- 2016/17
- 2017/18



Prompt Recognition and Treatment of Deteriorating Patients Including Implementation of the Sepsis Pathway

Aim: To embed the question "Are you concerned this child has sepsis?" in our routine clinical practice

Targets:

1. Develop and roll out a sepsis pathway to all our inpatient wards and Emergency Department (ED).
2. Deliver sepsis training to nursing and clinical staff based within Alder Hey.
3. Submit against the CQUIN for 2017/18

Outcomes - 2017/18:

1. 100% of inpatient and ED screened for sepsis.
2. Development of an electronic sepsis pathway.
3. CQUIN submission for Q1-3 of £56k (£66k max).
4. Average time to antibiotic administration for Inpatients 47 mins (Jul17 – Feb18) and ED 64 mins (Jul17 – Feb18).

Sepsis is life-threatening infection when it affects the function of an organ or body system and is caused by a dysregulated response by the body's own defences. Those with 'septic shock' are unable to maintain a normal blood pressure without critical care support. Sepsis and septic shock affect children and adults and are major causes of death and lasting complications in those that survive.

The priority was to improve the quality of care provided by the Trust in a condition that carries a high morbidity and mortality.

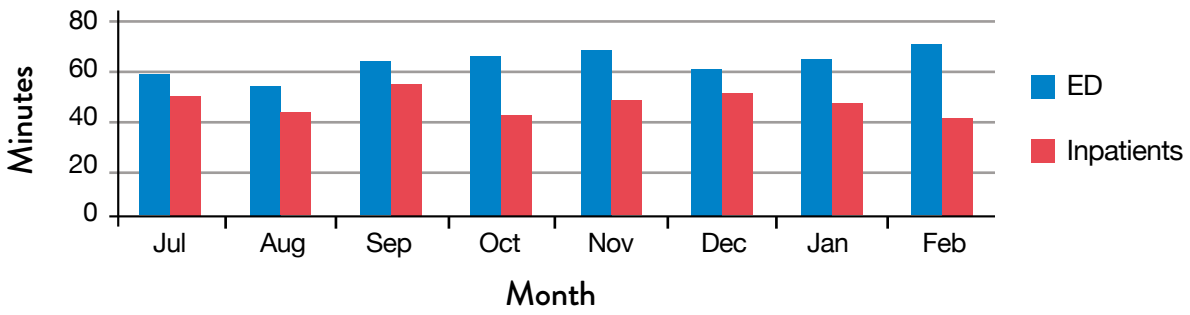
Improvements in 2017/18

- Developed electronic sepsis pathway
- All ED and inpatient ward nursing staff (excluding Paediatric Intensive Care Unit - PICU) were trained and the new sepsis pathway was implemented.
- Enhanced, earlier recognition of children at high risk of sepsis in ED and on the inpatient wards
- More timely provision of effective treatment for likely sepsis
- Consequent likely reduction in morbidity and mortality
- Improved education and training for nurses and doctors in managing sepsis
- Compliance with NICE guidance on sepsis management
- High quality informatics enabling identification of blocks to rapid, efficient care and allowing feedback to individuals and teams to improve service delivery
- Established a Sepsis Team – 1.5 Specialist Nurses and 2 clinical leads.
- Developed an e-Learning package to be rolled out in 2018/19.
- World Sepsis Day awareness session in the Trust.

Future Plans 2018/19

- Roll out of sepsis training to the community setting.
- Reviewing the pathways for non-acute setting.
- Launch the e-Learning package for 2018/19.
- Development of an enhanced IT offer that should facilitate improved clinical management and audit of data.

Average Time to Administration of Antibiotics



Reducing Hospital Acquired Infections - Sign Up To Safety Pledge

Aim: By March 2018, reduce avoidable harm due to hospital acquired infection by 50%.

Targets: From the 2014/15 baseline:
1. No hospital acquired MRSA bacteraemia
2. No Clostridium difficile infections due to lapses in care
3. Reduce the number of hospital acquired infections by 50% from the 2014/15 baseline of 147; this represents 74 infections

Outcomes - 2017/18:
1. 4 x MRSA bacteraemia
2. 1 x Clostridium difficile infection
3. 46% decrease in the number of hospital acquired infections: this represents 80

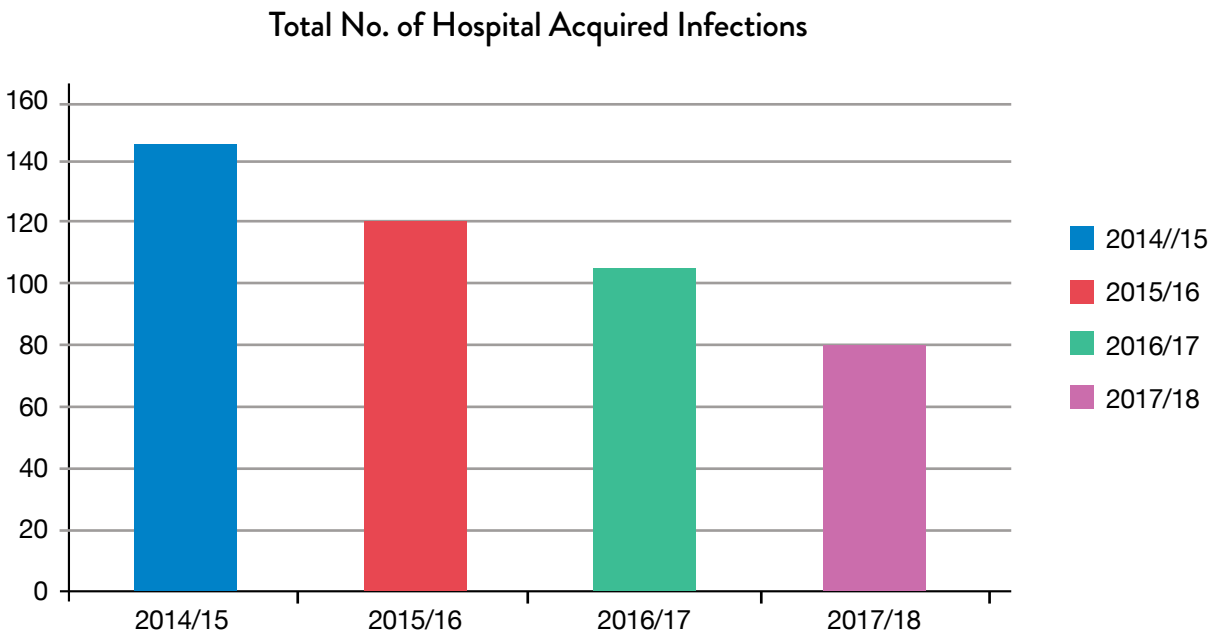
Data source – corporate report April 2018

Effective infection prevention and Control (IP&C) practice is essential to ensure that patients receive safe and effective care. In order to provide the best possible outcome for the children in our care it is vitally important that we identify and manage all infections that affect our children and young people to reduce the risk of healthcare acquired infection. Children and young people can present unique IP&C challenges, such as:

- They are susceptible to infections, which are preventable by vaccination.
- They have closer contact with other visitors such as parents and siblings.
- Their poor hygiene practices present more opportunities for infection to spread.
- They may also interact more closely with their environment, making them more likely to come into contact with contaminated surfaces and items.
- Communicable diseases affect a higher percentage of paediatric patients than adults increasing the likelihood of cross infection.

Improvements & Achievements 2017/18

- Development and implementation of a new Infection Prevention and Control Work Plan as a reporting system for the work undertaken by the Infection Prevention and Control Team and reported through to the Trust Board, CQAC, CQPG and IPCC.
- Rationalisation of the cleaning and disinfecting products used within the Trust through a quality improvement and evaluation process.
- Root Causes Analysis (RCA) process introduced for all Trust acquired MSSA, E.coli, Klebsiella and Pseudomonas bacteraemia to examine and highlight identification of lessons learned to inform improvement processes across the Trust.
- Introduction of the 'OneTogether' programme into Theatres to improve infection prevention and control processes which are monitored through the Surgical Site infection Surveillance Action plan, Theatre Safety Board and IPCC.
- Integration of Alder Hey into the Wider Health Economy from an infection prevention and control perspective both regionally and nationally including Gram negative blood stream infection work and Intravenous Forum work.
- Commencement of the National Paediatric Special Interest Group (SIG) supported by the Infection Prevention Society (IPS) incorporating Infection Prevention and Control, Tissue Viability, Intravenous Therapy and Infection Diseases.
- Introduction of an electronic Alert system on Meditech to monitor Alert Organisms to replace the paper based system.
- Checklist developed and used by IPCT to ensure appropriate investigation into hospital acquired diarrhoea; plan to produce posters for wards to replicate this.
- A gap analysis for the new Public Health England Toolkit for reducing E. coli bacteraemia was undertaken and actions have been added to the IPC Work Plan.
- Commencement of a sepsis nurse to audit compliance with sepsis management.
- SSI surveillance for K-wires insertion commenced. Results to be discussed with the surgeons before being distributed Trust wide.
- Successful amalgamation of Infection Prevention and Control, Tissue Viability and Intravenous teams as one collaborative team.



Graph shows a consistent year on year reduction in Hospital Acquired Infections, from 147 in 2014/15 to 80 in 2017/18, i.e. a reduction of 46%

Future Plans

- Plans to be drawn up and incorporated into the 2018/19 IPC work plan, to incorporate strategies to integrate Community staff, premises and education into the IPC audit and educational plan.
- Co-ordination of the First Paediatrics SIG Conference in September 2018.
- Roll out of use of hand hygiene audit app (introduced originally on PICU and HDU) throughout the Trust.
- Investigation of all Hospital acquired cases of Influenza and RSV during the winter season to ascertain if they could have been prevented and reporting back to the clinical teams the hospital acquired RSV and Influenza A rates by 1000 bed days
- Audit of compliance with NICE guideline 139 (baseline review of urinary catheter management)
- Business case to be presented for three ultra violet machines for the enhancement of the deep cleaning and PPM processes throughout the Trust.
- Business case to be presented for new 'Cephaid' machine for rapid identification of carbapenamase producing organisms therefore freeing up isolation cubicles.
- Surgical Site Infection surveillance to be expanded to incorporate all inpatient surgical procedures.
- To examine and update the Isolation policy incorporating the most up to date research and best practice available and benchmarking the policy against other Paediatric Specialist Hospitals in the country.
- To explore and develop a process across the whole Trust to monitor Central Vascular Line (CVL) data per 1000 catheter days and to benchmark these rates against other Paediatric Specialist Hospitals in the country.

Further details of improvement plans are captured in the Infection Prevention & Control Work Plan which will continue to be rolled out in 2018/19.

3.3.2 PRIORITY 2 – Increase Engagement of Children, Young People and Families in Improving Quality and Developing Services

The Trust has made significant efforts to increase the engagement and involvement of our children and families in many areas of improvement across the organisation, including:

- Improvements in outpatients
- Ensuring children with protected characteristics are not disadvantaged through any service development proposals

Improvements in Outpatients

Aim: The delivery of an excellent outpatient service to every patient, on time, every time

Targets:

1. Reduce the PALS concerns relating to phlebotomy waiting times by 50% by March 2018
   Baseline: 8 Target: 4
2. Improve the FFT rating for extremely/likely to recommend the Alder Hey Outpatients department
   Baseline: 93% Target: 98%
3. Reduction in short term staff absence by 300 days by March 2018
   Baseline: 1,764 days lost Target: 1,464 days lost

Outcomes:

1. PALS concerns relating to phlebotomy reduced to 4 in the year, i.e. 50% reduction.
2. FFT rating fluctuated widely each month between 91.4% and 97.7% patients/families who would recommend Alder Hey outpatients department
3. Short term staff absence reduced by 499 days to 1,265 days lost.

The Improving Outpatients project was established in 2016/17 following the Care Quality Commission (CQC) inspection in 2015. In 2017/18, the second year of the project continued with a focus on "Experience in Outpatients" and aimed to deliver an excellent outpatient service, building on previous achievements with a clear focus on increasing patient and family satisfaction as well as staff engagement and wellbeing.

Feedback from patients and staff highlighted several opportunities for improvement:

- Limited opportunity for patients to feedback their experience and often, limited detail provided
- Booking rooms for outpatient clinics is complex and often delayed setting up of clinic session
- Waiting and congestion in phlebotomy area resulted in delays and increased stress for both patients and staff
- Very busy fracture clinic with poor flow, blockages and delays, including in the plaster room
- Limited play and distraction provided in outpatient areas
- Staff morale low with significant days lost through staff sickness.

The work placed specific focus on delivering a safe system of booking patient appointments, an effective workforce delivery high quality patient care every time and digital improvements in line with the Global Digital Exemplar (GDE) project.

Many of the improvements utilised Listening into Action (LiA) methodolgy to place specific focus on the issue, and involve the right people in agreeing the solution, ensuring the patient was at the heart of the improvement.

Improvements

- Developed and implemented a monthly OPD specific Patient Survey, incorporating the existing OPD Family and Friends Test to improve quality of patient feedback

Friends & Family Test: October and Outpatient

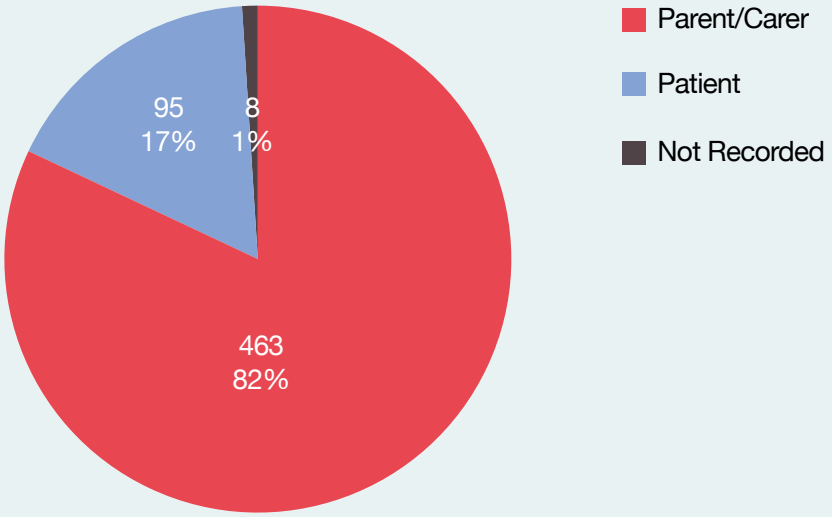
This report was generated on 14/11/17. The report has been filtered to show the responses for "October and Outpatient". Overall 566 respondents completed this questionnaire.

How likely are you to recommend our hospital to friends and family? (FFT)

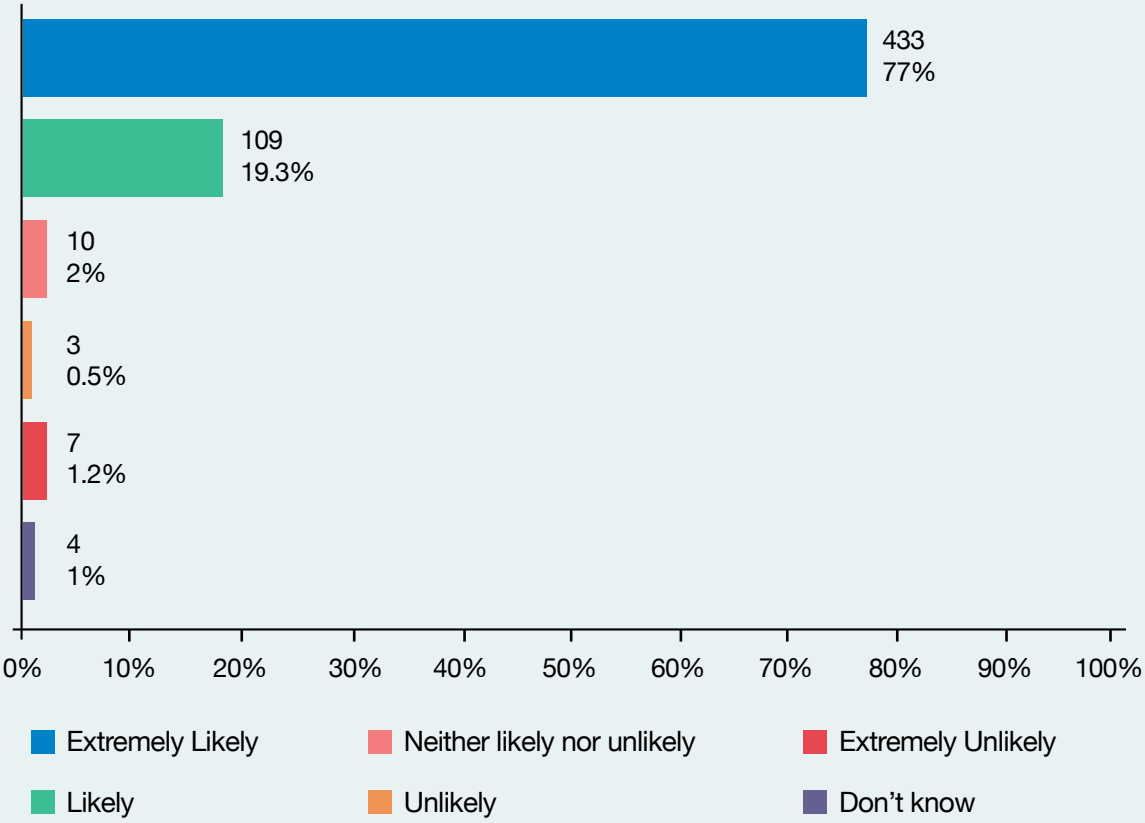
		How likely are you to recommend our hospital to friends and family?					
		Extremely Likely	Likely	Neither likely nor unlikely	Unlikely	Extremely unlikely	Don't know
Total	**566**	**433 77%**	**109 19%**	**10 2%**	**3 1%**	**7 1%**	**4 1%**
Ward /Department/Clinic:							
Outpatients (OPD) Ground Floor	226 40%	173 31%	41 7%	5 1%	- -	4 1%	3 1%
Physiotherapy	11 2%	10 2%	1 0%	- -	- -	- -	- -
Psychological Services	1 0%	1 0%	- -	- -	- -	- -	- -
Radiology	20 4%	16 3%	3 1%	- -	- -	1 0%	- -
Rainbow Centre	5 1%	4 1%	1 0%	- -	- -	- -	- -
Occupational Therapy	8 1%	7 1%	1 0%	- -	- -	- -	- -
Not Recorded	10 2%	5 1%	4 1%	- -	1 0%	- -	- -
Phlebotomy (Bloods)	19 3%	16 3%	2 0%	1 0%	- -	- -	- -
OPD (Level 1)	84 15%	57 10%	23 4%	3 1%	- -	1 0%	- -
OPD (Level 2)	169 30%	133 23%	31 5%	1 0%	2 0%	1 0%	1 0%
Fracture Clinic	169 30%	11 2%	2 0%	- -	- -	- -	- -

