



Liverpool Heart and Chest Hospital NHS Foundation Trust

Evidence appendix

Liverpool Heart and Chest Hospital,
Thomas Drive,
L14 3PE
Tel: 0151 600 1616
<https://www.lhch.nhs.uk>

Date of inspection visit:

15 January to 7 February 2019

Date of publication:

03 July 2019

This evidence appendix provides the supporting evidence that enabled us to come to our judgements of the quality of service provided by this trust. It is based on a combination of information provided to us by the trust, nationally available data, what we found when we inspected, and information given to us from patients, the public and other organisations. For a summary of our inspection findings, see the inspection report for this trust.

Facts and data about this trust

A list of the acute hospitals at Liverpool Heart and Chest Hospital NHS Foundation Trust is below.

Name of acute hospital site	Address	Details of any specialist services provided at the site	Geographical area served
Liverpool Heart and Chest Hospital	Thomas Drive, Liverpool, L14 3PE	Cardiothoracic surgery, cardiology, respiratory medicine including adult cystic fibrosis and diagnostic Imaging, both in the hospital and out in the community.	The trust serves a catchment area of 2.8 million people, spanning Merseyside, Cheshire, North Wales and the Isle of Man, and increasingly we receive referrals from outside these areas for highly specialised services such as aortic.

(Source: Trust Website)

Is this organisation well-led?

Leadership

Leaders had an inspiring shared purpose and strived to deliver and motivate staff to succeed. There were high levels of satisfaction across all staff. There was a strong collaboration, team working and support across all functions and a common focus on improving the quality and sustainability of care and people's experiences.

There was a stable leadership team at the trust. The chief executive had been in post since 2013, the medical director had been appointed deputy chief executive officer in 2016 and the director of nursing and quality had been in post since 2012. Other executive members of the trust board included the chief finance officer and the director of strategic partnerships and chief operating officer. A trust chair had been in post since 2009 and there were five non-executive directors.

The trust board had the appropriate range of skills, knowledge and experience to perform its role. The trust board was well established and both the trust board and senior leadership team displayed integrity on an ongoing basis. Leaders at all levels demonstrated high levels of experience, capacity and capability needed to deliver excellent and sustainable care. We found evidence of compassionate, inclusive and effective leadership at all levels.

Leaders at every level were visible and approachable. Compassionate, inclusive and effective leadership was sustained through a leadership strategy and development programme as well as effective selection, deployment and support processes.

The chief executive led a daily safety huddle with representatives from all staff groups and divisions. This improved leadership visibility and ensured that key information was shared effectively with staff such as learning from serious incidents.

Trust directors made regular visits to clinical areas. Feedback from staff was that they found trust leaders to be approachable and felt that they were able to raise concerns or issues as needed. They found that this helped to validate information which was presented at board meetings as they could get a feel for what was impacting delivery of care or staff morale. There was a structured approach to these walkabouts. Leaders focussed on a particular topic and prepared a note for the chair following each, from which action plans were developed if there were areas for improvement.

Divisional leadership structures were outlined in the trust quality strategy. Divisional leadership teams comprised of an associate medical director, divisional head of operations and divisional head of nursing and quality to form a triumvirate.

The trust board and senior leadership team displayed integrity on an ongoing basis. There were appropriate measures in place to provide adequate challenge to the board around key decisions and strategic objectives. We spoke with non-executive directors who felt their input and challenge was welcomed by the executive directors and actively encouraged by the chair. We were given examples of when non-executive directors had provided challenge to executive directors for example, the non-executive directors had not been satisfied that trust mortality indicators were improving sufficiently. Following this challenge, there was a deep dive review of trust mortality which provided assurance that the improved figures were not statistically significant.

The Health and Social Care Act 2008 (Regulated Activities) Regulations 2014: Regulation 5: Fit and proper persons: directors sets out a requirement for NHS bodies to assess whether directors are fit and proper. We found that the appropriate fit and proper persons checks were in place for

trust directors. We reviewed four personnel records pertaining to trust directors and found evidence, which demonstrated these checks had been carried out. The fit and proper person legislation came into effect for NHS bodies on 27 November 2014. There was a fit and proper persons policy in place which reflected requirements of the fit and proper persons legislation.

There was effective succession planning in place across the trust and the trust had a leadership and talent management strategy in place. This included the provision of development opportunities for staff at all levels across the trust. Leadership development opportunities were promoted across the trust and were open to all staff. A leadership module was included within the trust preceptorship programme and career aspiration conversations were a routine part of staff appraisals. Between 1 September 2017 and 31 August 2018, 104 members of staff has participated in a leadership development programme.

There was a talent management strategy in place for aspiring executives. This was linked to the appraisal process. Staff who aspired to progress to executive level were given opportunities for shadowing and secondment in order to gain more experience and understanding of the role. The trust leadership team had a comprehensive knowledge of current priorities and challenges. Each Non-Executive Director, except for the Chair, were part of an assurance committee. This allowed them to view issues and topics from a different perspective and provided further assurance that changes were implemented to improve quality and patient experience.

Leaders told us that information was provided to the board in an intuitive way which could be understood by anyone regardless as to whether they had a clinical or financial background. Non-executive directors told us that they felt comfortable in asking for any explanation around information which they did not fully understand and that the medical director was particularly obliging in providing any clinical explanations.

Board Members

Of the executive board members at the trust, 20.0% were Black and Minority Ethnic (BME) and 60.0% were female.

Of the non-executive board members 0.0% were BME and 16.9% were female.

Staff group	BME %	Female %
Executive directors	20.0%	60.0%
Non-executive directors	0.0%	16.9%
All board members	9.0%	36.0%

(Source: Routine Provider Information Request (RPIR) – Board Diversity tab)

Vision and strategy

There was a trust strategy in place which was aligned to the trust vision and values. There was a clear process for the monitoring and oversight of progress against the trust strategy and each division had its own set of objectives aligned to the trust objectives.

We found that there was a clear statement of vision and values, driven by quality and sustainability. This had been translated into a robust and realistic strategy and well-defined objectives that were achievable and relevant.

The trust vision was to 'be the best - delivering and leading outstanding heart and chest care and research' to enable 'excellent, compassionate and safe care for every patient every day'.

There was a quality strategy in place for 2017 to 2020 which comprised of four key elements; patient safety and quality, patient and family experience, clinical outcomes and effectiveness, regulation, compliance and assurance. Each division had set their own quality objectives to ensure the ambitions of the trust quality strategy would be achieved. There were measurable outcomes assigned with each objective so that progress against the strategy could be effectively monitored. A target date was listed against each objective.

The quality strategy included a vision for patient and family experience which consisted of six steps; reputation, arrival, contract of care, stay, treatment and after stay. This vision had also been adapted for patients and families with enhanced care needs, which was supported by and reflected the trust policy relating to learning disabilities and complex care needs.

There was also a dementia strategy in place for the period 2015 to 2018 which was evidence-based and considered the needs of the local population served by the trust. This strategy had been developed by the assistant director of nursing for patient and family experience.

There was a systematic and integrated approach to monitoring, reviewing and providing evidence of progress against the strategy and plans. Documentation we reviewed confirmed that both the vision and overall strategy for the trust ensured that plans were implemented, and had a positive impact on quality and sustainability of services.

The quality strategy set out what quality governance looked like. It included a quality governance committee structure, which demonstrated clear mechanisms for cascade of information from the board of directors and escalation from clinical divisions and operations committees.

The quality strategy was monitored by the trust board of directors on an annual basis and progress was monitored regularly through the trust board assurance levels. The trust had seen a notable improvement in a number of areas through implementation of the quality strategy since 2017. Most notably, incident reporting had increased by 20%, formal complaints had reduced by 20%, there was a sustained reduction in infection rates and incidence of pressure ulcers. The trust had also been ranked highest performing in the country compared with results from the 2017 National Adult Inpatient Survey.

The quality assurance committee met quarterly and received annual reports from each committee, which included assessment of progress against objectives relevant to the quality strategy. An explanation was given if it was unlikely that an objective would be met. This meant that there was regular oversight and monitoring of progress against the strategy.

The vision, values and strategy had been developed through a structured planning process in collaboration with people who used the service, staff and external partners.

Staff, patients, carers and external partners routinely were given the opportunity to contribute to discussions about the strategy, especially where there were plans to change services.

Staff we spoke with clearly demonstrated that they knew and understood the trust's vision, values and strategy and how achievement of these applied to the work of their team. The trust's strategy, vision and values underpinned a culture which was patient centred. Staff at all levels within the trust understood their role in delivery of the vision and strategy and the key objectives of quality and sustainability. The vision and values were introduced to staff as part of their induction and individual objectives were set aligned to the vision and values.

The trust vision, values and strategy was incorporated into internal information disseminated to staff which reinforced the objectives underpinning each and continuously motivated staff to work towards achieving the trust vision.

The strategy was aligned to local systems plans in the wider health and social care economy, which were aided through engagement with external stakeholders. Members of the trust leadership team played an active role in the development and implementation of local sustainability and transformation plans. For example, the chief executive was the senior responsible officer for the cardiovascular disease programme in the Cheshire and Merseyside Health and Care Partnership. The trust was also an active participant in working to achieve the Liverpool city region health plan which included a number of cardiovascular and respiratory priorities, which were led by representatives of the trust.

Culture

Leaders had an inspiring shared purpose and strived to deliver and motivate staff to succeed. There were high levels of satisfaction across all staff. There was strong collaboration, team-working and support across all functions and a common focus on improving the quality and sustainability of care and people's experiences.

The trust's strategy, vision and values underpinned a culture which was patient centred. There was a values-based recruitment process, and this was embedded in staff appraisals.

Staff were empowered to make positive changes to benefit patient care. The trust had in place a people strategy and the successful delivery of this was critical to ensuring the mitigation of its workforce risks, particularly in relation to the impact of national shortages of key staffing groups.

There was a renewed focus in 2018/2019 of staff engagement through adoption of the 'Listening into Action' model. This had led to staff being more involved in decision making, being more confident in raising concerns, reduction in violence from patients and senior management engagement.

The trust had an embedded volunteer scheme which had been in place since 2010 with an average of 45 volunteers in role across the trust and community. The work in a variety of areas and their impact at the trust over the last 9 years has been profound. They work alongside teams in wards and departments and support staff. Their role within the clinical areas is to provide one to one company and support for patients who do not have visitors. They also assist in giving out snacks

for patients when needed. They regularly anticipate the individual needs of the patients for example where a patient may want a newspaper or a book to read. This is a key role in the hospital.

In outpatients they play a critical role in meeting and greeting and helping them find their way. They also assist patients with checking in using the electronic self-checking desks and provide a supportive role to patients who have visual and hearing impairments to understand when they are being called for their appointments.

On the thoracic ward volunteers are dedicated to supporting patients with cancer. Specialist nurses are available but often patients want to speak to somebody other than a healthcare professional, who has time to simply listen and be with them.

The Trust has recently become the level one centre for adult congenital heart disease and in the new willow suite the trust provides volunteer support to assist and direct patients to their appointments.

The trust felt that their success in the 2017 CQC national inpatient survey was predominantly due to their focus on patient and family-centred care. The volunteer role is fundamental to this and has provided added value and improved the experience of patients and families.

Managers addressed poor staff performance when needed. There was a low tolerance of behaviours that worked against the values. For example, when working relationships had broken down within a team the organisational development team provided support with team away days, action planning and follow up. Additional culture support work was provided to one team with the use of an external facilitator.

The trust had strengthened its freedom to speak up guardian (FTSU) arrangements. There was a freedom to speak up policy with an executive and non-executive lead, FTSU guardian and champions. The FTSU executive and guardian kept a confidential log and tracked all incidents. A newly formed FTSU summit met quarterly to triangulate data raised through all speaking up avenues. This group consisted of FTSU, risk, nursing and human resources.

Analysis drawn from whistle blowers between 1 August 2017 and 31 July 2018 showed an improvement in people willing to forgo anonymity when speaking out compared to previously. Five out of 14 (35%) asked for their anonymity to be protected compared to the previous year where 12 out of 16 (75%) chose to retain their anonymity. The main themes from concerns were patient safety, values and behaviours, relationships and working practices.

The HALT (a process where staff can stop care or treatment to prevent harm to patients) was fully embedded. The development of a learning hub enabled staff to share good practice and learn from errors.

Staff were recognised in many ways. Executive and non-executive directors visited wards and personally thanked teams. Staff were nominated for recognition awards.

The trust enabled the workforce to be their best through offering health and wellbeing support, flexible working options and creating healthy workplaces.

The trust provided the following breakdowns of medical and dental and nursing and midwifery

staff by Ethnic group.

Ethnic group	Medical and dental staff	Nursing and midwifery staff
White – British/Irish/Any other white background	3.8%	28.0%
BME - British	1.4%	2.9%
BME - Non-British	1.0%	2.9%
Not stated	1.0%	0.7%

(Source: Routine Provider Information Request (RPIR) – Diversity tab)

NHS Staff Survey 2017 – results better than average of acute trusts

The trust has 25 key finding(s) that exceeded the average for similar trusts in the 2017 NHS Staff Survey:

Key Finding	Trust Score	National Average
Appraisals and support for development		
Key finding 11. Percentage appraised in last 12 months	96%	88%
Key finding 12. Quality of appraisals	3.33	3.16
Key finding 13. Quality of non-mandatory training, learning or development	4.11	4.08
Equality and diversity		
Key finding 20. Percentage experiencing discrimination at work in last 12 months	7%	9%
Errors and incidents		
Key finding 28. Percentage witnessing potentially harmful errors, near misses or incidents in last month	25%	27%
Key finding 30. Fairness and effectiveness of procedures for reporting errors, near misses and incidents	3.98	3.80
Key finding 31. Staff confidence and security in reporting unsafe clinical practice	3.94	3.71
Health and wellbeing		
Key finding 17. Percentage feeling unwell due to work related stress in last 12 months	31%	35%
Key finding 18. Percentage attending work in last 3 months despite feeling unwell because they felt pressure	45%	50%
Key finding 19. Organisational and management interest in and action on health and wellbeing	3.87	3.73
Working patterns		
Key finding 16. Percentage working extra hours	66%	75%
Job satisfaction		
Key finding 1. Staff recommendation of the organisation as a place to work or receive treatment	4.23	4.16
Key finding 4. Staff motivation at work	3.99	3.94
Key finding 7. Percentage able to contribute towards improvements at work	75%	73%
Key finding 9. Effective team working	3.91	3.79
Key finding 14. Staff satisfaction with resourcing and support	3.58	3.41
Managers		
Key finding 5. Recognition and value of staff by managers and the organisation	3.61	3.53
Key finding 6. Percentage reporting good communication between senior management and staff	46%	35%

Key finding 10. Support from immediate managers	3.95	3.81
Patient care and experience		
Key finding 2. Staff satisfaction with the quality of work and care they are able to deliver	4.22	4.02
Key finding 3. Percentage agreeing that their role makes a difference to patients / service users	94%	91%
Key finding 32. Effective use of patient / service user feedback	3.99	3.83
Violence, harassment and bullying		
Key finding 24. Percentage reporting most recent experience of violence	74%	70%
Key finding 25. Percentage experiencing harassment, bullying or abuse from patients, relatives or the public in last 12 months	12%	21%
Key finding 26. Percentage experiencing harassment, bullying or abuse from staff in last 12 months	18%	23%

NHS Staff Survey 2017 – results worse than average of acute trusts

The trust has three key findings worse than the average for similar trusts in the 2017 NHS Staff Survey:

Key Finding	Trust Score	National Average
Errors and incidents		
Key finding 29. Percentage reporting errors, near misses or incidents witnessed in last month	91%	92%
Violence, harassment and bullying		
Key finding 22. Percentage experiencing physical violence from patients, relatives or the public in last 12 months	10%	7%
Key finding 23. Percentage experiencing physical violence from staff in last 12 months	2%	1%

(Source: NHS Staff Survey 2017)

Workforce race equality standard

The scores presented below are questions relating to bullying and harassment from the NHS staff survey, they are question 17b and key findings 25, 26 and 21 split between white, black and minority ethnic (BME) staff, as required for the Workforce Race Equality Standard.

Notes:

- These scores are un-weighted, or not adjusted.
- For question 17b, the percentage featured is that of 'Yes' responses to the question.
- Key finding and question numbers have changed since 2014.
- In order to preserve the anonymity of individual staff, a score is replaced with a dash if the staff group in question contributed fewer than 11 responses to that score.

			Your Trust in 2017	Average (median) for acute specialist trusts	Your Trust in 2016
KF25	Percentage of staff experiencing harassment, bullying or abuse from patients, relatives or the public in last 12 months	White	13%	22%	15%
		BME	11%	17%	16%
KF26	Percentage of staff experiencing harassment, bullying or abuse from staff in last 12 months	White	18%	22%	16%
		BME	17%	26%	25%
KF21	Percentage of staff believing that the organisation provides equal opportunities for career progression or promotion	White	90%	88%	89%
		BME	82%	75%	86%
Q17b	In the 12 last months have you personally experienced discrimination at work from manager/team leader or other colleagues?	White	5%	6%	5%
		BME	5%	14%	12%

Of the four questions above, no questions showed a statistically significant difference in score between White and BME staff.

