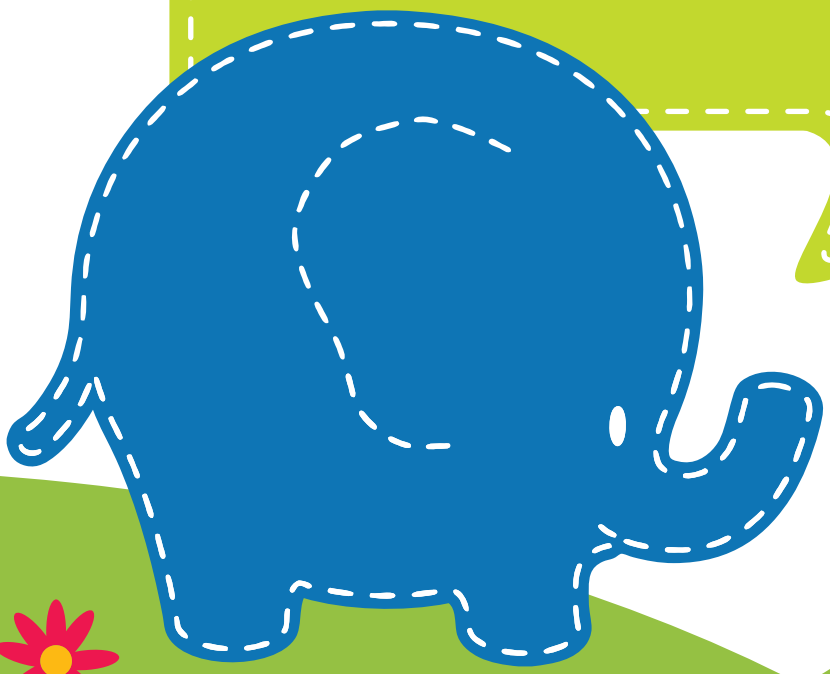
Alder Hey Children's NHS
NHS Foundation Trust

# Quality Account 2012/13



Inspired by Children

# Contents

# Quality Report:
# 'Quality: Our Promise to Patients'

## Part 1: Statement on quality from Louise Shepherd, Chief Executive

2012/13 marked the second year of the delivery of the Trust's Quality Strategy and it was heartening to see how our committed staff embraced a wide range of activities and initiatives geared toward demonstrating that Alder Hey's quality ethos is stronger than ever.

Our quality governance arrangements continued to take root and make a difference throughout the organisation and in particular through our Clinical Business Units' working practices, for example regular safety 'walkarounds'.

To further the progress we have made in the past year, we seized the moment to restate our purpose in relation to quality in January 2013 through an event with senior leaders from across the Trust, together with members of the Board and Council of Governors. This provided a forum for us to collectively agree how we strengthen our quality focus, using learning from the North West Leadership Academy's 'From the Top' Programme. The result was an agreed range of developmental quality aims that now form the basis of the quality dashboard for the Trust, underpinned by a structured drive towards an organisation wide quality improvement culture, sponsored by our Director of Nursing and Medical Director.

Our quality aims are now clear, measurable standards that everyone can see and understand and they form the basis of our promise to our patients and families based upon the things that we know are important to them about our services: that they are safe, effective and provide the best possible experience to every individual. We believe that this work is consistent with the principles underlying the recommendations made in the second report of the Public Inquiry into the failings in care at Mid Staffordshire NHS Foundation Trust.

We have made significant advances towards our quality goals in the last year, however there is still much to do to realise our ambitions, including the imperative to make the most of the opportunities presented by our new hospital, to push the boundaries of paediatric care nationally and internationally.

As Chief Executive I am confident that the information set out in the following report is accurate and a fair reflection of the key issues and priorities that clinical teams have developed within their services. The Board at Alder Hey remains fully committed to the aspirations described in the Quality Strategy and is steadfast in its support for staff as they strive to deliver its aims every day and for every child.

Louise Shepherd

**LOUISE SHEPHERD**
**CHIEF EXECUTIVE**

# Part 2: Priorities for improvement and statements of assurance from the Board.

## 2.1 Priorities for improvement

Progress made in 2012/13 and previous years, against quality improvement priorities identified in last year's Quality Report can be found on page 67.

### 2.1.2 Priorities for improvement 2013/14

The Alder Hey Quality Strategy utilises the definition of 'Quality' as set out in the Darzi Report, *High Quality Care for All* (2008) with its three main elements of patient safety, clinical effectiveness and patient experience. The purpose of the strategy is to ensure that we capture the essence of quality and translate this effectively by bringing together national policy, strategic direction and regulatory, financial and governance requirements with our stated imperative of providing safe, effective world class healthcare for each and every child for whom we care, within a culture of openness and continual improvement.

Children, young people and their families are at the centre of this strategy. The Trust's Board, in consultation with staff, patients, governors, Healthwatch organisations and commissioners has identified key priorities for improvement which have been derived from national and regional priorities, the Trust's performance against quality and safety indicators, risk trend analyses and patient and public feedback. The Trust has recently agreed Developmental Quality Aims which are the priority improvements for 2013/14:

The Board will monitor progress against these priority areas through the Clinical Quality Assurance Committee. Progress will be reported to commissioners through Clinical Performance and Quality Group meetings and to patients, carers and Healthwatch members through a series of engagement events. The Trust continues to develop the skills of our workforce to deliver quality improvements, through the utilisation of a variety of improvement methodologies.

| | |
|---|---|
| **Priority 1:** Patient Safety | Aim - Patients will not suffer harm in our care. |
| | 1. No hospital acquired infection.<br>2. No drug errors resulting in harm.<br>3. No hospital acquired pressure ulcers. |
| **Priority 2:** Clinical Effectiveness | Aim - Patients will receive the most effective, evidence-based care. |
| | 1. No acute (unplanned) readmission within 48 hours of discharge (including under 4's).<br>2. No acute admission of patients with long term conditions (Epilepsy, Diabetes, Asthma, Lower Respiratory Disease).<br>3. Patients will be discharged on planned day of discharge. |
| **Priority 3:** Patient Experience | Aim - Patients will have the best possible experience (as reported by patients and/or families). |
| | 1. Patients and families will have received information enabling them to make choices (involvement in care).<br>2. Patients and families will be treated with respect.<br>3. Patients will engage in play and learning. |

## 2.2 Statements of assurance from the Board

### 2.2.1 Review of services

During 2012/13 Alder Hey has provided 27 NHS services. Alder Hey has reviewed all the data available to them on the quality of care in all of these services. The income generated by the NHS services reviewed in 2012/13 represents 100% of the total income generated from the provision of NHS services by Alder Hey for 2012/13.

### 2.2.2 Participation in clinical audits and national confidential enquires

Clinical Audit is a key mechanism for 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 via other means. Priorities for the NCAPOP are set by the Department of Health with advice from the National Clinical Audit Advisory Group (NCAAG).

During the reporting period 1st April 2012 to 31st March 2013, there were 14 National Clinical Audits and five National Confidential Enquiries that related to NHS services provided by Alder Hey.

Alder Hey participated in 100% of the National Clinical Audits and 100% of the National Confidential Enquiries in which it was eligible to participate during the year. The details of the National Clinical Audits and National Confidential Enquiries that Alder Hey was eligible to participate in during the reporting period 2012/13 are set out in the table below.

The National Clinical Audits and National Confidential Enquiries that Alder Hey participated in, and for which data collection was completed during the reporting period 1st April 2012 to 31st March 2013, are listed 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.

## Participation in National Clinical Audits and National Confidential Enquiries During 2012/13

| Audit | Participation | % Cases submitted |
|---|---|---|
| **Children** | | |
| Paediatric Pneumonia (British Thoracic Society) | Yes | Ongoing Data collection Open till 31/03/13. |
| Paediatric Asthma (British Thoracic Society) | Yes | Submitted 48 cases, which was 63% of cases available (76) |
| Paediatric Fever (College of Emergency Medicine) | Yes | Submitted 50 cases, which was 100% of cases required for the audit sample |
| Childhood Epilepsy (RCPH National Childhood Epilepsy Audit) | Yes | Ongoing Data collection. Data Entry opens 01/03/13 |
| Paediatric Intensive Care (PICANet) | Yes | Submitted 100% of cases required for the audit sample. 1181 ICU episodes on PICANet database |
| **Acute care** | | |
| Severe Trauma (Trauma Audit and Research Network) | Yes | Submitted 134 cases, which was 100% of cases required for the audit sample. Ongoing Data collection. |
| **Cardiac** | | |
| Cardiac Arrest (National Cardiac Arrest Audit) | Yes | Submitted 22 cases, which was 100% of cases required for the audit sample |
| Paediatric Cardiac Surgery (NICOR Congenital Heart Disease Audit) | Yes | Submitted 275 cases, which was 100% of cases required for the audit sample. (Data up to December 2012) |
| Cardiac Arrhythmia (CRM) | Yes | Submitted 19 cases, which was 100% of cases required for the audit sample |
| **Long term conditions** | | |
| Ulcerative Colitis and Crohn's Disease (National IBD Audit) | Yes | Ongoing Data collection. Data Entry opened 01/01/13. 1 case collected so far |
| Diabetes (RCPH National Paediatric Diabetes Audit) | Yes | Submitted 1080 records, which was 100% of cases required for the audit sample |
| Renal Replacement Therapy (UK Renal Registry) | Yes | Submitted 34 records, which was 100% of cases required for the audit sample |
| **Blood and Transplant** | | |
| Audit of Blood Sample Collection and Labeling (National Comparative Audit of Blood Transfusion) | Yes | Submitted 121 cases, which was 100% of cases required for the audit sample |
| Potential Donor Audit (NHS Blood & Transplant) | Yes | Submitted 62 cases, which was 100% of cases required for the audit sample |

| National Confidential Enquiries | Participation | % Cases submitted |
|---|---|---|
| Asthma Deaths NRAD Royal College of Physicians (RCP) | Yes | 100%<br>(One death reported November 2012) |
| Child Health Review UK (CHR – UK contracted to RCPCH) | Yes | 100%<br>Ongoing participation |
| Themed Case Review Morbidity and Mortality Epilepsy – RCPCH | Yes | One case submitted<br>(100%) |
| Maternal and Perinatal Mortality Notification (MPMN) coordinated via HQIP | Yes | 19 Neonatal death<br>Cases submitted (100%) |
| National Confidential Inquiry (NCI) into Suicide and Homicide by People with Mental Illness (NCI/NCISH) | Yes | Questionnaire completed by Consultant Child and Adolescent Psychiatrist, CAMHS Clinical and Governance Lead<br>December 2012 |
| Maternal and Perinatal Mortality Notification (MPMN) coordinated via HQIP | Yes | 21 Neonatal death<br>Cases submitted 100% |
| National Confidential Inquiry (NCI) into Suicide and Homicide by People with Mental Illness (NCI/NCISH) | Yes | Questionnaire completed by Consultant Child and Adolescent Psychiatrist, CAMHS Clinical and Governance Lead<br>December 2012 |

### 2.2.3 Actions arising from National Clinical Audits

The reports of 13 National Clinical Audits were reviewed by the Trust in the reporting period 1st April 2012 to 31st March 2013 and it intends to take the following actions to improve the quality of healthcare provided.