Examples of the monthly FFT tests gathered in the Outpatient Department

Are you:



How likely are you to recommend our hospital to friends and family? (FFT)



Examples of the monthly FFT tests gathered in the Outpatient Department

Staff treated me nicely

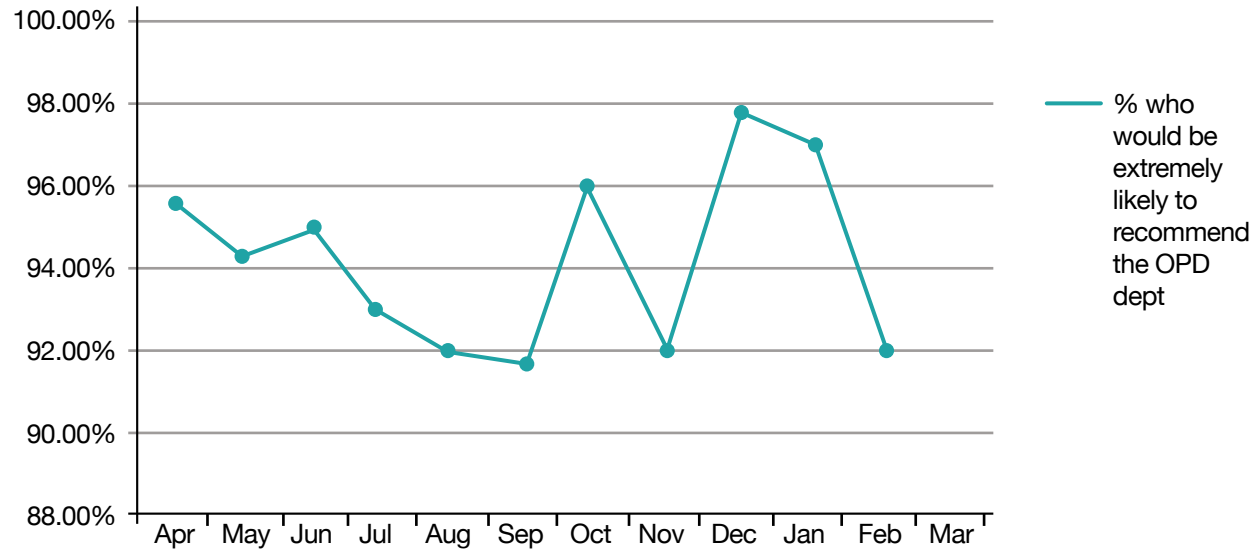
Total	566, 100%
Yes	556, 98%
No	10, 2%

Ward /Department/Clinic:	What was good about your visit?
Fracture Clinic	Service excellent in fracture clinic
OPD (Level 1)	Friendly staff
OPD (Level 2)	Clean environment, plenty for children to play with and organised
OPD (Level 2)	Staff excellent and clean
OPD (Level 2)	Clean bright and pleasant environment
OPD (Level 2)	Getting to the problem
OPD (Level 2)	Not applicable
OPD (Level 2)	Everyone was very helpful and friendly and always had a smile
Phlebotomy (Bloods)	Easy to find your way around
OPD (Level 2)	All OK
OPD (Level 2)	That we have had our appointments grouped together saving a trip.
OPD (Level 2)	Quick and efficient
Radiology	Day off school for daughter.
Outpatients (OPD) Ground Floor	Friendly, helpful, welcoming, excellent doctors and facilities.
Outpatients (OPD) Ground Floor	Good signage.
Outpatients (OPD) Ground Floor	We had good experiences with all areas of care - beginning with health care assistant nurses and doctors - they are all very good and the level of care is at a high standard.
Outpatients (OPD) Ground Floor	Toys for the children to play with.
Outpatients (OPD) Ground Floor	Staff are friendly.
OPD (Level 1)	Staff so friendly especially Nicki on the desk who sorted me an appointment after it was cancelled, she was so nice and made our experience a happy one.
Phlebotomy (Bloods)	Bright and friendly atmosphere.
OPD (Level 1)	When I had an operation I didn't feel anything.

Examples of the monthly FFT tests gathered in the Outpatient Department

- Improved the quality of room booking by implementing a new electronic Outpatient Clinic Room Booking system to allow a quick view, reduce time needed to request and confirm additional clinic sessions.
- Opened a second phlebotomy area on a separate floor and improved flow of inpatients, outpatients and GP patients attending the phlebotomy service.
- Developed a dedicated Improving Outpatients webpage on the staff intranet to allow a central point of information and improved communication with staff and stakeholders.
- Held an LiA workshop with Orthopaedics and developed an improvement action plan on fracture clinic flow leading to the introduction of a fracture coordinator in August 2017 which has successfully improved flow and patient experience.
- Reviewed and reorganised the OPD plaster room to improve flow and patient experience.
- Worked with the Play Specialist Corporate Lead to inform the Play and Distraction Strategy, ensuring OPD requirements were met and access to play and distraction was increased in 2017/18.
- Improved communications and engagement in the outpatient department with monthly staff meetings providing opportunities for staff to raise concerns and share ideas.

FFT Results - April 2017 - March 2018



Graph shows the significant fluctuation in the number of patients and families/carers who would be extremely likely or likely to recommend the Alder Hey Outpatients Department.

The Trust will maintain a strong focus on outpatients as an improvement area in 2018/19, and will strive to improve to a more consistent high level of FFT patient satisfaction.

Future Plans:

1. Test and Implement Aqua Ice, a GP led Phlebotomy ordering Solution which should further improve flow and patient experience

2. Undertake a review of OP private patients and develop an improvement plan based on findings

3. Place specific focus on further improving booking and scheduling of appointments

4. Complete an audit on the waiting times in Outpatients and review for areas of improvement

5. Continue to Implement the NHS e-referral system

6. Continue to focus on making improvements in partnership with patients and families.

Ensuring Children with Protected Characteristics are not Disadvantaged Through any Service Development Proposals

Aim: To ensure all transformation projects consider the potential impact of the proposed improvement on patients with protected characteristics

Targets:

- All proposed transformation projects will include a Quality Impact Assessment and an Equality Analysis.

Outcomes - 2017/18:

- 25 out of 29 projects have a QIA and EA completed.

Data source: Trust Programme Board project tracker

The Trust recognises the importance of meeting its public sector equality duties and the potential risks of inadvertently excluding or disadvantaging some members of our patient population.

We are committed to ensuring all service development proposals consider the potential impact on all of our children and young people, including those with protected characteristics, and their families.

By the end of March 2018, there were 29 active projects, 25 of which had a Quality Impact Assessment and an Equality Analysis completed

Improvements

- Redesigned Quality Impact Assessment (QIA) and Equality Analysis (EA) forms
- Included a mandatory section in service development initiation documents describing how children and families are involved and affected
- Tracked compliance with completion of QIA and EA through Trust Programme Board

Future Plans

- Refer to Section 3.3.10 Equality & Diversity to see plans to further improve compliance with public sector equality duties.

3.3.2.1 Other Examples of Engaging Children and Families in Improving Quality and Developing Services

Alder Hey Children's NHS Foundation Trust is committed to providing children and young people and their families/carers with the best possible experience during their time under our care. An important aspect of identifying the areas where we need to improve is to understand the patients' views of our services and how they rate their experience of the services we provide. We have adopted a number of different means for capturing this information, as identified below.

The Trust has adopted a wide range of methods to capture feedback including Family & Friends Test which provides a broad measure of patient experience which can be used alongside other data that is collected, including through our ward accreditation programme – 'Journey to the Stars', PLACE inspections, plus a listening event co-ordinated by our local Healthwatch organisations. Collection and aggregation of this data allows us to identify key themes and trends.

The data collection process is strongly supported by our team of volunteers who are trained in the use of an electronic tablet as part of their induction and support the patient experience team in gathering the feedback electronically and in real time.

A. Improvements in Acute Asthma Pathway

Aims:

- To make asthma care at Alder Hey the most evidence-based, patient-centred pathway in the world
- To reduce the length of stay, and reduce hospital admissions

Outcomes

- Co-designed new pathway with parents
- Reduced frequency of steroid treatment from 3 times per day to once per day
- Reduced side effects of treatment
- Reduced frequency of exposure to X-rays from 30% asthmatic children to 8%
- Reduced costs of medication by 90%

When a child has an asthma attack there is already a high degree of stress placed on parents and carers, and it is the responsibility of the hospital staff to ensure the journey is as comfortable and successful as it could possibly be, and discharge is achieved as soon as possible.

Reasons for Change

Hospital admission rates for childhood asthma are consistently amongst the highest in the UK. There is a feeling that children in Alder Hey were receiving more treatments than are needed and this was increasing length of stay.

The pathway was plotted and was found to have:

- Non-uniformity of care
- Some aspects that did not reflect recent best practice evidence from clinical trials
- Stress amongst junior doctors and nurses.

Alder Hey adopted an inclusive partnership approach to seeking to make improvements to this pathway. This included co-designing the revised pathway with staff and the parent of three boys suffering from asthma.

The parent was an equal partner in voting about each recommendation and played a crucial role in making change. This including teaching the parent about evidence based medicine and what results of randomised trials mean, to enable them to make informed choices.

We also informally spoke with parents of younger children before the pathway was developed to identify outcomes of importance and also to agree on the areas of most interest within the guideline.

Improvements

- Utilised a co-design methodology working with parents to identify the optimal solutions and define a new pathway
- Reviewed and streamlined the pathway so that it best suited the needs of the children and families.
- Systematically reviewed medical research with nurses, doctors, and parents who were involved in voting about issues with the pathway.
- Incorporated a change in the steroid we use (from prednisolone to dexamethasone) – resulting in reduced side effects and reduced frequency of dosing from three to one per day.
- Reduced costs of medication by 90%
- Reduced frequency of exposure to X-rays from 30% of asthmatic children to 8%.

This innovative improvement won a national award for innovation in Pharmacy and the revised pathway is being adopted by many other trusts across the UK.

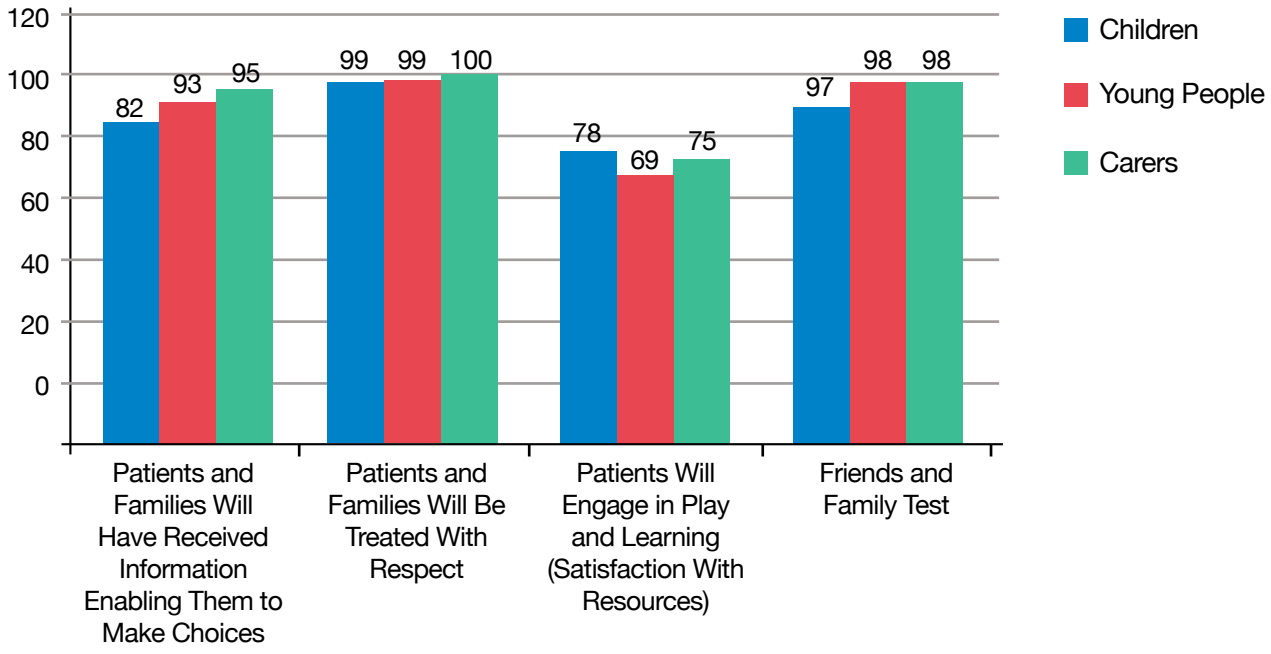
Future Plans

- Complete a follow up audit and seek further opportunity for improvement
- Publish these findings in a medical journal

B. Family and Friends Test

We have gathered information from children and families through the family and friends test (FFT), a national tool which provides consistent information that is comparable to other organisations and is published externally on both NHS England and NHS Choices websites. In addition we have added our own bespoke survey questions and the table below provides a summary of the responses.

April 2017 to March 2018



The following table shows the response from patients and families to the Family & Friends Test.

Patient Feedback Questions	Total Responses	Total Responding Positively
Friends and Family Test (How likely are you to recommend our hospital to friends and family if they needed similar care?)	5,138	5,019 (98.0%)

C. Journey to the Stars – Ward Accreditation Scheme

Safe Together & Always Right

The Journey to the STARs – Ward Accreditation Scheme is a quality and safety audit tool designed to give assurance of standards of practice by measuring the quality of care delivered by wards and department teams.

The assessment tools explore aspects of patient care and service delivery using the CQC key lines of enquiry as each of the standards. The audit process involves talking to the ward or department manager, talking to patients and families, talking to staff, reviewing patient records, observing practice and the environment. The auditors include clinical and non-clinical staff from across the organisation. The assessment tools have been modified for other departments so that all inpatient wards, day case wards, Emergency and Outpatient departments can be audited.

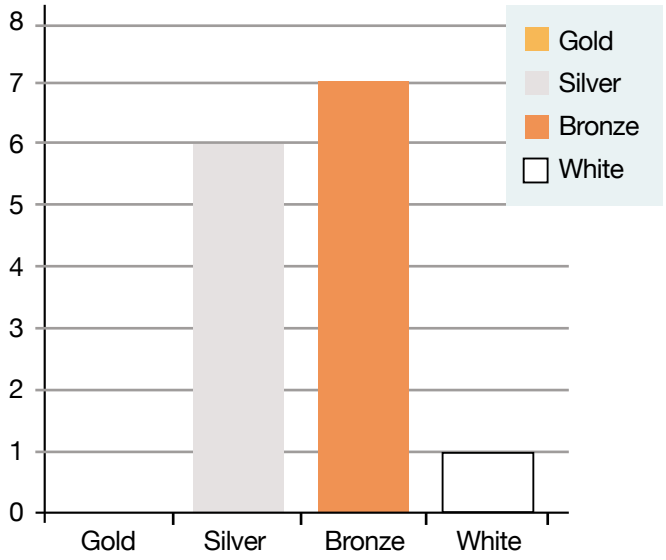
It is considered by the Trust to be important to use the assessment tool to reward the wards / departments' hard work, hence the use of a rating system, i.e. a White, Bronze, Silver or Gold award would be given to wards depending on the outcome of the audit and this will also determine when the ward or department will be re-audited.

The awards and review schedule is highlighted in the table below:

Award	Overall % for all Standards	Review Schedule
Gold	90% or above	Re-audit in 12 - 18 months
Silver	80 - 89%	Re-audit in 6 - 12 months
Bronze	70 - 79%	Re-audit in 3 - 6 months
White	Below 70%	Re-audit in 3 months

The Ward Accreditation process was relaunched and rolled out across the Trust from October 2017 and 14 wards/ departments have been audited. A full report is presented to the ward or department manager and the Matron, the feedback includes areas of good practice and areas for improvement. The manager and the Matron develop an action plan and progress is reported back through the Divisional Quality and Governance meetings.

The overall Trust position after the first round of assessments is shown in the graph below:



The second wave of assessments within the hospital started at the end of March 2018 and will be completed by the end of May 2018.

D. PLACE Inspection 2017/18

Alder Hey Children's NHS Foundation Trust is absolutely committed to ensuring that 'every NHS patient is cared for with compassion and dignity in a clean, safe environment.'