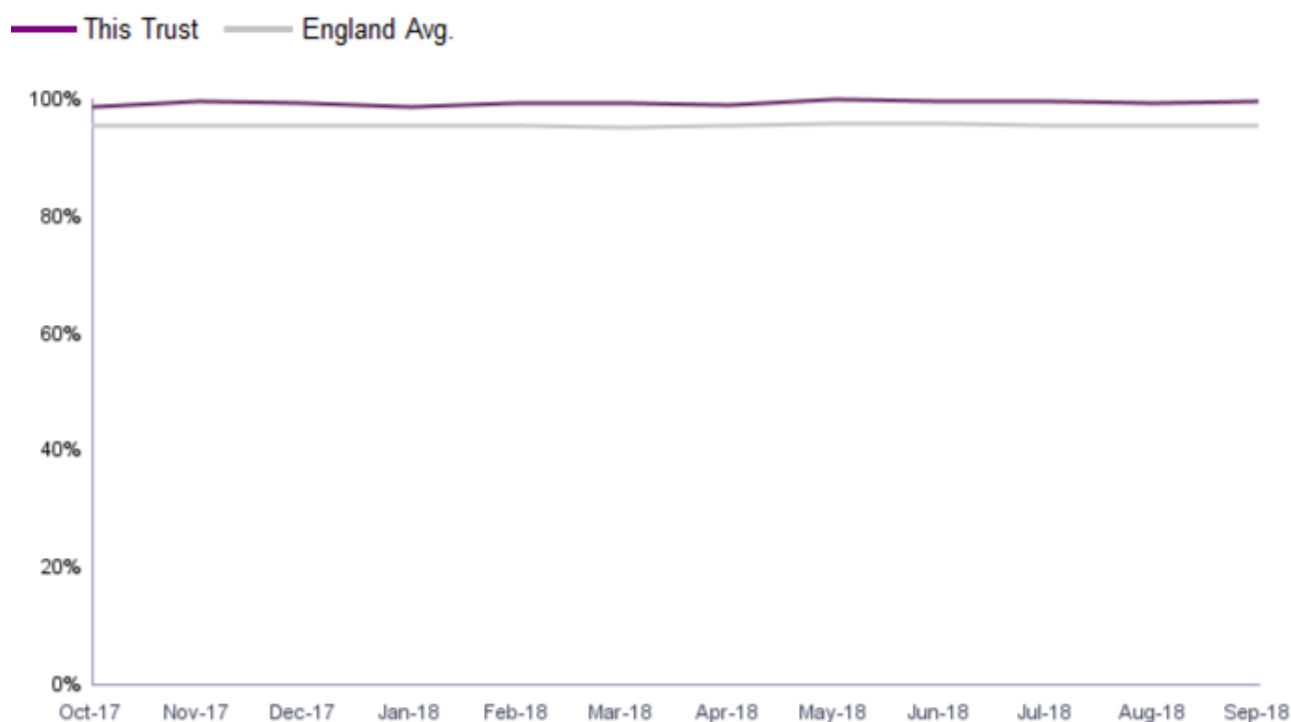
(Source: NHS Staff Survey 2017)

In support of the workforce race equality standard findings, the trust had established a black Asian minority ethnic (BAME) network and targeted several development programmes for BAME staff through the leadership academy, including 'Ready Now', 'Stepping Up' and the Florence Nightingale Foundation 'Windrush nurses and midwives leadership program' programme. Staff were provided with support with interview skills and the trust had strengthened recruitment and selection training to include unconscious bias. The trust was also working with the Royal College of Nursing cultural ambassador programme. The trust had launched its viability network group and was establishing several disability champions which would support the implementation of the workforce disability equality standard from April 2019.

Friends and Family test

The Friends and Family Test was launched in April 2013. It asks people who use services whether they would recommend the services they have used, giving the opportunity to feedback on their experiences of care and treatment.

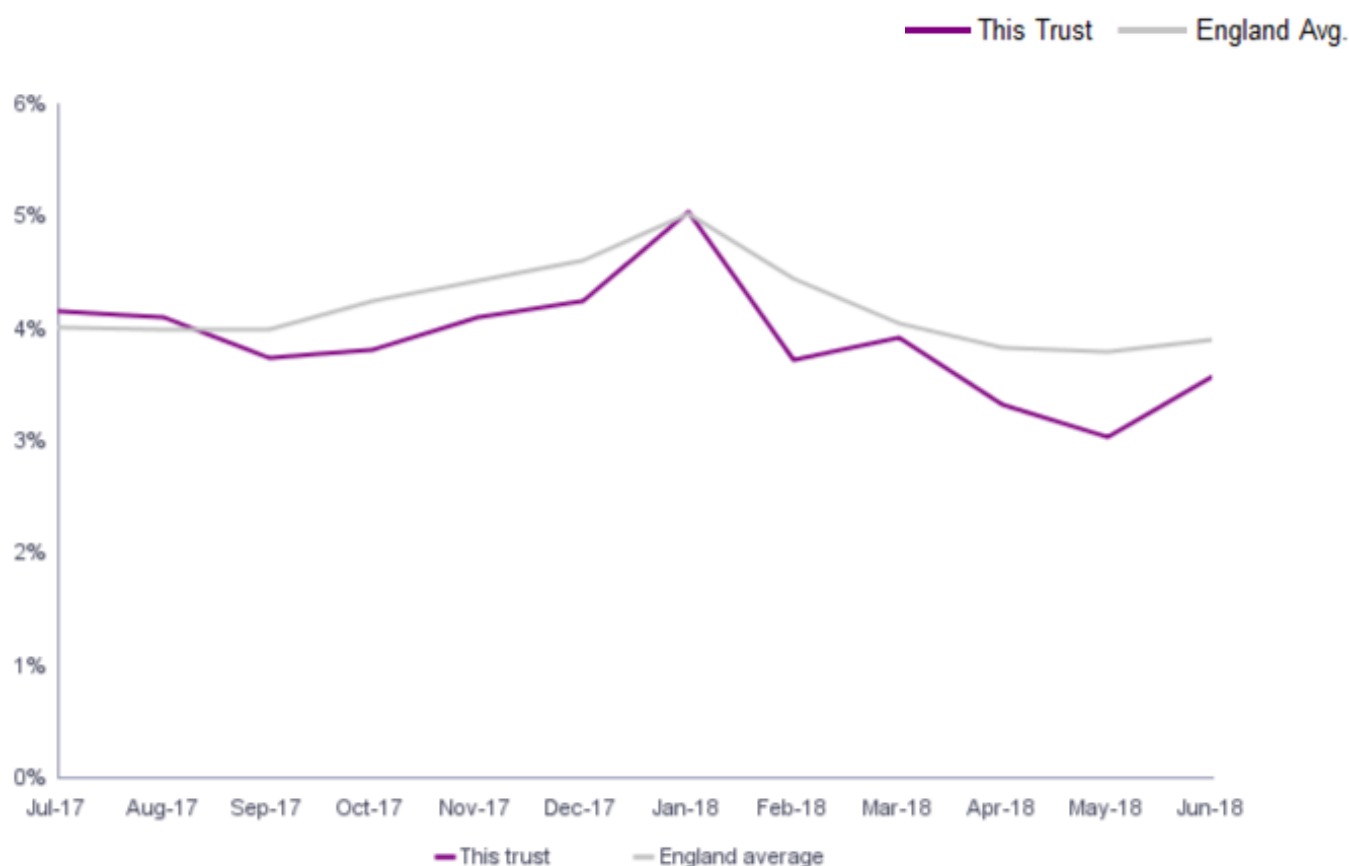
The trust scored above the England average for recommending the trust as a place to receive care from October 2017 to September 2018.



(Source: Friends and Family Test)

Sickness absence rates

The trust's sickness absence levels were below the England average for nine of the 12 months from July 2017 to June 2018. Rates followed a similar trend to the England average over the period.



(Source: NHS Digital)

General Medical Council – National Training Scheme Survey

In the 2018 General Medical Council Survey the trust performed the same as expected for the all indicators.

● Better than expected ○ Same as expected ◆ Worse than expected

Survey area	RAG
Overall satisfaction	○
Clinical Supervision	○
Clinical Supervision out of hours	○
Handover	○
Induction	○
Adequate Experience	○
Supportive environment	○
Work Load	○
Educational Supervision	○
Feedback	○
Local Teaching	○
Regional Teaching	○
Study Leave	○

(Source: General Medical Council National Training Scheme Survey)

Governance

The trust had effective structures, systems and processes to support the delivery of its strategy including sub-board committees, divisional committees, team and senior manager meetings. Leaders regularly reviewed these structures.

The trust's governance structures ensured that quality and safety was monitored through divisional governance and assurance received by the assurance committees. The trust operations board was responsible for the delivery of the annual plan, trust targets and strategies.

The board of directors were responsible for setting the overall strategic direction of the trust and to monitor performance against its objectives. The indicators reported to the board of directors had been reviewed for 2018/19 in line with its statutory duties and operational objectives. The risks associated with each were reflected in the board assurance framework for 2018/19. The board received a quarterly update on the delivery against each objective which aligned with the timetable for board assurance framework reporting.

The board set and monitored financial and operational performance targets to ensure delivery against key trust priorities using a performance dashboard. The board monitored performance monthly and indicators reported as 'red' were flagged for exception reporting.

There was a continuous drive to improve in all aspects of the organisations business. The trust had commissioned several reviews to identify opportunities for further development. For example, the operational board had been reviewed and changes made to ensure it was the lynch pin in operational governance arrangements. This included a revision to the terms of reference.

The governance structure facilitated a clear distinction between assurance (non-executive led) and performance management (executive led). An external well led review in March 2017 showed that the board was adequately trained and developed to fulfil and meet its responsibilities.

Non-executive directors said that board papers were presented in an understandable way. There was an executive summary and the information allowed sufficient discussion and challenge.

There was a clear framework which set out the structure of ward/service team, division and senior trust meetings. Performance and quality issues went through divisional governance and performance meetings which met monthly. There was good attendance. Managers used meetings to share essential information such as learning from incidents and complaints and to act as needed.

Staff we spoke with at all levels of the organisation, could demonstrate they understood their roles and responsibilities and what to escalate to a more senior person.

Board Assurance Framework

The trust provided their board assurance framework, which details five strategic objectives within each and accompanying risks. A summary of these objectives is below.

1. Quality and patient experience

- Continue to improve safety culture and reduce harm
- Embed organisational learning such that there is clear evidence of observable changes in practice
- Retain CQC 'outstanding' rating
- Deliver an improvement plan in response to the GIRFT Report

2. Research and innovation

- Implement robotics programme
- Deliver transition plan for CHD
- Deliver Informatics Review Action Plan and establish assurance mechanism for data quality
- Raise the Trust's academic profile and increase the number of academic appointments
- Deliver the R&I strategy milestones including attraction of research grants
- Develop a strategy for good corporate citizenship

3. Finance and value

- Retain Segmentation 1 under NHSI's Single Oversight Framework
- Develop business partner model and improve business intelligence
- Operate Use of Resources Framework in Shadow form
- Embed Accountability Framework
- Deliver targets set out in private patient strategy
- Develop 10 new international business models for future exploration with at least one contract signed in 2018/19
- Continue to meet regulatory requirements

4. Best NHS employer

- Listen, involve and develop Team LHCH through delivery of an effective staff engagement plan
- Build capacity for enabling leadership at all levels

5. Partnerships

- Lead and Deliver the CVD Programme
- Implement Single Cardiology Pathway
- Improve the visibility of and external promotion of surgical work
- Maintain stakeholder engagement across the wider health and care partnership

(Source: Trust Board Assurance Framework – 2018/19)

Management of risk, issues and performance

The board were aware of the challenges in the organisation to ensure quality of care and patient safety. There was an oversight framework to manage performance. The trust used a systematic approach to continually improve the quality of its services and safeguarding high standards of care by creating an environment in which excellence in clinical care would flourish.

Quality governance was embedded within the divisional structures, with monthly reporting to the operational board, where quality performance was reviewed. Cross-organisational quality initiatives were monitored and managed through a combined divisional quality governance meeting, the 'Quality and Patient and Family Experience Committee'. A formal board assurance committee for quality met quarterly and received assurances from this committee on progress with all the trust's quality initiatives.

The divisional triumvirate met monthly to discuss risks. There was constructive challenge which provided confidence to the board that professions were working together effectively.

Each department within the trust had its own electronic risk register, which was integrated with all others and ensured the identification of a high scoring risk automatically appearing in the relevant divisional (risk scores above eight) or corporate (risk scores above 10) risk register.

Risk registers were available to staff to ensure complete visibility and transparency across the trust. Comprehensive training on how to articulate risks together with identifying and applying relevant controls had been provided.

Where risks were high scoring, the chief risk officer proactively met with the relevant manager to ensure consistency in scoring and offered advice in risk management. The organisational appetite for risk had been set by the board, and was embedded in the risk register structures. This resulted in the acceptance of risks when appetite thresholds were reached or exceeded. There was a refreshed risk appetite statement in January 2019.

The trust had systems to identify learning from incidents, complaints and safeguarding alerts and make improvements. Clinical and internal audit processes functioned well and had a positive impact on quality governance.

Learning from incidents was supported by the emphasis on human factors training and the

development of human factors champions. There were work based simulations to re-enact situations to understand and change practice to prevent incidents.

When things went wrong, staff were encouraged to report incidents, even if there was no consequence, so that learning could be captured. Public stakeholders were involved in managing risks where there was an impact on them. For example, where a serious incident was investigated the trust met with those affected. The trust followed a clear policy on being open to ensure that duty of candour was adhered to.

The compliance of duty of candour was monitored by the completion of an annual audit which was reported through the divisional governance committees. There was an executive and operational lead for duty of candour.

Learning was shared through the 'Integrated Incident Complaints and Claims report' which was shared within the divisional governance committees and the 'Risk Management and Corporate Governance Committee'. This report was also reviewed at board level on a bi-annual basis.

As a sub group of the 'Human Factors Group', the 'Incident Reporting Sub Group' had been set up to look at topics in depth to find solutions to any issues. The education teams were copied into all the incidents concerning for example, medication and medical devices to tailor their education towards the type of incidents being reported.

The 'Safer Medications Group' reviewed all medication incidents. The incidents were trended and classified according to actual harm and potential harm. This feedback was provided to divisional governance committees for onward sharing. Safety videos were developed because of learning from medication incidents.

The trust used the 'Excellent, Efficient, Compassionate and Safe assessment framework' to assess standards of care and practice across clinical areas and provide assurance to the board. The aim of the assessment was achieving a green rating against all assessment criteria. A report presented to the board in January 2019, showed the outcome of assessments had demonstrated that most non-clinical areas across the trust were rated as green, with nine clinical areas achieving gold status.

There was a quarterly 'Safety and Organisational Learning E-bulletin' which looked at the previous quarters incidents and provided learning. Outcomes were measured by seeing a reduction in the classification of incident themes and severity reported and monitoring of the improvements. For example, there was a 20% reduction in falls and a sustained reduction in pressure ulcers.

All groups of staff attend daily trust-wide safety huddles led by the chief executive where areas of risk and potential safety concerns were shared. This then cascaded into safety huddles within departments and wards with clinical teams sharing and discussing how to ensure safety for patients.

An annual complaints report was presented to the 'Quality and Patient, Family Experience Committee'. All complaints received were reviewed by the chief executive, the director of nursing and quality and the deputy director of nursing. A review of surgical complaints during the inspection showed the trust responded quickly to patients' concerns. A quarterly summary of complaints was

shared with non-executive directors. Examples were given where the chief executive and director of nursing had visited and offered support to patients and their relatives following a complaint.

The trust protocol entitled 'Review and Implementation of Nationally Agreed Best Practice', including The National Confidential Enquiry into Patient Outcome and Death, described the process for ensuring that agreed best practice, as defined in all the National Institute for Health and Care Excellence (NICE) guidance (where appropriate), was considered in the context of the clinical services provided by the organisation.

The Clinical Audit and Effectiveness Group reviewed all NICE guidance and confidential enquiries at their monthly meeting. The group identified appropriate leads to undertake an organisational gap analysis of relevant publications which were included in monthly reports to the relevant divisional governance meetings. Divisions were responsible for monitoring delivery of any actions required to meet NICE guidance recommendations where gaps were identified.

The trust's outcomes were benchmarked against national and internal data, peer reviews and research trials. These were reviewed through governance structures and any improvements highlighted and actioned. For example, the getting it right first time (GIRFT) Review for cardiothoracic surgery showed several areas of existing good practice, and suggested areas to explore for improvement which the surgical division presented to the Board of Directors in November 2018. A medicines management review identified opportunities for increased automation to improve costs and safety and an assurance report on aseptic services showed most of the areas were satisfactory with some development opportunities identified.

The trust had an organisational learning policy which governed how learning was used for improvement and how it was disseminated, using a variety of strategies. These strategies included divisional governance committees for discussion and feedback, audit days, speciality professional group meetings and an organisational learning log.

There was a strong focus on quality improvement. The approach aimed to bring together cost, quality and innovation. There were several improvement projects across the divisions, including medicines flow and storage reducing readmission to critical care and the emergency and high risk acute coronary syndromes pilot. A monthly summary report on progress was reported directly to the Quality and Patient and Family Experience Committee.

The Quality and Patient and Family Experience Committee was responsible for monitoring progress against the set quality improvements and provided assurance to the quality assurance committee and the board of directors on progress. Progress against the improvements was also presented to the council of governors.