## Actions Taken/To be Taken as a Result of National Clinical Audits in 2012/13

| National Clinical Audit | Actions |
|---|---|
| Paediatric Asthma (British Thoracic Society) | The review of the national audit report shows that Alder Hey is meeting the majority of the audit standards.<br><br>We will continue to highlight the importance of following the Asthma inpatient care pathway by delivering training sessions to junior doctors and nursing staff. |
| Paediatric Pneumonia (British Thoracic Society) | The national audit report has been reviewed at the Respiratory team meeting. Due to the low numbers of cases identified in the last audit period it is not possible to draw any conclusions.<br><br>To increase the audit numbers, coding has been adjusted and data will be collected prospectively. |
| Paediatric Fever (College of Emergency Medicine) | The national audit report has been reviewed by the Emergency Department Senior Staff, at the Emergency Department Governance meeting and CBU Governance group. The Emergency Department at Alder Hey compared very favourably to national standards. In particular, our recording of vital signs, the time we take to triage and our adherence to NICE guidance were highlighted.<br><br>The audit report showed that the recording of respiratory rate at triage, while recorded for the majority of patients, had fallen from the previous year. Action has been taken to reinforce that respiratory rate is recorded at triage. The recording of blood pressure which had been identified as a weakness in the previous audit has improved. |
| Paediatric Intensive Care (PICANet) | The national audit report was reviewed and discussed on the Paediatric Intensive Care Unit (PICU); Alder Hey is meeting the majority of the audit standards.<br><br>The Trust has developed the statistical reports Cumulative Sum (CUSUM) and Sequential Probability Ratio Test (SPRT) charts to monitor mortality in close to real time in PICU. |

| National Clinical Audit | Actions |
|---|---|
| Paediatric Cardiac Surgery (NICOR Congenital Heart Disease Audit) | The national audit report was reviewed and Alder Hey is meeting the majority of the audit standards. An action plan has been put in place to restructure the data entry to capture more data at source and more accurately. Processes are also being changed to support ongoing data validation. |
| National Cardiac Rhythm Management Audit (NICOR) | The national audit report was reviewed and Alder Hey is meeting the majority of the audit standards. Alder Hey deals with a relatively low number of patients who require implantable cardioverter-defibrillators (ICD) and pacemakers and because of this gets advice from the main centre at the Liverpool Heart and Chest Hospital. Our system for follow up and diagnosis is sufficient for our case load. All ICD patients will soon be covered by the Carelink system of home monitoring. |
| Diabetes (RCPH National Paediatric Diabetes Audit) | The national audit report was reviewed and discussed at both the Diabetes Multi-Disciplinary Team (MDT) meeting and the Clinical Business Unit (CBU) audit meeting.<br><br>The median HbA1c achieved by the clinic population is slightly lower than the national median value. However this is comparable to similar hospitals who serve patients from areas of high deprivation indices.<br><br>The number of patients with an HbA1c is below the target value, however more patients at Alder Hey receive the required care processes than the current national average.<br><br>An action plan was agreed to address the areas requiring improvement:<br><br>**1. To improve the quality of the data**<br>• Update the existing annual review clinic sheet adding more information which is not routinely collected e.g. smoking status.<br>• Encourage members of the MDT to record hand written data (height, weight, blood pressure) electronically with each contact to make the audit process easier.<br>• Obtain IT input regarding extracting data required for the National Paediatric Diabetes Audit from new IT programme Medisec for Diabetes clinic letters (action taken in June to ensure this).<br>• Consideration is being given to installing a new Diabetes database along with existing Alder Hey Medisec data set for future audit purposes (the lead is currently working with IT).<br><br>**2. Improve HbA1c for overall patient population**<br>• Intensification of Diabetes treatment by starting all patients with Type 1 Diabetes on MDI at diagnosis unless there is a contra-indication (this was achieved in November 2010).<br>• Review Diabetes specialist nurse staffing.<br>• Review the process for providing additional appointments for children with HbA1c >9.5% in MDT clinic, and also with the Nurse Specialist or Dietician as required.<br>• Emphasis to educate patient population regarding the NICE guidelines for insulin pump and encourage those who are eligible to consider insulin pump therapy.<br>• Continue participating in research programmes like SKIPI to encourage new methods of treatment.<br><br>**3. Reduce DKA admissions**<br>• Reinforce the written sick day rules before discharge and in the first Diabetes clinic after a DKA admission.<br>• Provide additional appointments for children with HbA1c >9.5% whenever possible in MDT clinic, and also with the Nurse Specialist or Dietician as required.<br>• Encourage psychology intervention if there are concerns regarding treatment compliance (this action is already complete).<br><br>The main outstanding item is that the IT team and representative from the Diabetes Team are still working on having a separate Diabetes dataset.<br><br>At the current time Diabetes services are moving to a mandatory best practice tariff payment with criteria for the delivery of services. These criteria are designed to improve outcomes for children and young people with Diabetes. |

| National Clinical Audit | Actions |
|---|---|
| Cardiac Arrest (National Cardiac Arrest Audit) | The national audit report was discussed at Trust Resuscitation Committee. No action plan required as achieving above the audit standards in most or all areas.<br><br>RESPOND Course continues to be conducted. A revised Paediatric Early Warning (PEW) tool has been developed and project nurses are in place. This is being rolled out across the Trust. |
| Potential Donor Audit (NHS Blood and Transplant) | The national audit report is to be reviewed at the Organ Donation Committee meeting. However, it is unlikely that we will be able to draw conclusions as paediatric practice is quite different to adult practice. |
| Severe Trauma (Trauma Audit and Research Network) | Actions from the TARN documents arise and are discussed at Trust Trauma Committee, and noted as actions in the minutes and reviewed here rather than on a separate action plan document.<br><br>**Completed actions:**<br>1. Revised Trauma Team activation criteria and Trust-wide agreement to activate Trauma Team for pre-alerted patients.<br>2. Development of Standard Operating Procedure on Emergency Department Management of Open Fractures reviewed and agreed through Trauma Committee.<br><br>**Outstanding actions:**<br>1. Monitor times to CT for individual patients to ensure timely access and identify reasons for delay. Review Royal College of Radiologists' guidance on trauma radiology in children which is expected to be published soon.<br>2. Monitor Trauma Team Activations to ensure the team is activated according to agreed criteria and monitor attendance/availability of specialty teams.<br>3. Reinforce referral through the MTC Co-coordinator - to be done via the North West Children's Trauma Network Governance group as well as Cheshire and Mersey Major Trauma Clinical Delivery Group and Governance Group. |
| Audit of Blood Sample Collection and Labeling (National Comparative Audit of Blood Transfusion) | National audit report only recently released. Will be taken to the next Hospital Transfusion team meeting for review. |
| Childhood Epilepsy (RCPH National Childhood Epilepsy Audit) | The national audit report was reviewed by the General Paediatrics and Epilepsy Teams; Alder Hey is achieving above the audit standards in most or all areas.<br><br>No specific action to take, but continued network working is continuing with other healthcare providers across the North West. |
| Ulcerative Colitis and Crohn's Disease (National IBD Audit) | The IBD Audit and the national audit report is regularly discussed at Gastroenterology IBD meetings; Alder Hey is meeting the majority of the audit standards. A sub group was formed to identify areas for improvement. The paediatric IBDQip, works in parallel with the IBD audit (and is intended to merge in the next year) was identified as the most appropriate tool to use to form the basis to improve IBD services with targeted actions.<br><br>First four actions are completed or in progress: conducting an annual patient feedback survey and asking for patient stories; facilitating a meeting with CCUK and 4-5 families (including the young person) to understand what they feel they need and then support CCUK to initiate the group and support the volunteers to continue the group independently of Alder Hey input (unless requested); approaching different services to identify a named lead for Pharmacy, Histopathology and Radiology with the aim of establishing a more cohesive and formal MDT approach to improving patient care and improving the gastroenterology services; conducting an audit of the patients who have required steroids to review the number of patients who remain on steroids for longer than three months.<br><br>**IBD Biologics**<br>We currently meet all the standards required in the IBD biologics best practice guideline. This is an ongoing national audit primarily used to collect information on all IBD patients receiving biologics (which is more like a register). We have the facility to retrieve the data we have entered to audit our practice against the NICE guidelines which is about to be undertaken by one of our registrars. |

# Actions Taken/to be Taken as a Result of Local Clinical Audits in 2012/13

There were a total of 170 local audits registered in the reporting period 1st April 2012 to 31st March 2013. Four (2%) of these audits have been cancelled. There are 34 (20%) local audits completed. There are 131 (78%) ongoing audits, 28% have been registered in the last two months and completion will be in the reporting period of 2013/14.

The reports of 29 completed local clinical audits were reviewed by the provider in the reporting period 1st April 2012 to 31st March 2013 and Alder Hey Children's NHS Foundation Trust intends to take the actions stated below to improve the quality of healthcare provided.

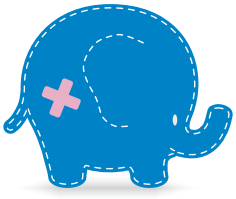
| Local Audit | Actions |
|---|---|
| How does the management of patients presenting with fever and petechial rash vary in terms of investigations, treatment and duration of admission? | • The audit was presented to a local General Paediatrics meeting on 19th November 2012.<br>• A re-audit is being planned to capture a bigger patient population and a larger case number. |
| General Paediatric Quality Improvement Programme. | • The audit was presented to a local General Paediatrics meeting in 2012.<br>• Recommendations were to improve the legibility of drug charts and to improve on documentation by not using abbreviations.<br>• Regular feedback from pharmacy regarding prescription errors is to be emailed to the lead consultant.<br>• Improve on senior review - aiming for at least 95% of patients to be seen by an ST4 or above within four hours as per the Royal College standard.<br>• The sample size for the audit was very small. A larger sample would have added to the validity of the results. The plan is to re-audit in three months time with a larger sample size once the recommendations have been put in place. |
| Case Note Audit (Physiotherapy) | • The audit was presented to a local meeting in 2012.<br>• Recommendations were for notes to be separated into volumes when starting to fill up so they do not become overfilled.<br>• Create a new consent form and ensure it covers all required areas for consent.<br>• Review case note layout and content to ensure that they provide the best possible basis for note writing and continue with regular review of the case notes on an annual basis to check for standardisation.<br>• Highlight the need for consistency in note taking and amending notes.<br>• Alder Hey continuation sheets to have 'page' printed on in order to prompt numbering.<br>• Review of manual handling forms/risk assessment plans. Ensure that they are included in the notes.<br>• Discuss with the Physiotherapy Team the necessity to time entries into notes.<br>• Include regular updates of the patient including treatment goals and plans into body of notes (treatment section).<br>• Recommendations have been partially implemented.<br>• Re-Audit in 12 months (Summer 2013). |
| Outcomes of Acute Pancreatitis | • The audit was presented at a local audit meeting where recommendations were discussed.<br>• Recommendations have been fully implemented as of 18th September 2012.<br>• A key recommendation was to measure biochemical markers such as CRP, Albumin and WBC at presentation and at 48 hours to get an accurate prediction of severity.<br>• Poster presentation at Annual American Pancreatic Association Meeting in Miami, 1st November 2012. |

| Local Audit | Actions |
|---|---|
| Audit into Quality Standards for Bacterial Meningitis and Meningococcal Septicaemia in Children (NICE CG102) | • Audit presented at local audit meeting where recommendations were discussed 10th September 2012.<br>• Recommendation was for observations to be recorded fully, in particular blood pressure.<br>• To create a checklist for LP indications/Contra-indications.<br>• Lab to record on hospital system when results are put on the system or phoned through.<br>• Audiology and OPD follow up.<br>• Query the need for a pro-forma to capture data.<br>• Recommendations have been partially implemented as of 3rd October 2012.<br>• Re-Audit at least two years in the future. |
| Hypospadias Surgery (Day Case Follow Up) | • Recommendations presented at a local meeting and fully implemented.<br>• An action was to re-start the pre-op clinic.<br>• A re-audit of the evaluation of the pre admission clinic was started in October 2012. |
| Four Year Outcome Using the Ponsetti Technique for the Management of Clubfoot | • No action plan required as the audit results are in keeping with National Standards.<br>• Audit was presented at the British Society of Children's Orthopaedic Surgery in London, January 2013.<br>• A re-audit is planned for five years time. |
| Audit of the Detection of Resistant Organisms by Faecal Screening in Oncology Patients | • The audit was presented at a local meeting in 2012.<br>• This study shows the clinical importance of rectal screening as a method of surveillance for resistant organisms. This information regarding the presence or absence of resistant organisms allows clinicians to ensure that appropriate empirical treatment is started when the child presents with febrile neutropaenia.<br>• Recommended a review of faeces resistance to be part of hospital surveillance system on a monthly basis.<br>• Recommendations have been partially implemented. |
| Burns Inpatient Psychosocial Screening Audit | • The audit was presented with recommendations at the Northern Burn Care Network meeting in January 2013.<br>• Audit recommended extending the data collection period in the future if planning a re-audit.<br>• No immediate plans to re-audit locally. |
| Audit of Difficult Airway Trolley Equipment and Maintenance | • The audit was presented at a local meeting in 2012.<br>• Actions identified were to improve the difficult airway trolleys by streamlining the contents and removing excess items and update the contents list of the difficult airway trolleys.<br>• Link processes to the new Difficult Airway Society (DAS) guidelines.<br>• Increase the accountability and responsibility for trolley checks to include who checks and how often they are checked.<br>• A re-audit is planned for twelve months time. |
| Audit of the Impact of a Rectal Screening System for Carbapenem Resistant Enterobacteriaceae | • The audit was presented at a local meeting in September 2012.<br>• Audit recommended continuing screening for Carbapenem Resistant Enterobacteriaceae.<br>• Recommendations have been fully implemented. |