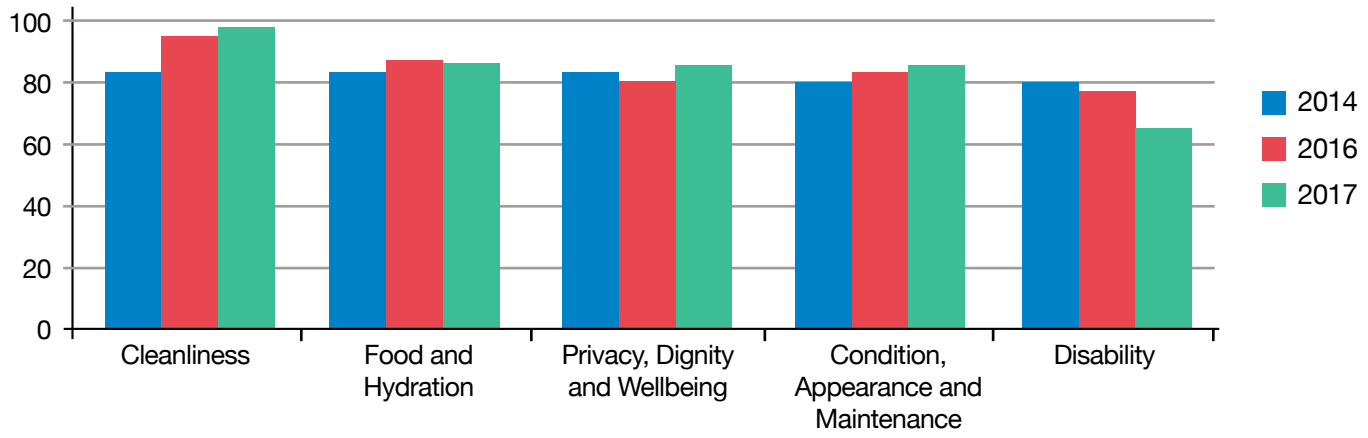
The Patient Led Assessment of the Care Environment (PLACE) is a thorough assessment conducted by patients, Healthwatch representatives, Governors and volunteers, in partnership with NHS staff, and designed to focus on the areas which patients say matter to them.

Participation is voluntary and the assessment covers a range of non-clinical activity that takes place within the care environment. The areas covered by the assessment are 'Cleanliness', 'Food and Hydration', 'Privacy, Dignity & Wellbeing', 'Condition, Appearance & Maintenance,' and Disability, which focuses on issues such as wheelchair access, mobility (e.g. handrails), signage and provision of other aids including visual/ audible appointment alert systems, hearing loops, plus aspects relating to food and food service.

Outcome

The results of the assessment are produced by NHS Digital (formerly Health and Social Care Information Centre). The table below provides a comparison of Alder Hey's performance over the past three assessment periods.

PLACE Reports 2014/2017 *Note: there was no PLACE assessment undertaken in 2015*



Improvements

- Implementation of the 'cleanliness action plan' through Infection Prevention & Control has delivered continued improvement over the past three inspections
- Food and hydration has maintained the improvement from 2014, with specific improvements being made in offering healthy options, reducing availability of sugary snacks and creation of personal space for children and young people to eat on wards.
- Privacy, Dignity and Wellbeing showed slight improvement on last year.
- Established a 'Blank Canvas' group which consults with children and young people, to design bespoke decoration throughout the hospital, reducing the bland clinical feel. This has supported consistent improvement in Condition, Appearance and Maintenance
- Disability has shown a worsening position. However this was related largely to wheelchair access to services provided on the Trust's retained estate. This has now been improved.
- Established a Patient Experience Task and Finish Group to address issues highlighted through PLACE inspection and through Family and Friends Test feedback.

Future Plans

- Collaborate with peer children's trusts to undertake future PLACE assessments and share best practice
- Introduce internal interim PLACE Assessments to be carried out with volunteers 3 times a year
- Address PLACE assessment findings through newly formed Patient Experience Task & Finish group.
- The Trust will continue to work with patients, the public and external organisations such as Healthwatch, and will again undertake a PLACE assessment in 2018 to identify further opportunities for improvement.

E. Healthwatch – Listening Event

Healthwatch Liverpool and Healthwatch Knowsley visited Alder Hey Children's NHS Foundation Trust to gather feedback from patients and visitors. This included questions about the staff and their interaction with patients, the facilities and the food. Plus respondents were asked how many 'gold stars' would they give Alder Hey overall from 1 (poor) to 5 (outstanding).

Star Rating	★	★★	★★★	★★★★	★★★★★
No of respondents (out of 32)	0	0	1	7	24

The full results of the work completed by Healthwatch were fed back to the Trust. Whilst it was recognised this was the output of a small number of respondents, the Healthwatch report did comment, "Healthwatch was pleased to receive mostly positive feedback from patients about Alder Hey. Most service users had good things to say about Alder Hey and were positive about the care they received."

F. The Alder Play App

Aims:

- To create a state of the art app that enhances the experience of care for children and young people at Alder Hey
- To distract, reward and familiarise children using a familiar digital medium
- To engage with parents to answer their questions about Alder Hey and what may happen during their child's visit to the hospital

Reasons for Change

The Alder Play app has been developed by the Innovation Team at Alder Hey working in partnership with Alder Hey Children's Charity. Designed with the help of young patients, the app is powered by the very latest digital and cognitive advances.

Evidence suggests that distraction can reduce worries and fears in children, whilst rewards can support positive health behaviours. Both approaches are used widely across the hospital, but this is the first time a bespoke digital medium will assist staff to engage children to enhance their experience of care.

Improvement

The app uses gaming and augmented reality to distract patients having procedures in hospital. Young patients choose an avatar which will help them understand their hospital visit before they arrive and guide them through a tour of the main hospital areas.

Rewards in the form of virtual stickers can be given by staff to acknowledge or encourage progress and there are games and video content to access too.

Within Alder Play, parents are also able to interact with a chatbot called "Ask Oli" to ask questions about the hospital and what may happen to their child. The chatbot is powered by artificial intelligence and can answer questions in real time.

Future Plans

The IT team at Alder Hey have provided continued expert input to Alder Play and involvement has been furthered enhanced by the GDE programme. As Alder Play is introduced across the Trust, the Innovation Team will work closely with departments to support adoption and realise the benefits of Alder Play. Initial evaluation of impact will be led by a strategic partnership with The University of Liverpool.

Development of Alder Play will continue, informed by the needs of children, families and staff. The Children and Young Peoples Forum have already played a central role and will continue to do so. Alder Play originated a number of years ago when a seven year old patient Niamh suggested to hospital staff the idea for an app to be created that would distract children like her while they were in hospital.

Niamh now says.
"It is exciting to see that the app is coming to life and providing entertainment for other children like me. I really like the 'Ask Oli' page which is really helpful and means kids and parents can ask questions about their stay in hospital."

3.3.3 PRIORITY 3 – Increase the Number of Defined Clinical Care Pathways across our Specialties

In reviewing feedback from patients and staff, and in analysing complaints, incidents, mortality and morbidity reports, the Trust recognises that there is a degree of variation in care across the specialties and across the week. We are committed to utilising best practice, such as NICE guidelines, national service specifications and other evidence to ensure the same standardised, high quality care is delivered to all patients seven days a week.

In striving to deliver this priority, the Trust agreed to place a specific focus on:

- Developing care pathways across clinical specialties
- Developing a system of 7 day working

Developing Care Pathways across Clinical Specialties – Digitised Clinical Pathways

Aim: To design and implement digitised clinical pathways that are patient centred and evidence based

Targets:

1. Develop standard methodology for creation of digitised clinical pathways
2. Implement digitised pathways in 6 specialties by March 2018
3. Establish a 'clinical intelligence portal'

Outcomes - 2017/18:

1. Standard methodology implemented and priority specialties identified.
2. Digitised clinical pathways implemented in 8 specialties
3. Clinical intelligence portal developed and ready to be launched

Background:

At Alder Hey Children's NHS Foundation Trust the transition to paper free working has been identified as an opportunity to engage the hospital's specialty teams in a process of service transformation and quality improvement. The aims of the project are aligned with the Trust's strategic goals to achieve success in three key domains; safety, effectiveness and patient experience. Digitised clinical pathways have been identified as one method for structuring the approach to service transformation around specific clinical scenarios.

The project is led by the Clinical Effectiveness Directors as part of the Global Digital Exemplar (GDE) project and reports to the GDE programme board. Resources including an operational project manager, clinical fellow, IM&T development staff and support from the business intelligence team have been allocated to the speciality package project.

The project plan is structured around four "gateways" involving;

- clinical engagement and identification of clinical pathways for digitisation;
- digitisation of documentation and the development of digital tools to support pathway implementation;
- training, testing and launch of digitised processes
- post-implementation review and revisions.

Improvements:

- Implemented standardized approach (PEDMAPs Pathways) - designed to promote the implementation of patient centred, evidence-based care within the Trust (summarised using the PEDMAPS mnemonic; Patient centred, Evidence based, Digitally enabled, Metric defined, Accessible Pathways).
- Engaged individual specialty teams to identify relevant patient-centred clinical and patient experience outcomes, which are then used to promote the identification of the most suitable evidence-based pathway recommendations
- Implemented pathway recommendations using service redesign strategies, supported by the development of digital tools including
  - Bespoke digital documentation
  - Computerized order entry systems
  - A 'clinical intelligence portal' providing an automated overview of clinical effectiveness and patient experience data.
- Speciality packages and digitised clinical pathways implemented for 8 specialities including the emergency department, rheumatology, gynaecology and CAMHS.

Future Plans:

- Continue to roll out digitised clinical pathways to a total of 63 specialty packages by 2020
- Populate and roll out clinical intelligence portal
- Use digital data to support the quality improvement cycle

Developing a System of 7 Day Working

Aim: To achieve the same level of access to clinical services across all 7 days of the week

Targets: To meet the 4 core national standards*:

1. Std 2 - Time to consultant review < 14 hours
2. Std 5 - Access to diagnostics
3. Std 6 - Access to interventions/key services
4. Std 8 - Ongoing senior review

**Core standard 2 required for 2017/18*

Outcomes - 2017/18:

1. October 2017 Updated baseline by audit (S2 only)
2. Stabilised trainee doctor numbers over winter to ensure consultant availability
3. Developed standardised electronic ward round package to mandate recording of consultant presence
4. Prepare for Spring Audit 2018 (4 core standards)
5. Engagement and planning for redesign of paediatric delivery model

Evidence exists that lack of access to resources at weekends across the NHS can be associated with delays to care and increased risk of adverse outcomes. The Trust is required to deliver national standards designed to address this variation and to focus on 4 of 10 of the agreed national standards. Generally good progress has been made with standard 2 requiring more thought and attention.

In implementing the system of 7 day working, the Trust has established a Trust wide "7 day Working Steering Group" to coordinate Trust approach, and to oversee mandated audits. To pull together this multifaceted approach, we have established the 'Best in Acute Care' working group which oversees activities and outputs of Out Of Hours working group, New Models of Care working group, Escalation policy and development of Rapid Response Nursing Team.

Achievements 2017/18

1. Clinical Standard 2 - Time to 1st Consultant Review: 54% of patients were seen and assessed by a suitable consultant within 14 hours of admission.
2. Improved ability to record when consultant review takes place on hospital information system.
3. Established an Out Of Hours working group (Junior Doctors, General paediatric and Specialty Consultants, Senior Clinical Leaders, Service Managers and Medical Staffing Lead)
4. Created an action plan including surveillance of junior doctor numbers and gaps, recruitment to additional posts, and wellbeing of junior staff.
5. Recruited over and above expected trainee establishment (in anticipation of gaps).
6. Appointed 3 experienced Foundation (F3) doctors (across general paediatrics and surgical teams) in addition to trainee establishment.
7. Appointed 4 zero hours contract doctors to support covering gaps in rotas.
8. Also introduced an additional 2 Advanced Nurse Practitioners to contribute to junior doctor responsibilities.
9. Developed a 'New Models of Care' working group looking at a new model of consultant delivery of care to different patient groups across Alder Hey.
10. Weekly meetings commenced July 2017 addressing a number of work streams including:

    a. Clarifying general paediatric and specialty team 'rules of responsibility'

    b. Determining best model of care for emerging Complex Care patient group

    c. Determining best model of care for consultant support to High Dependency Unit

    d. Determining most appropriate paediatric support for surgical patients (complex and non-complex)
11. Models of Care agreed in principle and supported by the Executive Team
12. New Models of Care work Programme has been agreed as one of the Trust's 5 key Operational Priorities for 2018/19, and each of the above work streams will be progressed with an implementation programme agreed.
13. Developed standardised electronic ward round documentation in place should make the process of monitoring compliance with the standards easier and allow for improvements to be made in a timely way.

Future Plans 2018/19

1. Completion of the 3 year Global Digital Exemplar (GDE) Programme will:
   - improve data capture; each patient will have a fully digitised and accurate record of their care; resulting in improved clinical governance, including for example which grade of medical staff has reviewed the patient and when – accurately capturing time-to-review.
   - provide digitised clinical pathways re-designed in line with best clinical practice, which will improve patient experience, patient safety and clinical outcomes and their ease of reporting.
   - lead the delivery of a collaborative approach to health and social care; working with other trusts, Primary Care and Social Care in sharing clinical information to improve the patient experience in the wider healthcare setting and future proofing our approach to 7-day services and other clinical pathways.
2. Continuation of Out Of Hours group monthly meetings to monitor gaps in rotas, recruitment to additional posts, and oversight of junior doctor wellbeing.
3. Comprehensive New Models of Care Work Programme will be established 2018/19 with likely 3 year implementation plan. Aligned to this will be dedicated Consultant Job Planning in 2018/19, working towards standardised weekend and out of hours consultant working across all specialties, for all patients.
4. Trust Patient Flow Work Programme (18/19), including implementation of SAFER Bundle across the Trust will support all 4 standards.
5. The Trust will review ANP developing workforce and their coordinated contribution to roles and responsibilities across Junior Doctor and ANP competencies, and their contribution to 7 day working standards.

3.3.4 PRIORITY 4 – Provide Support that will Enable our Staff to Feel Valued and Respected by the Organisation and Actively Contribute to the Organisation's Success

The Trust recognises the need to support and celebrate the great work undertaken by our staff and how they contribute to the organisation's success, and is committed to ensuring our workforce is representative of the local population demographics.

In striving to deliver this priority, the Trust agreed to place a specific focus on:

- Reward & recognition and celebrating success
- Increasing BME representation in the workforce

Reward and Recognition and Celebrating Success

Aim: To identify and celebrate the remarkable and outstanding effort being demonstrated every day by the staff at Alder Hey so that staff feel valued at work and feel like they contribute to the organisation's success.

Target:

- 5% improvement in baseline measure of 'staff that recommend Alder Hey as a place to work' in National Staff Survey.

Outcome:

Year	Percentage	Improvement
2016/17	53%	10%
2017/18	63%	

It is widely recognised by leaders at Alder Hey that the Trust's most valuable asset is its workforce. The importance of recognising and rewarding the great work being undertaken on a daily basis has been a strong area of focus during 2017/18. With a highly motivated workforce, we will see continued improvements in performance, patient experience and outcomes, and a high degree of staff satisfaction. Numerous initiatives have been adopted, many driven through our Listening into Action approach, which empowers staff by giving them confidence to raise issues and make change in their own areas.

Improvements 2017/18

• Fab Staff Week

As a means of saying 'thank you' to the staff, and in recognition of the NHS Fab Change Day the Trust held a 'Fab Staff Week', consisting of a whole week of health and wellbeing activities and stalls, free fruit and snacks for staff, and created a pledge wall for staff to commit to making a simple positive change to improve working life for themselves and their colleagues.

Catering's 'thank you' stall

Staff 'pledge wall'

Activities included:

- A free raffle with 61 prizes, for staff who submitted a change pledge.
- A commitment from staff to participate in a Randomised Coffee Trial, where pairs of staff from different parts of the Trust meet over a coffee and discuss each others roles, with a view to gaining a greater understanding of the organisation and sharing improvement ideas.
- Numerous healthy lifestyle stalls including 'Smoke Free Liverpool', 'Simplyhealth', 'Citizen's Advice', 'Slimming World', 'Union advice', 'Financial Advice', 'NHS Pensions advice'

A delighted staff member claiming her raffle prize

• Star Awards

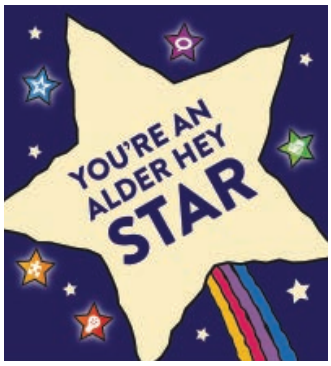
This year, we relaunched our staff recognition scheme to provide several opportunities for staff to recognise the tremendous work done by colleagues, by nominating them for a Trust award through the monthly or annual staff awards, or to simply say thank you to staff using one of our specially designed 'thank you' cards.

'Star of the Month' award – Staff are invited to submit nominees each month with evidence of how an individual, or a team, truly live the Alder Hey values and go beyond the call of duty. A panel of judges made up of staff and governors, assess each submitted nominee against the Trust values and declare the winner as Alder Hey Star of the Month. The winning individual or team receives a certificate, a gift voucher, and a place in the Atrium Star Chart.

'Annual Staff Awards' – The annual awards evening is designed to bring people together and celebrate the passion, dedication and successes of our remarkable staff at an annual Alder Hey Star awards gala. There are 11 categories which recognise staff for the commitment, care and compassion they deliver all year round. This includes a category which is subject to a public vote, the winner of which this year was described by patients as "nothing short of exceptional", "extremely compassionate and caring", and "truly made the difference in helping me and my family cope through what was the worst time in our whole lives".

Alder Hey Stars celebrating at the Annual Awards gala dinner

'Thank You Cards' – We have also developed a simple thank you card that all staff can download and use as an expression of gratitude to their colleague(s) whether for a piece of hard work they have done, or a positive attitude, or even simply just to show that they are appreciated.