The medical director was the board appointed patient safety director, and had responsibility for development, implementation and on-going review of mortality. The chair of the quality committee, an assurance committee of the board of directors, had responsibility for oversight of the mortality review process. All clinical staff had a responsibility to engage with the mortality review process and contribute to organisational learning. Where incidents were disclosed by the review process, the reviewer had responsibility to report these through the trusts risk management system.

The trust used the Royal College of Physicians structured judgement review methodology to

analyse expected and unexpected deaths. This was a two-tier process, that began with a screen of care and the circumstances of death. If the reviewer felt there were concerns with care that needed deeper exploration or felt there was an organisational learning, the case proceeded to a full mortality review. The review concluded with an estimate, on the balance of probabilities, whether the death was avoidable or not.

The 'Mortality Review Group' met monthly and learning and actions were shared with divisional groups. The trust had received five mortality alerts over the past twelve months. The medical director told us trust arrangements for the medical examiner role (national system of medical examiners to provide independent scrutiny of all deaths) had not yet started.

There was a process for governing the introduction and evaluation of new interventions and technology. Any proposals around the introduction of new technology was reviewed using a screening tool. This was completed by the proposer of the new technology in conjunction with their service line clinical lead. The proposal was referred to the Clinical Audit and Effectiveness Committee who decided whether the new intervention could be introduced based upon clinical effectiveness including clinical risk.

There was an annual Infection Control Report (April 2017 – March 2018) which was reported to the Board. The medical director was the Director of Infection Prevention and Control (DIPC). There was an 'Infection Control Annual Plan' which set out objectives and actions. The 'Infection Prevention Committee' met quarterly and was chaired by the DIPC. Membership was multi-disciplinary and included the governance manager, senior clinicians, nursing staff and representatives from different clinical areas. Reportable infections remained low and there was a new internal assessment process feeding back to the divisions to ensure improvements where indicated. Infection prevention audits show good compliance with established processes.

There was a new sepsis subgroup to drive forward continuous improvement in the management of sepsis. This group included first-line responders to sepsis (intensivists and critical care outreach nurses) and representation from pharmacy, electronic patient records, microbiology, information and audit departments. Data showed that 93% of patients identified as having a high risk of sepsis were treated with intravenous antibiotics within the hour.

There were clear processes to assure the trust had adequate arrangements for the safeguarding of adults and children. The director of nursing and quality had overall executive responsibility for safeguarding. The trust had a safeguarding committee that met bi-monthly and reported directly into Quality Patient and Family Divisional Governance Committee. This Committee was chaired by executives. All safeguarding reports were monitored through this process.

The annual safeguarding report was taken to the Quality Committee, an approved committee directly to the Board. Externally, the trust's safeguarding service was externally monitored by the commissioners to ensure governance arrangements were in place. The trust held quarterly progress meetings with commissioners to look at key learning using the trust key performance indicators. The trust also participated in the regional health safeguarding sub-groups and attended regular conferences and training events.

There was a business continuity strategy which represented the approach that the organisation was going to take to provide continuity of service, to the minimum acceptable level, until normal

service was resumed. For example, fall back to alternative sites (such as decanting patients to other NHS organisations or other parts of the hospital) and reduction in activity, such as cancellation of elective activity. The strategy formed an integral part of the overall business continuity plans for the trust including Emergency Planning Policy, Pandemic Flu Plan and Heatwave Plan.

The quality improvement support team had further developed the Quality Impact Assessment and Equality Impact Analysis process to safeguard quality in cost reduction programmes. This was regularly reported on to Business Transformation Steering Group and assurance provided to Quality Committee so that cost improvements did not compromise patient care.

Board members were sighted on the financial challenges of the trust. There was a strong financial focus in the organisation. The costs of delivering complex cardiac surgery was now more accurately reflected in the national tariff. This, together with the distribution of Provider Sustainability Funding, had a positive impact on moving the trust from a loss-making position to making a significant surplus of £8.4m in 2017/18 and £6.6m in 2018/19. This allowed the trust to increase its capital investment from £6m in 2017/18 to £10.7m in 2018/19.

Where there were risks of a reduction in funding in patient care the trust was working closely with commissioners to receive the planned income for the clinical services provided.

The trust had made significant areas of investment. This included a new computed tomography and magnetic resonance imaging scanner to enable the trust to meet demand, which was currently increasing at 14%. Refurbishment of catheter labs and investment in maintenance and development of the estate, medical equipment and IT services.

The trust was supporting its financial sustainability through the development of new business opportunities outside of the NHS including the development of a new private patient facility and international collaborations.

The finance team connected with and supported operational teams. The chief finance officer held a workshop with staff leads, providing a simplistic view of the importance of the link between finance and care. Staff members had to prioritise a list of different needs within a set budget. This enabled staff to develop solutions to ensure that where finances were limited this did not compromise patient care.

Finances Overview

Financial metrics	Historical data		Projections	
	Previous Financial Year (2016/17)	Last Financial Year (2017/18)	This Financial Year (2018/19)	Next Financial Year (2019/20)
Income	£128.60m	£144.60m	£156.90m	£147.70m
Surplus (deficit)	(0.39)	£8.5m	£17.2m	£144.90
Full Costs	£129.0m	£136.1m	£139.7m	£2.8m
Control Total	(0.93)	£6.9m	£9.6m	£2.8m

(Source: Routine Provider Information Request (RPIR) – Finances Overview tab)

Trust corporate risk register

The trust provided a document detailing their 10 highest profile risks. Each of these have a current risk score of 16 or higher.

Date risk opened	ID	Description	Risk score (current)	Risk level (target)	Last review date
May 2015	517	There is a risk to the delivery of the 18 week waiting time standard in the current month caused by inadequate capacity, poor flow, growth in non-elective demand, winter pressures and late referrals leading to delayed patient treatment, reduced patient satisfaction, and regulatory breach.	16	6	September 2018
May 2015	10	There is a risk to the delivery of the 18 week waiting time standard caused by the backlog of patients that have historically been on the waiting list, the ongoing patient pathway issues with delays from referring organisations, winter pressures and the pressure to ensure that urgent patients receive a timely date for surgery.	16	6	July 2018
Apr 2018	6094	There is a risk to providing anaesthetic support to all core activity sessions across the organisation caused by the recent retirements and two resignations in the anaesthetic team and the inability to recruit the number of anaesthetists required to provide full cover for all LHCH services, leading to activities being cancelled within all three clinical divisions.	16	9	August 2018
Feb 2018	6059	There is a risk to the delivery of the surgical annual activity plan caused by the shortage of anaesthetists to cover core and flexible sessions leading to a potential underperformance against the income plan and a poor patient experience.	16	9	July 2018
Jan 2018	6036	There is a risk to delivering the Trust's Financial Control Total in 2018/19 and following years caused by a) shortfall in identification of CIP schemes to deliver the required quantum and b) additional cost pressures arising, for example: (i) implementation of Zero Cost Model, (ii) delivery of CQUIN Schemes, and (ii) reduction in trained staff available to fill vacancies Leading to an adverse impact on EBITDA, the overall income	16	9	September 2018

		and expenditure position, the Trust's Use of Resources rating and cash position and the Service and Transformation funding (3.5m) (which is dependent on delivery of the plan) and have an adverse impact on the Trust's reputation.			
Jul 2016	1715	There is a risk that patients will not receive CT and MR scans within the 6 weeks wait times, caused by increasing demand to CT and MR Leading to breach of the 6 week diagnostic waiting target or the 18-week pathway and patients' diagnosis and treatment being delayed.	16	3	August 2018
Apr 2015	35	There is a risk to safe prescribing within EPR caused by the clinical decision support system within EPR (MULTUM) not being suitable for use within the EPMA prescribing module of EPR Leading to alert fatigue (when switched on and firing inappropriate and unintelligible warnings) and subsequent bypassing of clinically significant alerts or, (when switched off) leaving prescribers without the electronic alert necessary to ensure patient safety when prescribing multiple medicines with potentially complex interactions.	16	3	September 2018
Feb 2017	2882	There is a risk of the future financial stability of the Trust, caused by HRG4+ as a currency has not been accepted by Wales resulting in Wales not agreeing to the Trust's contract offer Leading to a reduction of £2.2m in Trust patient care income in 2018/19 and beyond.	16	9	September 2018
Jul 2017	5008	There is a risk to timely treatment of patients referred to the trust from Welsh organisations caused by the IT technical issues that have been ongoing since the summer of 2017, leading to significant delays in receiving images from Wales (up to four months) Leading to delays in urgent patient treatment and elective patient care.	16	3	July 2018
Jun 2017	2886	There is a risk to not achieving the timely reporting of CT and MR scans caused by increasing demand to radiology for CT and MR that requires additional sessions and outsourcing scans to third party providers Leading to delay in diagnosis and treatment of	16	3	August 2018

		patients and identification of other unexpected findings. In addition, due to the high use of agency usage there is a risk that the trust will breach the agency cap in delivering the additional work.			
--	--	---	--	--	--

(Source: Trust Corporate Risk Register)

Information management

The service invested in innovative and best practice information systems and processes. We found the information used in reporting, performance management and delivering quality care was consistently found to be accurate, valid, reliable, timely and relevant.

Leaders used meeting agendas to address quality and sustainability sufficiently at all levels across the trust. Staff at all levels said they had access to all necessary information and were encouraged to challenge its reliability.

We found a holistic understanding of performance, which sufficiently covers and integrates the views of people with quality, operational and financial information.

Information was presented to the trust board in an accessible format. This information was timely, accurate and identified areas for improvement.

The trust had completed the Information Governance Toolkit assessment. An independent team had audited it and the trust took action where needed. The Information Governance Toolkit is an online system which allows organisations to assess themselves or be assessed against Information Governance policies and standards. The trust had gained a rating of 'satisfactory' which is the highest grade attainable.

Staff told us that had they had full access to the IT equipment and systems needed to do their work. We observed in practice that IT systems worked well and team managers had access to information they needed around team performance and management.

We found robust arrangements in place to ensure for the availability, integrity and confidentiality of patient identifiable data, records and data management systems.

The trust had learned from data security breaches and this was most evident following the cyber-attack in 2018 which affected some NHS providers.

The electronic patient record system was used to extract clinical information which could be analysed and used to monitor performance. Standardised care protocols were in place to ensure that mandatory fields were completed which allowed for a more robust data set. Staff told us this was a reliable and accurate process which was not burdensome for service managers and senior leaders within the trust. This information was provided to the board along with patient experience and financial information to give a holistic view of service quality and sustainability. The board members and senior staff we spoke with expressed confidence in the quality of this data.

There was an audit committee with responsibility for providing data quality assurance oversight on behalf of the board of directors. Data quality was subjected to regular internal audit reviews and we found that any recommendations were acted on.

The trust had invested over £2.7 million in its electronic clinical systems and underlying digital infrastructure. This included upgrades to network, security and storage capabilities. An electronic patient records system had been introduced to community services which allowed staff access to real time GP records.

Engagement

The trust had a structured and systematic approach to engaging with staff, people who use services, those close to them and their representatives.

The trust engagement cycle included daily safety huddles which were led by the chief executive as well as team briefs, team meetings, junior doctors and black and minority ethnic forums. There were also weekly corporate communications and newsletters and a quarterly staff friends and family test.

The annual staff survey results remained high for staff engagement and this finding was supported by other local surveys and a full staff culture survey which was undertaken in 2017. Such surveys were routinely followed up with staff focus groups so that trust leaders could explore any areas for improvement in more depth. This had led to a number of service improvement projects one of which included a review of all communication methods.

The trust provided copies of the action plans in place across each division following the annual staff survey results. Engagement sessions were facilitated in each division so that staff could input their ideas into the divisional action plans. Progress against action plans was monitored through divisional governance systems and the people committee.

The trust provided details of six external partner organisations, which trust leaders regularly engaged with. This included links with organisations set up to implement plans to work towards achieving local and wider public health initiatives. Trust leaders were actively engaged in regional and national networks, working alongside external stakeholders to improve services and patient pathways.

Trust leaders were collaborative and open with all relevant stakeholders about performance. Leaders we spoke with told us this was to build a shared understanding of challenges to the system and the needs of the patients who use the service and to design improvements to meet them.

Non-executive directors told us that they had good working relationships with the council of governors and regularly attended governor meetings and interest events.

We found consistently high levels of constructive engagement with staff and people who use services, including all equality groups. The trust had a membership strategy in place which engaged staff, patients and members of the public through meetings, surveys, newsletters and fundraising. There were two membership constituencies; a public constituency divided into four

voting areas and a staff constituency divided into four classes. The public constituency was divided according to geographical location of the members and it was up to patients, carers, volunteers and the public to opt in to becoming a member. The staff constituency was divided according to role; registered medical practitioners, registered and non-registered nurses, allied healthcare professionals and technical and scientific staff and non-clinical staff. Staff membership worked on an opt out basis.

As of 31 March 2018, there were 9,852 public members located across the catchment area. The strategy aimed to engage membership which was representative of the patient population rather than simply increasing the number of members. There was a focus on reaching underrepresented groups using specific targeted campaigns.

Public members were routinely engaged in focus groups and events through which their input was used to shape service delivery and the vision for patient and family centred care. Public members were also encouraged to attend governors' meetings and board of directors' meetings.

Patients, carers and families were routinely asked to provide feedback about the care and treatment provided by the trust. The friends and family test results for the trust had been consistently higher than the England average since October 2017 for recommending the trust as a place to receive care.

Each quarter, non-executive directors were given a summary of formal complaints which they could look into further. One example was of a relative of a patient who had passed away. It was identified that this relative was probably in need of additional support around grief and bereavement. Trust leaders went above and beyond to visit this relative and offer support.

There was a patient story presented at the start of each quality meeting and board meeting. This helped to ensure that discussions were patient focussed.

Communication systems such as the intranet and newsletters were in place to ensure staff, patients and carers had access to up to date information about the work of the trust and the services they used.

There was an employee of the month award for which any member of staff could be nominated. Staff who were awarded employee of the month received a trophy and visit from the chief executive. As well as this, trust leaders promoted thankyou's and there was an admin assistant of the month award. We were also told of staff members who had been nominated to attend the royal garden party.

Trust leaders were keen to celebrate staff achievements. Following our last inspection, staff were given an additional day's leave and the trust hosted a barbeque to celebrate their outstanding rating.

Learning, continuous improvement and innovation

The trust board and leaders were committed to continuous learning, improvement and innovation.

Leaders fostered a culture in which staff were encouraged to share their ideas for service improvement and provided examples of staff ideas which had been invested in. The trust had a director of research and innovation in post since 2012.

The trust was committed to learning from incidents and when care could be improved. The Trust had a mortality review process which involved the review of all deaths. There was a mortality review group, which met monthly to consider any unexpected or potentially avoidable deaths followed an episode of care at the trust. We were provided with the action logs from nine recent meetings of this group. These minutes evidenced that where there were lessons to be learned from patient deaths, this information was shared with staff through divisional governance, audit and team meetings. In cases where the outcome was likely unavoidable but improvements in service delivery or care were identified these were still taken forward as actions. The action logs also included examples where learning had been shared with external partner agencies and across wider networks.

At our inspection we reviewed 12 deaths that had occurred within the last twelve months. We found that each death up to 14 days after discharge was investigated. The investigation included discussions regarding any potential avoidable harm and lessons learnt. The investigations included input from nursing staff as well as medical staff and reviewed what actions had been taken and what actions could be taken. Duty of candour was built into the process. Each death was discussed at a mortality review meeting with actions outlined and monitored between meetings. All staff we spoke with during our surgery inspection were aware of mortality investigations and lessons learnt, which were circulated to staff. Staff were able to cite occasions when they had given their input. We found that the process was in-depth and robust. It determined potential lessons learnt and we saw evidence that the trust took action to ensure that learning was implemented. The quality of the investigations was reviewed at the mortality board and feedback was given to the reviewer/investigator as needed. We also noted that early contact, within 24 hours, was made with bereaved families. Support was offered in whatever form suited the families.

Staff had access to software which allowed them to contribute ideas and innovations to improve service provision and patient experience. This was referred to as the Innovation Factor and ideas were followed up by the director of research and innovation as appropriate to ensure they were progressing. The idea for a new pressure relieving device, invented by a member of staff, was shared in this way. The trust supported this member of staff in promoting this idea so that it could come to fruition.

Trust leaders were clear that quality of care would not be compromised in favour of financial savings. We were given examples of this; the board opted to keep in-house catering as this was deemed of better quality and an option to switch to smaller venous thrombosis bandages was overruled by surgeons as they did not want to give a potentially less effective product to patients.

The trust actively sought to participate in national improvement initiatives. For example, trust representatives were active members of national networks working to implement and improve patient pathways for cardiovascular disease with the aim of reducing care inequalities.

Notably, the trust had launched the UK's first robotic heart and lung surgery programme, which made minimally invasive surgery accessible to more patients than previously. Robotic-assisted surgery is a form of minimally invasive surgery that is performed through small incisions. The

benefits to patients include a reduced length of stay in hospital as well as reduced pain and risk of infection postoperatively.

There was a quality improvement programme for 2018-2020 which aligned to the trust quality strategy. The trust used A3 reporting and problem solving methodology, which follows a 90-day cycle of improvement from the improvement project proposal to its conclusion. This enabled staff working on improvement projects to build teams for problem solving and break actions down into manageable chunks that in turn ensures that improvement momentum is maintained.