| Local Audit | Actions |
|---|---|
| Audit of the Clinical Utility of Pertussis PCR in Comparison to Culture Methods | • The audit was presented at a local meeting in October 2012. Submitted for publication to the Journal of Hospital Infection (JHI).<br>• The audit recommended that laboratories continue to try and culture Pertussis as this creates the opportunity to perform whole genome sequencing. We believe a culture-only approach misses positive cases which would only be picked up by PCR and advocate the further evaluation of PCR performed in parallel with culture to detect Pertussis in all infants referred to hospital with symptoms suggestive of whooping cough.<br>• Recommendations have been fully implemented. |
| Anaphylaxis Audit (NICE CG134) | • The audit was presented at a local meeting in 2012.<br>• Audit recommended increasing the awareness of A&E and General Paediatric Team members regarding the need to involve the Allergy Team as early as possible in cases of anaphylaxis.<br>• Allergy Team are to provide documentation of all teaching.<br>• Provide ongoing and regular (1-2 yearly) education for patients with adrenaline pens and their families.<br>• Video training and a new management plan established since the audit. This has been rolled out across the North West Allergy network website. A prospective audit of the new management plan is in progress.<br>• In conjunction with this audit and to maintain compliance with NICE guidelines a new pathway (anaphylaxis check list) has been introduced at Alder Hey, which aims to improve management as well as documentation, from the patient's point of entry in Accident and Emergency. It also aims to ensure patients are educated and followed up appropriately. |
| Review on the Management of New Chronic Fatigue Syndrome Patients (NICE CG53) | • The audit was presented at a local meeting in 2012.<br>• The audit found 100% of patients had appropriate screening tests.<br>• The audit recommended changing monthly new patient clinics to weekly clinics.<br>• The audit further recommended improving the documentation of early symptom advice to achieve 100% compliance.<br>• Recommendations were discussed and have been fully implemented. A re-audit is planned for twelve months time. |
| Anaesthetic Disposables Costs and Savings | • The results of the audit were presented to the Anaesthetic Department on the 6th September 2012.<br>• Findings were noted and the department determined to leave it to the discretion of the individual anaesthetist to make informal choices armed with the facts as presented.<br>• No further monitoring or re-audit is required. |
| Re-Audit: HDU Refused Admissions: Reasons and Subsequent Patient Outcomes | • The audit was presented at a local meeting in 2012.<br>• A recommendation of the audit is to implement a new data collection tool.<br>• An action plan has been developed which is to be monitored by the HDU ward manager and senior nursing staff.<br>• Nursing staff are to perform a further re-audit in another six months. |
| Paediatric ICU Prescribing Audit | • Audit was presented at a local risk and governance meeting in 2012.<br>• Poster and abstract have been submitted to the European Society of Paediatric and Neonatal Intensive Care (ESPNIC) Conference 2013, being held in Rotterdam, Netherlands in June 2013.<br>• We are compliant with most of the requirements in the different prescription groups. Areas for improvement were reported and appropriate actions taken around:<br>1. Noting allergies.<br>2. Number of prescription cardex cards in unit.<br>3. Recording name and DOB on every page.<br>4. Recording reason for PRN medications.<br>• Re-audit in six months time. |

| Local Audit | Actions |
|---|---|
| Clinical Outcomes after Herniotomy Surgery in the First Year of Life-Focusing on Hernia Recurrence and Need for Future Orchidoplexy. | • The audit was presented at a local meeting in December 2012. The audit was also presented at the Surgical Trainee's 'STEC' meeting and is to be submitted to the Annual Meeting.<br>• No action plan was required as outcomes of herniotomy in infants at Alder Hey are comparable to the published rates in the literature. |
| Re-Audit of Abdominal Pain on Oncology Unit April 2012 - Sept 2012 | • The audit was presented at a local meeting in 2012.<br>• Recommendations were to continue to follow the Oncology Unit abdominal pain guidelines.<br>• Consider serum analysis in patients with Acute Lymphatic Leukaemia who develop abdominal pain with an obvious cause.<br>• Consider early surgical options if thought to be a surgical cause or no definite cause identified.<br>• Recommendations of the audit have been fully implemented.<br>• No re-audit required. |
| Evaluation of Nurse Led Scar Management Clinics | • The audit was presented at a ward multi-disciplinary meeting with the consultant. Recommendations of the evaluation were to improve directions to the clinic and allow nurses more time with each patient.<br>• An action plan is to be developed in order to implement the recommendations. |
| Audit of Efficacy and Use of Pizotifen for Childhood Headache. | • The audit was presented as a poster at a local meeting in 2012. Poster has been submitted to relevant journals.<br>• No action plan was required.<br>• No re-audit was required. |
| Perioperative Temperature Management (NICE CG65) | • The audit was presented at a local meeting in November 2012.<br>• Recommendations were to improve the education about the NICE guidelines and their application to paediatric practice.<br>• To improve the education and training for all staff measuring temperature, including anaesthetics, about both the technical factors and user technique which affect accurate temperature measurement.<br>• To ensure all anaesthetic charts, including day-case, have space or a prompt for temperature measurement.<br>• Re-audit in main theatres to complete the audit cycle.<br>• Repeat the audit in the day-case theatres. While the perception is that day-case procedures are mostly short and high turnover cases, many have a total intraoperative time of over 30 minutes and would therefore be eligible for temperature measurement and warming. |
| Are we taking radiographs when treatment planning for paediatric dental general anaesthetic? A comparative, retrospective audit of compliance with UK National Clinical Guidelines at Alder Hey Hospital | • The audit results will be disseminated amongst ward and departmental staff in order to advise of failure to meet the standard.<br>• The audit recommended to remind departmental staff of the UK clinical guidelines and to stress the importance of obtaining radiographs prior to General Anaesthetic for caries detection and ultimately to reduce the risk of repeat General Anaesthetic.<br>• Ensure that bitewings are the radiograph of choice for caries diagnosis and that they should be taken in addition to OPT if an OPT is required for other reasons. An OPT should not be relied upon for diagnosis of interproximal caries.<br>• When radiographs have been requested but the patient has not been able to tolerate them at the initial consultation a second attempt should always be made when the patient attends for any further clinic appointments or on the day of their anaesthetic.<br>• Prospectively re-audit the pre-General Anaesthetic radiograph process in order to gain a greater understanding of how clinicians are making decisions on taking radiographs in children who are treatment planned for General Anaesthetic and to obtain data for a second audit cycle. This documentation will also serve to prompt clinicians in their decision making process. |

| Local Audit | Actions |
|---|---|
| | • Develop a business case and assess the feasibility of introducing intra-General Anaesthetic radiography at Alder Hey will be investigated as well as training for radiography staff to improve the outcomes of intra-oral radiographs.<br>• With regard to the latter point this is due to be addressed in the results of a concurrent audit.<br>• As the standard was not met an action plan has been formulated and a re-audit will be due in April/May 2013. |
| Audit of Current Prescribing Practice for Etanercept for Juvenile Idiopathic Arthritis (JIA) and Tocilizumab for Systemic JIA (NICE TA35 & TA198) | • The pilot audit was presented to a local meeting in 2012. The main audit using data from January to March 2013 was completed on schedule as per PCT / CQUIN recommendations. The audit results have been forwarded to the Trust information team and Liverpool PCT for circulation to the correct commissioners. |
| Clinical Outcomes of Initial Glucocorticoid Treatment at 30 Days and One Year Post Diagnosis with Paediatric IBD (Ulcerative Colitis and Crohn's Disease). | • An abstract was submitted to the European Paediatric Gastroenterology conference. This has been accepted for a poster presentation at (ESPGHAN) meeting 2013 in London (8 – 11 May 2013). A further audit is planned for 2013 as part of the National IBD Audit action plan. |
| The Management of Traumatic Anterior Shoulder Dislocation in the Adolescent | • The audit was presented at a local Orthopaedic alumni meeting where recommendations were discussed.<br>• Recommendations have been fully implemented as of 15th March 2013.<br>A re-audit was not required. |
| Audit of the Use of Doxycycline for Sclerotherapy of Lymphatic Malformations. | • The audit was presented at a local Radiology Audit meeting where recommendations were discussed.<br>• Recommendations have been fully implemented as of 14th March 2013.<br>A re-audit was not required. |
| Temperature Control During Magnetic Resonance Scanning on Anaesthetised Patients | • A repeat of this audit is recommended after a period of at least three months. It was suggested that such an audit should try to include assessment of the adequacy of temperature monitoring pre- and post-MRI, and be designed in such a way as to trace the communication of abnormal temperatures between staff, to confirm that they are being properly highlighted and considered. It should also take account of ambient temperature in the MRI unit. |
| An Audit of Lateral Condyle Fractures of the Elbow | • The audit was presented at a local consultants meeting where recommendations were discussed.<br>• Recommendations have been fully implemented as of 15th March 2013.<br>A re-audit is planned for six months' time. |



## 2.2.4. Participation in clinical research

The number of patients receiving NHS services provided or subcontracted by Alder Hey Children's NHS Foundation Trust in 2012/13 who were recruited during that period to participate in research approved by a Research Ethics Committee was 8,265.

Alder Hey is pro-actively working towards becoming a world class centre for children's Research and Development and this is one of the Trust's key strategic aims. Furthermore, the Alder Hey/University of Liverpool integrated ten year research strategy states that "Every child should be offered the opportunity to participate in a research study / clinical trial". Participation in clinical research demonstrates Alder Hey's commitment to contributing to evidence-based and leading edge treatment which will improve the quality of care we offer whilst taking due care to patient safety and to making a contribution to wider health improvement. The research structures for setting up and running clinical research studies are firmly grounded in the Research Business Unit (RBU).

Our clinical staff lead and contribute to studies of the latest possible treatment possibilities and active participation in research leads to successful patient outcomes.

Alder Hey was involved in conducting (169) clinical research studies during 2012/13: defined as studies which are actively recruiting patients. Most studies will not have reached the stage of reporting outcome results. The majority (99) were in Medical Specialties. Over the same period, there was no mortality from causes considered preventable in all Medical Specialties, this has not changed from the previous year and is at 0%.

## Participation in Clinical Research 2012/13

| | NIHR Studies | Number of Participants | Non-NIHR Studies | Number of Participants |
|---|---|---|---|---|
| **SG1** (Oncology, Haematology, Palliative Care) | 32 | 411 | 10 | 218 |
| **SG2** (Nephrology, Rheumatology, Gastro, Endocrinology, Dietetics) | 28 | 192 | 5 | 49 |
| **SG3** (Respiratory, Infectious Diseases, Allergy, Immunology, Metabolic Diseases) | 19 | 6402 | 6 | 99 |
| **SG4** (A&E, Gen Paeds, Diabetes, Dermatology, CFS/ME) | 10 | 221 | 2 | 11 |
| **SG5** (CAMHS tier 3 & 4, Psychological Services & Dewi Jones) | 2 | 3 | 5 | 47 |
| **SG6** (Comm. Child Health, Safeguarding, Social Work Dept., Comm Clinics, Neurodisability Education, Fostering, Adoption, Audiology) | 0 | 0 | 0 | 0 |
| **SG7** (PICU, HDU, Burns) | 3 | 24 | 4 | 45 |
| **SG8** (Theatres, Day Case Unit, Anaesthetics Pain Control) | 0 | 0 | 1 | 2 |
| **SG9** (Gen Surgery, Urology, Gynae, Neonatal) | 5 | 40 | 4 | 9 |
| **SG10** (Cardiology, Cardiac Surgery) | 2 | 0 | 2 | 121 |
| **SG11** (Orthopaedics, Plastics) | 1 | 1 | 0 | 0 |
| **SG12** (Neurology, Neurosurgery, Craniofacial, LTV) | 10 | 124 | 2 | 3 |
| **SG13** (Specialist Surgery, ENT, CL&P, Ophthalmology, Maxillofacial, Dentistry, Orthodontics) | 5 | 31 | 1 | 64 |
| **SS1** (Radiology) | 2 | 5 | 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 | 87 | 1 | 0 |
| **CNRU** | 0 | 0 | 1 | 0 |
| **RBU** | 1 | 8 | 2 | 48 |
| **Non Classified** | 0 | 0 | 0 | 0 |
| **TOTAL** | **123** | **7549** | **46** | **716** |

The Quality Account deals with research activity during the 2012/13 period. In the majority of studies no results/findings are yet available from those studies to inform future practice. Studies from earlier years provide evidence of research leading to better treatments for patients. In terms of research infrastructure development 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 location. This resource helps facilitate research by providing a bespoke location for research on a day-case basis and moving to overnight provision shortly. 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. 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.