Alder Hey 'Thank You' Card

Future Plans

- Continue to utilise Listening into Action as an empowerment methodology to engage staff and patients in identifying and implementing improvement opportunities
- Hold a Quality Summit with contributions from all specialties and departments as well as children and families to identify local priorities whilst maintaining children and families at the centre of everything we do.
- Repeat the 'Fab staff' week to ensure we continually recognise and reward staff for their outstanding work
- Continue to explore new and innovative ways of building staff confidence and motivation.

Increasing the Black and Minority Ethnic (BME) Workforce Within the Trust by a Further 5% by 2022

Aim: Increase the BME workforce by 1% each year, over the next 5 years to 2022, thus reflecting the demograhic make up of the local population, with an 11% BME population.

Targets:

- 1% increase each year

Outcomes - 2017/18:

- April 2017 – 190 BME employees (5.6%)
- March 2018 – 222 BME employees (6.3%)
- Overall annual increase of 0.7%

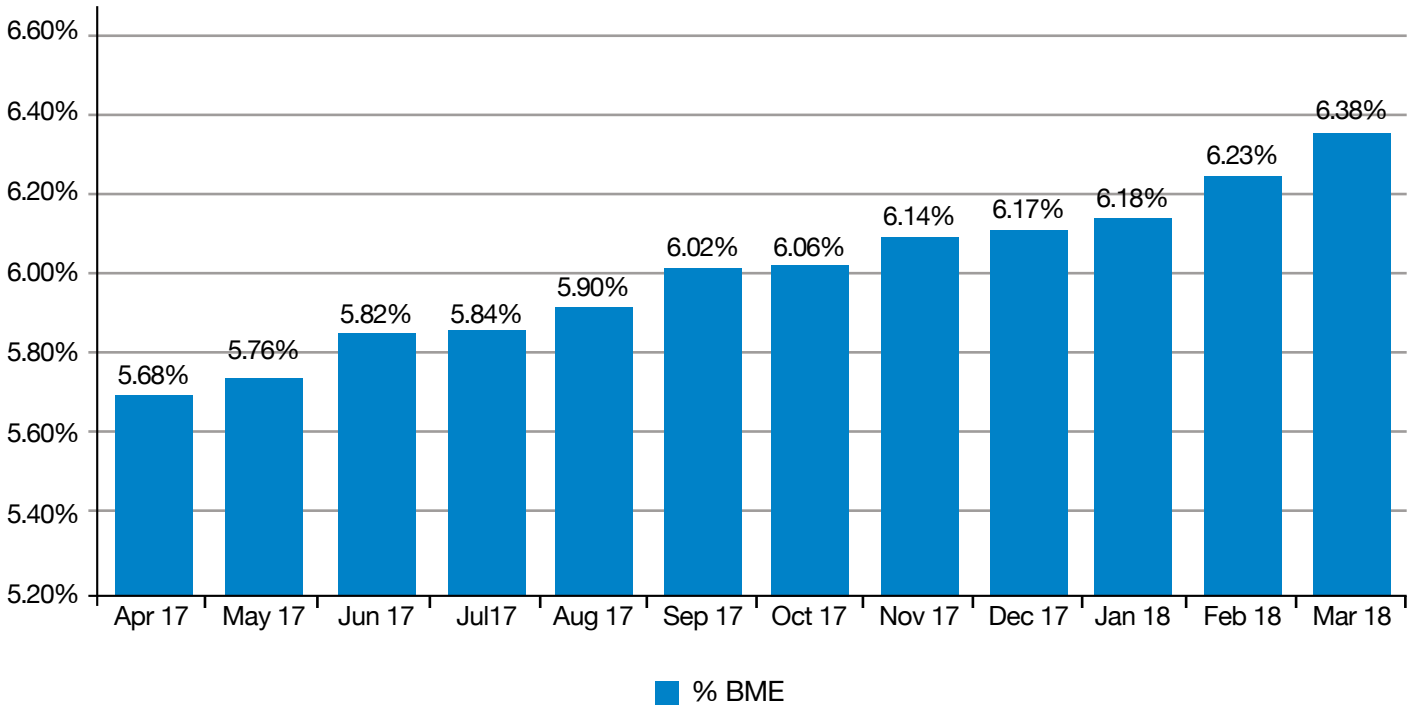
The Trust recognises that the staff are the most important and valuable resource and are committed to attracting and retaining a diverse and motivated workforce, with the right skills, values and knowledge to deliver world class care for patients. Creating a more diverse and inclusive workforce will enable the organisation to deliver a more inclusive service and improvement in patient care.

Improvements 2017/18

- Review of Recruitment and Selection Policy, methods and training – a revised Recruitment and Selection Policy and Management Toolkit was implemented in June 2017, providing clear direction to managers and staff regarding the processes in place when recruiting staff internally and externally.
- During August 2017 a revised Recruitment and Selection Training programme was introduced for recruiting managers providing information relating to selection methods which enabled recruiters to avoid any form of discrimination or unconscious bias.
- BME staff also received the recruitment and selection training to act as a 'critical friend' and to share personal experiences, which can in turn be incorporated in the programme to enrich the training.
- The Human Resources Team have identified recruitment campaigns where BME applicants have applied and been shortlisted. HR team members have then observed those interview panels ensuring that no form of discrimination or unconscious bias occurs. To date no unconscious bias or discrimination has been identified.
- Training has also been provided to managers to assist them with constructive and meaningful feedback to unsuccessful applicants following interview. Managers and staff have also accessed Cultural competence training.
- The Trust has adopted 'positive action' in recruiting - the following statement is contained on all advertised vacancies on NHS Jobs.
  "Black, Chinese and Disabled individuals are under-represented in our total workforce, and males are under-represented in our nursing workforce. We actively encourage applicants from these groups".
- The development of an inclusive careers promotional video and brochure is now in use to further assist in our recruitment strategy.
- The Trust has also developed a pathway for volunteers enabling them to apply for internal vacancies following successful placement within the volunteer's team. This opportunity has been promoted to various BME groups and networks.
- Introduction of and development of a Staff BME Network – the BME Network was introduced in April 2016; the aims were to address under-representation of BME groups at Alder Hey. This group has been invaluable in understanding and addressing issues affecting the BME workforce. The group has reviewed the reasonable adjustments processes, and evaluated internal recruitment processes and opportunities which has already enabled staff progression and development.
- Development of Pre-employment Programme – during October 2017 Alder Hey and Job Centre Plus implemented a programme offering unemployed members of the local community the opportunity to participate in a 10 week work experience programme based within Alder Hey. Following successful completion of the programme the applicants were offered the opportunity to apply for internal vacancies or bank work within the Trust. When advertising the Trust targeted BME groups and actively encouraged applicants from BME backgrounds.

- Working with external organisations to promote NHS Careers to schools and colleges - the Human Resources Team are working in partnership with Merseyside Careers Hub and Health Education England to promote careers on an ongoing basis. The HR team have co-ordinated Trust attendance at external careers events which are attended by various schools and colleges. They have also hosted careers event for a local school providing careers information to year 10 students, providing career pathway information from various professionals within the organisation.
- Review of workforce data – throughout 2017/18 the Human Resources Team has cleansed the workforce data held within ESR to ensure accurate reporting on equality information for all staff.

Graph 1.1, shows the Total number of BME staff in post each month from April 2017 to March 2018



Future Plans

- The BME network continues to meet regularly and has assisted the implementation of the disability network.
- Develop links with the BME communities to promote careers at Alder Hey.
- Working in partnership with Job Centre Plus specifically targeting BME unemployment, with the aim to offer apprenticeship at the end of the Pre-Employment Programme.
- To continue with all positive active actions to actively recruit BME applicants such as monitoring interview, feedback to applicants and vacancy statistics.
- To continue working with Merseyside Careers Hub and NHS England to promote NHS Careers.
- Continue to improve our data held in ESR by encouraging new staff to complete all aspects of equality information on new starter forms.

3.3.5 PRIORITY 5 – Continue to Improve the Environment and Make it Work For Both Patients and Staff

Following feedback from patients and families the Trust identified the need to continue to enhance opportunities for play and improved entertainment for children and young people, plus a requirement to improve wayfinding and familiarisation of the hospital environment

In striving to deliver this priority, the Trust agreed to place a specific focus on:

- Improving arts, performance and play
- Improving signage and wayfinding for children and families

Improving Arts, Performance and Play

Alder Hey has had an Arts for Health programme since 2002 which has become increasingly active in enhancing the physical environment, improving the patient experience and supporting clinical objectives using knowledge of proven research into the benefits of arts participation. It is distinct from those in other paediatric hospitals in that it is focused on patient participation, being both patient-centred and patient led. The arts support an individualised and very positive healthcare experience for many patients, often focusing on those who have long-term conditions.

The Trust Arts Coordinator along with the Arts Strategy Team and children and young people were instrumental in the development of arts in the new hospital, inspired by the theme of nature and the outdoors – connecting with the environment.

The Arts Coordinator manages an ongoing programme of participatory arts, major projects and collaborations with our cultural partners, as well as:

- showcasing the best of live music and performance in our performance space,
- developing strategic links with further and higher education,
- supporting and advising healthcare staff in developing arts initiatives
- developing mentoring and CPD programmes for arts and healthcare professionals.

The programme is recognised by our peers as a national model of best practice and in July 2017, was cited for its exemplary practice in the All-Party Parliamentary group Inquiry into Arts, Health and Wellbeing.

2017/18 has seen unprecedented levels of participatory activity with our patients and their families. The number of workshops delivered on the wards and in our community sites has risen from 300 per year to 586 last year, and we worked with over 5,000 children and young people. This is in large part due to a number of high profile major projects:

Music Matters

This was a project funded by The Big Lottery: The People Project; Alder Hey was one of three North West organisations to receive funding through securing the most public votes following an ITV screening promoting the project. The project enabled us to deliver music workshops led by professional musicians on each in-patient ward (8 in total) once a week for 12 months. During that time, we delivered 320 workshops and worked with 1,600 patients. The project demonstrated clearly the immediate benefits of music intervention on the wards. Evaluation carried out with patients showed that 92% of patients believed that the music session had significantly improved their hospital stay and 84% of patients said that it significantly helped them to forget about their illness or condition.

Patients, parents and ward based staff unanimously supported and welcomed the programme, recognising the influence that live participatory music had on the child's wellbeing, physical ability and emotional state - and particularly with long term patients, their ability to cope with hospital life.

"I heard her playing across the corridor and couldn't wait for my turn."

Noah, aged 4

"The music session today was fantastic, the lady who performed was amazing, we all joined in as a family and it left us all with a really positive and enjoyable memory to look back on at such a difficult and hard time. I would highly recommend these sessions and believe they are a great idea for helping the child feel like there is something to look forward to and make them smile. I think these sessions are one of the best ideas the hospital has to offer for children."

Mum of Miley, aged 7

Music As Medicine

This is an 18 month programme funded the Youth Music Foundation. It is a partnership project with Live Music Now North West and aims to support long term patients in four areas of the hospital through regular participation in music sessions led by Live Music Now musicians. The project also embeds bespoke training for the musicians, equipping them with the skills to work in this sensitive environment and deliver music sessions that the patients and families will enjoy. We are also making a film resource to share with other professional musicians interested in working in a paediatric healthcare setting.

Making A Difference

> *"This is so worth doing, it's a great distraction and they learn a new skill."*
>
> **Parent of patient**

This was an eight week residency by willow artist Caroline Gregson, funded by Arts Council England, in partnership with Bluecoat Display Centre, the regions leading centre for contemporary craft. The artist worked on one of the wards twice a week to deliver craft making sessions using willow. Children and young people were able to make individual willow pieces to customise their patient bedrooms. The artist worked with 176 patients during the residency.

As a legacy for the project, the artist created a willow sculpture for our Radiology Courtyard called The Apiary, featuring a life size bee keeper, child and bees, which is now on permanent display.

Bedlam!

This was a four month arts residency by animation company Twin Vision, funded by The Big Lottery Fund: Awards for All. Twin Vision worked with patients on one of the in-patient wards to create a short animated film inspired by "My Bed", an iconic work of art by contemporary artist Tracy Emin, which was being exhibited at Tate Liverpool at the time of the project. The patients worked on all aspects of film production from script writing to making models and sets and providing voice overs. The resulting animated film was then displayed at Tate Liverpool as part of the Tate Exchange programme during the summer of 2017 along with a documentary film and models from the animation, seen by thousands of visitors to the gallery.

> *"It was overwhelming seeing myself and my art in the Tate!"*
>
> **Amelia (patient)**

> *"Thanks so much for allowing the children to be a part of the animation. They both loved it and were excited to see the finished article. They liked seeing themselves in the documentary as well. A brilliant idea for children to take part in whilst in hospital, staff were so encouraging and engaging."*
>
> **Parent of patient**

The Harmonic Oscillator

This was a project funded by the Australian Government exploring the impact of sound on wellbeing through a series of residencies by international artist Vic McEwan, culminating in a Tate Liverpool exhibition and presentation at the International Conference of Culture, Health and Wellbeing in June 2017. The artist worked with patients, families and staff over a three year period, exploring sound and creating new artwork, including an app, a publication, an exhibition and radio documentary.

'smalldances' App

This is the UKs first somatic child focused dance app, 'Smalldances' aimed at parents/carers of long term hospitalised children produced in collaboration with Small Things Dance Company; the app was funded by Arts Council England and Children in Need, and was launched in November 2017. It is the culmination of over 10 years of award winning dance participation at Alder Hey.

Our regular dance and movement work has continued to support patients and their families on the cardiac, neuro medical and renal dialysis wards, funded generously through Children in Need.

Improving Signage and Wayfinding for Children and Families

Patient feedback including the Patient Led Assessment of the Care Environment (PLACE) assessment, has helped the Trust to identify a number of areas that require improvement to reduce stress, improve safety and improve the experience of children and families who are anxious about attending the hospital. In particular a number of opportunities to improve signage and wayfinding, making it easier for children and families to find their way around the hospital have been implemented over the past 12 months.

Improvements 2017/18

- Welcome signs written in multiple languages at every entry point on each level of the car park
- Improved signage for disabled parking
- Created dedicated waiting space inside the atrium for families waiting for a taxi pick up
- Increased visibility of no smoking signs around the grounds of the hospital
- Improved handwashing signage in toilets
- Electronic notice boards placed on every ward displaying staffing levels and other information for the patients and families
- Increased number of volunteers to help support families with booking in and finding the way to their destination. Currently we have over 490 volunteers active within the Trust
- New welcome desk in place at the A&E end of the atrium, staffed by volunteers
- Infection control signage in every lift reminding everyone of the importance of good hygiene to keep children safe
- Introduced 'Alder Play App', to improve wayfinding, familiarisation and distraction for our patients.

Future Plans

- Further develop our electronic/interactive improvements through the Alder Play App
- Introduce a second welcome desk at the outpatients' end of the atrium
- Continue to consult with our patients and families to identify further opportunities for improvements.

3.3.6 Medication Safety (Sign Up To Safety Pledge)

Aim: No drug errors resulting in avoidable harm. Targets were set in the Sign up to Safety improvement plan 2015/18.

Targets: From 2014/15 baseline:

- Reduce all medication errors that result in harm by 25% by March 2018;
  Baseline: 128 Target: 96.
- Reduce medication errors that result in moderate, severe harm or death by 50% by March 2018;
  Baseline: 4 Target: 2.

Outcomes:

- Total medication errors resulting in harm reduced from 128 to 32 representing a 75% reduction since April 2014.
- Medication errors resulting in moderate, severe harm or death reduced from 4 to 0 (zero) representing 100% reduction.
- 72% increase in medication incident reporting since 2014/15. From 703 to 1,209 medication incidents reported.
- Decrease from 18.2% to 2.6% of medication incidents associated with harm attached since 2014/15.

Almost every patient who is admitted to hospital requires medication. Prescribing, administering and dispensing medicines for children are complex processes and require specialist knowledge and

experience. Medication errors are the most common type of incident reported in most hospitals in the UK. We want to reduce the number of medication errors happening in Alder Hey for 3 main reasons:

- Medication errors can harm patients. The majority of the errors which have happened in Alder Hey have not caused harm to patients but a small number have caused harm or might have caused harm if they had not been discovered before reaching a patient.
- Medication errors can increase the length of time a patient stays in hospital or increase the cost of their stay because more tests, investigations or treatments are needed.
- Being involved in a medication error can be a very difficult experience for patients, their families and the staff involved.

Medication errors are reported on the Trust's incident reporting system (Ulysses). Individual errors are immediately triggered to the manager in the area where the error happened plus other appropriate individuals.

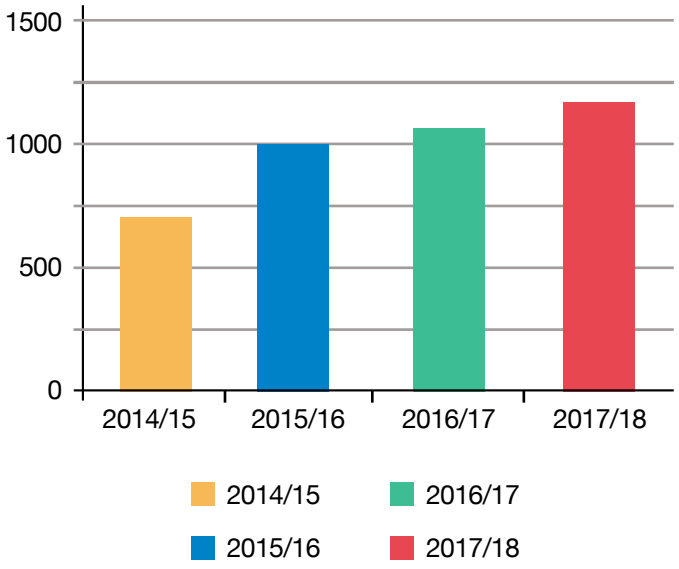
The Medication Safety Committee (MSC) (a subgroup of the Drug and Therapeutics Committee) review monthly summaries and identify trends in reporting.