There was a clinical trials unit at the trust, which worked in collaboration with local universities and external stakeholders to design, implement and in reporting of single-centre and multi-centre clinical trials. The trust had in excess of 50 clinical trials open across five main areas of research; aorta (major blood vessel within the body), respiratory, cardiac, surgery and lung cancer. There were research patient ambassadors employed by the trust. The first was in post since 2014 and received a regional award in recognition of their contribution to patient and public engagement in research. There was a research strategy in place which focussed on improving links with industry to further build on research successes.

The trust had received a grant from the local academic health science network to promote the use of 3D printing with the aim of improving the safety and education of operations in patients with adult congenital heart disease.

The trust provided examples of numerous initiatives involving advancing technology and the use of latest software innovations to improve quality and safety of care. This included development of a software solution to electronic governance surrounding randomised clinical trials which was being commercialised at the time of our inspection.

The trust was asked to comment on their targets for responding to complaints and current performance against these targets for the last 12 months.

Question	In days	Current performance
What is your internal target for responding to complaints?	First working day whenever possible, respond in writing within 2 days. We always aim to contact by telephone initially.	Fully met
What is your target for completing a complaint.	25 working days - negotiated with complainants on individual basis	YTD - fully compliant (from July-Dec 17 - 7 complaints were out of time but these were re-negotiated with families)

If you have a slightly longer target for complex complaints please indicate what that is here.	30 working days but will individually negotiate with complainant	As negotiated with the complainant.
Number of complaints resolved without formal process in the last 12 months?	208 (July 2017 to June 2018)	

(Source: Routine Provider Information Request (RPIR) – Complaints Process Overview tab)

The trust received 48 complaints from July 2017 to July 2018. Surgery received the most complaints with 17.

Core Service	Number of complaints	Percentage of total
Surgery	17	35.4%
Medical care (including older people's care)	12	25.0%
Outpatients	5	10.4%
Not core service specific	4	8.3%
Critical care	4	8.3%
Community services for adults	3	6.3%
Diagnostics	3	6.3%
Total	48	100.0%

(Source: Routine Provider Information Request (RPIR) – Complaints tab)

Compliments

From September 2017 to August 2018, the trust received a total of 2,656 compliments. A breakdown by core service can be seen in the table below:

Core service	Number of compliments	Percentage of total
Medical care	1,767	66.5%
Surgery	826	31.1%
Other	63	2.4%
Total	2,656	100.0%

The information described above is taken from a combination of

1. Narrative responses within the Friends and Family Test results. As the FFT describes compliments in one-word terms these have been categorised as:

Excellent, friendly, good, helpful, professional, caring, lovely, kind, amazing, best (in relation to the patients experience of their stay), excellent care, friendly helpful staff, informative and knowledgeable staff, communication excellent.

2. Formal compliment letters addressed to the chief executive. Themes are:

Exceptional standards, Staff went out of their way, Attention to detail , Treated with dignity , Compassionate care, High standards, Made to feel special, Excellent care, Professionalism,

Individualised care, Kindness/care/compassion, Exceptional /Gold standard, Efficiency/kindness, Proud /Kind, Attention to family impressive, Quality of care, Friendly/caring/sympathetic, Supportive, Excellent reputation, Every member of staff impressed, Impressed /competence, Communication/keeping informed, knowledgeable and professional, Supportive, Dignity, Encouragement /advice /exceptional, Exceptional, skilled, courteous, Outstanding, Ambience and Cleanliness.

(Source: Routine Provider Information Request (RPIR) – Compliments)

Accreditations

NHS trusts are able to participate in a number of accreditation schemes whereby the services they provide are reviewed and a decision is made whether or not to award the service with an accreditation. A service will be accredited if they are able to demonstrate that they meet a certain standard of best practice in the given area. An accreditation usually carries an end date (or review date) whereby the service will need to be re-assessed in order to continue to be accredited.

The table below shows which of the trust's services have been awarded an accreditation.

Accreditation scheme name	Service accredited
Clinical Pathology Accreditation and its successor Medical Laboratories ISO 15189	All LCL departments apart from Histology have transitioned to UKAS accreditation or are awaiting grant of accreditation letters / certificates.
Improving Quality in Physiological Services Accreditation Scheme (IQIPS)	BSE Advanced accreditation in Echocardiography 02/06/2015
Quality Control North West (QCNW) for pharmacy aseptic services	Aseptic Unit was QA assessed on 21/11/2017
Cheshire and Mersey Critical Care Network (CMCCN)	ODN Service Spec Review on 28/06/2018
BACPR Accreditation	Community CVD (Cardiac Rehabilitation) to learn outcome in April 2019

(Source: Routine Provider Information Request (RPIR) – Accreditations tab).

Acute services

Liverpool Heart and Chest Hospital

Thomas Drive,

L14 3PE

Tel: 0151 600 1616

<https://www.lhch.nhs.uk>

Surgery

Facts and data about this service

Details of the surgical wards and the services provided at Liverpool Heart and Chest Hospital are below.

Name of ward	Description of ward and services provided
Aspen Suite	Aspen suite is a newly developed same day admission suite. Patients are admitted directly from home on the same day as surgery and transferred from this suite to theatre.
Cedar Ward	Cedar Ward is a cardiothoracic ward with 34 beds. Patients are admitted directly to the ward. Patients then transfer to theatre following a post-operative stay on critical care. Once the patient is discharged from critical care they return to Cedar Ward until discharge.
Elm Ward	Elm ward is a cardiothoracic ward with 20 beds. Patients who have sustained any neurological injury or need rehabilitation, return to Elm Ward following their post-operative stay on critical care.
Oak Ward	Oak Ward is a thoracic surgery ward with 20 beds.
Theatres	<p>Theatres within surgery comprise:</p> <ul style="list-style-type: none">• Six cardiac theatres.• Two thoracic theatres.• One pacing theatre.• Endoscopy suite.

(Source: Routine Provider Information Request (RPIR) – Sites tab)

The trust had 2,966 surgical admissions from June 2017 to May 2018. Emergency admissions accounted for 150 (5.1%), 229 (7.7%) were day case, and the remaining 2,587 (87.2%) were elective.

(Source: Hospital Episode Statistics)

Although the trust considers endoscopy as part of the core service of surgery, CQC inspects endoscopy as part of medicine. As such it was not inspected as part of this core service. Add headings, text, graphs and diagrams

Is the service safe?

Mandatory Training

The trust set a target of 95% for completion of all mandatory training courses.

A breakdown of compliance for mandatory training courses from April to September 2018 for qualified nursing staff in surgery at Liverpool Heart and Chest Hospital is shown below:

Training module name	April to September 2018				
	Staff trained	Eligible staff	Completion rate	Trust target	Met (Yes/No)
Venous thromboembolism	9	9	100.0%	95.0%	Yes
Meds management	30	30	100.0%	95.0%	Yes
Advanced life support	10	10	100.0%	95.0%	Yes
Health and safety (slips, trips and falls)	122	124	98.4%	95.0%	Yes
Equality and diversity	122	125	97.6%	95.0%	Yes
Duty of candour	122	127	96.1%	95.0%	Yes
Adult basic life support	24	25	96.0%	95.0%	Yes
Conflict resolution	120	126	95.2%	95.0%	Yes
Moving and handling	116	122	95.1%	95.0%	Yes
Learning disabilities	120	127	94.5%	95.0%	No
Sepsis	118	125	94.4%	95.0%	No
Basic resus theory expiry 3 yearly	116	124	93.5%	95.0%	No
Infection prevention (level 2)	112	121	92.6%	95.0%	No
Moving and handling practical	110	120	91.7%	95.0%	No
Information governance	110	122	90.2%	95.0%	No
Fire 1 year	89	99	89.9%	95.0%	No
Intermediate life support	80	98	81.6%	95.0%	No
Fire safety 2 years	17	23	73.9%	95.0%	No
Consent	1	2	50.0%	95.0%	No

In surgery the target was met for nine of the 19 mandatory training modules for which qualified nursing staff were eligible.

A breakdown of compliance for mandatory training courses from April to September 2018 for medical staff in surgery at Liverpool Heart and Chest Hospital is shown below:

Training module name	April to September 2018				
	Staff trained	Eligible staff	Completion rate	Trust target	Met (Yes/No)
Advanced life support	6	6	100.0%	95.0%	Yes
Conflict resolution	47	59	79.7%	95.0%	No
Equality and diversity	47	59	79.7%	95.0%	No
Fire safety 2 years	17	22	77.3%	95.0%	No
Moving and handling	44	59	74.6%	95.0%	No
Basic resus theory expiry 3 yearly	44	59	74.6%	95.0%	No
Health and safety (slips, trips and falls)	44	59	74.6%	95.0%	No
Fire 1 year	27	37	73.0%	95.0%	No
Infection prevention (level 2)	42	58	72.4%	95.0%	No
Information governance	42	59	71.2%	95.0%	No
Duty of candour	39	59	66.1%	95.0%	No
Venous thromboembolism	38	58	65.5%	95.0%	No
Sepsis	38	59	64.4%	95.0%	No
Learning disabilities	38	59	64.4%	95.0%	No
Consent	35	57	61.4%	95.0%	No
Adult basic life support	35	58	60.3%	95.0%	No

In surgery the target was met for one of the 16 mandatory training modules for which medical staff were eligible.

(Source: Routine Provider Information Request (RPIR) – Training tab)

Some staff had not received up-to-date training in all safety systems, processes and practices. This had been recognised and actions put into place to increase access to training.

The training figures for mandatory training for surgery remained below the services targets at this inspection. Rates of training were monitored but these rates had fallen due to the failure of the online training system. Following the inspection, the trust submitted updated training. There had been a significant improvement in training rates. As an example, Intermediate life support for nurses had dropped at the inspection to below 80% the updated training figures showed that this was at 87%. Overall, for nurses six of the 19 mandatory training courses met the trusts target. For medics two of the 16 mandatory training courses met the trust targets. This additional data also showed that overall aggregated compliance across the surgery division was 93%. The trust acknowledged these were still below their targets.

The trust had transferred their training to a national online training system to support staff changing job roles within trusts across the North West. This would assist in staff not having to repeat up to date training at induction. This transfer had impacted on staff members ability to access training in a timely manner. Additionally, the national system had developed a problem over the Christmas period, which meant for a three-week period staff were unable to access training. Because, of these limits and the reduction in completing and renewing of mandatory training, the service had arranged that training would be completed in the service by face to face training. Plans had been in place to address the recognised risk associated with the national learning system (OLM) with training being in place from July 2018 when the risk was noted on the risk register. The service had recognised the reduction in the rates of mandatory training and had active plans in place to meet the training needs of staff. Rates of training were monitored but these rates had fallen due to the failure of the online training system. Following the inspection, the trust submitted updated training. There had been a significant improvement in training rates. The trust acknowledged these were still below their targets but had made significant improvements in three weeks.

Where staff were identified as out of date in the mandatory training an alert was generated both to the staff member and to the management team. As a result, staff were supported to undertake individual training.

The failure of the online training system to provide suitable and timely training to staff had been added to the trusts risk register in July 2018, in order that action could be taken and monitored.

Safeguarding Training

The trust set a target of 95% for completion of all Safeguarding training courses.

A breakdown of compliance for safeguarding training courses from April to September 2018 for qualified nursing staff in surgery at Liverpool Heart and Chest Hospital is shown below:

Training module name	April to September 2018				
	Staff trained	Eligible staff	Completion rate	Trust target	Met (Yes/No)
Safeguarding adults (level 1)	125	125	100.0%	95.0%	Yes
Safeguarding ambassador level 3	9	9	100.0%	95.0%	Yes
Safeguarding children (level 1)	121	121	100.0%	95.0%	Yes
Prevent level 1	122	126	96.8%	95.0%	Yes
Safeguarding adults (level 2)	119	125	95.2%	95.0%	Yes
Safeguarding children (level 2)	118	125	94.4%	95.0%	No
Prevent WRAP level 3	114	123	92.7%	95.0%	No

In surgery the target was met for five of the seven safeguarding training courses for which qualified nursing staff were eligible, with performance very close to the target for the two courses for which the target was not met.

A breakdown of compliance for safeguarding training courses from April to September 2018 for medical staff in surgery at Liverpool Heart and Chest Hospital is shown below:

Training module name	April to September 2018				
	Staff trained	Eligible staff	Completion rate	Trust target	Met (Yes/No)
Safeguarding adults (level 1)	48	48	100.0%	95.0%	Yes
Safeguarding ambassador level 3	1	1	100.0%	95.0%	Yes
Safeguarding children (level 1)	47	47	100.0%	95.0%	Yes
Prevent level 1	48	59	81.4%	95.0%	No
Safeguarding adults (level 2)	40	59	67.8%	95.0%	No
Safeguarding children (level 2)	37	59	62.7%	95.0%	No
Prevent WRAP level 3	20	58	34.5%	95.0%	No

In surgery the target was met for three of the seven safeguarding training courses for which medical staff were eligible.

(Source: Routine Provider Information Request (RPIR) – Training tab)

Some staff had not received up to date training in appropriate safeguarding. There had been changes in how the service provided training. Additionally, the online training system had failed for three weeks resulting in staff not having access to complete the training in a timely manner. The rates of training completion had reduced. The service recognised that the training rates had reduced and had arranged for face to face training to take place to support staff until the issues with the online training system could be resolved.

Following the inspection, the service submitted updated training. There had been a significant improvement in training rates from that at inspection. Overall for nurses, five of the seven training courses met the trusts target. For medics, three of the seven training courses met the trust targets. The trust acknowledged these were still below their targets.

The failure of the online training system to provide suitable and timely training to staff had been added to the trusts risk register in July 2018 in order that action could be taken and monitored. It was noted to be a national issue.

Cleanliness, infection control and hygiene

All ward and surgical areas viewed were clean and were well-maintained.

We saw hand gel dispensers throughout all the areas that we inspected. There was signage to remind patients, their carers and visitors to wash their hands or use the hand sanitising gel.

Sharps bins were labelled appropriately and not over filled. We saw that foot operated clinical waste bins were in use. We saw appropriate arrangements for the disposal of clinical waste in accordance with the services waste management policy.

Cleaning records viewed were up to date and demonstrated that all areas were checked appropriately and in accordance with the trusts policy.

All patients were screened for potential infections prior to admittance and appropriate action taken.

Appropriate measures were in place for the decontamination of surgical instruments, and single

usage equipment was appropriately disposed of after its use.

The Patient-Led Assessments of the Care Environment (PLACE) score for cleanliness in the trust was 98.71% for 2018. PLACE is a system for assessing the quality of the patient environment. It is an organisational voluntary self-assessment which takes place annually. The 2018 results were consistent with the 2017 score of 98.75% and was above the national average.

Audits viewed, and staff spoken with demonstrated that staff adhered to infection control principles, including handwashing. Rates of training were monitored but these rates had fallen due to the failure of the online training system. Following the inspection, the trust submitted updated training, that showed that medics infection control rates had doubled from the inspection to 59% but remained significantly below the services target. Nursing staff training was 100% for level 1 and 87% for level 2.

The service recognised that the training rates had reduced and had arranged for face to face training to take place to support staff until the issues with the online training system could be resolved.

The failure of the online training system to provide suitable and timely training to staff had been added to the trusts risk register in July 2018 in order that action could be taken and monitored.

Environment and equipment

Equipment suitable to assess and monitor patients' health was seen in clinical areas.

There were in date, 'I am clean stickers' on equipment throughout the wards and theatres.

Emergency trolleys and resuscitation equipment on the surgical wards and theatres were in date and monitored.

Patients had access to nurse call systems to summon help and assistance as needed.

Maintenance issues were reported directly and responded to in a timely manner. During the inspection a ward experienced a flood in a patient area and heating was not available. The maintenance department responded rapidly to this. Patients were relocated to other wards as suitable to their needs and heating equipment was supplied.

Portable appliance testing (PAT) was in place to make sure that equipment was safe for staff to use.

Specialist equipment such as the robotics used in surgery had a specific cleaning schedule in place that was adhered to.

Sepsis treatment kits were available. The kits were sealed, within their expiry date and stored securely in the medicine store rooms. There were kits available for patients with allergies to specific antibiotics.

Assessing and responding to patient risk

A proactive approach to anticipating and managing risks to patients was embedded and recognised as the responsibility of all staff.

The trust had instigated a system known as HALT. This was in place for staff, patients and visitors and empowered all those involved in patient care to call a halt in care if there were any concerns regarding the safety. We were shown several examples where staff and patient challenge had resulted in the avoidance of a safety concern.

Each ward and theatre area undertook a “huddle” each morning this was to review any risks including patient safety risk and plan how to address these. There was also a trust wide huddle that we observed, this took place each day and assisted in making sure that support could be made available from other areas if needed.

Electronic patient records viewed were thorough and up to date. The system was easy to access and included areas such as risk assessments. Every patient received an appropriate assessment on admission which was updated if incidents occurred or the patients’ condition changed.

Staff used recognised risk assessment tools to monitor patients’ condition. Such as an early warning system which supported staff to monitor a patient’s condition and seek medical support as needed. The early warning system was audited and checked to ensure that they were appropriately used. If training issues were identified staff were appropriately contacted to receive additional support.

Staff spoken with and records seen reflected that staff were aware of and dealt with any specific risk issues, such as falls or pressure ulcers.

Observational, ‘comfort rounds’ were carried one to two hourly depending on individual patient needs. The electronic patient records showed that these had all been completed and any concerns escalated.