There were 74 members of clinical staff participating in research approved by a Research Ethics Committee at Alder Hey during 2012/13. These included consultants, nurse specialists, scientists, clinical support staff and research nurses from across all Clinical Business Units.

Over the past three years the Trust has witnessed a growth in commercially sponsored studies using monoclonal antibodies (mAbS). These interventions have been used primarily in Rheumatology and Oncology but are becoming available in other sub-specialities. 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. A good example of this type of study is the PLUTO study. Alder Hey proudly recruited the first patient globally into this study. This is the second study during 2012/13 which boasted the first global recruit here at Alder Hey. This bodes well for development of commercial research studies as it demonstrates Alder Hey's commitment to supporting the speedy set up of clinical trials with the support of the Trust R&D office and the NIHR Medicines for Children Local Research Network. The Trust has a growing critical mass of research activity in Oncology, Rheumatology, Infectious Diseases, Respiratory Medicine, Endocrinology/Diabetes and Neurosciences but is witnessing a growth in research activity in Gastroenterology, Nephrology, and Critical Care. One of the highest recruiting studies was SPICED: "Development of a rapid salivary test to detect serious bacterial infection in children presenting to the accident and emergency department" which looked at a using a less invasive means of bacterial infection detection.

Our engagement with clinical research also demonstrates Alder Hey's commitment to testing and offering the latest medical treatments and techniques.

## 2.2.5. Use of the Commissioning for Quality and Innovation Framework (CQUIN) payment framework

A proportion of Alder Hey's income in 2012/13 was conditional upon achieving quality improvement and innovation goals agreed between Alder Hey and any person or body entered into a contract, agreement or arrangement for the provision of NHS services, through the Commissioning for Quality and Innovation payment framework. During 2012/13 these commissioning bodies consisted of Liverpool Primary Care Trust (PCT) and consortia partners Sefton PCT, Knowsley PCT and the North West Specialist Commissioners.

For 2012/13 the baseline value of CQUIN was £3.1m which was 2.5% of the total contract value. This means that if Alder Hey did not achieve an agreed quality goal then a percentage of the total CQUIN money would be withheld. For 2012/13 Alder Hey received 100% of the CQUIN money. The CQUIN goals and related percentage of contract value are overleaf.

See overleaf for CQUIN goals

# Local Commissioner CQUINs 2012-13

| Domain | Indicator | Indicator Description | Target | Weighting | Financial Value | End of Year Performance |
|---|---|---|---|---|---|---|
| Patient Experience | Investing in Children | Accreditation of 2 new areas | 2 | 0.15% | 2 | Fully achieved |
| | | Reaccreditation of accredited areas | 2 | | | |
| | | Survey results and recommendations documented and discussed at appropriate Boards/Committees | Not applicable (N/A) | | | |
| Patient Safety | Paediatric Safety Scan | Development of a National Paediatric Safety Scan prevalence tool to measure paediatric harm. The four areas which will be assessed are: skin integrity, extravasation, early warning risk assessment and pain | Reporting update of the project, draft definitions and pilot data | 0.10% | £44,424 | Fully achieved |
| Clinical Effectiveness | Electronic Discharge Summaries | Contain minimum dataset | 98% | 1.00% | £444,243 | Fully achieved |
| | | Sent to GPs within 24 hours | 95% | | | |
| | | Patients to receive a copy of their discharge summary on day of discharge | 95% | | | |
| | Electronic Outpatient Correspondence | Provide implementation plan | Jun-12 | | | |
| | | Milestones completed within timeframe specified | N/A | | | |
| | | Letters sent to GPs within 2 weeks from identified areas: Dermatology | N/A | | | |
| Clinical Effectiveness | Medicine Management | Prescribing of Omalizumab for severe persistent allergic asthma in line with NICE TA 201 | 95% | 0.625% | £277,652 | Fully achieved |
| | | Prescribing of Etanercept for the treatment of Juvenile Idiopathic Arthritis in line with NICE TA 35 | 95% | | | |
| | | Prescribing of Tocilizumab for Systemic Juvenile Idiopathic Juvenile Arthritis is in line with NICE TA 238 | 95% | | | |
| | | Minimum dataset supplied for PBR-excluded cytokine modulators for non-Cancer treatment with data recharges from Provider to Commissioner | 95% | | | |

| Domain | Indicator | Indicator Description | Target | Weighting | Financial Value | End of Year Performance |
|---|---|---|---|---|---|---|
| Clinical Effectiveness, Safety and Patient Experience | Energise for Excellence: Nursing Indicators | Participation in programme | N/A | 0.625% | £46,275 | Fully achieved |
| | Your Skin Matters | Maintain 2011-12 performance of 17 grade 2 pressure ulcers | ≤17 | | £46,275 | Partially achieved |
| | | Pressure ulcer risk assessments undertaken within 6 hours admission to an inpatient ward using agreed tool | 100% | | | |
| | | Mini RCAs carried out on all grade 2, full RCA grade 3+ | 100% | | | |
| | Keeping Nourished | Nutritional screening tool implemented on admission incl measure weight | 95% | | £46,275 | Fully achieved |
| | | Appropriate care plan for patients at risk of malnutrition. High risk referred to Dietician | 95% | | | |
| | Important Choices: Where to Die When the Time Comes | Liverpool Care Pathway to be revised and second pilot commenced in community by Q2 | N/A | | £46,275 | Partially achieved |
| | | Focus Groups of professionals in the hospital setting and initial scoping of LCPC for use in hospital by Q4 | N/A | | | |
| | | Preferred Place of Care for End of Life patients to be recorded via new Meditech death date collection system | 90% by Q4 | | | |
| | | Relevant personalised care plan developed within 2 weeks of initial assessment | 95% | | | |
| | | Patients transferred to their preferred place of care within 48 hours when end of life is recognised | 95% | | | |
| | | Documented evidence that pain is assessed and controlled at the time of death | 95% | | | |

| Domain | Indicator | Indicator Description | Target | Weighting | Financial Value | End of Year Performance |
|---|---|---|---|---|---|---|
| Clinical Effectiveness, Safety and Patient Experience | | Patients reporting symptoms (Respiratory Secretions, Terminal Agitation, Nausea and Vomiting) have documented evidence that they are assessed and controlled at time of death | 95% | | | |
| | | Patients at the end of life will have a fax/electronic correspondence sent to their GP when discharged from hospital to facilitate their entry onto the electronic supportive care template | 95% | | | |
| | Fit and Well to Care | Demonstrate actions taken to implement recommendations of the Boorman Health and Wellbeing Report | N/A | | £46,275 | Fully achieved |
| | Reduction in Surgical Site Infections (SSIs) in Orthopaedics | Reduce incidences of SSIs in cardiac surgery, neurosurgery and spinal surgery | Set Process & Baseline (Q1 & Q2) Agree Data collection target - monitor against this (Q3 & Q4) | | £46,275 | Fully achieved |

## North West Specialised Commissioning Team CQUINs

### CQUIN Pick List

| Domain | Indicator | Indicator Description | Target | Weighting | Financial Value | End of Year Performance |
|---|---|---|---|---|---|---|
| Patient Safety | PIC: Unplanned Extubation | % of unplanned extubations for which a review (and action plan if necessary) were completed | 90% | 10% | £198,426 | Fully achieved |
| | PIC: Unplanned Readmissions | Reduction on % of unplanned readmissions to PICU within 48 hrs | Develop baseline | 10% | £198,426 | Fully achieved |
| Clinical Effectiveness | Haemophilia: Joint Immobilising Bleeds | Reduction on number of breakthrough bleeds | Reduction from 11/12 | 5% | £99,213 | Partially achieved |

| Domain | Indicator | Indicator Description | Target | Weighting | Financial Value | End of Year Performance |
|---|---|---|---|---|---|---|
| Patient Experience | Haemophilia: Use of Haemtrack | % of paediatric and adult patients completing information records via Haemtrack, data stratified by condition severity | N/A | 5% | £99,213 | Fully achieved |
| Clinical Effectiveness | Neuromuscular: Use of 'Early Warning Pack' | Q1: Draft proposal<br>Q2: Engagement and set baseline<br>Q3: Identify areas for Improvement and roll out<br>Q4: Promote system and feedback results | N/A | 5% | £99,213 | Fully achieved |
| Patient Experience | CAMHS Tier 4:Service User Defined CPA Standards | Service User defined CPA standards | N/A | 3% | £59,528 | Fully achieved |
| | CAMHS Tier 4:Length of Stay | CAMHS Tier 4: Optimising Length of Stay | N/A | 3% | £59,528 | Fully achieved |
| | CAMHS Tier 4: Recruitment | CAMHS Tier 4: Patient (Carer) involvement in recruitment | N/A | 3% | £59,528 | Fully achieved |
| Clinical Effectiveness | Cardiac Services: Improving the NW Cardiac Network | Cardiac Services: Improving the NW Cardiac Network | N/A | 6% | £119,056 | Fully achieved |
| Clinical Effectiveness, Patient Experience and Patient Safety | Local Commissioner CQUINs (see page 61) | | | 10% | £198,426 | Partially achieved |
| **Dashboards** | | | | | | |
| Clinical Effectiveness, Patient Experience and Patient Safety | Dashboards | Bone Marrow Transplant | N/A | 2% | £39,685 | Partially achieved |
| | | Haemophilia | N/A | 2% | £39,685 | Fully achieved |
| | | Burns | N/A | 2% | £39,685 | Fully achieved |
| | | Cystic Fibrosis | N/A | 2% | £39,685 | Fully achieved |
| | | HIV | N/A | 2% | £39,685 | N/A Not implemented in 2012-13 |

| Domain | Indicator | Indicator Description | Target | Weighting | Financial Value | End of Year Performance |
|---|---|---|---|---|---|---|
| **Dashboards** | | | | | | |
| | | Paediatric Cardiac Surgery | N/A | 2% | £39,685 | N/A Not implemented in 2012-13 |
| | | Paediatric Intensive Care | N/A | 2% | £39,685 | Fully achieved |
| | | Paediatric Neurosurgery | N/A | 2% | £39,685 | Fully achieved |
| | | Major Trauma | N/A | 2% | £39,685 | N/A Not implemented in 2012-13 |
| | | CAMHs Tier 4 | N/A | 2% | £39,685 | Fully achieved |
| **National CQUINs** | | | | | | |
| Clinical Effectiveness, Patient Experience and Patient Safety | Patient Experience: Investing in Children | | | 8% | £158,741 | Fully achieved |
| | Paediatric Safety Scan | | | 12% | £238,112 | Fully achieved |

Further details of the agreed goals for 2012/13 and for the following 12 month period are available online at **www.monitornhsft.gov.uk**

## 2.2.6 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 regulated activities of: diagnostic and screening procedures, surgical procedures and treatment of disease, disorder or injury. Alder Hey remains registered without conditions.

The Care Quality Commission has not taken any enforcement action against Alder Hey during 2012/13.

Alder Hey has participated in special reviews or investigations by the Care Quality Commission relating to the following areas during 2012/13:

- Ionising Radiation.
- Outcome 1 (Respecting and Involving People Who Use Services), outcome 4 (Care and Welfare of People Who Use Services), outcome 7 (Safeguarding People Who Use Services from Abuse), outcome 14 (Supporting Workers) and outcome 16 (Assessing and Monitoring the Quality of Service Provision).
- Outcome 8 (Cleanliness and Infection Control), outcome 11 (Safety, Availability and Suitability of Equipment) and outcome 13 (Staffing).
- Registration as a provider of the regulated activity of: assessment or medical treatment for people detained under the Mental Health Act 1983.

Ionising Radiation by the Care Quality Commission related to the Ionising Radiation (Medical Exposure) Regulations 2000 and amendments made in 2006, known as IRMER. Minor concerns were raised in relation to establishing the pregnancy status of female patients of childbearing age. An action plan was developed by the Radiology Department following the CQC visit. Actions completed include: ensuring all clinical trials requiring exposure to ionising radiation now have the protocols sent to the Radiation Protection Advisors (IRS Ltd) for discussion and to agree dose constraints and completion of an audit of the procedure for the clinical evaluation of dental images. Work is ongoing to develop a Trust wide system for the checking of pregnancy status.

Alder Hey was subject to a routine unannounced inspection in November 2012 which focused on five outcomes. As a result of the inspection the Trust was found to be fully compliant against the following outcomes: outcome 1 (Respecting and Involving People Who Use Services), outcome 4 (Care and Welfare of People Who Use Services), outcome 7 (Safeguarding People Who Use Services From Abuse), outcome 14 (Supporting Workers) and outcome 16 (Assessing and Monitoring the Quality of Service Provision).