The Trust's Weekly Meeting of Harm reviews incidents that have caused harm to patients in the previous week, this includes medication incidents.

The Clinical Quality Steering Group review overall trends in medication error reporting.

Graph shows ongoing increase in reporting of medication incidents. This has increased from a baseline in 2014/15 from 703 incidents to 1209 in 2017/18 (a 72% increase in reporting).

Total Number of Medication Incidents Reported

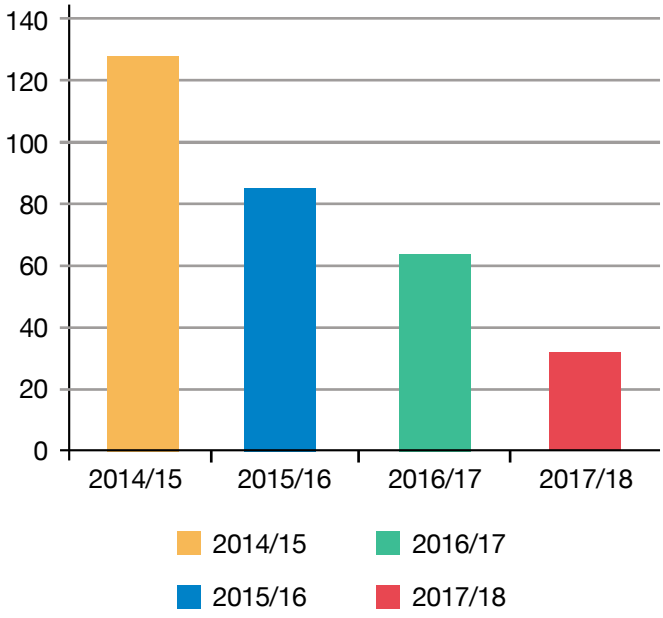


Whilst the number of reported medication incidents has increased since appointment to the role of Medication Safety Officer in 2014/15, the actual harm attributed to incidents has dramatically reduced as demonstrated in Table 2. This is reflective of an improved safety culture and willingness to report incidents openly, including those that don't reach the patient.

Graph shows the number of incidents that resulted in harm. This has decreased from 128 in 2014/15 to 32 in 2017/18 (75% improvement), including zero incidents causing moderate, severe harm or death.

This fantastic outcome far exceeds our Sign up to Safety 3 year target for reducing harm from medication.

Number of Incidents of Harm from Medication Incidents



Improvements

This section lists the improvements developed to reduce the number of medication errors reaching patients and causing harm over the past three years:

- Improved the quality of incident report data by implementing a more consistent approach to follow up and ensuring minimum data is completed prior to incidents being uploaded to the National Reporting and Learning System.
- The implementation of the MERP (Medication Error Reporting Program) grading structure for classification of harm caused by a medication error. This provides a much more objective method of assessment.

- A more formal process for involving educational supervisors in follow up of prescribing errors by junior doctors has been well received. This is supported by circulation of a monthly summary of incidents caused by prescribing errors.
- Developed a medication safety mandatory training workbook. This has been approved by MMC and was implemented in April 2017.
- Line managers are offered support when investigating incidents by MSOs. This has improved the response time for investigations following an incident.
- 'Medication Safety Surgeries' have been set up for managers needing support to complete or review incidents. This has improved timeliness of reports and ensured reporters know their incidents are followed and should reduce the risk of a similar error recurring.
- Ensuring any medication errors involving Meditech (our Electronic Prescribing and Medication Administration (EPMA) system) are fed back to the Meditech team and used to shape and prioritise developments and training programmes.
- Developed links with universities which have increased the delivery of medication safety training to student nurses who are placed within the Alder Hey.
- Showcased our successes at the Sign up to Safety event held at Alder Hey to re-iterate to staff to follow the "Five rights for medication safety" and encourage reporting of near misses and actual medication errors
- The Nurse MSO was a speaker at the Medication Safety Summit in London in June 2017 and ran a workshop on safe administration of medicines at the Neonatal and Paediatric Pharmacists Group annual conference in November 2017

- MSOs continue to provide regular training on many aspects of prescribing, administering and dispensing medicines to medical, theatre, nursing and pharmacy staff.
- Monthly reports for nursing staff regarding medication errors and specific medication reports are provided to each Division and also the education department for prescribers.
- An intranet page dedicated to medication safety has been developed which includes recent alerts and lessons learned.
- We have publicised the need to report more adverse drug reactions via the Yellow Care Scheme by running a competition between the doctors and the pharmacists. Since this was set up, the number of adverse drug reactions reported to the MHRA via the Yellow card scheme has increased from 19 to 43 (126% increase from 2014/15).
- A TPN errors reduction working group and workshop has highlighted 3 key areas for improvement:
- Developing criteria for when TPN is appropriate to start.
- Develop a training package on TPN for nurses and doctors.
- Develop a new TPN prescription form
- A MSO dashboard is used to monitor progress and training activity
- The Medication Safety Committee have led the Trust response to appropriate national medication safety alerts.
- A new Pharmacy Medication Safety Officer, has been appointed.

Future Goals and Plans:

- A WhatsApp group for Junior Doctors was initiated to communicate medication alerts. Currently we are not utilising this service as intended and is to be re-evaluated for the following year.
- To improve the process of involving prescribers in the incident by forging closer links with the Medical Leads.
- Developing close working links with the new MDSO.
- Assist with the development of an app with the innovation team. This app will allow the patients to have a better understanding of their medications. This is being driven by feedback from children, young people and parent's workshop.
- Decreasing the incidents that involve TPN and Heparin. To embed the work from the workshops that has been done.
- Develop more medication safety audits including TPN, controlled drugs and critical medicines and involve more staff in undertaking these audits and taking ownership for resulting actions
- Furthering links with ward-based Patient Safety Champions and the newly appointed practice education facilitators

- To complete and roll out the new electronic Root Cause Analysis tool for all medication errors that result in harm, which includes identification of harm, contributory factors and financial implications.
- Implement a new independent checking process across the trust.
- Reviewing Ulysses functionality to make it easier to report an incident (e.g. more drop down functions).
- Making staff more aware of the Yellow Card scheme. We are planning an open day forum around Yellow Card reporting.
- Running a Medication Safety Week in June 2018 during which we will run medication safety workshops.

A.I.M.S
(Alder Hey Improving Medication Safety)

3.3.7 Reducing Harm from Pressure Ulcers - Sign Up To Safety Pledge

Aim: No avoidable pressure ulcers.

Targets: From the 2014/15 baseline:

1. Reduce avoidable hospital acquired grade 2 pressure ulcers by 50%; this represents 10.
2. Reduce avoidable hospital acquired grade 3 pressure ulcers by 50%; this represents 1.
3. Achieve zero avoidable hospital acquired grade 4 pressure ulcers.

Outcomes:

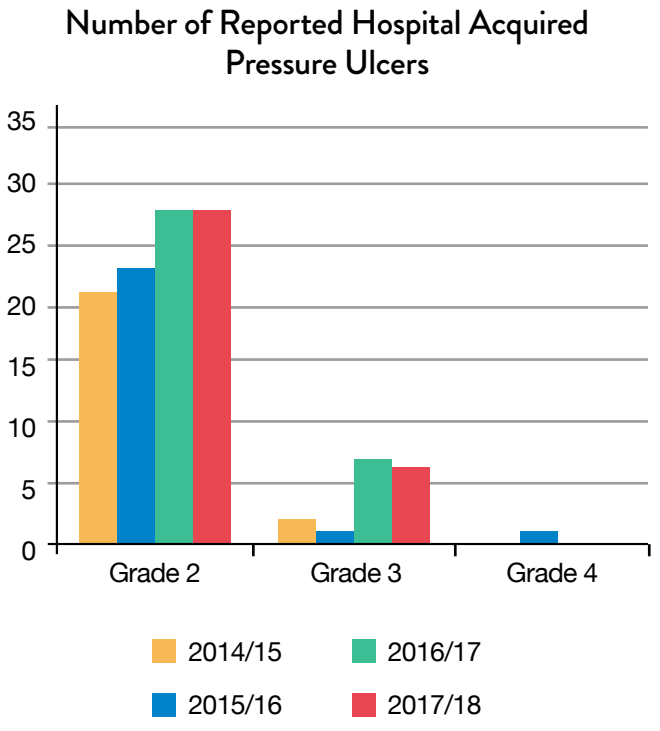
1. Increase of 11 grade 2 hospital acquired pressure ulcers since 2014/15: this represents 32.
2. Increase of 4 hospital acquired grade 3 pressure ulcers since 2014/15: this represents 6.
3. Achieved zero grade 4 hospital acquired pressure ulcers.
4. Total number of pressure ulcers of grades 2-4 is 38 compared to 23 in 2014/15.

A pressure ulcer is an injury that breaks down the skin and underlying tissue due to pressure, friction and shear or a combination of these. They can be very painful and debilitating and are often preventable. It is recognised that immobilised and acutely ill neonates and children are at risk of developing pressure ulcers, particularly in a critical care environment. Most pressure ulcers within our organisation are associated with medical devices such as cannula and endo-tracheal tubes which are reflective of national research showing that most paediatric pressure ulcers are device related.

Alder Hey continues to have a strong focus on education and training in the prevention, recognition and treatment of pressure ulcers and clarifying and simplifying reporting procedures.

Whilst the reported figures in the table below reflect an increase in numbers of pressure ulcers reported, these include all pressure ulcers, avoidable and unavoidable. We have now introduced an improved system of defining when Grade 3 and 4 pressure ulcers are avoidable and are taking specific steps to address these through undertaking Root Cause Analysis and sharing lessons learned. The increase in numbers is reflective of a greater awareness and improved education across the Trust which has led to increased reporting. All of the Grade 3 pressure ulcers are linked to medical devices. Reducing the number of pressure ulcers remains a high priority for the Trust and we continue to take action through the Trust wide pressure ulcer action plan, for example we are seeking to identify a means of safe cushioning of cannula devices to avoid pressure ulcers.

	Grade 2	Grade 3	Grade 4	Total
2014/15	**21**	**2**	**0**	**23**
2015/16	**23**	**1**	**1**	**25**
2016/17	**27**	**7**	**0**	**34**
2017/18	**32**	**6**	**0**	**38**



Improvements and Achievements 2017/18

- The development of a Trust wide Pressure Ulcer action plan incorporating previous action plans with emphasis on education and training in prevention, recognition and treatment of pressure ulcers. Progress of the action plan monitored through the IPCC and divisional governance meetings.
- Implemented an e-learning package on Pressure Ulcer Prevention and Management and embedded advice on recommended grading of pressure ulcers according to European Pressure Ulcer Advisory Panel.
- Developed an improved investigation tool for Grade 3 and 4 pressure ulcers to determine if it was avoidable/ unavoidable
- Embedded the investigation tool in the incident reporting system (Ulysses) for easy access for staff
- Implemented Standard Operating Procedure on the reporting process when a pressure ulcer is identified or suspected.
- All avoidable hospital acquired Grade 3 and Grade 4 pressure ulcers have a comprehensive Root Cause Analysis with action plans developed and implemented.

Future Plans

- Link e-learning package with Electronic Staff Record (ESR). Work with community nursing team to support management of pressure ulcers in the community
- Development of a classification system, along with CCG partners for the reporting of pressure ulcers.
- Develop a Standard Operating Procedure to support development of tissue viability skills for out of hours staff when specialist nurse is unavailable.
- Development of a support structure for community staff for access to specialised tissue viability knowledge. To include the nomination of link personnel from the community.
- Commencement of a task and finish group to examine and investigate the causes of endo-tracheal mucosal pressure ulcers in the paediatric intensive care unit (PICU) and to make recommendations to help reduce incidences of the same.
- Development of a new Tissue Viability Service to ensure continuity of the service seven days per week; consisting of a Tissue Viability Specialist Nurse, Tissue Viability Support Nurse and Tissue Viability Link Nurse System across the Trust.
- Development of an improved wound assessment tool on the Meditech System.
- To embed the new Tissue Viability Service into the awareness of Trust Staff.
- Development of a rejuvenated Tissue Viability Link Nurse System with monthly meetings and educational sessions supported by industrial partners.
- Replacement/adaptation of the Braden Q assessment tool with a more suitable to the requirements of Alder Hey.
- The exploration of alternative intravenous dressings through the intravenous Access and Therapy Group to help minimise the incidences of cannula acquired pressure ulcers.

3.3.8 Peri-operative Care

The focus of the previous report was creating and implementing standards in relation to national policy such as the national safety standards. The focus across this year has been on ensuring these standards are embedded and are useful to the whole team in theatre.

This set out eight key aims for the year ahead alongside a strategy for achieving those aims. On reflection, at the close of 2017/18 all of these aims have been achieved or work has commenced.

Aims and Objectives 2017/18	Achieved
Embed risk, governance and National Safety Standards for Invasive Procedures (NatSSIPS) into mandatory training sessions within theatre.	Mandatory training delivered in house on all update sessions.
Creation of Divisional Infection Prevention and Control (IPC) board.	Now reports into Divisional integrated governance and Trust IPC Committee.
Establish audit process for NatSSIPS.	Peer audit in place, departmental audit plan being completed for next year.
Development of departmental human factors strategy.	Strategy developed, actions underway to embed.
Creation of a surgical site surveillance service for the division.	Business case complete and recruited, database underway.
Undertake baseline safety culture report with plans to repeat bi-annually.	Initial safety assessment undertaken, plan in place to repeat.
Creation of an electronic booking system to improve emergency theatre flow.	Emergency List Information system (ELIS) created and live within department.
Development of strategy for peer support and reduction in stress related sickness.	Strategy developed and funded, will assess impact on work related stress over coming year.

Key Quality Improvements made in 2017/18:

- Development of a business case and funding for the surgical site surveillance programme.
- Agreed changes and funding for the way in which patients requiring surgery for plastics trauma injuries are booked and managed.
- Surgical admissions lounge working group to improve pathway of admission for patients admitted on the day of surgery.
- Approval of a business case for the expansion of the pre-operative assessment service.
- Development and implementation of a clear strategy for human factors training supported by external partnerships.
- Award winning electronic booking system for the emergency theatre.

Surgical Site Surveillance:

Surgical site surveillance is a mandatory reporting requirement for all national trusts within the UK, but a lot of the data required for submission is only relevant to adult surgery. We completed a successful business case to fund and develop a surgical site surveillance team within surgery which will ensure that all sites are surveyed and reported on to support improvements to patient care and clinical outcomes.

Successful recruitment took place in March 2018 and we are currently working with the developer to create a bespoke database for use within the service. We hope to see our first full year's set of data complete at the close of the 2018/19 financial year.

Improving the Quality of Care Provided:

Human factors has been cited as a contributory cause during root cause analysis into many incidents within the department over the past year. It was felt that a multi-faceted approach would be the best way to embed and sustain a change to a human factors way or working to ensure that this becomes the "way we do things around here".

The quality assurance team with the assistance of some of our clinical staff, clinicians and allied health professionals have worked together to create a model of implementation for human factors training which is currently under way. This will see the development later this year of a clinical simulation package which support team training and communication; with the aim to facilitate a more open culture and improvement in the quality of care for our patients and job satisfaction for our staff.

Improving Care for Patients Requiring Emergency Surgery:

A full time band 7 clinical lead was introduced into the emergency theatre last year. Since this we have seen improvement in the flow and efficiency of the emergency list.

A large part of improving the efficiency has been the development of the electronic booking system (Emergency List information System - ELIS) which now enables staff all over the hospital to observe who is currently waiting on the emergency list and for what procedure without attending the department. It also allows remote booking of patients as well as prioritisation of list order and better oversight of how long children have been waiting for a procedure.

ELIS was the culmination of months of work across clinical and support teams; and the whole team were ecstatic to be given the award for game changing research and innovation at the annual staff awards.

Key Points of Focus For The Year Ahead:

- Creation of theatre/anaesthetics quality dashboard.
- Development of 'in-department' mandatory training package for all theatre staff to access.
- Plan for human factors training development and implementation.
- Work with the regional network to develop a peer review strategy to support benchmarking and consistency of care within the region.
- Embed the TRiM (Trauma Risk Management) model of peer support within the department to enable rapid debrief and support following traumatic incidents.
- Develop and manage a clear SOP database for the whole department which enables us to review our SOPs in a timely way and ensures they are easily locatable for all staff using them.

3.3.9 Best in Operative Care

The Best in Operative Care (BIOC) group set out the below aims for 2017/18. Improvements have been achieved in all areas with some ongoing work which will continue to be tracked and supported throughout 2018/19.

Comprehensive Pre-Operative Assessment Service

- Develop comprehensive pre-assessment service for all patients undergoing a general anaesthetic
- Review processes at other centres to provide a benchmark of pre-assessment service nationally

Improving Patient Access and Flow

- Simple, accurate single process booking system
- Good communication throughout all phases of patient journey from clinic to theatre
- Reduce inpatient bed requirements
- Theatre staff involved in list planning for all specialities
- Formula 1 theatre teams
- Private practice

Patient Safety First

- Recognition and accreditation
- Completion of overarching policy and risk assessment
- Electronic dashboard development to provide oversight and assurance
- Surgical site surveillance for all specialities
- Updated approach to paediatric life support/resus training
- Embed and audit use of NatSSIPs

Staff Development and Well Being

- 95% compliance with mandatory training and CPD requirements
- Plan in place for all staff to have a qualification for the role they perform
- Human factors training in place
- Development of a Band 6 leadership programme and first cohert trained
- Clear development plan for all staff
- Improved staff survey results
- Communication strategy
- Staff recognition
- Reduction in sickness

Emergency Surgery

- Senior leadership across six days
- Electronic booking system
- Development of a set of Emergency Surgery standards
- Robust training and development plan in place for all emergency staff
- Review of early bird pathway
- Coordinate the line list

Materials Management

- Enhanced Materials Management Team
- New contract for decontamination of surgical instruments
- Theatre non-pay spend in line with budget
- Capital replacement programme with budget
- STP and HTE procurement projects

<u>Notable achievements included:</u>

- Implementation of ELIS (Emergency List Information System) across all specialties, winning the Game Changing Innovation award at the staff awards in January 2018.
- Delivering human factors training to over 55% of theatre and surgical staff (from 0% in April 2017).
- Pre-operative assessment delivered to 4,344 children in 17/18 (an increase of 600 patients compared to the previous year).
- Reduction in never events relating to theatres.