Staff followed the sepsis six pathway. Sepsis is a medical emergency that requires prompt treatment. Management of sepsis after admission is known as the "sepsis six". Staff could access the sepsis pathway on the trusts intranet and there was a sepsis flowchart on the walls in the wards to guide staff to safely manage any patients requiring additional support.

World Health Organisation surgical safety checklists (WHO) were in place for all patients undergoing surgery. WHO checklists are a simple tool designed to improve the safety of surgical procedures. The service undertook audits and set a target of 90% on compliance. The latest audit reviewing staff practice and records had a rate of 100% compliance.

Patients wellbeing was at the centre of the service to safeguard and protect them from discrimination and harm. Although training rates for safeguarding throughout the service were below the trusts targets there was a culture in place based on safeguarding patients. Discussion with staff and managers demonstrated a proactive approach to safeguarding and focus on early identification. Information regarding safeguarding and its prevention was available throughout the service. The guidance available to staff was supported by robust policies and safety arrangements. The priority of the staff, policies and managers was to prevent abuse or discrimination that might cause avoidable harm and respond appropriately to any signs or allegations of abuse. There was active and appropriate engagement in local safeguarding procedures and effective work with other relevant organisations, including at risk groups within the community accessing the service.

Nurse staffing

The trust has reported their staffing numbers for medical staff for Surgery below for the periods from April 2017 to March 2018 and April to August 2018.

April 2017 to March 2018

April to August 2018

Ward / team name	Actual staff	Planned staff	Staffing rate (%)	Actual staff	Planned staff	Staffing rate (%)
Surgery	129.4	145.6	88.9%	118.9	144.9	82.1%

(Source: Routine Provider Information Request (RPIR) – Total staffing tab)

From September 2017 to August 2018, the trust reported a vacancy rate of 14.5% in surgery for nursing staff. The trust reported no vacancy target.

(Source: Routine Provider Information Request (RPIR) – Vacancy tab)

From September 2017 to August 2018, the trust reported a turnover rate of 14.8% in surgery for nursing staff, this was higher than the trust target of 10%

(Source: Routine Provider Information Request (RPIR) – Turnover tab)

From September 2017 to August 2018, the trust reported a sickness rate of 5.7% in surgery for nursing staff, this was higher than the trust target of 4%

(Source: Routine Provider Information Request (RPIR) – Sickness tab)

The table below shows the numbers and percentages of hours in surgery at Liverpool Heart and Chest Hospital from August 2017 to July 2018 that were covered by qualified nursing bank and agency staff or left unfilled by department.

Of the 117,738.4 total working hours available for non-qualified nurses, 9.6% were filled by bank staff and 0.0% were covered by agency staff to cover sickness, absence or vacancy for qualified nurses. In the same period, 1.6% of the available hours for qualified nurses were unable to be filled by either bank or agency staff.

Of the 135,971.3 total working hours available for qualified nurses, 13.4% were filled by bank staff and 0.0% were covered by agency staff to cover sickness, absence or vacancy for qualified nurses. In the same period, 1.7% of the available hours for qualified nurses were unable to be filled by either bank or agency staff.

Staff group	Total hours available	Bank usage		Agency usage		Not filled by bank or agency	
		Hrs	%	Hrs	%	Hrs	%
Non-qualified nurses	117,738.4	11,275.1	9.6%	7.5	0.0%	1,918.9	1.6%
Qualified nurses	135,971.3	18,283.0	13.4%	1,621.5	0.0%	2,293.1	1.7%
Total	253,709.7	29,558.1	11.7%	1,629.0	0.0%	4,211.9	1.7%

(Source: Routine Provider Information Request (RPIR) - Nursing bank agency tab)

Staffing levels and skill mix were planned, implemented and reviewed to keep patients safe. Any staff shortages were responded to in a timely manner.

Managers had calculated the number and grade of nurses and healthcare assistants required to meet patients' individual needs.

Staffing was reviewed each day at the trust bed management meetings. Additionally, each areas safety huddle and the trusts safety huddles took account and monitored staffing levels. Staff were

shared across wards as appropriate. Staff told us that they thought the arrangements worked well and although stretched on occasions the staffing levels were appropriate.

The ward manager could and did adjust staffing levels daily to take account of patients' needs. Adjustments were made where patients required enhanced observation and additional staff were needed. There were clear policies and procedures in place to support enhanced observations.

Records reviewed showed that the number of nurses and healthcare assistants on duty matched the numbers determined as safe by the trust.

When necessary, managers deployed bank staff to maintain safe staffing levels. The service did not use agency staff. Where there were not sufficient staff available, managers within the trust undertook to work in the area that required additional support. This equated to one shift a month to most managers and was seen by staff and managers as an opportunity to work as a team.

Where bank staff were used, they received an induction and were familiar with the wards they worked on.

Medical staffing

The trust has reported their staffing numbers for medical staff for Surgery below for the periods from April 2017 to March 2018 and April to August 2018.

Ward / team name	April 2017 to March 2018			April to August 2018		
	Actual staff	Planned staff	Staffing rate (%)	Actual staff	Planned staff	Staffing rate (%)
Surgery	71.6	83.2	86.0%	76.5	84.2	90.8%

(Source: Routine Provider Information Request (RPIR) – Total staffing tab)

From September 2017 to August 2018, the trust reported a vacancy rate of 10.6% in surgery for medical staff, the trust reported no vacancy target.

(Source: Routine Provider Information Request (RPIR) – Vacancy tab)

From September 2017 to August 2018, the trust reported a turnover rate of 29.5% in surgery for medical staff, this was higher than the trust target of 10%.

(Source: Routine Provider Information Request (RPIR) – Turnover tab)

From September 2017 to August 2018, the trust reported a sickness rate of 0.6% in surgery for medical staff, this was lower than the trust target of 4%.

(Source: Routine Provider Information Request (RPIR) – Sickness tab)

The table below shows the numbers of hours in surgery at The Liverpool Heart and Chest Hospital from August 2017 to July 2018 that were covered by medical bank and locum staff or left unfilled.

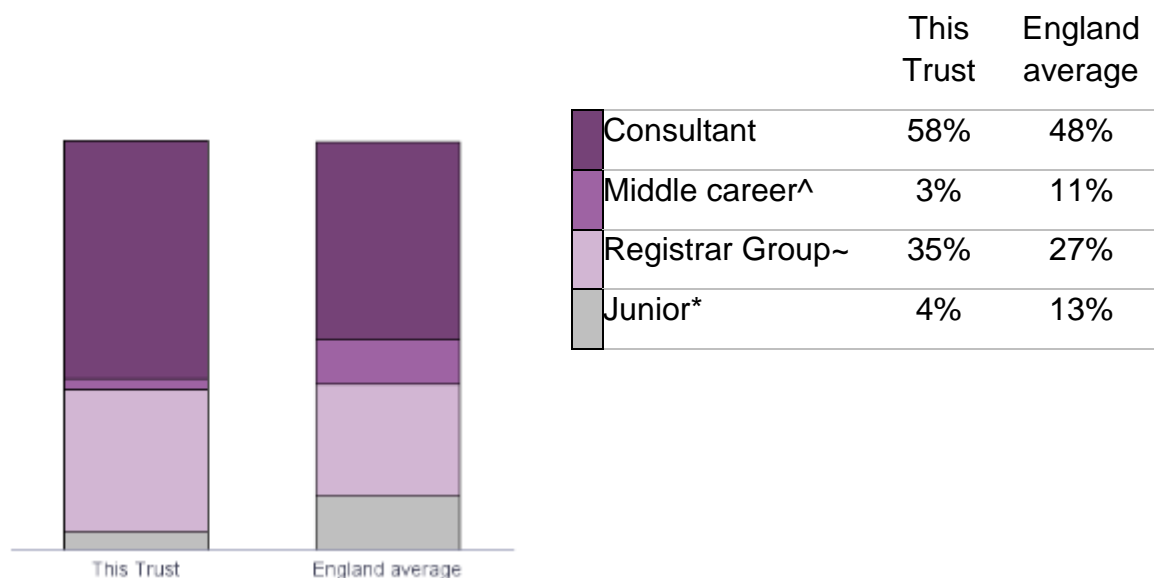
Of the 58,500.0 hours within surgery total, 0.0% hours were filled by bank staff and 0.2% hours were covered by locum staff to cover sickness, absence or vacancy for medical staff. In the same period, 0.0% hours were unable to be filled by either bank or locum staff.

Ward / team	Total hours available	Bank usage		Locum usage		Not filled by bank or locum	
		Hrs	%	Hrs	%	Hrs	%
Surgery	58,500.0	0.0	0.0%	125.0	0.2%	0	0.0%

(Source: Routine Provider Information Request (RPIR) - Medical agency locum tab)

From July 2018, the proportion of consultant staff reported to be working at the trust was higher than the England average and the proportion of junior (foundation year 1-2) staff was lower.

Staffing skill mix for the whole time equivalent staff working at Liverpool Heart and Chest Hospital NHS Foundation Trust



^ Middle Career = At least 3 years at SHO or a higher grade within their chosen specialty

~ Registrar Group = Specialist Registrar (StR) 1-6

* Junior = Foundation Year 1-2

(Source: NHS Digital Workforce Statistics)

Medical staff levels were planned, implemented and reviewed to keep patients safe.

The level of medical staff at consultant level was above the national average. The service is specialised in nature and attracts consultants nationally and internationally to work and learn within the service. This also accounts for a slightly higher than average turnover. As a result, there is minimal usage of locum medical staff and no usage of bank. This assists in making sure that there is always sufficient skilled and appropriate medical staff to meet the needs of patients with complex needs.

Each patient was allocated a specific consultant on assessment. However, the service had arrangements in place to allow the patient to be flexibly managed if for any reason the specific consultant was unavailable. As all the records were electronic, this could be managed safely and was undertaken to ensure that the patient received care appropriate to their needs in a timely manner.

There was a lower representation than comparable trust of junior doctors. As a specialist trust the experience for junior doctors was limited in scope. The trust had worked with the General

Medical Council to provide additional support to junior doctors. There has also been an increase in the training for advanced nurse practitioner to support doctors.

Records

Patient information was recorded on an electronic patient record system, all members of staff had their own unique log-in. This made sure that all entries were recorded with a date, time and attributed to a staff member. Staff were positive about the electronic patient record and found it easy to use and accessible. Paper files were available which contained patient identification stickers and wristbands, these were kept secure in a locked trolley within the nurses' station area.

All information needed to deliver patient care was available to all relevant staff (including bank staff) when they needed it and was in an accessible form. This included when patients moved between teams.

Staff could highlight whether a patient had a specific need that they needed to be aware of. Alerts were also displayed on the patient bed management system screen which was linked to the electronic patient record in the nurse's station. The bed management system could be accessed by management staff and was used to manage the flow of patients within the service.

Records were clear and easy to follow. We saw that, records included a detailed social and medical history, a current and discontinued medication list, the pre-operative checklist, and there was evidence of a multidisciplinary approach of staff involved in the patients care. We saw evidence of post-surgical plans, an on-going discharge plan and relevant risk assessments including falls, mobility, moving and handling and mental health. Discharge summaries were sent electronically to GP practices and a copy given to the patient.

The electronic patient record system allowed medical staff to remotely review patient care plans as results from diagnostic scans and blood tests became available and updated care plans as necessary. Results from tests and scans required acknowledgement on the electronic patient record system by an appropriate staff member which staff described as a mechanism to reduce the risk of results not being seen.

Medicines

Compliance with medicines policy and procedure was routinely monitored and action plans were always implemented promptly.

Staff followed good practice in medicines management (that is, transport, storage, dispensing, administration, medicines reconciliation, recording, disposal, use of covert medication) and did it in line with national guidance.

Medical staff electronically prescribed medication using the electronic patient record system, only staff members who were competent to prescribe medications were given prescriber rights. Staff told us this reduced medication prescription errors. The electronic patient record system alerted staff when patient medicines were due and highlighted when new medicines had been prescribed.

Staff reviewed the effects of medication on patients' physical health regularly and in line with National Institute for Health and Care Excellence guidance, especially when the patient was prescribed a high dose of antipsychotic medication.

Medicines practice was consistently audited and monitored to identify areas of improvement. We saw examples of where practice had developed because of the ongoing review and monitoring of

medicines practice.

Staff confirmed that they had attended training and received supervision before they attained their competency.

The Electronic Patient Record (EPR) system showed the progress of 'to take out' medicines. Medicines prescribed for patients to take once they leave hospital.

The service had introduced a trial initiative on Birch Ward where a ward based pharmacy technician prepared the medication to take home by patients. Freeing up nursing time and to improve the efficiency of the "to take out" process.

Staff said it strengthened working relations and pharmacy staff saw this as an opportunity for role expansion. During the time of our inspection the service had put together a business case to make the ward based pharmacy technician role permanent.

Patient own medicines were kept secure in a lockable bedside cabinet, staff said they supported patients that wished to administer their own medicines.

Incidents

Never events are serious patient safety incidents that should not happen if healthcare providers follow national guidance on how to prevent them. Each never event type has the potential to cause serious patient harm or death but neither need have happened for an incident to be a never event.

From November 2017 to September 2018, the trust reported no incidents classified as never events for surgery.

(Source: Strategic Executive Information System (STEIS))

In accordance with the Serious Incident Framework 2015, the trust reported no serious incidents (SIs) in surgery which met the reporting criteria set by NHS England from November 2017 to October 2018.

(Source: Strategic Executive Information System (STEIS))

Patients were protected by a comprehensive safety system, a focus on openness, transparency and learning when things go wrong. Learning was based on an ongoing analysis and investigation of safety incidents. All staff were encouraged to participate in learning to improve safety.

There was one never event after September 2018 this resulted in no harm to the patient. A patient had received air for 45 minutes when they should have received oxygen therapy. This was identified rapidly, and the patient suffered no harm because of a rapid identification. The trust reviewed this, and learning was cascaded to all staff in a timely manner.

The service had in place good practice initiatives such as National Safety Standards for Invasive Procedures and Local Safety Standards for Invasive Procedures. These have been created to bring together national and local learning from the analysis of never events, Serious incidents and near misses. This created a set of recommendations that helped NHS organisations to provide safer care to their patients. The service has an eLearning package to assist staff and remind them of the importance of incident management. There was also an audit of these undertaken by the audit team with findings feedback to the relevant teams and managers.

Medical and nursing staff told us they knew how to report incidents and had received feedback. Incident feedback was cascaded through email, staff meetings and during the safety huddles.

Other forums in which incidents were discussed included governance meetings and audit meetings. All staff knew what incidents to report and how to report them. Staff told us that they were supported to report all incidents. Staff received feedback from investigation of incidents, both internal and external to the service. Staff were debriefed and received support after a serious incident.

There was a high level of reporting incidents this included any incident consider a HALT incident. Patients, carers and staff were supported to call a HALT if they thought there was a need to review the care or safety of a patient. Although these did not specifically create a safety incident the trust recorded and monitored these to understand patterns and take forward any learning. This approach supported all parties to act to prevent a safety incident and protect patients. Additionally, any safeguarding concerns and complaints were recorded as potential safety incidents. All potential incidents were discussed as part of each huddle and staff meetings and monitored by management to determine lessons learnt.

Staff spoken with understood the duty of candour. Written records reflected that the service was open and transparent and gave patients and families a full explanation when things went wrong. The policy for duty of candour was timely and robust Records showed that the service did not apply duty of candour if they deemed that the service was not at fault. This did not meet the services policy. Following the inspection, the service provided information that showed they had put into place this change and reflected this in their policy.

There have been no coroners' investigations from deaths within the service in the last 24 months.

There was evidence that changes in practice had been made because of feedback from incidents. This included specific quality initiatives such as an increased presence of pharmacy technicians on a ward to reduce any medicines incidents.

Safety Thermometer

The Safety Thermometer is used to record the prevalence of patient harms and to provide immediate information and analysis for frontline teams to monitor their performance in delivering harm free care. Measurement at the frontline is intended to focus attention on patient harms and their elimination.

Data collection takes place one day each month – a suggested date for data collection is given but wards can change this. Data must be submitted within 10 days of suggested data collection date.

Data from the Patient Safety Thermometer showed that the trust reported no new pressure ulcers, no falls with harm and one new catheter urinary tract infection from October 2017 to October 2018 for surgery.

(Source: NHS Digital)

We saw that all the surgical wards had up to date safety thermometer data on display. There were no incidents of any of these events such as infections in the last 30 days on any of the wards. The Trust was in the process of attempting to have their own Infection Prevention software systems linked to Liverpool Clinical Labs.

Managers were aware of all patients who had a urinary tract infection in surgery. However, they were unable to separate the data for the hospital and non-hospital acquired infection

Add headings, text, graphs and diagrams

Is the service effective?

Evidence-based care and treatment

Accurate and up-to-date information about effectiveness was shared internally and externally and was understood by staff. It was checked and monitored to improve patient care and treatment.

The service contributed to the 'National Cardiac Benchmarking Collaborative' and to national standards. These were actively contributed to by the trust and learning from performance was used to improve services.

Staff provided a range of care and treatment interventions suitable for the patient group. The interventions were those recommended by, and were delivered in line with, relevant guidance such as the National Institute for Health and Care Excellence.

We saw staff monitored the patient's progress throughout their care journey. Baseline physiological observations were recorded at pre-assessment followed by agreed and planned frequencies of physiological observations based on the needs and condition.