Alder Hey was subject to an unannounced inspection in January 2013 which focused on three outcomes: outcome 8 (Cleanliness and Infection Control), outcome 11 (Safety, Availability and Suitability of Equipment) and outcome 13 (Staffing). The Trust was found to be fully compliant with outcomes 11 and 13; we are awaiting the formal report from the Care Quality Commission in relation to outcome 8.

In order to register as a provider of the regulated activity of assessment or medical treatment for people detained under the Mental Health Act 1983, the inpatient Dewi Jones Unit at Alder Park in Crosby was inspected by the Care Quality Commission in February 2013. A decision about registration for this regulated activity will be made shortly by the Care Quality Commission.

### 2.2.7 Information on Data Quality

### 2.2.7.1 Data Quality

Alder Hey Children's NHS Foundation Trust submitted records during 2012/13 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 the patient's valid NHS Number was: (99.53%) for admitted patient care; (99.82%) for outpatient care; and (99.49%) for accident and emergency care.
- Included the patient's valid General Medical Registration Code was: (100%) for admitted patient care; (100%) for outpatient care; and (100%) for accident and emergency care.

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

- Continue to review our suite of Data Quality reports ensuring that errors identified are corrected and monitored on a regular basis.
- Continue to hold workshops for staff to ensure the integrity of data held on our clinical systems is accurate at source.

### 2.2.7.2 Information Governance Toolkit attainment levels

Alder Hey Children's NHS Foundation Trust Information Governance Assessment Report overall score for 2012/13 was 80% and was graded as satisfactory (green).

### 2.2.7.3 Clinical Coding Error Rate

Alder Hey Children's NHS Foundation Trust was subject to the Payment by Results clinical coding audit during the reporting period by the Audit Commission and the error rates reported in the latest published audit for that period for diagnoses and treatment coding (clinical coding) were:

- Primary Diagnoses Incorrect 5%.
- Secondary Diagnoses Incorrect 1%.
- Primary Procedures Incorrect 4.3%.
- Secondary Procedures Incorrect 15.4%.

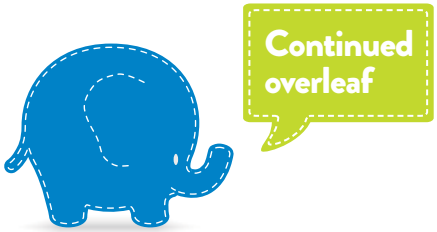
The results should not be extrapolated further than the actual sample audited and the services audited during this period included:

- 100 Random Finished consultant episodes non-elective admissions through A&E with length of stay less than one day.

## Part 3: An overview of quality of care

In order to ensure that we provide the best quality services to everyone who is part of the Alder Hey community, we recognise that we must continue to stretch ourselves and set goals that we can measure in order to demonstrate that we truly put quality at the heart of everything we do. In 2011/12, in consultation with our staff, governors and patients we agreed on a number of goals in each of the quality 'domains' of patient safety, clinical effectiveness and patient experience.

This section of the Quality Account provides an overview of the progress made against the 2012/13 identified priorities, which were:



| | |
|---|---|
| **Priority 1:** Patient Safety | • Improved recognition of patient deterioration and a reduction in cardiac arrests, through implementation of PEWS (Paediatric Early Warning System).<br>• A reduction in medication errors.<br>• Improved safety and prevention of VTE (Venous Thromboembolism). |
| **Priority 2:** Clinical Effectiveness | • Enhanced hospital mortality review process.<br>• Implementation of a surgical site infection surveillance programme.<br>• Implementation of Paediatric Nurse sensitive indicators. |
| **Priority 3:** Patient Experience | • Use of Fabio Trust-wide to improve patient experience, engagement and feedback.<br>• Develop parent information leaflets for a number of long term conditions.<br>• Develop a transition assessment tool for neuro and cardiac patients. |

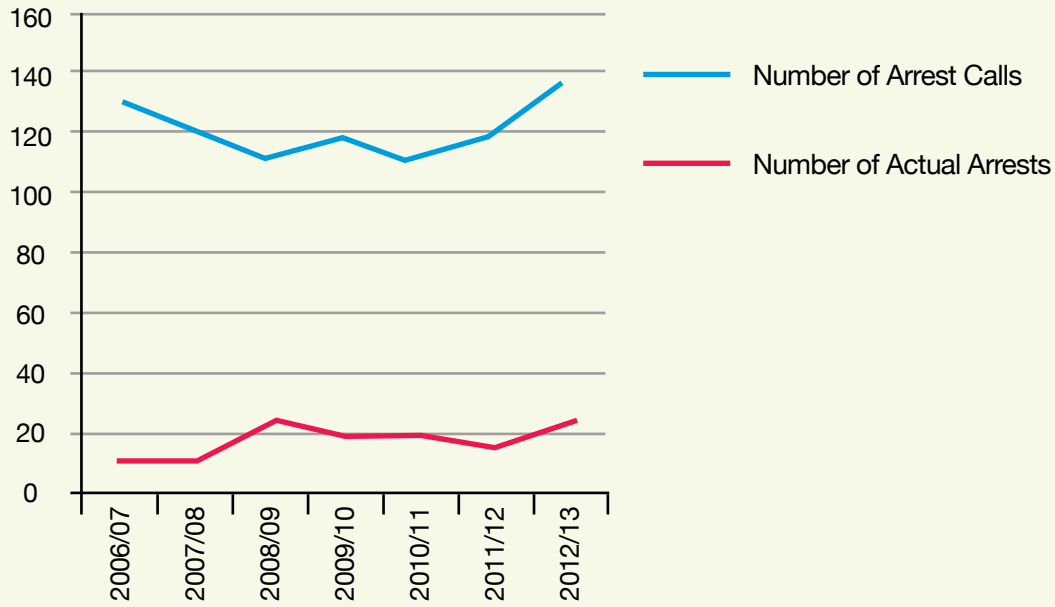
## 3.1 Patient Safety

| Quality Improvement Priority | Improved Recognition of Patient Deterioration and a Reduction in Cardiac Arrests, Through Implementation of PEWS (Paediatric Early Warning System) |
|---|---|
| Why was this area chosen as a priority for improvement? | A cardiac arrest is a catastrophic event for a child and their family. There is an increasing dependency of ward patients and a greater number of cardiac arrests. Missed patient deterioration incurs longer length of stay for patients and extra costs of additional care delivered. |
| What were the improvement aims? | The PCT provided £60,000 funding to invest in reviewing and improving the PEW system, improve training for ward nurses and doctors and develop mechanisms for reviewing missed deterioration so that other organisational and clinical factors are addressed. |
| How was the improvement monitored? | The resuscitation training officers capture the data for cardiac arrest calls, which are not always actual arrests but a result of deterioration. The data is used for internal reporting and provided to the National Cardiac Arrest Audit (NCCA) database which compares the outcomes of Alder Hey to the other participating Trusts.<br>Resuscitation Committee reviews all matters related to cardiac arrests, outside of Paediatric Intensive Care Unit (PICU) and theatres.<br>PICU review all readmissions to PICU within 48hrs of discharge. |
| Quality improvements and key successes achieved in 2012/13 | Currently the Trust is part way through converting to age specific evidence based PEW charts. They were trialled in four clinical areas. They are now in use in an additional six areas. There is an ongoing requirement to reinforce the PEW process in all areas and feedback to individual areas.<br>Developed multi-professional RESPOND (Recognising Signs of Paediatric Deterioration) course aimed at ward nurses and junior doctors; which utilises real case based scenarios, to help frontline staff to recognise common patterns of paediatric deterioration and target their clinical response.<br>The NCCA database shows the arrests and survival rates for 2011/12: (2012/13 comparison data unavailable). |

| **NCCA Database April 2011 to February 2012** (Paediatric is defined as a child greater than 28 days to less than 16 years of age). | **All Cardiac Arrest Team Visits - Alder Hey** | **All Paediatric Team Visits in the NCCA Database** |
|---|---|---|
| Number of team visits | 16 | 199 |
| Number of individuals | 15 | 196 |
| Return of a spontaneous circulation that was sustained for greater than 20 minutes | 14 | 80 |
| *Survival to hospital discharge | 9 | 54 |
| ‡ Favourable neurological outcome | 4 | 24 |

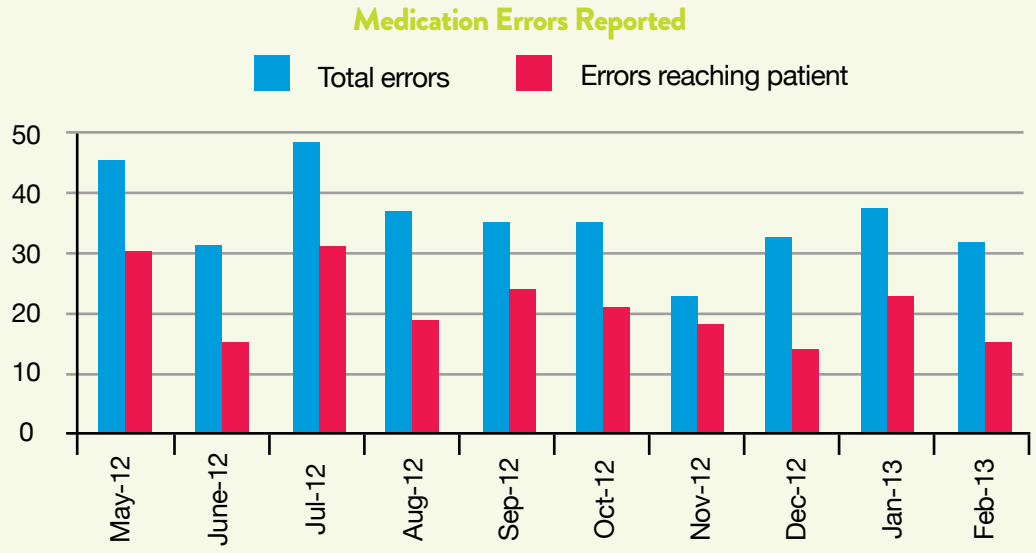
*Excludes individuals missing status at discharge from hospital.
‡ Excludes individuals sedated on discharge from your hospital and individuals alive, not sedated and missing CPC at discharge from your hospital.

Alder Hey does not have an independent Medical Emergency Team and as such when patients deteriorate a cardiac arrest call is made even though the patient may not have had a cardiac arrest. The increased incidence of inpatient cardiac arrest calls, and actual cardiac arrests [requiring cardiac massage and drugs] since the introduction of PEWS in 2006 and conversion to the new age specific PEWS highlights the ongoing challenge of managing in-hospital deterioration, presented in the chart below. There has been an increase in actual cardiac arrests in 2012/13 compared to 2011/12 but there is recognition that there is an increasing dependency of patients.




What are the next steps in 2013/14?