When planning the workstreams for 2018/19 the focus has been on "doing the basics brilliantly" with the team wanting to lead change not just for the surgical division but with workstreams which will be far reaching and impact upon care for all patients and families attending the Trust.

The metrics for improvement have been defined and presented as part of the annual plan and monitoring of these improvements will take place via the BIOC group.

Pre-Operative Assessment Service

- Improve safety, quality and patient experience
- Reduce cancellations

Incident Reporting and Management

- Use of Ulysses within Theatres
- Safety Culture

Workforce Development

- NatSips
- Recruitment and Retention
- CPD, Training, Career progression
- Human Factors

Emergency Surgery

- Consolidate and further improve Emergency pathways

Materials Management

- Reduced incidents/ cancellations due to stock
- Reduce expired stock/wastage
- Reduce cost

- **Theatre Scheduling and Planning**
- Re-allocated sessions
- Review under-utilised lists
- Realignment of sessions

3.3.10 Equality and Diversity

Alder Hey continues with its commitment to try to ensure that its services offer equal access for all communities who need to use them and that all employees experience equal opportunity in employment. This means that we actively seek to engage with patients, parents and carers, as well as members of staff, to ensure that we do not discriminate against any individual and that the diversity of each individual is valued. The principles of equality and diversity are core elements of the Trust's stated Values, which are reinforced through the Trust's induction programme and personal development review for all staff. We are able to monitor our performance in meeting our public sector equality duties (PSED) as required by the Equality Act 2010, the NHS Constitution, CQC inspection questions and NHS commissioners through:

1. Equality Delivery System (EDS2) that has eighteen outcomes and four goals:
   1. Better Health Outcomes
   2. Improved Patient Access and Experience
   3. A Representative and supported workforce
   4. Inclusive Leadership

2. Workforce Race Equality Standard (WRES) that has 9 indicators comparing the data for white and black & minority ethnic (BME) staff. Four are based on workforce profile data, four on data from the NHS staff survey questions and one on BME representation at board level.

Aim: For Alder Hey to be an inclusive and accessible place for all to visit and work, to meet our duties and in so doing to provide the best patient care possible.

Targets: From the 2016/17 Equality Objectives Plan:

- To increase the representation of black and minority (BME) ethnic staff
- To improve the experience of families with learning disability/autism that visit Alder Hey
- To improve the involvement of patient and staff stakeholders in decision making
- To improve the quality of staff data
- To improve the quality of patient data
- To ensure equality is embedded through the quality strategy
- To broaden equality training opportunities for staff

Improvements:

- Increased the Black and Minority Ethnic (BME) representation in the workforce from 190 to 222, representing a 0.7% increase (refer to Section 3.3.4 for details).
- Developed induction training package for all volunteers and nurses in Learning Disability and Autistic Spectrum Condition awareness.
- Developed a flag on hospital computer system for easy identification of patients with a learning disability.
- Developed risk assessment/Mental Health First Aid training for all areas across the Trust.
- Adopted a collaborative approach with several Trusts in close partnership with Merseyside Clinical Commissioning Groups to improve existing Equality Delivery System (EDS2) outcomes, with Alder Hey focussing on EDS2 goals 1 and 2 (patients). This work is ongoing and will identify priorities for 2018/19.
- EDS2 goal 3 (workforce) is supported by the Trust staff BME Network and the Disability Network that represent the views of these staff groups. The BME network also supports the progress of the Workforce Race Equality Standard (WRES) action plan.
- The Trust continues to be a member of the community advisory group.
- Implemented the self-service aspects of the employee staff record (ESR), thereby providing staff with greater control over their personal data including demographic data.
- Published our first gender pay gap report.
- The Trust has provided for British Sign Language Video Remote Interpreting (VRI) located in the Emergency and Outpatient departments, available to all staff. This provides instant BSL interpretation services when required.

Future Plans

- Establish an Equality and Diversity Steering Group. This will enable the Trust to continually monitor performance responding to evolving contractual and legislative requirements and the priorities identified by stakeholders.
- Continue to improve the quality of patient and staff data particularly in terms of capturing protected characteristics.
- Continue to improve the quality of equality analysis (EA) and strengthen the assurance process regarding EA and to provide support to project and policy leads to ensure lawful decision making.
- Research to identify barriers to accessing services will be undertaken through engagement with stakeholders in the community
- Explore how our services can be made more accessible in relation to information formats and communication support for families and recording these preferences on patient records
- Further work collaboratively with commissioners and local Trusts to broaden opportunities to engage with different community groups to progress the Trust's equality objectives.
- Continue to make training opportunities in cultural competence and unconscious bias available for staff.
- Undertake a detailed analysis of the results of the Gender Pay Gap Report and take steps to reduce the gender pay gap.

3.3.11 Improving the Transition from Children and Young People Services to Adult Services 2017/18

Aim:
To establish a good quality, safe, effective and seamless transition to adult services, for children with complex long term conditions.

Transition to adult services (transition) is defined as "a purposeful, planned process that addresses the medical, psychosocial and educational/vocational needs of adolescents and young people with [long term] conditions as they move from child-centred to adult-oriented health care systems' (DfES 2006).

Transition to adult services ensures that young people are able to access the most appropriate services according to their age, developmental needs and the nature of their long term condition. If young people are not adequately supported through transition they may not engage with adult health care providers, and this increases the risk of deterioration of their long term condition. Transition to adult services can be a traumatic period for young people, who commonly fall between services or 'disappear' during transition, disengaging from services and becoming lost to follow up, only to present later in life with potentially avoidable complications. Additionally, if young people remain inappropriately in children's services there is less capacity within the Trust for younger children and babies.

Achievements in 2017/18

- North West Multi-organisational Transition Network founded and chaired by AHFT
- Planned and delivered a national transition conference at Alder Hey 29th June 2017 attended by over 100 delegates. Excellent evaluations
- Won award for £3,200 from Vertex to support the development of a five minute patient transition story/ film
- Delivery of Multi-organisational transition training by AHFT (including social care and Education), over 30 hourly sessions delivered
- National engagement and attendance at Alder Hey from other Trusts interested in improving transition developments
- Ratification of Trust Transition policy
- Secured a two year 2017-2019 CQUIN from NHSE planning transition for young people with neuro-disabilities, achieved all milestones Q1-Q3 and expected to achieve all in Q4
- Development of draft 10 steps transition programmes, health information passports and transition care plans for all young people 14 years plus who have complex neuro-disabilities
- Delivery of non-clinical transition preparation clinics for young people with complex neuro-disabilities
- Implementation of transition preparation into a further four specialities 2017/18
- Worked with information technology team towards identifying a sensitive, reliable and reproducible method for identifying any patients of transitional age
- Transition embedded into patient electronic records - Meditech 6 - go live 26/02/18
- Transition map updated
- Development of transition dashboard/report
- Transition applied to Trust incident reporting electronic system - Ulysses
- Commenced work with two large Liverpool GP practices to re-engage GP's in the transition of their patients
- Newsletter continued to share transition information Trust wide
- Working with innovation hub on a number of projects to support transition (APP & OBLIGE OMEGA)
- Development of the 10 steps transition patient folder
- Continued support for research CLAHRC and PhD student researching AHFT 10 steps transition
- Presented and engaged with two large GP practices in Liverpool around transition of their patients who have complex neuro-disabilities, and ADHD/ASD where there is a service gap between 16-18 years
- Continue to engage with schools - EHCP planning for young people with complex neuro-disabilities
- Support for day placements for student nurses
- Presented at C&YP and parents forums twice this year to engage and receive their feedback on transition work and patient information leaflets

- Business case developed for the continuation of transition nurse lead role
- Won an award of £75K from The Health Foundation to continue to develop the Carer Skills Passport which is a key enabler for transition of complex neurodisability patients (www.carerskillspassport.org.uk)
- Distributed 'banner pens' with 10 steps Transition pathway information incorporated into pen
- Held a number of stands promoting Transition in hospital atrium
- Presented transition and a Carer Skills passport stands free of charge at the Manchester Kidz to Adultz event
- Development of a Trust 'Consent and confidentiality' patient information leaflet in partnership with Edge Hill University
- Completed an equality and diversity self-assessment against Trust transition policy and met all requirements
- Met and shared 10 steps transition pathway, AHFT work to date and given contact details of Transition team with Liverpool Hope and John Moores Universities if they require any support and advice regarding young people transitioning to their establishment
- Self-assessed against the Your Welcome standards and achieved
- Developed a works team to develop a pathway for YP with complex neuro-disabilities from paediatric specialist respiratory physiotherapy to adult respiratory physiotherapy, this includes representation from paediatric and adult commissioners, physiotherapy service managers, and service managers. This remains operational

and continues to work towards finding a solution. Proposed plan is to pilot transitioning one patient, and delivering joint paediatric and adult physiotherapy to support training and development for adult services

- Presented AHFT Transition work at Greater Manchester Health and well-being board and have been identified as key players and invited to return to the group in March 2018
- Become members to represent AHFT at the National transition network
- Invited to present AHFT at National AQuA event in March 2018
- Presented at AHFT Grand Round
- Working closely with community paediatricians to address service gaps for ADHD/ASD patients moving to adult services, and prescribing issues with GP's
- After working in partnership with AQuA two years ago on developing a paediatric friendly 'Ask 3 Questions' the draft versions have been received for comments, we have given feedback and are awaiting confirmation to implement. We have requested Alder Hey's logo to go onto these documents

Front page of transition website at www.10stepstransition.org.uk

Future Plans for 2018/19

- Further develop work on transition of patients with complex conditions as per CQUIN for 2018/19
- Implement the transition folder for children with a long term condition, to hold all their transition specific information in and their personal transition plan
- Planning a third National Transition Conference, to be delivered in partnership with Lancashire, Manchester, NW Coast SCN, MHT, Claire House and Alder Hey, as a North West approach to Transition to be held in June 2018
- Development of a 'capacity, decision making and best interest' information leaflet in partnership with Edge Hill University
- Continue to implement Transition specialty by specialty Trust wide.

3.3.12 Learning Disability Strategy

Aims:

- To improve the experience of children with a Learning Disability (LD) and/ or Autistic Spectrum Condition (ASC).
- Improve Trust's ability to identify children with a LD/ASC and respond to their needs through the provision of reasonable adjustments (Equality Act 2010).
- Raise awareness of LD/ASC amongst staff through bespoke training.
- To build upon service user/carer and partnership involvement in the LD/ASC strategy across the trust.

Approximately 1.5 million people in the UK have a learning disability (LD), including approximately 286,000 children. Research shows that men with a LD die 13 years sooner than peers, and women die 20 years sooner than peers.

In partnership with Edge Hill University and supported by commissioners, Alder Hey has made significant improvements to the LD pathway.

Reasons for Change

Children and Young people with LD can present to any service or specialty in the hospital and community. The Trust recognises the need to identify this group of children as early as possible to ensure the provision of reasonable adjustments (Equality Act 2010) to support their timely and successful access to healthcare, and promote the best experience possible.

Following cessation of the Trust agreed CQUIN (Commissioning for Quality and Innovation) which was designed to improve aspects of the LD pathway and access to care, the Trust has made significant progress in meeting the needs of this population.

In January 2018 a full time acute liaison team was formed to continue to drive the LD/ASC agenda forward in the trust. This team will continue to build on improvements and will contribute to the ongoing partnership work across Liverpool via the Acute Liaison Network that has continued post CQUIN hosted by Liverpool CCG.

Improvements

- Continued long term secondment agreement (5 years) for the Consultant LD nurse post
- Formation of LD/ASC liaison team which will include
  - Full time LD liaison nurse
  - Part-time play specialist
  - Part-time admin support
  - Part-time LD nurse contribution (across site, released from clinical areas) to team
- 4 LD nurse appointments within the Trust across clinical areas
- Established Learning Disability and Autistic Spectrum Condition Steering Group
- Established parent and child reference groups to support steering group and trust consultation (Millstead, Bank View and Redbridge schools)
- Established partnerships with voluntary and independent sector organisations e.g. Contact a Family, Autism Together
- Ongoing participation in CCG hosted Liverpool Acute Liaison Network
- Mandatory training LD awareness e-learning pack rolled out
- Ongoing training – e.g. Learning disability and ASC awareness via induction training for all volunteers and nurses that is the pan-Liverpool LD health training pack (used in all acute sites in Liverpool – developed with Liverpool Mencap as part of the Liverpool Acute Liaison Network)
- Ongoing risk assessment/ mental health first aid and Positive Behaviour Support (PBS) training across the trust (rolling programme available to all areas)
- Ongoing autism awareness training for all staff provided by Autism Together
- Developed LD indicator for easy LD identification on Meditech (Trust wide computer system)
- Developed 'LD champions' training and new champions identified
- Developed LD resource pack and pilot in clinical areas - including pathways
- Pilot of hospital passport/ risk assessment and reasonable adjustment tools as per Liverpool acute liaison Network strategy
- Developed academic and practice links across Edge Hill University and Alder Hey children's hospital to support student journey/experiences and ultimately recruitment for the Trust.

Future Plans

- Continued development of the five day acute liaison service across site (LD nurse workload model and supervision)
- Trust strategy to have an LD trained nurse on every ward. Further recruitment planned
- Continued development of LD/ASC steering group and parent/ child reference groups
- Development of Alder Hey information pack for children and families with LD/ASC in conjunction with Liverpool network
- Continued roll out of hospital passport, a one page profile, communication passport
- Continued attendance and benchmarking across Liverpool acute network and nationally re best practice
- Further implementation of risk assessment and reasonable adjustment tools across the Trust
- Continued rolling programme of training across all clinical areas - bespoke training planned for clinical areas where requested
- Implementation of toy library proposals - across site access to sensory and specialist toys for all children with LD and additional sensory needs
- Continue development of LD champions and resources
- Continue to support clinical areas in the development of specific pathways for children with LD/ASC
- Improve external communication with families e.g. through electronic/media etc.
- Develop further the use and availability of communication tools across areas to increase staff awareness.
- Continued identification of research streams and dissemination of best practice across professional networks e.g. LD Consultant Nurse Network , Learning Disability Research Network.

3.3.13 Nurse Staffing

Aims:

- To have zero nursing vacancies.
- To sustain a Nurse Pool to cover maternity leave and long term sick cover and fill ward/department vacancies.
- To have a proactive recruitment campaign.
- To have a nursing workforce who have the right skills and receive the right training for the job.

Changes or deficiencies in the nursing workforce can have a detrimental impact on the quality of care. Patient outcomes, and particularly safety, are improved when organisations have the right people, with the right skills, in the right place at the right time.

In November 2017, the National Quality Board (NQB) published improvement tools specifically for the care of children and neonates: *Safe, Sustainable and Productive Staffing: An improvement resource for children and young people's in-patient wards in acute hospitals / neonatal care*. The improvement resources are based on the 2013 NQB guide to nursing, midwifery and care staffing capacity and capability that sets out the need for safe, effective, caring, responsive and well led care, on a sustainable basis, that ensures the right staff with the right skills are in place the right place at the right time. The Trust is undertaking a review of all ward establishments in line with this new guidance which will be reported to the Trust Board.

In line with Department of Health Hard Truths Commitments (2013), all trusts are mandated to provide nurse staffing information on a monthly return via the National Reporting and Learning System and publish this data at ward level and make the information available to the public. The Trust is compliant with submitting data to the public through NHS Choices, on the Alder Hey website, and at ward level. A monthly ward fill rate of 90% and over is considered acceptable nationally. Fill rates for 2017 demonstrated that the overall staffing level was consistently higher than 93% throughout the year. The staffing levels reported are the head count on each shift which does not analyse skill mix or the impact of temporary staff on a shift.

The Trust has continued to successfully recruit to vacancies through collaborative working with our education providers, national recruitment days and bespoke recruitment in specialty areas. Additionally there has been a key focus on reducing the use of agency staff, which in addition to reducing expenditure, also provides safer nursing care with staff employed directly by the Trust. Use of nurse agency staff has continued to be low in 2017 with virtually no agency used in summer months, with 0.2 WTE used in August 2017 which is the lowest ever rate. In 2017, the Trust took the decision to take non-complaint agencies off our framework and only use agencies that are compliant with the rate cap. We have been able to do this due to the increased numbers of registered practitioners recruited, with 114.68 WTE registered staff recruited in 2017.

Safe Staffing Levels and Compliance with RCN Guidelines

To continue to monitor and improve staffing levels, an audit against the RCN standards has been repeated in February 2018 involving the Ward Managers, Matrons and Associate Chief Nurses for all in patient and day case wards.

A previous audit of compliance against the core standards conducted in February 2017 demonstrated Trust compliance with 12 standards, partial compliance with 3 standards and no compliance with one standard as shown in the thermometer below:

The February 2018 audit has demonstrated an improvement against the standards compared to February 2017 with core standard 14 moving from a rating of Red (no compliance) to Amber (partial compliance) following the appointment of Matrons, and core standard 3 moving from Amber (partial compliance) to Green (full compliance) following a comprehensive review of resuscitation training incorporating identified service need for Advanced Paediatric Life Support trained nurses on each shift. This is demonstrated in the 2018 thermometer below:

The areas for improvement rated Amber above relate to:

Core standard 1: All clinical areas are required to have a supernumerary shift supervisor: Not all wards have an establishment funded for a supernumerary shift supervisor however there have been significant improvements in 2017 with increased funded establishment on three wards resulting in supernumerary shift coordinators. Six wards are fully compliant with this standard. Partially compliant wards allocate a nurse to take charge and co-ordinate the shift. All wards have a Ward Manager who is supernumerary and benefit from presence of a supernumerary Matron.