The electronic patient record showed that staff developed care plans that met the needs identified during assessment. Care plans were personalised, holistic and recovery-oriented. Staff monitored care plans and updated them when necessary.

Nutrition and hydration

There was a holistic approach to assessing, planning and delivering suitable food and drink to meet patients' dietary needs.

In the pre-operative assessment clinic, eating and drinking instructions were given prior to surgery being undertaken. Patients were also asked if they had any special dietary requirements and fasting details and instructions were given.

Records showed that patients were assessed for any risks of poor food and fluid intake or special dietary needs such as diabetes. Where risks were identified, care plans were put into place to review the patient and obtain additional support with eating and drinking as needed. Patients were screened using the 'Malnutrition Universal Screening Tool'. The screening tool is a simple assessment that identifies if patients are at risk of poor nutrition. A dietitian saw patients with scores that indicated a risk. Screening scores were audited and the results reviewed and discussed at governance committee meetings. Where action was needed this was passed to staff in team meetings and handovers.

For patients at an increased risk of malnutrition or dehydration or who had needs with eating the service utilised red tray and jug system. This arrangement was a strong visual flag to staff that the patient required extra support eating and drinking.

A variety of food choices was available to patients. This included special diets that were needed to meet patients' individual needs. Patients spoken with were satisfied with the quality of the food. When patients had expressed that the food became "boring" after a long stay. The service and staff worked with the patients to alter the choices available, and supported them to continue to eat a healthy nutritious diet.

Patients, carers and staff could access a café, restaurant and vending machines. Wards also had family rooms and kitchens to support patients and carers to access drinks.

We saw that 'protected mealtimes' had been introduced. Protected Mealtimes are periods on a hospital ward when all non-urgent clinical activity stops. During these times patients could eat without being interrupted and staff could help.

Managers confirmed that diet and fluid information was given to patients. A letter was provided to patients on-going care provider regarding any special dietary needs following surgery. For example, the GP or local hospital or community services.

Staff told us, and records reflected that patient's if specialist nutritional equipment was required this was delivered to the patient's home prior to discharge. This was undertaken in order to ensure the patient had the necessary equipment in place when they arrived home.

Pain relief

There was a holistic approach to assessing, planning and delivering care and treatment to patients. This included meeting patients' specific needs in relation to pain relief.

Pre-assessment nurses identified patients who may require additional pain management support prior to surgery. Staff could refer the patients to the pain team in order that the management of individual pain could be planned for. If patients were identified at any time as requiring additional pain relief support they could be referred directly to the team 24 hours a day. The target for the team to assess urgent referrals within two hours was consistently met.

The service pain relief team comprised of two consultants and two nurses from Monday to Saturday. The team could be accessed for advice as needed and out of hours there was an on-call pain team member available. The team were supported by pain link nurses from each clinical area and advanced nurse practitioners. Records recorded liaison with the pain management team.

Pain management devices and pain monitoring processes were in place. Staff said that they had received appropriate training in the use of equipment.

Pain link nurses from the clinical areas communicated developments to staff in pain management and were key trainers for the use of pain management devices in order that nursing staff could provide patients with the correct information.

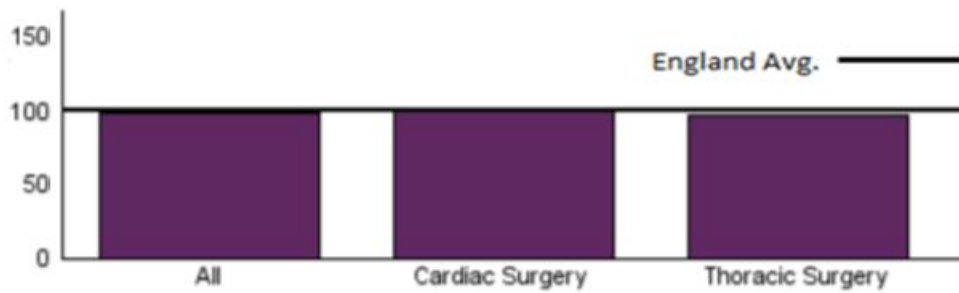
In theatre recovery areas there was information available that highlighted to staff the importance of pain monitoring and used a pain recognition tool to assist staff.

Patient outcomes

Liverpool Heart and Chest Hospital

From June 2017 to May 2018, all patients at Liverpool Heart and Chest Hospital had a similar expected risk of readmission for elective admissions when compared to the England average.

Cardiac Surgery and Thoracic Surgery patients at Liverpool Heart and Chest Hospital had a similar to expected risk of readmission for elective admissions when compared to the England averages.



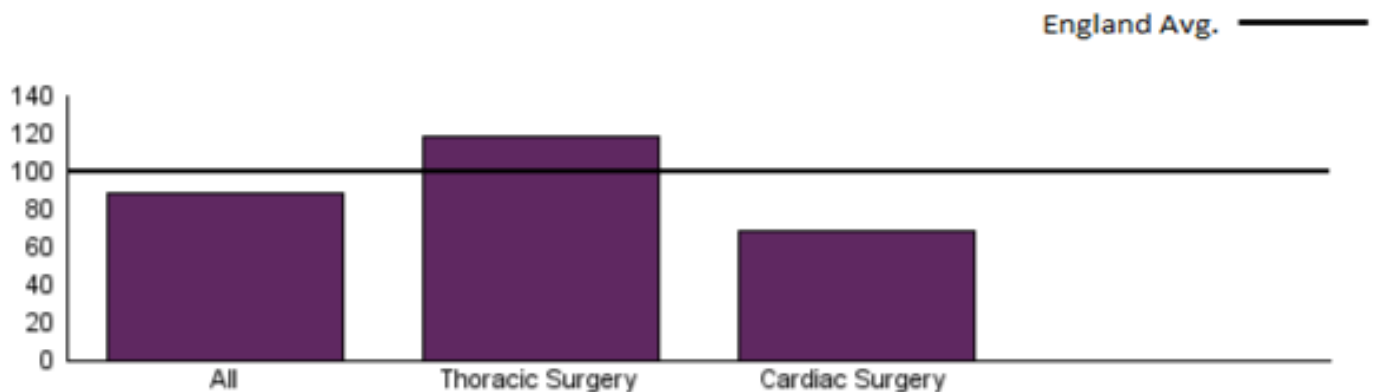
Note: Ratio of observed to expected emergency readmissions multiplied by 100. A value below 100 is interpreted as a positive finding, as this means there were fewer observed readmissions than expected. A value above 100 represents the opposite. Top three specialties for specific site based on count of activity

All patients at Liverpool Heart and Chest Hospital had a lower expected risk of readmission for non-elective admissions when compared to the England average.

Thoracic surgery patients at Liverpool Heart and Chest Hospital had a higher expected risk of readmission for non-elective admissions when compared to the England average.

Cardiac surgery patients at Liverpool Heart and Chest Hospital had a lower expected risk of readmission for non-elective admissions when compared to the England average.

Non-Elective Admissions - Liverpool Heart and Chest Hospital



Note: Ratio of observed to expected emergency readmissions multiplied by 100. A value below 100 is interpreted as a positive finding, as this means there were fewer observed readmissions than expected. A value above 100 represents the opposite. Top three specialties for specific site based on count of activity

(Source: Hospital Episode Statistics)

National Hip Fracture Database

The trust did not participate in this audit as they do not provide surgical care for hip fractures.

(Source: National Hip Fracture Database 2017)

Bowel Cancer Audit

The trust did not participate in this audit as they do not provide surgical treatment for bowel cancer.

(Source: National Bowel Cancer Audit)

National Vascular Registry

The trust did not participate in this audit as they do not provide vascular surgery.

(Source: National Vascular Registry)

Oesophago-Gastric Cancer National Audit

In the 2016 National Oesophago-Gastric Cancer Audit (NOGCA), the proportion for the age and sex adjusted proportion of patients diagnosed after an emergency admission was not applicable because the trust doesn't have an emergency department.

The 90-day post-operative mortality rate was 4.3%. This was within the expected range. The 2015 rate was 5.3%.

(Source: National Oesophago-Gastric Cancer Audit 2016)

National Emergency Laparotomy Audit

The national Emergency Laparotomy audit has three ratings for each indicator. Green ratings indicate performance of over 80%, amber ratings indicate performance between 50% and 80% and red ratings indicate performance under 50%.

In the 2016 National Emergency Laparotomy Audit (NELA), Liverpool Heart and Chest Hospital achieved a red rating for the crude proportion of cases with pre-operative documentation of risk of death. This was based on 19 cases.

The site achieved a green rating for the crude proportion of cases with access to theatres within clinically appropriate time frames. This was based on 19 cases.

The site achieved a red rating for the crude proportion of high-risk cases with a consultant surgeon and anaesthetist present in the theatre. This was based on 18 cases.

The site achieved a green rating for the crude proportion of highest-risk cases admitted to critical care post-operatively. This was based on 12 cases.

The risk-adjusted 30-day mortality for the site was within the expected range, based on 19 cases.

(Source: National Emergency Laparotomy Audit)

Patient Reported Outcome Measures

The trust did not participate in this audit as they do not provide the relevant surgical procedures.

(Source: NHS Digital)

The service submits data to the National Institute for Cardiac Outcome Research (NICOR). The National Institute for Cardiac Outcome Research collects data and produces analysis to enable hospitals and healthcare improvement bodies to monitor and improve the quality of care and outcomes of cardiovascular patients. A review of the adult cardiac surgery audit from 2014 to 2017 and data submitted by the trust showed that overall the service's trend was of increasingly positive outcomes. Examples included the average waiting time in days for first time urgent coronary artery bypass grafting (CABG) had decreased from 17 days in 2014 to 15 days in 2017. Coronary artery bypass grafting is a type of surgery that improves blood flow to the heart. Additionally, re-operation for any cause had decreased from 5.20% to 4.06% over three years demonstrating a decrease in the need for further surgery.

The service monitored the patient outcomes used as part of the National Institute for Cardiac Outcome Research. The latest data generated on 4 October 2018 showed that the positive trends continued. The average waiting times for urgent coronary artery bypass grafting had last been determined as 13 days, a reduction in waiting times from the 2013 figures. Re-operation for any cause had decreased to 2.31%, an increasingly positive outcome. For outcome areas detailed above the patient outcomes were overall better than the national average. In terms of survival rates, the trust is in line with national average for patient outcomes.

There was an active programme of assessing and learning from incidents and deaths. Learning from these events was widely shared amongst staff. We saw this monitoring information shared in newsletters, discussed at meetings, emails to staff and information on a repeated television screen prompting staff.

Competent staff

From May to September 2018, the trust reported 100% of appraisal completion for all staff groups in surgery compared to the trust target of 95%. A breakdown by staff group is provided below:

Staff group	May to September 2018				
	Staff trained	Eligible staff	Completion rate	Trust target	Met (Yes/No)
Support to doctors and nursing staff	78	78	100.0%	90%	Yes
Other non-medical staff	19	19	100.0%	90%	Yes
Qualified nursing and health visiting staff	117	117	100.0%	90%	Yes
Other qualified scientific, therapeutic, technician staff	22	22	100.0%	90%	Yes
Qualified healthcare scientists	7	7	100.0%	90%	Yes
Medical & dental staff - hospital	35	35	100.0%	90%	Yes
All staff groups	278	278	100.0%	90%	Yes

(Source: Routine Provider Information Request – Appraisals tab)

All staff had the skills and qualifications they needed to carry out their roles effectively. Staff were supported to deliver effective care and treatment, to support this had been provided with meaningful and timely, supervision and appraisal.

There were criteria within surgery that supported patients with more complex needs to have two surgeons perform surgery. This assisted the surgeons in their learning but also provided additional support for longer complex surgery.

Data from the service, records and discussions with staff showed that the service supported managers to provide staff with supervision (meetings to discuss case management). This supported staff to reflect on and learning from practice, and for personal support and professional development. All staff received an annual appraisal of their work performance.

Managers ensured that staff had access to formal team meetings. Meetings were held to assist staff in raising concerns and developing personal and team practice.

Records showed and managers confirmed that staff were experienced and qualified, and had the right skills and knowledge to meet the needs of the patient group.

Staff told us and records confirmed that service provided new staff with appropriate induction suitable to their role.

Systems were in place to assist managers to identify the learning needs of staff and provide them with opportunities to develop their skills and knowledge.

Managers ensured that staff received the necessary specialist training for their roles.

Managers dealt with poor staff performance promptly and effectively.

Multidisciplinary working

Staff held regular and effective multidisciplinary team meetings. A multidisciplinary team is where the different professionals in the service work together to provide care.

Staff shared information about patients at effective handover meetings within the team and across the service. The ward teams had active working relationships with other relevant teams internally and externally to the organisation.

Patients records reviewed showed senior clinicians attended the daily ward round.

Records also showed that the multidisciplinary team were involved in patients care and treatment planning.

We saw that daily 'safety huddle' multidisciplinary team meetings had taken place with members of the multi-disciplinary team present where issues such as incidents and safeguarding issues were discussed.

Doctors, nursing staff and allied professionals such as physiotherapists told us they thought that they worked well together. Planning patient care was collaboratively undertaken from assessment to discharge.

Ward link nurses for end of life care worked closely with the end of life care team and chaplaincy to ensure that patients at end of life received the necessary support and care they required. The ward link nurse acted as a resource regarding end of life care to other staff on the ward.

We saw examples of multidisciplinary team working across other services. For example, a surgeon with an expertise from a different trust undertook a complex surgery with a surgeon from the service. This enhanced the safety of the surgery and assisted the surgeons to expand their own learning.

Seven-day services

Theatres, including anaesthetics and recovery had staff on call to cover for emergencies.

Physiotherapy staff were ward based and followed patients through their treatment pathway. A physiotherapist was on site from 8am to 8pm Monday to Friday and between 8am and 4pm at weekends. On-call physiotherapy was available at other times.

Patient investigation results were accessed easily using the Electronic Patient Record.

Health promotion

Patients were assessed for general health concerns and given smoking cessation advice and information regarding excessive alcohol intake if necessary.

There was a diabetic link nurse who could provide support and advice.

Wards had information about various physical and mental health issues and how to manage them. For example, sepsis awareness leaflets were available for patients their families and their carers. The information provided emphasised the importance of recognising the early stages of sepsis and if present the need for the patient to be taken to hospital as soon as possible.

Information for healthy living was given out by staff to patients. Health promotion was also part of the discharge discussion and explored at multidisciplinary meetings to make sure that patients received the correct information.

Where patients' needs were identified staff could ask for support from relevant professionals such as dietary advice and guidance.

Discharge information was also sent to patients GPs as needed indicating what support was needed for a health promotion.

The service had information on its website on initiatives for health promotion in the local area. For example, "Fit for Me Campaign" to promote healthier eating which was supported by the service.

The service audited staff uptake of flu injections and supported staff and patients to have the immunisation.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

Liverpool Heart and Chest Hospital

The trust set a target of 90% for completion of Mental Capacity Act (MCA) training. The trust informed us that this course encompasses deprivation of liberty safeguards (DoLS) training.

A breakdown of compliance for MCA training from July 2017 to June 2018 for nursing staff in surgery at Liverpool Heart and Chest Hospital is shown below:

Training module name	April to September 2018				
	Staff trained	Eligible staff	Completion rate	Trust target	Met (Yes/No)
Mental Capacity Act Level 1	124	126	98.4%	95.0%	Yes
DoLS	124	126	98.4%	95.0%	Yes

The trust reported that from April to September 2018, MCA and DoLS training targets were met for nursing staff within surgery eligible for the training.

A breakdown of compliance for MCA training from April to September 2018 for medical staff in surgery at Liverpool Heart and Chest Hospital is shown below:

Training module name	April to September 2018				
	Staff trained	Eligible staff	Completion rate	Trust target	Met (Yes/No)
DoLS	43	59	72.9%	95.0%	No
Mental Capacity Act Level 1	42	58	72.4%	95.0%	No

The trust reported that from April to September 2018, MCA and DoLS training targets were not met for medical staff within surgery eligible for the training.

(Source: Routine Provider Information Request (RPIR) – Training tab)

Staff had a good understanding of the Mental Capacity Act and Deprivation of Liberty safeguards. Staff were aware of how to get advice regarding the Mental Capacity Act and could access the services policy as needed. The service audited the application of the Mental Capacity Act and acted on any learning that resulted from it.

For patients who might have impaired mental capacity, staff assessed and recorded capacity to consent appropriately. The service did this on a decision-specific basis to meet patients' individual needs and obtain an appropriate consent. The electronic patient records recorded when patients' capacity was in question, how capacity had been assessed and best interest's discussions in relation to the appropriateness of the medical care planned.

The service had arrangements to monitor adherence to the Mental Capacity Act 2005.

There was a low rate on medical staff undertaking Mental Capacity Act 2005 and Deprivation of Liberty Safeguards training. The training had been scheduled recently. However, the medical staff and trust had identified that a bigger training priority in relation to safeguarding had been identified. As a result, the training for MCA and DoLS had been rearranged for later in the year.

Is the service caring?

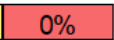
Compassionate care

The Friends and Family Test response rate for surgery at Liverpool Heart and Chest Hospital NHS Foundation Trust was 60% which was better than the England average of 27% from October 2017 to September 2018.

A break down for the three surgical wards at the trust is below, scores were 95% or above each month at both wards.