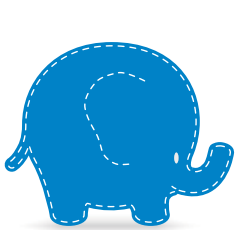
Completion of the scheduled roll out of the age specific PEWS to all remaining wards will be achieved in 2013/14, with simultaneous training and support on each ward.
No preventable deterioration is one of the Trusts developmental quality sub-aims.

| Quality Improvement Priority | A Reduction in Medication Errors |
|---|---|
| Why was this area chosen as a priority for improvement? | Almost every patient who is admitted to hospital requires medication. Prescribing, administering and dispensing medicines for children is a complex process and requires 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 three main reasons:<br>• 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.<br>• 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.<br>• Being involved in a medication error can be a very difficult experience for patients, their families and the staff involved. |
| What were the improvement aims? | A reduction in the number of medication errors reaching a patient.<br>An increase in the number of "near-miss" medication errors. |
| How was the improvement monitored? | Medication incidents are reported via the Ulysses incident reporting system. Monthly reports are reviewed by the Safe Medication Practice Committee (SMPC) who report to the Drug and Therapeutics Committee. |
| Quality improvements and key successes achieved in 2012/13 | • Increased teaching on preventing medication errors provided for clinical staff across the Trust.<br>• Information on how we can learn from the errors that have happened is sent to all clinical staff every month.<br>• Audits of prescribing are undertaken monthly.<br>• A special project on reducing errors related to administering medicines called "Breakthrough Collaborative" launched in June 2012. Teams from four wards and Pharmacy are involved.<br>• Safety posters have been produced to highlight specific medicines safety issues.<br>  <br>• There has been a slight reduction in the number of medication errors reported per month over the last 10 months.<br>• There has not been a reduction in the percentage of medication errors which have reached a patient.<br>• There has not been an increase in the number of near-misses reported. |
| What are the next steps in 2013/14? | This will remain a high priority for the Trust. No drug errors resulting in harm is one of the Trusts developmental quality sub-aims. |

| Quality Improvement Priority | Improved Safety and Prevention of VTE (Venous Thromboembolism) |
|---|---|
| Why was this area chosen as a priority for improvement? | NICE guidance on Venous Thromboembolism covers adults from the age of 18. A review of literature produced very little guidance for paediatrics. |
| What were the improvement aims? | To develop a Paediatric VTE risk assessment tool. |
| How was the improvement monitored? | A small task and finish group was established. Progress with this project has been reported to the Clinical Quality Steering Group. |
| Quality improvements and key successes achieved in 2012/13? | A paediatric risk assessment tool has been developed, based on the available evidence base.<br>This has been through consultation with medical staff and is currently in the process of being reviewed by nursing staff.<br>This risk assessment tool will be added to the Meditech patient assessment screens. |
| What are the next steps for 2013/14? | The risk assessment tool will be rolled out across the Trust in 2013/14 and implementation will be monitored. |

## 3.2 Clinical Effectiveness

| Quality Improvement Priority | Hospital Mortality Review Process |
|---|---|
| Why was this area chosen as a priority for improvement? | Mortality is seen as an important outcome in healthcare. The organisation has attempted to undertake a Trust wide review of all inpatient mortality for the last few years by instigating the Hospital Mortality Review Group (HMRG). We wished to adapt our historical approach to mortality review to accommodate the new structures within the organisation and to improve reporting analysis and any proposed action arising from such reviews to the appropriate CBUs. The new review process has now incorporated reporting in line with NECPOD and CEMACH assessment criteria and assigns action plans to timescale and lead responsibility at a local level; this can then be co-ordinated by CBU boards with oversight by the HMRG giving assurance to the Trust Board. |
| What were the improvement aims? | To ensure all inpatient deaths and deaths within 30 days of discharge are reviewed by the relevant service within a two month time frame and by the HMRG within a four month time frame. |
| How was the improvement monitored? | A new process was instigated in January 2012 with ongoing monitoring via clinical audit. HMRG reports to the Clinical Quality Steering Group (CQSG), Clinical Quality Assurance Committee (CQAC) and Trust Board. |
| Quality improvements and key successes achieved in 2012/13? | 53 of the 54 mortality reviews have been undertaken by the HMRG, the outstanding case has been delayed due to factors outside of the HMRG control.<br>Nearly all deaths have had completed at least one full Mortality Review within two months of their death. In two cases (May 1; August 1) a Departmental/Service Group Mortality Review did not occur within the target two month period. However, in October all the departments involved had reviewed all their cases within one month, rather than within the two month limit.<br><br>The Departmental Mortality Reviews and HMRG highlighted two deaths that would benefit from further examination. Although the mode of death was different, both occurred in the same Department and this triggered the HMRG to instigate a review to assess whether there were common service or system failures. The review concluded that this was not the case. |



Continued overleaf

Mortality is being monitored using the Cumulative Sum Chart (CUSUM) and Sequential Probability Ratio Test (SPRT).

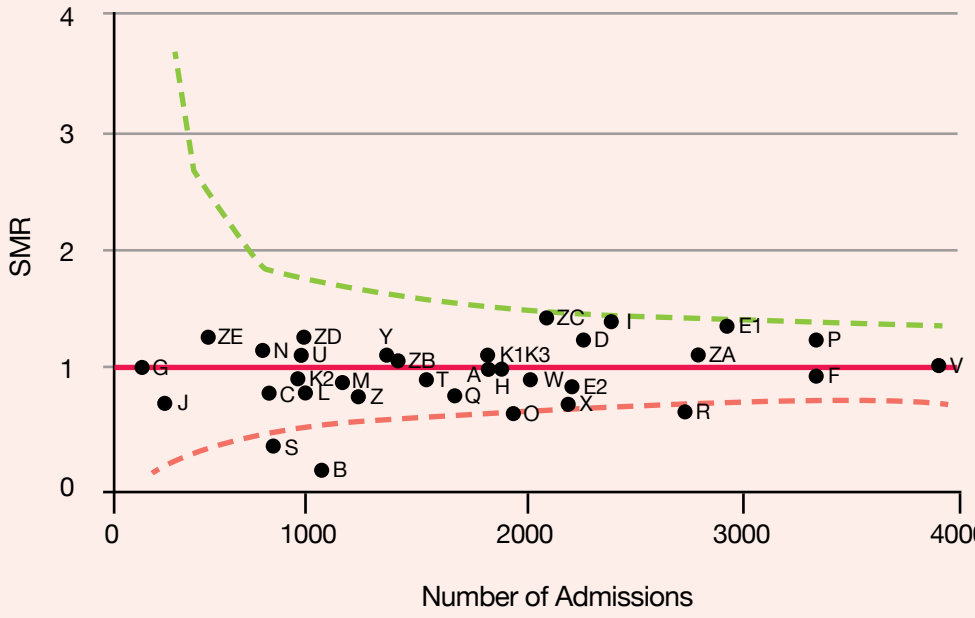
CUSUM is a cumulative sum chart method used to monitor the difference in expected and actual mortality sequentially over a series of patients. The predicted mortality for Paediatric Intensive Care (PICU) is given by the risk adjustment model the Paediatric Index of Mortality 2 (PIM2). Sequential Probability Ratio Test (SPRT) tests the hypothesis that the odds of death in PICU has doubled against the alternate hypothesis that the odds of death has not doubled. Control limits are set to determine whether the hypothesis should be accepted or rejected.

Statistical analysis of mortality using CUSUM and SPRT is currently being reported to PICU on a fortnightly basis. In the event of a trigger of high levels of mortality, the patient deaths will be reviewed and discussed in the Hospital Mortality Review Group. The CUSUM and SPRT are work in progress and subject to change as new risk models are introduced.

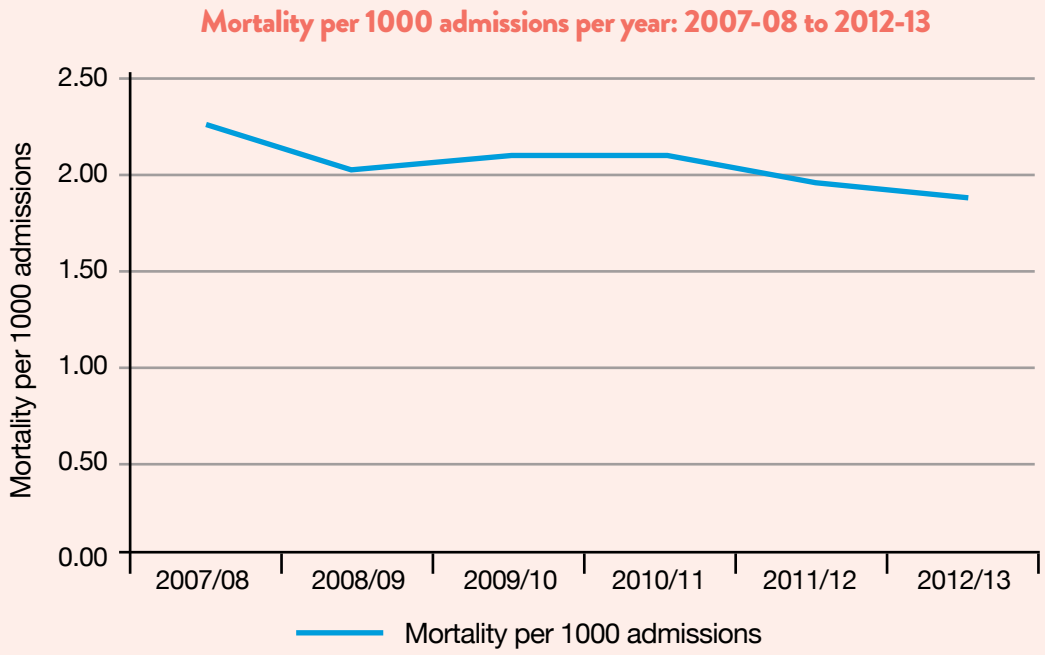
Reports have been produced to allow real time monitoring of mortality. Deaths will be analysed by year, ward, and specialty, deaths within 7 days, 30 days and over 30 days from admission. There are no current indications of patterns of concern.

Alder Hey benchmarks externally for PICU, Congenital Cardiac Disease and Oncology. In the most recent PICANet report (Ninth Annual Report of the Paediatric Intensive Care Audit Network January 2009-December 2011), mortality is displayed in funnel plots. The Standardised Mortality Ratios (SMRs) for each organisation are plotted against the number of admissions. The SMR is the ratio of the observed number of deaths in the population against the expected number of deaths. Control limits are displayed on the funnel plots; variation within these limits is termed common-cause variation; variation outside of these limits is special-cause variation. Points above the upper control limit indicate higher than normal mortality; highlighting the need for further investigation into the mortality rate.

The chart below is taken from PICANet's most recent report, and shows the PICU Standard Mortality Ratios by organisation with 99.9% control limits, 2009-11: PIM2r adjusted.




The funnel plot above shows Alder Hey at point 'P'. The SMR for Alder Hey is within the control limits of the funnel plot, suggesting mortality is under control.

| | |
|---|---|
| | The chart below shows mortality per 1000 admissions per year form 2007/08 to 2012/13.<br>  <br> |
| What are the next steps for 2013/14? | The HMRG is an established group that will continue to ensure that practice is consistently reviewed and improved to achieve improved patient outcomes. |

| Quality Improvement Priority | Implementation of a Surgical Site Infection (SSI) Surveillance Programme |
|---|---|
| Why was this area chosen as a priority for improvement? | Evidence from adult literature suggests infections of the surgical site account for approximately 14% of all hospital acquired infection (HAI), which is estimated to double the length of post-operative stay and significantly increase the cost of care. A number of studies show that well-organised surveillance and infection control programmes, which include feedback of infection rates to surgeons were associated with significant reductions in surgical site infection. However, the situation in paediatrics is less clear, particularly in the neonatal population.<br><br>At Alder Hey a very limited SSI surveillance programme has been in place. The expansion of the programme will provide valuable information on infection rates that will allow targeted improvements to be made.<br><br>The overall aim is to describe baseline rates in two areas (cardiac surgery and neurosurgery) in the first 12 months and subsequently implement SSI care bundles. Once baseline and SSI care bundles are established targets for reduction of SSI rates will be formulated. |
| What were the improvement aims? | • Develop data collection methodology.<br>• Implement and review data collection system.<br>• Develop and implement care bundle.<br>• Review data collected, reduction target and timescale. |
| How was the improvement monitored? | Improvement is monitored by regular data checking to ensure 30 day SSI follow up for all children within the relevant specialty.<br>The rates are reported to the Bi – Monthly IPCC and to Surgical CBU committees. |

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| Quality improvements and key successes achieved in 2012/13? | For cardiac surgery and neurosurgery robust data capture systems are being developed. The system will include follow up for all patients at 30 days and for 12 months for any patients with implants. This is recognised as the GOLD standard for SSI surveillance and many organisations do not capture or report this. Alder Hey aims to implement a robust data capture system to accurately report SSI rates.<br><br>Two service specific SSI care bundles have been developed for cardiac surgery and neurosurgery. Cardiac has been implemented; monitoring is to be undertaken in Quarter 1 (April to June) of 2013. Neurosurgery is going through the process of CBU ratification prior to implementation. |
| Evidence of improvement | For cardiac surgery complete data capture will be in place from Quarter 1 of 2013 and which will establish accurate post discharge surveillance. Analysis of existing SSI data led by the Cardiac Team demonstrates an average annual rate of 12.5% (this rate applies only to those patients where 30 day follow up data was available). Fluctuation of rate is to be expected whilst an SSI surveillance baseline is established.<br><br>For neurosurgery a robust data capture system, accurate post discharge follow up and analysis of data has been established by the Neurosurgery Team supported by the IPCT. Further work is needed to ensure capacity for timely analysis of data on a quarterly basis. The SSI rate was between 5.7 and 6.4%.<br><br>Although the rate appears low the baseline data does not provide enough information to corroborate this and further baseline data collection is required for a number of months.<br><br>A care bundle has been developed and is awaiting final ratification before implementation.<br><br>Spinal SSI surveillance commenced in July 2012 (first Quarter available to join). Internal systems have been set up by the IPC surveillance lead to ensure accurate data is provided and inputted to the Health Protection Agency (HPA) SSI site. The HPA release of data is not in real time due to capture of post discharge information. Data for July-Sept 2012 was made available in January 2012. No SSI was reported for this period.<br><br>No infections were identified during the period, although it should be noted that a full base line is required before any conclusions can be drawn from the data. |
| What are the next steps in 2013/14? | Further SSI surveillance is planned to incorporate orthopaedic implant surgery.<br><br>No hospital acquired infection is one of the Trusts developmental quality sub-aims. |

| Quality Improvement Priority | Implementation of Paediatric Nurse Sensitive Indicators |
|---|---|
| Why was this area chosen as a priority for improvement? | Nursing care indicators have been used in other hospitals throughout the United Kingdom to improve core fundamentals of nursing care. Alder Hey did not have evidence of any benchmark data on nursing care provision and the information being previously presented on key performance indicators merely reflected a measurement of audit data in respect of hand hygiene, cleanliness and incident reporting. It was agreed that Alder Hey should work alongside NHS Northwest on previously tested indicators used in adult services, because paediatric nursing sensitive indicators would support improvements in the provision of paediatric nursing care. |
| What were the improvement aims? | Nurse sensitive indicators measure the nursing care of patients relating to infection control, nutrition assessment, PEWS, pain management, patient documentation, patient identification, medication assessment and tissue viability / cannula assessment.<br><br>Aims were to set KPIs for the eight key nursing areas aiming to achieve a score of greater than 90% on a regular basis. |