Core standard 5: There should be a 25% increase in nursing establishment to cover annual leave, sickness and study leave: Alder Hey provision is capped at 23% from 2013/14. The impact of this will continue to be monitored and evaluated between nursing and finance staff particularly the impact of the proposed Clinical Educator role in 2018.

Core standard 14: There should be access to a senior (Band 8a) children's nurse for advice at all times. This standard has moved from Red to Amber following the establishment and appointment of a Matron structure. An experienced Band 6 or 7 provides support to the nursing team out of hours through the Patient Flow, Night Matron and Senior Nurse bleep holder.

In further progressing the work towards the aims of having zero nurse vacancies, sustaining the Nurse Pool, recruiting proactively, and ensuring the provision of a nursing workforce who have the right skills and receive the right training for the job, the Trust has made the following improvements:

Improvements

Recruitment:

- 114.68 WTE front line nursing staff recruited in the last 12 months.
- The development of a responsive recruitment culture with evidence of strong partnership between senior nurses and human resource staff, notably working together on two successful national recruitment days and a comprehensive induction programme for new nursing staff.
- Nurse Pool sustained to cover maternity leave, sickness and vacancies.
- Development of nurse recruitment working group.
- Review and revamp of the nurse national recruitment day.
- Revamp of the Nurse Induction Programme.

Safe Staffing Levels

- Significant reduction month on month in the closure of beds to admissions due to nurse staffing levels.
- Reduction in cancelled operations due to "staffing unavailable".
- 11 additional beds opened and staffed sustainably to support bed availability due to projected winter pressures.
- Increased funding of the Nurse Pool from 20 WTE to 40 WTE.
- Increased ward based funded establishment for registered and unregistered nurses on four wards
- Increased PICU funded establishment to support safe and effective provision of ECMO.
- Comprehensive review of nurse staffing on Tier 4 CAMHS ward.
- Increased fill rates via NHSP for both registered and unregistered staff.
- Reduction in use of "agency rate" payment leading to significant savings.

Strong and Effective Leadership Structure

- Introduction and recruitment to a Matron structure across the three clinical Divisions.
- Introduction and recruitment of a specific HDU Ward manager to provide dedicated leadership.
- Internal promotion and external recruitment to Band 6 and Band 7 posts.
- Introduction and recruitment of a Play Manager to enhance and improve the play and recreation provision for children and young people.

Educational Developments

- Increased number of places to train Advanced Nurse Practitioners secured and recruited to enhance nursing practice and assist in the reduction of Junior Doctors.
- Partnership working with HEI to run a new training programme for individuals educated to Masters level to undertake a shortened course to become a registered Children's nurse. Cohort due to complete course in April 2018.

Quality Metrics

- Reviewed and enhanced monthly Safety Thermometer point of care survey designed to measure commonly occurring harms and support improvements in patient care and experience.
- Reviewed and enhanced Ward Accreditation scheme, a quality initiative where wards across the Trust are regularly inspected by an independent senior team of nurses and patient experience leads assessed against a range of measures based on the Care Quality Commission's Key Lines of Enquiry (KLOE's).

Future Plans

- Continue proactive recruitment of student nurses
- Development of nurse apprenticeship and nurse associate programmes.
- Ensure that the nursing workforce strategy is a continuing integral part of the overarching Trust strategy.
- Review and revamp the Preceptorship programme
- Work with the Communication Team to develop a recruitment offer including a brochure and handouts for the recruitment days.
- Explore developing an offer of nursing rotational posts
- Continue monitoring vacancies, turnover rates and daily staffing levels with work feeding in to Workforce sustainability group.
- Review the potential to implement an E Roster system to support staff management of shifts.
- Review provision and resourcing of nurse education requirements in line with new Nursing & Midwifery Council (NMC) standards for nurse training due May 2018 and ongoing specialist training needs.

3.3.14 Management of Complaints and Concerns

The model of devolved governance implemented through the quality strategy is intended to drive early supportive intervention by the relevant clinical teams & Divisions so that children, young people and their families/carers have the best experience, with any issues raised locally being dealt with immediately and appropriately.

Whilst formal complaints have increased in year, the overall trend from 4 years ago remains positive. When compared to activity levels, the number of complaints represents 0.025% of hospital attendances.

PALS attendances have also increased this year. When compared to activity levels the number of PALS attendances represents 0.4% of hospital attendances in the year.

	2013/14	2014/15	2015/16	2016/17	2017/18
Formal Complaints	166	134	70	66	83
PALS	1248	1133	1246	1294	1349

Improvements

- Further embedding of the model of devolved governance to drive early supportive intervention by the relevant clinical teams/Divisions
- Complaints and PALS update now form part of a Divisional quality dashboard report provided monthly to the Clinical Quality Steering Group
- Appointed to new role of Head of Quality for corporate services, with expertise in management of complaints.

Future Plans

- *Improve training for clinical teams*

  In 2018/19 there will be bespoke training for clinical teams relating to "managing concerns and complaints". This will aim to support staff in effectively handling parents/carers/children's concerns and finding resolution in the clinical area before there is escalation of this formally.

- *Keeping records of local concerns*

  Staff will log local concerns in Ulysses so there is a full understanding of issues being raised at ward and department level.

- *Improve learning from complaints*

  Learning from complaints will be one of the year's objectives, to understand how we can compassionately and with consideration share the complaints raised and ensure Trust staff are aware of any actions we have implemented to ensure these issues do not occur again.

APPENDIX 1: REPORTING AGAINST CORE INDICATORS

Target or Indicator	Threshold	National Performance	Qtr1	Qtr2	Qtr3	Qtr4
Summary Hospital level Mortality Indicator (SHMI) [1]	n/a	n/a	n/a	n/a	n/a	n/a
C. Difficile Numbers - Due to Lapses in Care	0		0	0	0	0
C. Difficile - Rates per 100,000 Bed Days	0	14.4 [2]	0	0	5.8	0
18 Week RTT Target Open Pathways (Patients Still Waiting for Treatment)	92%	87.9% [3]	92%	92%	92%	92%
All Cancers: Two Week GP Referrals	100%	94.9% [4]	100%	100%	97%	100%
All Cancers: One Month Diagnosis (Decision to Treat) to Treatment	100%	97.7% [4]	96%	100%	96%	100%
All Cancers: 31 Day Wait Until Subsequent Treatments	100%	97.7% [4]	100%	100%	100%	100%
A&E - Total Time in A&E (95th Percentile) <4 Hours [5]	95%	85% [5]	95.97%	95.29%	93.77%	94.61%

Target or Indicator (per 2013/14 Risk Assessment Framework)	Threshold	National Performance	Qtr1	Qtr2	Qtr3	Qtr4
Readmission Rate Within 28 Days of Discharge [6]	National Data Collection Methodology Currently Under Review	0-15 Years: 16 Years and above	9% 10%	11% 18%	10% 17%	11% 18%
% of Staff Who Would Recommend the Trust as a Provider of Care to Their Family Or Friends		80% [6]	79%	Not Completed	84%	

Target or Indicator (per 2013/14 Risk Assessment Framework)	Threshold	National Performance	Qtr1	Qtr2	Qtr3	Qtr4
Staff Survey Results: % of Staff Experiencing Harassment, Bullying or Abuse from Staff in the Last 12 Months [7]		24%	21%			
Staff Survey Results: % Believing That Trust Provides Equal Opportunities for Career Progression or Promotion for the Workforce Race Equality Standard [7]		85.2%	81%			
Rate of Patient Safety Incidents per 1000 Bed Days [8]		56	75	75	68	76
Total Patient Safety Incidents and the Percentage that result in Severe Harm or Death [8]		0.22%	1302 (0.15%)	1290 (0.08%)	1215 (0.16%)	1424 (0.14%)
Diagnostics: % Waiting Under 6 Weeks	> 99%	98.6% 9	100%	100%	100%	99.9%

NOTE: Unless otherwise indicated, the data in the table above has been obtained from the local Patient Administration Service to enable the Trust to provide the most recent available data. Most of this data is accessible through the NHS England website.

[1] Specialist Trusts are excluded from SHMI reporting.

[2] C Diff Rates based on Specialist Trusts rate for Qtr 1-3 2017/18 as per HED benchmarking analysis Qtr 4 rate represents 1 incident of C difficile in the quarter. This was the only reported case for 2017/18.

[3] National Performance based on most recent published data for Feb 2018, NHSE website.

[4] National Performance is based on most recent published Quarter 3 data for 2017/18, NHSE website.

[5] A&E National Performance based on most recent published data for Feb 2018, NHSE website.

[6] Data source: Trust Patient Administration System – not published nationally.

[7] Data source: 2017 Staff Survey http://www.nhsstaffsurveyresults.com/key-findings-by-trust-type/ (national performance based on performance within the 'Acute Specialist' Sector group).

[8] Data source: Trust Incident Reporting System (Ulysses) – national data is based on most recent available data (Apr17- Sep17) NRLS data for Acute Specialist Trusts https://improvement.nhs.uk/resources/organisation-patient-safety-incident-reports-21-march-2018/.

[9] Diagnostics national performance based on most recently published data (February 2018) https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2018/04/DWTA-Report-February-2018.pdf.

Alder Hey Children's NHS Foundation Trust considers that this data is as described for the following reasons.

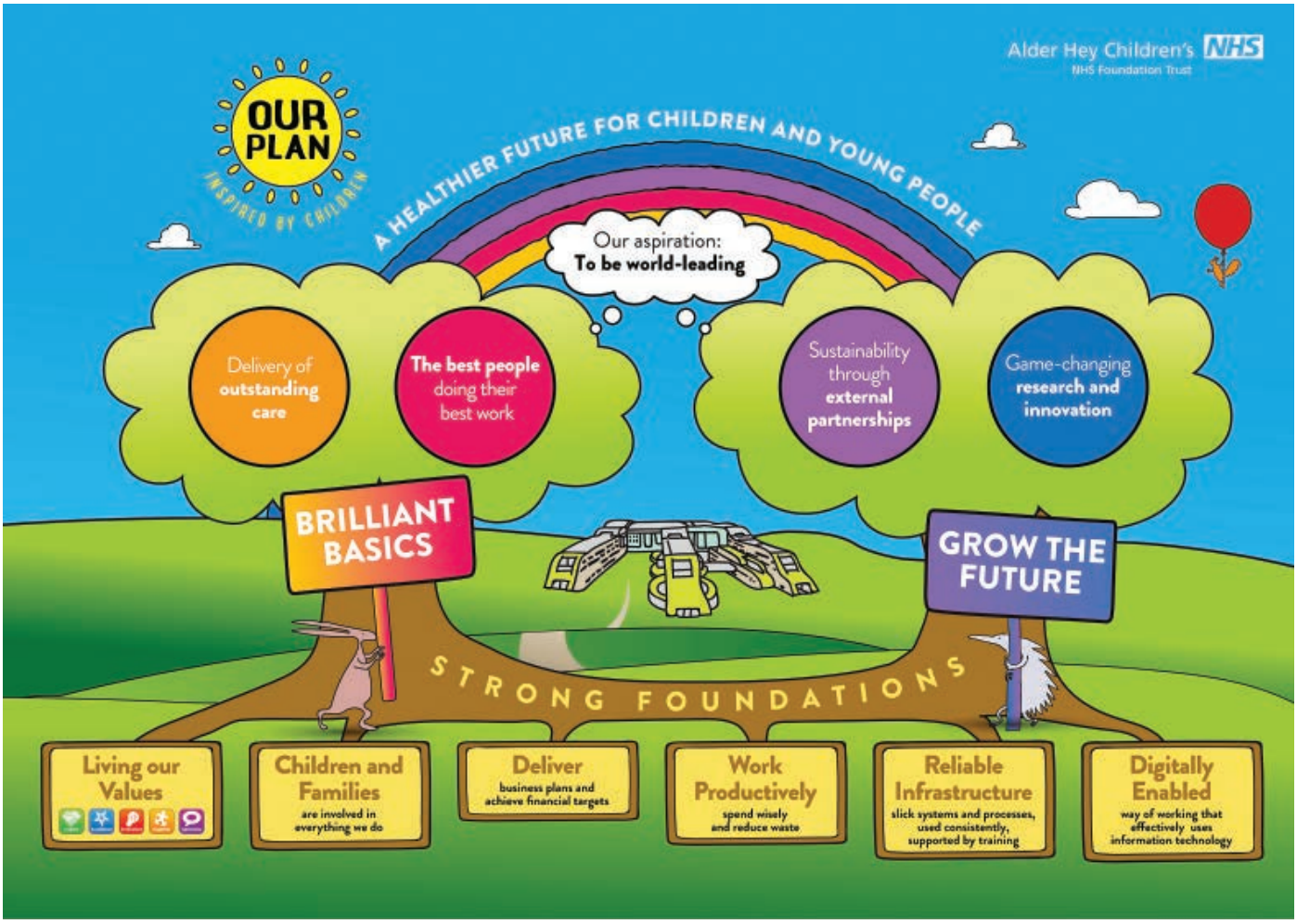
- The indicators are subject to a regular schedule of audit comprising completeness and accuracy checks which are reported monthly via the Data Quality Steering Group

The Trust is taking the following actions to improve the scores and so the quality of its services, by:

- Continuing to review and refresh the Infection Control Delivery Plan.
- Placing significant resource and effort into Winter Planning to predict and mitigate peak activity weeks, so as to improve patient flow throughout the hospital and deliver improvement in the A&E targets

For all other indicators the trust is maintaining and improving current performance where possible.

APPENDIX 2: ALDER HEY STRATEGIC VISION AND AIMS 'PLAN ON A PAGE'



STATEMENTS ON THE QUALITY REPORT BY PARTNER ORGANISATIONS

Commentary from Governors

"I am satisfied that this thorough report addresses areas of development by monitoring action plans, targets and outcomes closely, using reliable evidential bases and statistics.

The aim at Alder Hey is to be world class in every aspect of providing high quality medical and health care to children and young people. All concerns are addressed with considered action and a full understanding of the real issues involved. Complaints are taken seriously and the voices of children, parents and carers guide service development.

I am confident that this report reflects the remarkable efforts staff are making on their journey to meet milestones and excel in their practice.

I am happy to commend this report."

Councillor Barbara Murray – Appointed Governor, Liverpool City Council

"Thank you for giving me the opportunity to comment on what is a very thorough and comprehensive quality report.

There are two specific areas which are of special interest to me;

- One, the involvement of children in the development of quality and services - which is an achievement identified for 2017/18 in the quality improvements progress update and
- The participation in clinical audit both nationally and locally. The Trust is clearly committed to involvement across a whole range of clinical specialities and demonstrates wholehearted participation in work which better identifies outcomes and the quality of care given to our patients.

I would recommend the Trust's approach to achieving quality care and service development."

Kate Jackson – Public Governor for Greater Manchester and Lead Governor

"I am an elected Parent and Carer Governor with the Trust, second term of office. I confirm that I have read through the Quality Accounts for 2017/18 and believe them to be a sound reflection of the transformational work undertaken within the Trust during the period in question."

Pippa Hunter-Jones – Parent & Carer Governor

Commentary from Healthwatch Organisations

healthwatch Liverpool

Healthwatch Liverpool welcomes this opportunity to comment on the Quality Account of Alder Hey Children's NHS Foundation Trust. We base these comments on the content of this Quality Account, our ongoing engagement with the Trust and feedback received from patients and families. We feel that the Quality Account produced by the Trust this year is both clear and reader-friendly.

On 17th July 2017 we visited the Accident and Emergency Department of the Trust for a Listening Event. We spoke to patients and their parents/carers to find out about their experiences of the service. The feedback we received was generally very favourable and 67% of those surveyed rated their experience as either good or very good. Although some people were unhappy about the waiting time to be seen, there was a lot of praise for the dedication and caring approach of the staff.

We have a further Listening Event arranged for 24th May 2018 which will cover other wards and departments within the Trust.

We congratulate the Trust for their positive CQC inspection report which rates all areas as 'Good' with the exception of the 'Caring' domain which was rated as 'Outstanding'.

There have been many positive steps this year in the area of patient experience including innovations such as the Alder Play and smalldances apps which demonstrate a creative use of technology for the benefit of patients. We are also pleased to see other examples of the use of creativity and the arts. Given how tight NHS budgets are at the moment it is encouraging that the Trust have been able to secure external funding for these.

It is positive to see that the Trust has engaged with patients and families and used feedback to achieve improvements. A good example of this is the improvements made to signage and wayfinding as a result of feedback.

We are encouraged by the Trust's attention on issues of equality and diversity, particularly some progress towards increasing the number of BME staff, although more work remains to be done. We look forward to seeing progress around equality and diversity continue over the coming year with an increased focus on patients and patient experience.

We are pleased to see the range of work that has been undertaken in relation to young people transitioning into adult services and also around care for those patients with a Learning Disability. We look forward to seeing how this improves patient experience.

The Quality Account does highlight some areas of concern including an increase in the number of grade 2 and 3 pressure ulcers. The majority of these ulcers have been caused by medical devices and we are reassured to see that the Trust will be actively working with manufacturers in an attempt to reduce such occurrences.

Overall we are pleased to see the positive improvements detailed in the Quality Account and reassured that areas of concern are being actively addressed. We look forward to continuing to work closely with the Trust over the forthcoming year.