Ward name	Total Resp ^{1,2}	Resp. Rate	Percentage recommended ³												Annual perf ¹
			Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	
Oak	819	72%	100%	100%	100%	100%	98%	100%	100%	100%	100%	100%	100%	100%	100%
Cedar	754	55%	95%	98%	98%	98%	100%	100%	99%	100%	100%	98%	98%	100%	99%
Elm	530	67%	100%	100%	100%	100%	98%	98%	100%	100%	98%	100%	100%	94%	99%

Highest score to lowest score

Key  100%  50%  0%

1. The total responses exclude all responses in months where there were less than five responses at a particular ward (shown as gaps in the data above), as well as wards where there were less than 100 responses in total over the 12-month period.
2. Sorted by total response.
3. The formatting above is conditional formatting which colours cells on a grading from highest to lowest, to aid in seeing quickly where scores are high or low. Colours do not imply the passing or failing of any national standard.

(Source: NHS England Friends and Family Test)

Feedback from patients, carers and stakeholders was continually positive about the way staff treat them. Patients thought that staff went the extra mile and their care and support exceeded their expectations.

Staff attitudes and behaviours when interacting with patients showed that they were discreet, respectful and responsive, providing patients with help, emotional support and advice at the time they needed it. Interactions observed between staff, patients and relatives were polite, caring and respectful. We saw that staff took the time to engage with patients and communicated in a caring way and considered the wishes of the patient.

Patients confirmed they had access to call bells and that staff responded promptly and addressed the needs of patients when they were in pain or distress.

Patients had their privacy and dignity maintained, we observed interactions between staff, patients and relatives and staff treated people with privacy and dignity. Patients told us that curtains were drawn, and doors closed when treatments, examinations or nursing care were delivered. We saw that confidentiality was respected in staff discussions between patients and those close to them, patients told us that staff spoke to people in a way that ensured people's privacy and dignity was respected.

We observed that all the wards we visited had received 'thank you' cards from patients and relatives, which thanked staff for the support and treatment and commented on the 'compassion and caring' nature of staff.

The response rates and scores for Friends and Family test were consistently above the national average. On the surgical wards we saw a short guide for patients for the Friends and Family Test outlining what it is, how it will work and how the results were used.

There were well established electronic patient records these reflected that staff understood and supported patients to understand and manage their care, treatment or condition.

The service had systems in place that supported staff to direct patients to other services when appropriate and, if required, supported them to access those services.

Staff recognised and respect the totality of patient's needs, taking people's personal, cultural, social and religious needs into account. Records showed that patients individual preferences and needs within this area were assessed and utilised as part of the care planning process. There was a system in place that allowed staff to quickly identify patients who may need additional support particularly if they would find a stay in hospital distressing in any way.

Staff maintained the confidentiality of information about patients. Electronic patients' records had different levels of access depending on the staff members job role and supported that information only relevant to meeting the needs of patients was shared.

The Patient-Led Assessments of the Care Environment score for privacy, dignity and wellbeing for the trust was 96.8% for 2018. Patient-Led Assessments of the Care Environment is a system for assessing the quality of the patient environment. It is an organisational voluntary self-assessment which takes place annually. The 2018 results were an improvement on the score of 89.3% in 2017 and was consistently above the national average.

The day case service had developed a bespoke suit for use instead of a hospital gown. This was disposable trouser and top that ensured that patients' privacy and dignity was maintained and enabled them to stay with their relative or carer until they had their procedure.

Emotional support

Patients and their carers were active partners in their care. Staff were fully committed to working in partnership with people and making this a reality for each person.

Staff used the admission process to inform and orient patients to the ward and to the service. For patients who were particularly anxious and their carers visits to theatre and wards could be arranged prior to the patients' surgery to help them be prepared and less anxious about the experience.

Staff involved patients in care planning and risk assessment took part in multidisciplinary team reviews. Patients and their relatives were invited to join in the daily handover and ward rounds of their care.

Staff communicated with patients so that they understood their care and treatment, including finding effective ways to communicate with patients with communication difficulties. There was a learning disability and dementia lead on each ward to assist patients and adapt care to meet their individual needs. The electronic patient record system allowed staff to identify these patients in advance of their admittance making sure that appropriate support could be accessed in advance of the patients' admittance. The ward manager on Cedar Ward included their contact telephone number and email address by each bedside should a patient or relative want to directly contact them to access support or if they had any concerns.

Staff told us that felt they had sufficient time to spend with patients when they needed support.

The service operated 24 hour visiting times to support patients and carers to feel that they could have appropriate support from loved ones at any time.

We were given examples where staff had made specific arrangements to meet patients' emotional needs. They explained how multiple members of staff arranged the marriage of a patient with a poor prognosis to their partner whilst on the ward. Another example g etc

Patients and their carers told us that staff were approachable and they could talk to them if they needed to. Patient anxieties and questions were openly discussed and patients spoke positively of the emotional support they received.

Patients were all allocated a named nurse and consultant. This information was displayed on boards above the patients' beds to assist patients and their carers to access support as needed.

Services to support patients' religious needs were available for patients and their carers as needed.

Robert Owen House was an overnight facility for relatives. The House provided accommodation for carers to stay this was of benefit to patients from outside the local area and allowed carers to provide and receive emotional support as needed.

Understanding and involvement of patients and those close to them

The 'Care Partner Programme' supported people to become involved in their relatives care in hospital. The Programme was designed to be a method to keep patients and their carers fully informed about the care and treatment they were to receive. Information leaflets were available on the wards and on the trust website. Staff involved patients and those close to them in decisions about their care and treatment. Patients confirmed that they and their relatives were included in decisions and care plans had been individualised to meet their needs. Patients we had spoken to were aware of their care plans. Comments from patients included, "we were really kept in the loop" "I am always told what is happening and why".

Between August 2017 and January 2018, a questionnaire was sent to 1,250 recent inpatients. Responses were received from 794 patients at Liverpool Heart and Chest Hospital NHS Foundation Trust

Liverpool Heart and chest Hospital results for operations and procedures showed that for having any questions answered in a way they could understand, before the operation or procedure they scored 9.3/10. This was about the same as other trusts.

Expectations after the operation as to told how patients could expect to feel after the operation or procedure was 7.6 out of 10. This was about the same as other trusts.

Information as to how the operation or procedure had gone in a way they could understand was 8.7 out of 10. This was better than other trusts.

Most of the patients we spoke with said that staff communicated with them in a way they could understand. Patients told us that staff members also kept their carers updated as needed.

Comments from patients included, "we were really kept in the loop" "I am always told what is happening and why".

Several patients said that staff spoke to them about their care and treatment in a way they understood and that they were also happy that leaflets were given for reference. All information leaflets were available on the trusts website and we saw staff advise patients of this. We saw that staff communicated in ways that people could understand and took the time to answer questions.

The service ensured that patients individual needs were understood, sought best practice and learn from it. Managers were working with other organisations to make sure that patients could have any special needs understood and appropriate support put into place. This included needs such as autistic spectrum disorders and dementia care needs. The learning had been used to make sure that patients and the carers had the correct information about their care in a manner that met their needs.

Patients said they felt safe and had been shown around the ward area on admission. If there was more than one room available on a ward, patients could choose which one they preferred.

Family members said they were kept well informed about how their relative was progressing. Patients we spoke with said they had received good information about their condition and treatment.

Patients were encouraged to be independent, we saw evidence that patients were given the option to self-administer their own diabetic medications and staff provided support to enable this.

Is the service responsive?

Service delivery to meet the needs of local people

Patients individual needs and preferences were central to the delivery of tailored services.

As a specialist provider, the service was provided beyond the local community and included Merseyside, Cheshire, North Wales and the Isle of Man. They also provided private services which were chargeable. Private services for surgery included heart surgery and thoracic surgery. Information regarding private fees and charges were discussed with patients prior to treatment.

As the service is specialised, patients were often transferred from other organisations in to the

hospital. The senior managers within the service attend a North-West forum to share best practice and to make sure that there was a consistent approach to care and support for patients from all hospitals in the area.

At the request and following discussions with patients and carers for a family room and kitchen, the staff within the wards developed a business plan and gained approval for these to be implemented. All the surgical wards had a family room and kitchen available for patients and families to spend time together.

The trust is a member of the local 'Dementia Action Alliance' and was working with Liverpool Museum's. As a result, dementia champions were available on each ward. Additionally, each ward had an activity box and reminiscence files to provide stimulation and promote conversations with carers and staff.

There was a "memory" box containing pictures over the decades that could be used as a discussion point with patients and prompt a dialogue with individuals.

The facilities and premises were appropriate for the services that were planned and delivered. There were suitable facilities in bedrooms, the majority of which had ensuite facilities.

The service had a variety of systems in place that indicated if patients required additional needs and support that needed reasonable adjustments to the staff practice or the environment for patients. These were logged on the patients notes and alerted staff every time they accessed or reviewed patients notes.

The service had an action plans in place to implement the recommendations outlined in the national strategy's. This included recognising and assessing carer's needs, and increased awareness training for staff. As a result, patients and carers were supported in a manner appropriate to their needs.

There was facility on site that supported carers who did not live locally to be able to stay overnight at a reasonable charge.

Meeting people's individual needs

There was a proactive approach to understanding the needs and preferences of different groups of people, and to delivering care in a way that meets these needs, which was accessible and promoted equality.

All care records reviewed were person centred in their approach. They included specific information such as spiritual views and recorded the care and support needed to make sure that staff meet patients expressed needs. For example, a patient who was a Jehovah's witness had a very clear record regarding their wishes not to receive blood products. This was clearly recorded and alerted staff on access to the patient records that this was their wishes.

Pre-assessment visits could be arranged to patients who may require additional support prior to their receiving care in the service. This was for patients with a specific need who were visited prior to admission to the service on their own homes in order that a less stressful and person-centred assessment could be completed.

Technology was used innovatively to ensure people had timely access to treatment, support and care. An e-referral system was in place this for three hospitals based in Liverpool, Wales and the Isle of Man. Consultants could access patient's referral information to ascertain how long their wait was and progress along the referral pathway in a manner that met their individual needs.

As patient electronic records could be accessed remotely by the consultants', timely records and review of patients' conditions could be undertaken to ensure care and treatment was provided in a timely manner.

For patients living with dementia or communication difficulties the 'this is me' tool was in place. 'This is me' tool provides an easy and practical way of recording a holistic view of the person. The form includes space to include details on the person's cultural and family background, events, people and places from their lives; preferences, routines and their personality. These could be kept by the patient and used if they transfer care providers.

Single sex accommodation and gender-neutral bathrooms were available to support patients' dignity, privacy and support transgender patients.

The service run an initiative called 'home for lunch'. Discharge planning commenced at admission and the initiative aimed for patients to leave hospital before midday. Small food parcels were made available on request to make sure that the patients could have the basics in place on return to their homes.

There were bed management meetings daily amongst the ward teams and managers to identify patients for discharge and support them appropriately. It was also used to make sure that patients transferring between wards was kept to a minimum and occurred if there was a medical need. The service aimed to make sure that patients were not transferred overnight by making sure that any plans were in place early in the day.

The service used innovative ways of considering improvements, including using external people and professionals to make sure there was an independent and objective approach.

The service had commissioned and assessment from the British Deaf Association and the Royal National Institute of Blind people. A report had been produced by the British Deaf Association which made several recommendations. The service had reviewed these findings and were putting into place actions to achieve the recommendations made. The service was awaiting the results from the Royal National Institute of Blind people. Managers told us that they would follow a similar process and implement as many recommendations from that report as possible.

Verbal and written language interpretation services were provided for patients. The service followed best practice and did not accept family members as a translation service. Telephone interpretation services were available where there was a need. We saw that there was leaflets available in a variety of languages including Welsh.

A hearing loop system to assist patients, carers and staff with hearing loss was available throughout the service and in theatres. A hearing loop is a special type of sound system for use by people with hearing aids. The hearing loop provides a wireless signal that is picked up by the persons hearing aid.

The trusts website had access to google translate which meant the contents could be translated immediately into different languages. The trust also provided some of the most accessed information in audio formats. However, none of the audio or leaflets on the website relevant to surgery were in any language other than English. There was no information that showed how patients could obtain the information in a different language available on the trusts website.

Access and flow

The average length of stay for cardiac surgery non-elective patients at Liverpool Heart and Chest

Hospital was 16.2 days, which was higher compared to the average of all trusts in England providing cardiac surgery which was 11.8 days.

The average length of stay for thoracic surgery non-elective patients at Liverpool Heart and Chest Hospital was 5.8 days, which was lower compared to the average of all trusts in England providing cardiac surgery which was 8.1 days.

Comparisons between this trust and the England average for average length of stay for all specialties have not been provided due to the different range of specialties covered in the total at other trusts.

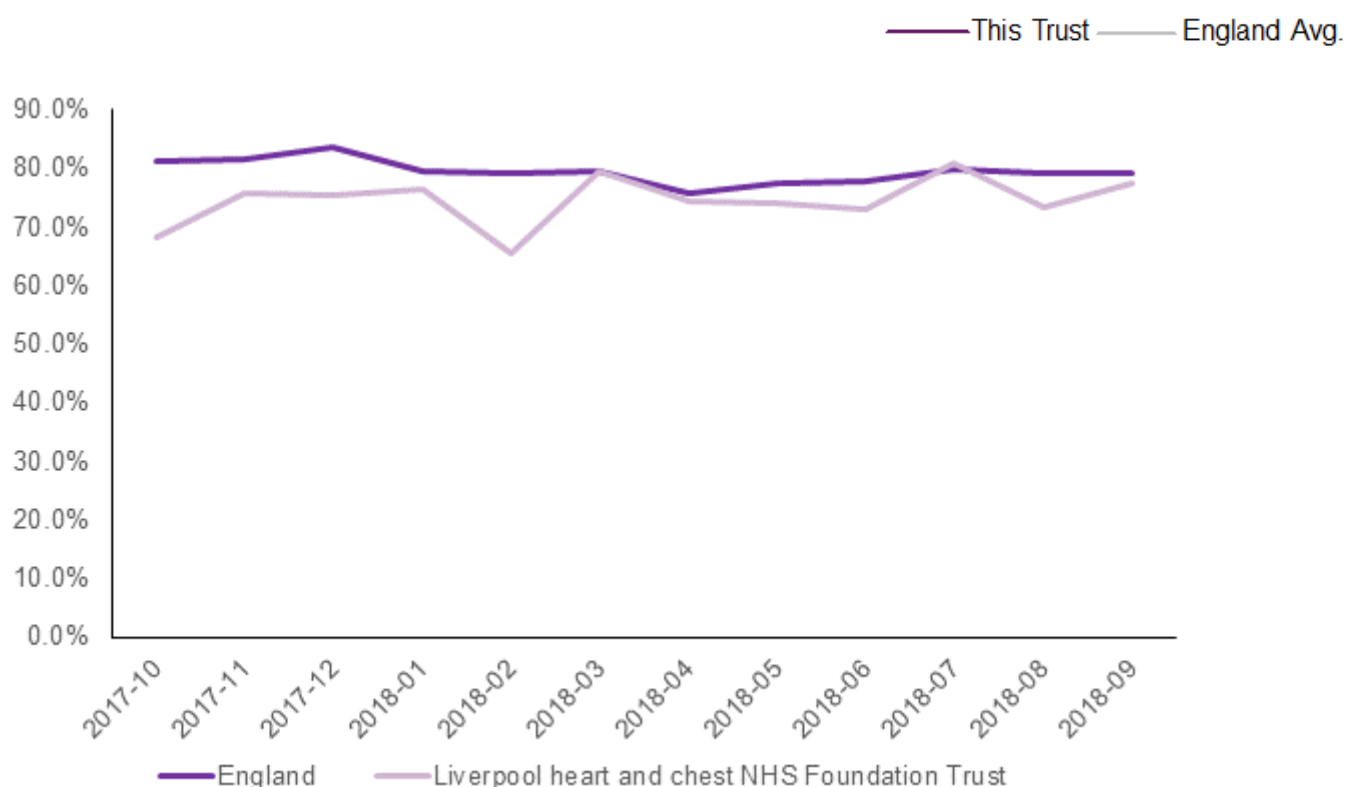
Non-Elective Average Length of Stay - Liverpool Heart and Chest Hospital



Note: Top three specialties for specific site based on count of activity.

(Source: Hospital Episode Statistics)

From September 2017 to August 2018 the trust's referral to treatment time (RTT) for admitted pathways for cardiothoracic surgery was worse than the England average every month except for July 2018. The rate at the trust overall was 74.6% compared to an England average of 79.4%.