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| | In addition staff are asked questions regarding their experience of care, whether they would recommend Alder Hey as a place to work, if they feel they are able to deliver high quality care and if they have had a PDR and training.<br><br>Parents and children over 5 years of age are also asked their views of the care they receive. |
| How was the improvement monitored? | Improvement is monitored on a monthly basis with ward managers submitting data on the assessment of 10 patients within each ward per month. Reports are produced for the corporate report and each Lead Nurse works with ward managers to produce action plans on a quarterly basis to examine improvements where areas are consistently measuring less than 79%. |
| Quality improvements and key successes achieved in 2012/13? | The Trust has seen improvements in the majority of wards over the last 12 months, particular within patient identification, medication practice and tissue viability.<br><br>The nursing indicators were reviewed and improved in September 2012 and a database set up so that ward managers can input information directly into the dashboard. |
| What are the next steps in 2013/14? | This will be an ongoing Trust priority in 2013/14 with stretch target for the assessment.<br><br>It is anticipated that additional assessments will be made in outpatients and theatres with specific areas for assessment of care.<br><br>A review of all the nursing indicators will take place in June 2013 and any improvements made to the dataset by September 2013. |

| Indicator | Oct-12 | Nov-12 | Dec-12 | Jan-13 | Feb-13 | Mar-13 |
|---|---|---|---|---|---|---|
| Infection Control and Environment | 92% | 93% | 87% | 87% | 89% | 84% |
| Medication Assessment | 96% | 95% | 96% | 95% | 97% | 97% |
| Nutrition Assessment | 96% | 94% | 92% | 96% | 95% | 94% |
| Pain Management | 83% | 86% | 81% | 87% | 84% | 89% |
| Patient Documentation | 99% | 98% | 89% | 96% | 99% | 93% |
| Patient Early Warning Score | 94% | 92% | 93% | 92% | 94% | 91% |
| Patient Identification | 97% | 100% | 97% | 99% | 96% | 98% |
| Tissue Viability/Cannula Site | 85% | 91% | 87% | 88% | 87% | 88% |
| **Total** | **93%** | **93%** | **91%** | **93%** | **93%** | **92%** |

## 3.3 Patient Experience

| Quality Improvement Priority | Use of Fabio Trust-Wide to Improve Patient Experience, Engagement and Feedback |
|---|---|
| Why was this area chosen as a priority for improvement? | To enable the Trust to capture real time patient experience data. |
| What were the improvement aims? | Collecting, interpreting and responding to patient feedback using key patient experience indicators and feedback trends will be shared and analysed throughout the Trust. |

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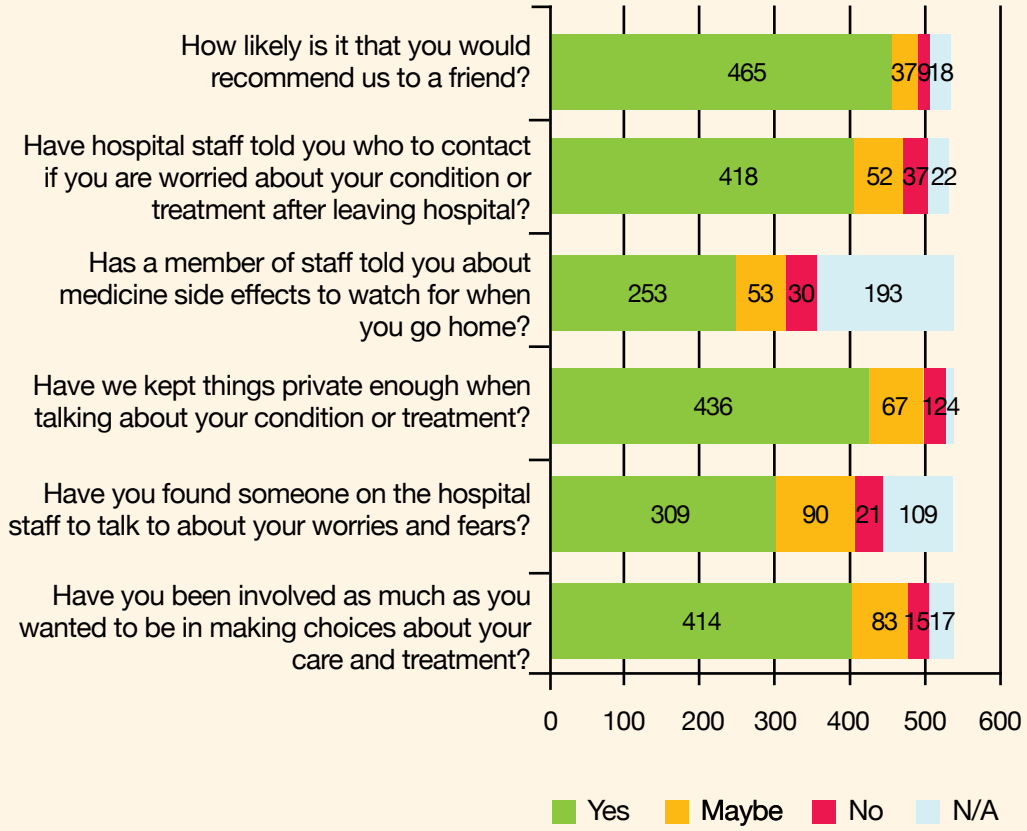
|---|---|
| How was the improvement monitored? | The implementation of Fabio is currently monitored by the Patient Experience staff and supported via the National Paediatric Toolkit Orovia ltd. The Concierge service undertakes the Patient Experience feedback surveys on a daily basis and utilisation and feedback is reported to Trust Board. |
| Quality improvements and key successes achieved in 2012/13? | • Asset list devised to track Fabio Devices.<br>• 21 new Fabio tablets and four older version tablets have been distributed to the CBU's.<br>• Individual areas are currently purchasing further Fabio Tablets.<br>• Fabio training by an external trainer from Orovia has been provided.<br>• 73 staff has been trained to use the Devices 27 of which are super users which means that they can set up, undertake and provide survey reports.<br>• Concierge staff and volunteers implemented Fabio November 2012 and collate patient experience feedback data on a daily basis. |
| Evidence of Improvement |  <br>There are two further active surveys that have commenced :-<br>• Craniofacial.<br>• Abdominal pain survey A&E.<br>Several other surveys are set up and now ready to be implemented with infection control, cardiac, and the Intravenous Therapy Team currently in the process of launching their surveys. |
| What are the next steps in 2013/14? | The team will facilitate and provide cascade training and support to the CBUs to further develop the reporting and sharing of this feedback. All new volunteers recruited to the Trust will be trained to use the devices providing further support to the CBUs.<br>This will be an ongoing priority for the Trust and patients will have the best possible experience is one of the Trusts developmental Quality aims. |

| Quality Improvement Priority | Development of a Methotrexate Patient Information Leaflet |
|---|---|
| Why was this area chosen as a priority for improvement? | The Rheumatology Team aim to provide up to date, relevant information for young people in our care and the families who support them. Good information underpins their involvement in their daily treatments and we encourage them to develop a healthy lifestyle. We aim to help them develop competence and confidence in managing their condition so that they function independently as adults. |
| What were the improvement aims? | Develop a support leaflet covering Methotrexate drug therapy. It has been designed to give a broad overview of the medication, including the "Do's and Dont's" that will support understanding and facilitate improved compliance. |
| How was improvement monitored? | Team and Multi-Disciplinary Team Meetings with lead clinician accountability. |
| Quality improvements and key successes achieved in 2012/13? | All eligible patients will be given the information. Other teams involved in the care of children with chronic disease will also have access to this as a resource. This has enabled improved understanding across the clinical teams concerning this drug, as many complex children with chronic diseases have multiple teams involved in their care. |
| What are the next steps in 2013/14? | This drug is being used more frequently as improved clinical outcomes are achieved. Patient numbers will continue to increase and this parent information leaflet will continue to be made available to all services across the Trust. Rheumatology patients and their parents are visited by the specialist nurse team when an inpatient. Closer working with other specialist nurses working in different departments will improve the quality and timeliness of parent information around Methotrexate being distributed. |

| Name of Quality Improvement Programme | Development of an 'Alder Hey Transitional Care Programme Record' |
|---|---|
| Why was this area chosen as a priority for improvement? | The Cystic Fibrosis (CF) Team aim to provide up to date, relevant information for young people in our care. Good information underpins their involvement in their daily treatments and we encourage them to develop a healthy lifestyle. We aim to help them develop competence and confidence in managing their condition and clinical consultations so that they function independently as adults. |
| What were the improvement aims? | Review the Transitional Care Programme Record and ensure it is introduced to all eligible members of our clinic (aged >12yrs). |
| How was improvement monitored? | The Transitional Care Programme Record is reviewed by the CF multi-disciplinary team (MDT) as part of our regular CF Service review to ensure it is relevant. |
| Quality improvements and key successes achieved in 2012/13 | All eligible patients have been involved in the programme from the age of 13 years. The content of the Transitional Care Programme Record can be summarised to provide information for the referral to adult services.<br>Other teams involved in the care of children with chronic disease have used this as a resource when designing their own transitional care programme. |
| What are the next steps in 2013/14? | The programme will be extended to the patients in the partner hospitals in our Cheshire and Mersey Regional CF Network. |

| Name of Quality Improvement Programme | Develop of an Asthma and Wheezy Patient Information Leaflet (Action Plan). |
|---|---|
| Why was this area chosen as a priority for improvement? | The Asthma Team aim to provide up to date, relevant information for young people in our care and the families who support them.<br>Good information underpins their involvement in their daily treatments and we encourage them to develop a healthy lifestyle. We aim to help them develop competence and confidence in managing their condition so that they function independently as adults. |
| What were the improvement aims? | Develop a support leaflet covering Asthma and the Wheezy child. They have been designed to give a broad overview of condition management and medication, including the "Do's and Don'ts" that will help to support understanding and facilitate improved compliance. |
| How was improvement monitored? | Team and Multi-Disciplinary Team Meetings with lead clinician accountability. |
| Quality improvements and key successes achieved in 2012/13? | All eligible patients have been given the information. Other teams involved in the care of children with chronic disease also have access to this as a resource.<br><br>This has enabled improved understanding across multi-agency teams concerning the treatment of these conditions as many complex children with chronic diseases have multiple teams involved in their care. |
| Will this be an ongoing priority for the Trust for 2013/14? | Patient numbers suffering from these conditions will continue to increase and this parent information will be made available to all services across the trust. Asthma patients and their parents are visited by the specialist nurse team when an inpatient. Closer working with other specialist nurses working in different departments will improve the quality and timeliness of parent information around Asthma/Wheezy child being distributed. |

| Quality Improvement Priority | Develop a Transition Assessment Tool for Cranio-facial Patients |
|---|---|
| Why was this area chosen as a priority for improvement? | Many of the children who are seen with the Cranio-facial Team are with us for a long time. The Cranio-facial Team is a multidisciplinary team (MDT) made up with several disciplines, including neurosurgeons, plastic surgeons, maxiofacial surgeons, ENT surgeons, speech language therapy and psychology. The operations need to be undertaken jointly with a Neurosurgeon and a Plastic Surgeon together with Maxillary Facial Surgeon.<br>The MDT recognised the need for improved transition to the adult sector for a lot of our teenage children. |
| What were the improvement aims? | It has been shown that when young people and their carers first make the move or transfer from children's services to adult services, they may feel nervous about the change. However, when they are prepared for the move, they may find it easier to cope in the new situation.<br><br>What are the aims of transition in the Cranio-facial Clinic?<br>• To provide support and information to teenagers and parents as they move through the process of transition.<br>• To enhance control and independence.<br>• To support teenagers in the development of skills needed to help them move on to adult care. |
| How was improvement monitored? | Improvement is monitored as per the outcomes of the adult transition clinic. Our clinicians also attend the transitional clinic off site to make sure that the patient is being seen by somebody who knows the history of their care. |