Robert Benn
Information and Project Officer
Healthwatch Liverpool

healthwatch Sefton

Healthwatch Sefton welcomed the opportunity to comment on the draft version of the Trusts Quality Account.

We have had support from Sefton Parent Carer Forum in reviewing this account. The forum is a member of our steering group and has over 800 members. On page 4, the Trust refers to engaging with the parent forum, which we assume is an internal forum. Over the next 12 months, it would be great for the trust to engage in dialogue with Sefton Parent Carer forum.

In reviewing the key priorities which were set for quality improvements (2017/18), it was good to read the achievements which the Trust has made in embedding a safety culture throughout the organisation, with incidents being reported. The work to reduce hospital acquired infections is noted with the 46% reduction in the number of infections since 2014/15. Despite the account sharing a number of improvement areas relating to action on pressure ulcers, increases in grade 2 and grade 3 pressure ulcers were seen. We would like to see a reduction in pressure ulcers over the next 12 months.

In the work to increase engagement of children, young people and families in improving the quality of services, the target for the Friends and Family test was just missed. From working with the trust over the past 12 months, we are aware that the Trust is looking at ways to increase take up of this, particularly with community services, in particular Child & Adolescent Mental Health services. In addition, we felt that information relating to this service was lacking within the account.

In the draft version of the account, on page 137 it was very difficult to review information within the table and therefore we were unable to review Friends and Family data in full.

In looking at the work to co-design service improvements with children and their families, the Trust is innovative in its methods. However it would have been great to have read more about how children and families find out how to get involved in this area of work.

It was good to read about the improvements made to outpatient services and access to booking systems. We would be interested in finding out more about this work as these are two areas in which we receive feedback on, particularly for services which are not delivered on the main Trust site.

One of the other areas which we have received feedback on is medication. Issues relate to the processes that are followed to get the correct medication to families in a timely manner. There have been difficulties for parents getting medication within the 14 day window that is stated on all paperwork. We have concerns about the processes that are in place within the pharmacy to deal with repeat prescriptions and whether they have adequate staffing in place to get medication to families.

The inclusion of the PLACE assessments was welcomed and the findings relating to cleanliness and privacy and dignity. Disability had worsened but we have been informed that the results for this are linked to services which are still delivered on the retained estate where some clinics are still held.

We have had meetings with the Trust over the past 12 months but they have not been as regular as in previous years and we would welcome meetings every three months moving forward. However during those meetings held, we have gained useful updates on progress made with the Equality and Diversity agenda and we are particularly pleased to see an increase in both quality and equality impact assessments being undertaken. On page 51, reference is made to signage in various languages. Is there any plan to add visual signage for example, Makaton/Signalong/ Boardmaker for young people that require visuals to support their reading? In reviewing information about hospital passports/ risk assessments and reasonable adjustments it would be good to find out how families gain access to this to make sure they have everything in place for their child/children.

In looking at the ward accreditation scheme 'Journey to the Stars' has the trust engaged with staff to find out how they perceive this and how it affects staff morale?

Page 62 details the work and improvements with Learning Disabilities and Autism. We note that the reference groups involved in this work were from Liverpool schools only. Is there any intention to look at the surrounding local authorities, including Sefton? In moving forward with this work, again good contacts for the Trust to make will be with the differing parent carer forums across Merseyside and wider.

It is good to have sight of the priority areas for 2017/18. We would have welcomed an invitation to the quality summit which was held 14th May but look forward to our work with the trust over the next 12 months.

Diane Blair
Manager
Healthwatch Sefton

Commentary from Clinical Commissioning Groups

NHS South Sefton Clinical Commissioning Group

NHS Liverpool Clinical Commissioning Group

NHS Southport and Formby Clinical Commissioning Group

NHS Knowsley Clinical Commissioning Group

Liverpool, South Sefton, Southport and Formby and Knowsley CCGs welcome the opportunity to jointly comment on the Alder Hey Children's Hospital NHS Foundation Trust Draft Quality Account for 2017/18. It is acknowledged that the submission to Commissioners was draft and that some parts of the document require updating. Commissioners look forward to receiving the Trust's final version of the Quality Account. We have worked closely with the Trust throughout 2017/18 to gain assurances that the services delivered were safe, effective and personalised to service users. The CCGs share the fundamental aims of the Trust and supports their strategy to deliver high quality, harm free care. The account reflects good progress on most indicators.

The Trust's presentation of its Quality Account was an honest, open and positive demonstration of the improvements made to date and an acknowledgement of areas that need to be developed further. It was identified that there was a strong focus on the use of innovation in the organisation.

This Account details the Trust's commitment to improving the quality of the services it provides, with commissioners supporting the key priorities for the improvement of quality during 2017/18.

Priority 1: Further embed a safety culture throughout the organisation

Priority 2: Increase engagement of children, young people and families in improving quality and developing services.

Priority 3: Increase number of defined clinical care pathways across our clinical specialties.

Priority 4: Provide support that will enable our staff to feel valued and respected by the organisation and actively contribute to the organisation's success.

Priority 5: Continue to improve the environment to make it work for both patients and staff.

This is a comprehensive report that clearly demonstrates progress within the Trust. It identifies where the organisation has done well, where further improvements are required and what actions are needed to achieve these goals, in line with the Trust Quality Strategy. Through this Quality Account and on-going quality assurance process, the Trust clearly demonstrates their commitment to improving the quality of care and services delivered. Alder Hey Children's NHS Foundation Trust continues to develop innovative ways to capture the experience of patients and their families in order to drive improvements in the quality of care delivered. The Trust places significant emphasis on its safety agenda, with an open and transparent culture, and this is reflected with the work the Trust has undertaken to further embed a safety culture in the organisation.

Of particular note is the work the Trust has undertaken to improve outcomes on the following work streams:

- Improvements in sepsis awareness and screening, with 100% of inpatient and emergency department patients screened for sepsis; the development of an electronic sepsis pathway; the average time to antibiotic administration for Inpatients id 47 mins (Jul17 – Feb18) and emergency department patients is 64 mins (Jul17 – Feb18).
- The Trust is the third highest reporter of incidents, maintaining its position in the top quartile with a further increase in reported incidents in 2017/18.
- Improvements in the asthma pathway, with the co-design of a new pathway with parents; reduced frequency of steroid treatment from 3 times per day to once per day; reduced side effects of treatment; reduced frequency of exposure to X-rays from 30% of asthmatic children to 8% and a reduction in the cost of medication by 90%
- The innovations in the use of technology and the introduction of the 'Alder Play App', to improve wayfinding, familiarisation and distraction for patients.

Commissioners are aspiring through strategic objectives to develop a local NHS that delivers great outcomes, now and for future generations. This means reflecting the government's objectives for the NHS set out in their mandate to us, adding our own stretching ambitions for improving health and delivering better services to go even further to tailor care to the local health economy. Providing high quality care and achieving excellent outcomes for our patients is the central focus of our work and is paramount to our success.

It is felt that the priorities for improvement identified for the coming year are reflective of the current issues across the health economy. The priorities being:

Priority 1: children and families first every time

Priority 2: no preventable harms or deaths

Priority 3: outstanding clinical outcomes for children
We therefore commend the Trust in taking account of opportunities to further improve the delivery of excellent, compassionate and safe care for every patient, every time.

Liverpool CCG
Signed

JAN LEDWARD
Chief Officer
23rd May 2018

South Sefton CCG
Southport and Formby CCG
Signed

FIONA TAYLOR
Chief Officer
21th May 2018

Knowsley CCG
Signed

DIANNE JOHNSON
Chief Executive
18th May 2018

Commentary from Overview and Scrutiny Committee

The Overview and Scrutiny Committee were invited to comment on the Quality Account, but confirmed they were unable to provide commentary within the required timescales.

STATEMENT OF DIRECTORS' RESPONSIBILITIES IN RESPECT OF THE QUALITY REPORT

The directors are required under the Health Act 2009 and the National Health Service (Quality Accounts) Regulations to prepare Quality Accounts for each financial year.

NHS Improvement has issued guidance to NHS foundation trust boards on the form and content of annual quality reports (which incorporate the above legal requirements) and on the arrangements that NHS foundation trust boards should put in place to support the data quality for the preparation of the quality report.

In preparing the Quality Report, directors are required to take steps to satisfy themselves that:

- the content of the Quality Report meets the requirements set out in the NHS foundation trust Annual Reporting Manual 2017/18 and supporting guidance
- the content of the Quality Report is not inconsistent with internal and external sources of information including:
  - board minutes and papers for the period April 2017 to March 2018
  - papers relating to quality reported to the board over the period April 2017 to March 2018
  - feedback from commissioners dated 23rd May 2018
  - feedback from governors dated 17th and 18th May 2018
  - feedback from local Healthwatch organisations dated 11th and 23rd May 2018
  - feedback from Overview and Scrutiny Committee dated – none received at the time of publication
  - the Trust's complaints report published under regulation 18 of the Local Authority Social Services and NHS Complaints Regulations 2009, dated 05/09/17, 05/12/17, 06/03/18 and 16/05/18 (four quarterly reports)
  - the 2017 national patient survey
  - the 2017 national staff survey dated 6th March 2018
  - the Head of Internal Audit's annual opinion of the trust's control environment dated April 2018
  - CQC inspection report dated October 2017
- the Quality Report presents a balanced picture of the NHS foundation trust's performance over the period covered
- the performance information reported in the Quality Report is reliable and accurate
- there are proper internal controls over the collection and reporting of the measures of performance included in the Quality Report, and these controls are subject to review to confirm that they are working effectively in practice
- the data underpinning the measures of performance reported in the Quality Report is robust and reliable, conforms to specified data quality standards and prescribed definitions, is subject to appropriate scrutiny and review and the Quality Report has been prepared in accordance with NHS Improvement's annual reporting manual and supporting guidance (which incorporates the Quality Accounts regulations) as well as the standards to support data quality for the preparation of the Quality Report.

The directors confirm to the best of their knowledge and belief they have complied with the above requirements in preparing the Quality Report.

By order of the Board.

David Henshaw — Louise Shepherd

SIR DAVID HENSHAW
Chairman

LOUISE SHEPHERD CBE
Chief Executive

22nd May 2018

INDEPENDENT AUDITORS REPORT TO THE COUNCIL OF GOVERNORS OF ALDER HEY CHILDREN'S NHS FOUNDATION TRUST ON THE QUALITY REPORT

We have been engaged by the council of governors of Alder Hey Children's Hospital NHS Foundation Trust ("The Trust") to perform an independent assurance engagement in respect of Alder Hey Children's Hospital NHS Foundation Trust quality report for the year ended 31 March 2018 (the 'Quality Report') and certain performance indicators contained therein.

This report is made solely to the Trust's Council of Governors, as a body, in accordance with our engagement letter dated 23/04/2018. We permit the disclosure of this report within the Annual Report for the year ended 31 March 2018 to enable to Council of Governors to demonstrate that they have discharged their governance responsibilities by commissioning an independent assurance report in connection with these indicators.

To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Trust and the Trust's Council of Governors as a body, for our examination, for this report, or for the conclusions we have formed.

Our work has been undertaken so that we might report to the Council of Governors on those matters that we have agreed to state to them in this report and for no other purpose. Our report must not be recited or referred to in whole or in part in any other document nor made available, copied or recited to any other party, in any circumstances, without our express prior written permission. This engagement is separate to, and distinct from, our appointment as the auditors to the Trust.

SCOPE AND SUBJECT MATTER

The indicators for the year ended 31 March 2018 subject to limited assurance consists of the national priority indicators as mandated by NHS Improvement.

- Percentage of patients within a total time in A&E of 4 hours or less from arrival to admission
- Percentage of incomplete pathways with 18 weeks for patients on incomplete pathways at the end of the reporting period

We refer to these national priority indicators collectively as the 'indicators'.

RESPECTIVE RESPONSIBILITIES OF THE DIRECTORS AND ERNST & YOUNG LLP

The directors are responsible for the content and the preparation of the quality report in accordance with the criteria set out in the 'NHS Foundation Trust Annual Reporting Manual 2017/18' issued by NHS Improvement.

Our responsibility is to form a conclusion, based on limited assurance procedures, whether anything has come to our attention that causes us to believe that:

- the quality report is not prepared in all material respects in lie with the criteria set out in the 'NHS Foundation Trust Annual Reporting Manual 2017/18', which is supported by NHS Improvement's Detailed Requirements for quality reports 2017/18.
- the quality report is not consistent in all material respects with the sources detailed in Section 2.1 of the 'Detailed guidance for external assurance on quality reports 2017/18' and
- the indicators in the quality report identified as having been the subject of limited assurance in the quality report are not reasonably stated in all material aspects in accordance with the 'NHS Foundation Trust Annual Reporting Manual 2017/18' and supporting guidance and the six dimensions of data quality set out in the 'Detailed guidance for external assurance on quality reports 2017/18'.

We read the Quality Report and consider whether it addresses the content requirements of the 'NHS Foundation Trust Annual Reporting Manual 2017/18' and supporting guidance, and consider the implications for our report if we become aware of material omissions.

We read the other information contained in the quality report and consider whether it is materially inconsistent with the other information sources detailed in Section 2.1 of the 'Detailed guidance for external assurance on quality reports 2017/18'. These are:

- Board minutes for the period April 2017 to May 2018
- Papers relating to quality reported to the Board over the period April 2017 to May 2018
- feedback from commissioners, dated 23 May 2018
- feedback from governors, dated 17 & 18 May 2018

- feedback from local Healthwatch organisations, dated 11 May 2018
- the trust's complaints report published under regulation 18 of the Local Authority Social Services and NHS Complaints Regulations 2009, dated quarterly throughout 2017/18
- the latest national patient survey, dated November 2017
- the latest national staff survey, dated 2017
- Care Quality Commission inspection, dated October 2017
- the Head of Internal Audit's annual opinion over the trust's control environment, dated April 2018, and
- any other information included in our review.

We consider the implications for our report if we become aware of any apparent misstatements or material inconsistencies with those documents (collectively, the 'documents'). Our responsibilities do not extend to any other information.

We are in compliance with the applicable independence and competency requirements of the Institute of Chartered Accountants in England and Wales (ICAEW) Code of Ethics. Our team comprised assurance practitioners and relevant subject matter experts.

This report, including the conclusion, has been prepared solely for the Council of Governors of Alder Hey Children's Hospital Foundation Trust as a body, to assist the Council of Governors in reporting Alder Hey Children's Hospital Foundation Trust's quality agenda, performance and activities. We permit the disclosure of this report within the Annual Report for the year ended 31 March 2018, to enable the Council of Governors to demonstrate they have discharged their governance responsibilities by commissioning an independent assurance report in connection with the indicators. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Council of Governors as a body and Alder Hey Children's Hospital NHS Foundation Trust for our work or this report, except where terms are expressly agreed and with our prior consent in writing.

ASSURANCE WORK PERFORMED

We conducted this limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) – 'Assurance Engagements other than Audits or Reviews of Historical Financial Information', issued by the International Auditing and Assurance Standards Board ('ISAE 3000').

Our limited assurance procedures included, but were not limited to:

- evaluating the design and implementation of the key processes and controls for managing and reporting the indicators
- making enquiries of management
- limited testing, on a selective basis, of the data used to calculate the indicator back to supporting documentation
- comparing the content requirements of the 'NHS Foundation Trust Annual Reporting Manual 2017/18' to the categories reported in the Quality Report.
- reading the documents.

The objective of a limited assurance engagement is to perform such procedure as to obtain information and explanations in order to provide us with sufficient appropriate evidence to express a negative conclusion on the Quality Report. The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently the level of assurance obtained in a limited assurance engagement is substantively lower than the assurance that would have been obtained has a reasonable assurance engagement been performed.

INHERENT LIMITATIONS

Non-financial performance information is subject to more inherent limitation than financial information, given the characteristics of the subject matter and the methods used for determining such information.

The absence of a significant body of established practice on which to draw allows for the selection of different, but acceptable measurement techniques which can result in materially different measurements and can affect comparability. The precision of different measurement techniques may also vary. Furthermore, the nature and methods used to determine such information, as well as the measurement in the context of the criteria set out in the 'NHS Foundation Trust Annual Reporting Manual 2017/18' and supporting guidance. The scope of our assurance work has not included governance over quality or non-mandated indicators, which have been determined locally by Alder Hey Children's Hospital NHS Foundation Trust.

CONCLUSION

Based on the results of our procedures, nothing has come to our attention that causes us to believe that, for the year ended 31 March 2018:

- the Quality Report is not prepared in all material respects in line with the criteria set out in the NHS Foundation Trust Annual Reporting Manual 2017/18 and the Detailed requirements for quality reports 2017/18 published in January 2018 (updated in February 2018) issued by NHS Improvement
- the Quality Report is not consistent in all material respects with the sources specified, and
- the indicators in the Quality Report subject to limited assurance have not been reasonably stated in all material respects in accordance with NHS Foundation Trust Annual Reporting Manual 2017/18 and the Detailed requirements for quality reports 2017/18 published in January 2018 (updated in February 2018) issued by NHS Improvement.

Ernst + Young LLP

ERNST & YOUNG LLP
Manchester
25th February 2018

Notes:

1. The maintenance and integrity of the Alder Hey Children's Hospital NHS Foundation Trust's web site is the responsibility of the directors; the work carried out by Ernst & Young LLP does not involve consideration of these matters and, accordingly, Ernst & Young LLP accept no responsibility for any changes that may have occurred to the Quality Report since it was initially presented on the web site.
2. Legislation in the United Kingdom governing the preparation and dissemination of financial statement may differ from legislation in other jurisdictions.

Alder Hey Children's NHS
NHS Foundation Trust

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

By post: Alder Hey Children's NHS Foundation Trust, Eaton Road, Liverpool, L12 2AP
By telephone: 0151 228 4811
By email: communications@alderhey.nhs.uk

www.alderhey.nhs.uk