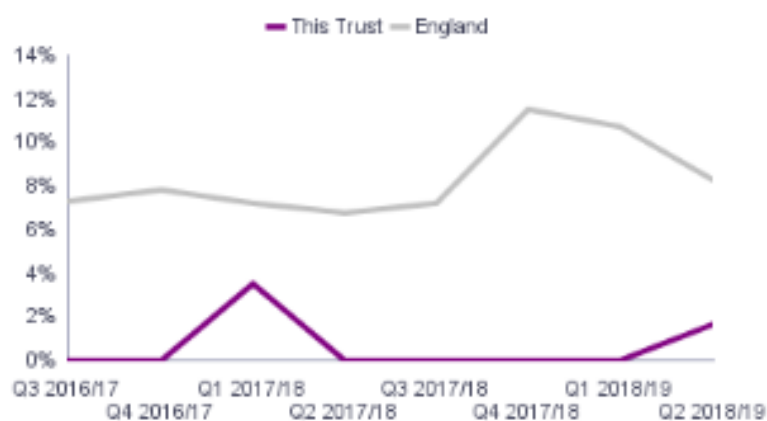


(Source: NHS England)

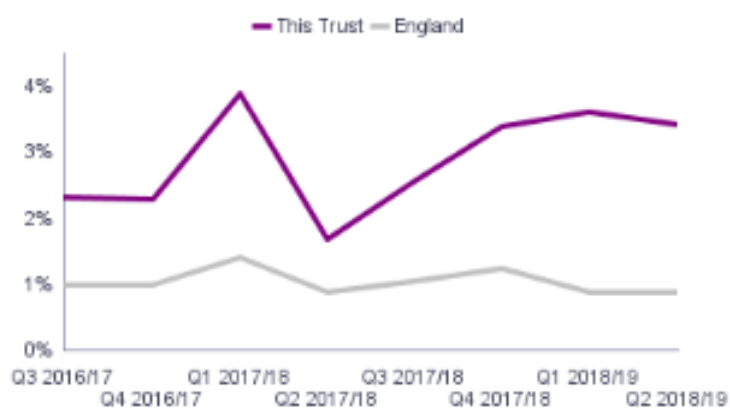
A last-minute cancellation is a cancellation for non-clinical reasons on the day the patient was due to arrive, after they have arrived in hospital or on the day of their operation. If a patient has not been treated within 28 days of a last-minute cancellation, then this is recorded as a breach of the standard and the patient should be offered treatment at the time and hospital of their choice.

Over the two years, the percentage of cancelled operations at the trust showed this was lower than the England average.

Percentage of patients whose operation was cancelled and were not treated within 28 days - Liverpool Heart and Chest Hospital NHS Foundation Trust



Cancelled Operations as a percentage of elective admissions - Liverpool Heart and Chest Hospital NHS Foundation Trust



Over the two years, the percentage of cancelled operations as a proportion of elective admissions was above the England average. Cancelled operations as a percentage of elective admissions only includes short notice cancellations.

(Source: NHS England)

Patients' individual needs were a priority for the service to deliver appropriate and responsive care that met their needs.

As a specialised trust with a large catchment area there is often a greater demand than can be easily accommodated. Additionally, discharge delays for patients returning to another trust can impact on the trust's ability to take new patients.

The service had in place a referral to treatment action plan for admitted patients that was shared across the service and monitored. Actions identified had assisted in improving referral to treatment performance from the previous inspection. We reviewed the data we held for the service. This showed that for admitted patients there was a continued improvement and 84% of admitted patients had met the target of 18 weeks. The trust supplied information following the inspection that showed for non-admitted patients it achieved 92% of patients treated within 18 weeks. This was in line with the national expectation.

The trust reviewed referral to treatment performance at divisional performance meetings with a report produced for the executive team. The weekly divisional performance meetings, included discussions on the top 10 late referrals and prioritised patients based on care need as well as late referral. Consultants spoke with told us that the priority was always to achieve the best outcome possible for patients.

Although the service had a slightly higher than average rate for cancelled operations for elective surgery all patients whose surgery was cancelled were assessed and their surgery rescheduled as soon as possible. The service aimed that this was within 48 hrs as a maximum. Operations could be cancelled at short notice as emergency surgery may need to take place. Although there were on call arrangements particularly overnight the service needed to respond to the most at risk patients as a priority. Patients whose operations were cancelled by the service were rescheduled promptly, and the service had a significantly lower than average rate of when the surgery had not rescheduled to take place within a month. The trust had no breaches of the 28 day target.

Learning from complaints and concerns

From July 2017 to July 2018 there were 17 complaints about surgical care. The trust took an average of 27.6 days to investigate and close complaints. Complaints targets are negotiated with patients individually, however the trust also provided an indicative target of 25 working days.

Type of complaints	Number of complaints	Proportion of total
Patient care	9	52.9%
Access to treatment or drugs	3	17.6%
Communications	3	17.6%
Waiting times	1	5.9%
Other (specify in comments)	1	5.9%
Grand Total	17	100.0%

(Source: Routine Provider Information Request (RPIR) – Complaints tab)

From September 2017 to August 2018 there were 357 compliments within surgery.

(Source: Routine Provider Information Request (RPIR) – Compliments tab)

Patients and carers were involved in regular reviews of how the service managed and responded to complaints. The service demonstrated where improvements have been made because of learning from reviews.

A review of six complaints records showed that the service responded quickly to patients' initial concerns. Where investigations that were more complex needed to be undertaken the service contacted and wrote to patients explaining the reason for any delay. Records reviewed reflected there was a thorough investigation undertaken. If an investigation required a more extensive review, the service contacted external services to provide an impartial third-party investigation.

Written complaints responses showed that complaints were responded to in a warm and friendly manner reducing technical language and providing an apology where needed.

Where an investigation may be complex and the patient had been discharged from hospital the investigator had attend patients and carers homes. This was undertaken in order that the patient and carer felt at ease to express their concerns and that a robust and meaningful investigation could be put into place.

There was information throughout the service to inform patients how to raise concerns if necessary. This included information to patients regarding how to raise concerns using the trusts HALT system where any safety concerns could be addressed immediately.

Patients told us that they felt safe and comfortable to raise any concerns.

Is the service well-led?

Leadership

Leadership was compassionate, inclusive and effective. Leaders at all levels demonstrated the high levels of experience, capacity and capability needed to deliver excellent and sustainable care. Leaders had the skills, knowledge and experience to perform their roles.

Leaders had a good understanding of the services they managed. They could explain clearly how the teams were working to provide high quality care. Leadership structure comprised of a directorate triumvirate team, which comprised of a medical director, nursing director and clinical leads.

Leaders were visible in the service and approachable for patients and staff. Staff said that senior managers were supportive. Staff reported there was clear visibility of members of the trust board throughout the service. Staff could explain the leadership structure within the trust and the executive team were accessible to staff. All nursing staff spoke highly of the service managers as leaders and told us they received good support. We observed good working relationships within all teams.

Medical staff told us that senior medical staff were accessible and responsive, and they received good leadership and support.

The surgical nursing hierarchy included a head of nursing, matrons and ward managers who were supported by band six nursing staff. The unit manager reported to a matron, who reported to the

head of nursing. Staff said they felt supported by the head of nursing who was described as 'approachable' and was a visible presence throughout the service.

Leadership development opportunities were available, including opportunities for staff below team manager level. We observed that several staff had been supported to develop further leadership skills and a leadership course was available to senior managers. Senior management staff met regularly with them to monitor progress and to provide support.

Vision and strategy

Leaders and staff had a deep understanding of issues, challenges, priorities and vision for their service. The strategy places patients' safety and individual needs at the core of its strategy.

Staff knew and understood the provider's vision and values and how they were applied in the work of their team. The vision was to be the "to be the best - leading and delivering outstanding heart and chest care and research". The vision was underpinned by five strategic objectives; themes quality and patient experience, Enhancing service delivery, Research and innovation, Financial sustainability and value for money, effective workforce and partnerships.

The trust puts its visions into action including partnership working with other trusts in the area, utilising surgeons' expertise who work elsewhere and running global symposiums bringing together expertise within cardio-thoracic surgery.

The provider's senior leadership team had successfully communicated the provider's vision and values to the frontline staff in this service.

The vision was to provide, excellent, compassionate and safe care for every patient, every day.

The trust values were, patient and family centred, accountability, continuous improvement and teamwork, known locally as PACT, these were displayed throughout the trust.

The services operational objectives were based on this vision and these objectives were understood by staff and formed the basis for their own personal objectives found in annual appraisals.

The service had a cardiology strategy with the key driver being the healthy Liverpool programme, which was to eradicate duplicate services and develop new models of care. The strategy outlined objectives to support this programme and the trust vision. These included improving outcomes for people with cardiovascular disease.

Staff had the opportunity to contribute to discussions about the strategy for their service, especially where the service was changing.

Staff could explain how they were working to deliver high quality care within the budgets available.

Culture

There was strong collaboration, team-working and support across all functions and a common focus on improving the quality, safety and sustainability of care.

Staff were proud of the service as a place to work and spoke highly of the culture. Everyone we spoke with were enthusiastic and passionate about the culture. They explained that the patients' needs were at the core of all the services delivered. However, it was also explained that staff wellbeing and welfare was considered as vital to the experience of patients. All staff spoken with consistently told us that they "loved" working in the service felt, "highly valued" and overall, they were a "happy" team who worked "well" together.

Staff told us that at all levels they felt managers were supportive, approachable and friendly.

All staff told us of a good team working culture where staff helped each other. Staff told us they felt able to raise concerns without fear of retribution.

Staff knew how to use the whistle-blowing process and about the role of the speak up guardian. The trust had four freedom to speak up guardians. Freedom to speak up guardians were staff who worked within the service and were given additional training. Their role was to make sure that open and supportive culture that encouraged staff to speak up about any issues of patient care, quality or safety was in place. There was a freedom to speak up champion in every ward and theatre area. Staff spoken with told us that they felt comfortable to approach any of the champions and guardians. When staff raised concerns with a guardian the staff members confidentiality was maintained and the issue was raised through internal communications with feedback given to the member of staff. Throughout the service there was information on the role of speak up guardians and how to contact them.

Managers dealt with poor staff performance when needed.

Staff appraisals included conversations about career development opportunities.

Governance

Governance arrangements were proactively reviewed and reflected best practice. A systematic approach was taken to working with other organisations to improve care outcomes.

The surgical service had governance and management systems in place and that they interacted effectively to provide assurance that risks were managed and that service improvements were made.

Staff on wards and theatres were kept updated via several means, which included ward meetings, newsletters, information leaflets, a repeating television screen and via email. Senior nursing staff held monthly ward meetings. Exceptions reports on safety performance were compiled monthly and shared with staff.

Staff undertook or participated in local clinical audits. Ward managers brought the information from the senior nursing staff meetings and audits to the ward managers meetings, where governance, risks, the monthly exception reports and serious incident reports were discussed. There were also departmental meetings, bi-monthly governance and business meetings and surgical care group quality governance meetings. Information brought to the patient safety council, clinical effectiveness council, workforce council and patient experience council was fed into the quality committee. The quality committee reported to the audit committee and the trust board.

Staff had implemented recommendations from reviews of deaths, incidents, complaints and safeguarding alerts at the service level. Representatives from the surgical care group including nursing staff attended monthly mortality surveillance group meetings in which improvements and learning from inpatient deaths were discussed. This included the learning from surgical and post-operative deaths.

Quality improvement initiatives were put into place at the direction of the staff or from incident findings. These included an initiative on birch ward to free up nursing time and to improve the process of medication. The trial was received positively by staff they said that it had strengthened working relations with pharmacy staff and improved care for patients. During the time of our

inspection the service had put together a business case to make the ward based pharmacy technician role permanent

Staff understood the arrangements for working with other teams, both within the provider and external, to meet the needs of the patients.

Management of risk, issues and performance

There was a demonstrated commitment to best practice performance and risk management systems and processes.

There were a several systems to capture and disseminate learning from incidents, complaints and audit to all staff, which factored in the complexities of the working arrangements of the surgeons.

Senior staff knew there was a risk register, and managers could tell us what the key risks identified were and their area of responsibility. They described how these risks were kept under review and updated. When required staff understood the risks to be escalated to other risk registers within the trust as needed.

Staff could tell us how their ward performance was monitored and were aware that data was collected and discussed at relevant meetings. Risks were reviewed regularly. The governance and risk management arrangements were well developed and mature. Senior managers had full oversight of the areas for development affecting front line staff and patient safety and experience.

There was a clear governance structure in place, which all staff we spoke to understood. This meant that concerns and risks were escalated and action taken as needed.

There was a clear reporting structure in surgical services and the main governance committee and governor's meetings. During the meeting a review of any areas of performance was undertaken and the discussion recorded.

The service had a nursing assessment system which looked at ward performance. The system was named EECS (excellent, efficient, compassionate and safe care) all wards had recently been assessed as green if they continued to perform to a high standard then they could be assessed as gold. We saw that theatre had a gold EECS plaque outside. Additionally, the theatre had been the winners of the Nursing Times Award 2018 for Surgical Nursing. Staff were proud of the award.

Staff said that multidisciplinary team meetings were held regularly. Copies of the meetings were available on the wards and emailed to staff.

Safety issues were highlighted to staff groups through the monthly team brief and newsletters from the chief executive officer.

Staff said the 'safety huddles' introduced were effective. Safety huddles took place at the start of each shift in clinical areas. At 9.30am, a safety huddle led by the executive took place in the management offices. Staff said that the direct communications with the executive team through this forum had made for constructive and meaningful team working.

Staff said information from the daily trust safety huddle was circulated to all clinical areas, which was useful, as they were made aware of issues in other areas.

The 'Speak out safely' campaign 'HALT' was well embed in the practice of the service and gave staff and patients the power to speak out. We saw several examples of where this had been effective and help prevent safety incidents from occurring.

Performance dashboards were used to communicate performance for specific areas. Each clinical area performance dashboard identified performance levels against named criteria. The trust

performance dashboard was discussed by the executive team. One area discussed was the 18-week referral to treatment discussions. The actions put into place by the service had improved the services figures reducing patients waiting times before treatment significantly.

The service had plans for emergencies, for example, adverse weather or a flu outbreak.

Information management

Information governance systems included confidentiality of patient records. The use of appropriate information technology was supported by the service with ongoing training and support for staff using the systems. Electronic patient records were well established and understood by staff. It provided information on monitoring and planning patients care. Additionally, it was utilised to manage medicines, consultants' information, test results and produced information for external sources such as GPs.

The paper system for staff training had been replaced with this electronic system which provided up to date information for individual staff compliance with training. The service had put plans into place to address this and the failing of the system had been included on the services and trusts risk register.

Staff had access to the equipment and information technology needed to do their work. The information technology infrastructure, including the telephone system, worked well and helped to improve the quality of care.

Team managers had access to information to support them with their management role. This included information on the performance of the service, staffing and patient care.

On the surgical wards we saw information leaflets for patients out lining how the trust would use and protect their personal information. Contact details were also given for the information governance manager and how to access health records. Additionally, information regarding patients' records was available on the trust website.

Engagement

Staff, patients and carers had access to up-to-date information about the work of the provider and the services they used. This included through the intranet, internet, bulletins, newsletters, emails and displayed in clinical areas.

Managers and staff had access to the feedback from patients, carers and staff and used it to make improvements. Examples had included the home before lunch initiative put into place which was implemented following listening events from patients.

Patients and carers were involved in decision-making about changes to the service.

Patients and staff could meet with members of the provider's senior leadership team and governors to give feedback. Feedback from staff, patients and carers was openly encouraged. Staff were confident that their views were listened to.

Directorate leaders engaged with external stakeholders, such as commissioners and Healthwatch. There was also significant engagement with local councils, health initiatives and other trusts to continually increase the quality of the service available.

The service participated in the NHS friends and family test giving people who used services the opportunity to provide feedback about care and treatment. 98% of patients would recommend surgical services at the hospital to friends or a relative. This was above the 81% average in England.

The governance committees heard a patient story at the beginning of each meeting and any learning was taken forward to improve services.

The NHS Staff Survey 2018 had recently been completed the results of which had not been published within the service at the time of the inspection.

Staff said the executive team visited the wards monthly and described the executive team as approachable.

Staff received bi-monthly newsletters to inform them of the latest news.

Staff said they had received good support and communications from their line manager and that monthly team meetings took place.

Patients and carers had opportunities to give feedback on the service they received in a manner that reflected their individual needs. The trust held at least four patient and carers listening events per year close to where patients lived, for example, in Wales, the Isle of Man and locally. Listening events included a listening element where patients and their families were encouraged to share their stories of care with the staff and discussions relating to service improvement and development.

Patient and family engagement events were held in collaboration with other local initiatives to determine the needs of patients and families. Additionally, the service had consulted with external organisations to review the services being delivered.

Learning, continuous improvement and innovation

Staff had opportunities to participate in research. There was a research department based in hospital. This department dealt with all aspects of clinical research and innovation within the trust and include many initiatives for surgery and post-surgery recovery.

Innovations were taking place in the service. Following Board review, robotic surgery was implemented in 2017. The robot is operated by a consultant surgeon, the robot behaves the same way as a surgeon would when carrying out surgery, but through smaller incisions. A full implementation plan including ongoing training and support for surgeons was implemented prior to its usage. An initial audit had identified that the outcomes for patients included less scarring and a more rapid recovery for patients.

Staff used quality improvement methods and knew how to apply them. Examples included, "the home before lunch" initiative, HALT initiative, the usage of external surgeons to extend surgical skills and the trial of pharmacy technicians. Staff were encouraged to suggest quality improvement initiatives and these were reviewed and trialled with an appropriate business case. An example of staff lead implementation was the advent of family rooms and kitchens on wards which were put into place following staff developed an appropriate business plan.

The service participated in national audits relevant to the service and learned from them. Quality improvements were reviewed and implemented in a structured and supported manner.

Wards participated in accreditation schemes relevant to the service and learned from them. The surgical wards were aiming for them all to become gold status using the services EECS (excellent, efficient, compassionate and safe care) assessments. The service had a variety of action plans for improvements and for recognising areas of improvement. These were readily available to staff and monitored by senior management. Actions were reviewed and amended as needed.