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|---|---|
| Quality improvements and key successes achieved in 2012/13? | The transitional clinic has been up and running for approximately 12 months. This has proved successful for the Cranio-facial Team allowing them to have more appointments available to the new children referred into the service. This service is something that is happening in our Cleft Service as well – and many of the clinicians aim to provide a good transition for our long term patients. |
| What are the next steps in 2013/14? | We will continue to work with many of our specialties to look at transition for those patients who would benefit from such a service. |

| Quality Improvement Priority | Develop a Transition Assessment Tool for Cardiac Patients |
|---|---|
| Why was this area chosen as a priority for improvement? | Young people and their families were anxious/afraid of moving to adult services. In addition, there was no clear programme of education for young people on their conditions, medications, surgeries, etc and managing these, including future impact on careers, pregnancies, lifestyle issues. |
| What were the improvement aims? | To establish a regular clinic for educating and empowering young people, providing support, information and links with the adult centres and youth forums. |
| How was the improvement monitored? | Currently improvement is monitored through verbal feedback and high attendance rates. |
| Quality improvements and key successes achieved in 2012/13? | The extremely positive verbal feedback shows that those who have attended have benefitted. Patients and families are now actively seeking to attend, an indication that awareness of the service is increasing and people are discussing its positive impact.<br>Recently the Investing In Children Team which visited Alder Hey looked closely at the work done through the Young People's Clinic (Cardiac) and were impressed, another sign of the success of the clinics.<br>Evidence of improvement is currently based on informal feedback. |
| What are the next steps in 2013/14? | It is an ongoing priority, as the issues the clinics address (the need for education and reducing anxiety) will persist. The main aims are to:<br>1. Begin the education/transition process at age 12/13 for all cardiac patients.<br>2. Address the geographical problems impacting on attendance.<br>3. Re-establish formal transition clinics for 17/18 year olds.<br>4. Establish a formal feedback system to identify other areas for improvement. |

## 3.4 Performance Against National Priorities

The Trust achieved all national priorities as indicated below:

| National Targets and Minimum Standards | Target or Indicator | Target (2012-13) | 2012-13 | 2011-12 | 2010-11 |
|---|---|---|---|---|---|
| Clinical Effectiveness | Summary Hospital-Level Mortality Indicator (SMHI)[1] | | n/a | n/a | n/a |
| | Readmission Rate Within 28 Days of Discharge[2] - 0 - 14 yrs | 10.8% | 9.9% | 7.2% | 9.4% |
| | - > 15 yrs | 7.7% | 6.7% | 5.7% | 6.4% |
| Infection Control | Clostridium Difficile - Meeting the C.Diff Objective | 3 | 0 | 4 | 3 |
| | MRSA - Meeting the MRSA Objective | 1 | 0 | 1 | 2 |

| | | | | | |
|---|---|---|---|---|---|
| Patient Safety | Patient Safety Incidents and the Percentage That Results in Severe Harm or Death | | Apr - Sept 792 = 0 Resulting in severe harm or death | Apr - Sept 538 = 0 Resulting in severe harm or death Oct - Mar 613 = 0 Resulting in severe harm or death | Apr - Sept 459 = 0 Resulting in severe harm or death Oct - Mar 362 = 0 Resulting in severe harm or death |
| | Rate of Patient Safety Incidents per 100 Admissions | | Apr- Sept Trust 4.7 Median 5.8 | Apr - Sept Trust 2.5 Median 6.2 Oct - Mar Trust 2.8 Median 7.0 | Apr - Sept Trust 2.2 Median 6.6 Oct - Mar Trust 1.7 Median 5.4 |
| | % of Above Patient Safety Incidents = Severe/Death | | Apr - Sept Trust 0 National just under 1% | Apr - Sept Trust 0 National just under 1% Oct - Mar Trust 0 National just under 1% | Apr - Sept Trust 0 National Just under 1% Oct - Mar Trust 0 National just under 1% |
| Access to Services | Cancer 31 Day Wait for Second or Subsequent Treatment - Surgery | 94% | 100% | 100% | 100% |
| | Cancer 31 Day Wait for Second or Subsequent Treatment - Drug Treatments | 98% | 100% | 100% | 100% |
| | Cancer 62 Day Waits for First Treatment (from urgent GP referral) *1 Month for Paediatrics/Excludes Reallocated Patients | 85% | 100% | 100% | 100% |
| | Cancer 31 Day Wait from Diagnosis to First Treatment | 96% | 100% | 100% | 100% |
| | Cancer 2 Week (all Cancers) | 93% | 100% | 100% | 100% |
| | 18 Week Referral to Treatment (RTT) Target Admitted Patients[3] | 90% | 88% | 22.1 | 90% |
| | 18 Week RTT Target Patients Waiting | 92% | 94% | | |
| | 18 Week RTT Target Non Admitted Patients | 95% | 98% | 14.8 | 97% |
| Access to A&E | A&E Clinical Quality - Total Time in A&E <4hrs | 95% | 97.0% | 96.6% | 97.9% |

[1] Specialist Trusts are excluded from SHMI reporting.
[2] Target is based on peer performance compared to other Specialist Paediatric Trusts.
[3] Achieved the target for Quarters 1-2 and Quarter 4; planned failure in Quarter 3 to allow Waiting List backlog to be reduced.

| Glossary | |
|---|---|
| CBU | Clinical Business Unit |
| CCUK | Crohn's and Colitis UK (charity) |
| CT | A CT (Computerised Tomography) scanner is a special kind of X-ray machine.<br>Instead of sending out a single X-ray through your body as with ordinary X-rays, several beams are sent simultaneously from different angles.<br>This allows more detailed images from within the body to be constructed, and these images are then interpreted by a doctor. |
| DKA | Diabetic ketoacidosis is a dangerous complication faced by people with Diabetes which happens when the body starts running out of insulin. Particularly affecting people with Type 1 Diabetes, DKA may also affect those with Type 2 Diabetes. |
| HbA1C | HbA1c occurs when haemoglobin joins with glucose in the blood. Haemoglobin molecules make up the red blood cells in the blood stream.<br>When glucose sticks to these molecules it forms a glycoslated haemoglobin molecule, also known as A1c and HbA1c.<br>The more glucose found in the blood the more glycated haemoglobin (HbA1c) will be present. |
| IBD | Inflammatory Bowel Disease. The major types of IBD are Crohn's Disease and Ulcerative Colitis. |
| ICD | Implantable Cardioverter-Defibrillators |
| MDT | Multi-Disciplinary Team |
| NICE | National Institute for Health and Care Excellence |
| PICU | Paediatric Intensive Care Unit |
| TARN | Trauma Audit and Research Network |

## 3.5 Statements from Primary Care Trusts, Local Involvement Networks, Governors and Overview and Scrutiny Committees

### 3.5.1 Comments from Governors

"The report reads well, is very detailed and reflects the volumes of activity going on in the Trust. It's very understandable and easy to read."

"From my perspective, it reflects evidence of tremendous commitment to quality of the staff and Board. As a governor I recognise the straightforward over-arching goals in the three domains. These have been discussed at every Council of Governors. Based on the information provided, I am confident that the processes are in place both to address any issues and also to sustain high levels of quality."

I know from review of Board minutes that the Board discusses the content of each review. The Board clearly establishes measures to ensure follow-though. I would encourage them to also ensure that a discussion takes place on the systemic issues that underlie any issues.

For example, rather than agree on a set of solutions to maintain or improve a quality area but to also ask what is ensuring success or what are the underlying causes of an issue, I would also encourage the Board to review the impact of changes of procedure as a result of executing the transformation process that is part of the new building."

"On the whole, the report represents a reasonably comprehensive overview of the work the Trust is doing to improve quality in terms of both national and local issues. It captures the ongoing commitment to develop staff skills which is important in view of the negative comments contained in the 2012 Staff Survey. In terms of both local and national audits, the Trust's contribution to these programmes seems to be positive with appropriate outcomes. We would welcome further information on the financial impact of clinical coding errors and the measures being taken to eradicate/ reduce these errors however."

**Jeanette Chamberlain, Staff Governor**
**Murray Dalziel, Appointed Governor from the University of Liverpool**
**Kate Jackson, Public Governor**
**Norma Gilbert, Public Governor**

### 3.5.2 Comments from Commissioners

Liverpool CCG is pleased to provide a statement for inclusion in this Quality Account. Alder Hey Children's Hospital has taken reasonable steps to corroborate the accuracy of data provided within this Quality Account and consider it contains accurate information in relation to the service provided. Information contained accords with data received throughout the year in question, and which is considered within regular Clinical Quality and Performance Meetings.

Liverpool CCG was pleased to support the priorities selected by the Trust last year. The work the trust has undertaken, described within this Quality Account has helped to improve patient safety and the quality of patient experience whilst receiving care.

The NHS is striving to make sure that the Patient Experience of care is central to good quality of care and is used to ensure that the care delivered is right for patients. The Quality Account describes the work the Trust has undertaken to proactively seek feedback from patients and carers and demonstrated how this has impacted upon changes in service delivery. Liverpool CCG is pleased to note the engagement with stakeholders that led up to the publication of this Quality Account and commend the Trust for taking its responsibilities for engagement seriously. We are also pleased to note the audit and research information contained in the Quality Account.

It is felt that the priorities for improvement identified for the coming year are both challenging and reflective of the current issues across the health economy. We therefore commend the Trust in taking account of new opportunities to further improve the delivery of excellent, compassionate and safe care for every patient, every day.

Overall the trust has complied with its contractual obligations in developing this Quality Account and has made extensive progress over the last year with evidence of improvements in key quality and safety measures. We have established excellent working arrangements between the CCG and the Trust and look forward to developing our relationship further over the coming years as we collaboratively seek to improve health outcomes for the population of Liverpool.

**KATHERINE SHEERIN**
CHIEF OFFICER
NHS LIVERPOOL CLINICAL COMMISSIONING GROUP

**DR NADIM FAZLANI**
CHAIR LIVERPOOL CENTRAL LOCALITY
NHS LIVERPOOL CLINICAL COMMISSIONING GROUP

**DR SIMON BOWERS**
CHAIR LIVERPOOL MATCHWORKS LOCALITY
NHS LIVERPOOL CLINICAL COMMISSIONING GROUP

### 3.5.3 Comments from Healthwatch organisations

Healthwatch Liverpool is pleased to have the opportunity to comment on the 2012 – 2013 Quality Account for Alder Hey Children's NHS Foundation Trust.

The Quality Account sets out the quality priorities for the Trust very clearly and will be a useful tool for Healthwatch to monitor progress over the coming year.

Healthwatch Liverpool is also pleased to note the commitment to quality and to gathering the views of patients that is exemplified in this Quality Account. The nature of Quality Accounts make them an unsuitable vehicle for communicating the quality of a service to young patients, so Healthwatch Liverpool will also be keen to observe how the Trust communicates quality information to its young patients in the coming year.

## 3.6 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 2010 to prepare Quality Accounts for each financial year.

Monitor 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 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 2012/13;

• 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 2012 to June 2013
- Papers relating to Quality reported to the Board over the period April 2012 to June 2013
- Feedback from the commissioners dated [none received]
- Feedback from governors dated 20th May 2013
- Feedback from Local Healthwatch organisations dated [none received]
- The Trust's complaints report published under regulation 18 of the Local Authority Social Services and NHS Complaints Regulations 2009, dated 14th May 2013
- The 2012 national Staff Survey published in March 2013
- The Head of Internal Audit's annual opinion over the Trust's control environment dated March 2013.
- CQC quality and risk profiles between April 2012 and March 2013

• 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 Monitor's annual reporting guidance (which incorporates the Quality Accounts regulations) (published at www.monitornhsft.gov.uk/annualreportingmanual) as well as the standards to support data quality for the preparation of the Quality Report (available at www.monitornhsft.gov.uk/annualreportingmanual).

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

**CHAIRMAN**
**DATE: 28TH MAY 2013**

Louise Shepherd

**CHIEF EXECUTIVE**
**DATE: 28TH MAY 2013**

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:

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