



## **Sign up to Safety**

**Liverpool Heart and Chest Hospital Safety  
Improvement Plan  
2014 – 2017**

**(NHSLA bid included in document)**

## **National Campaign aim**

To drive the necessary improvements required within the NHS that support the safety culture and reduce avoidable harm by 50% saving approximately 6000 lives over a three year period.

## **Introduction**

At Liverpool Heart and Chest Hospital (LHCH) has ambition to reduce avoidable harm by 50% within three years. This is in line with the national campaign as set out by the NHS Sign up to Safety campaign. To support this ambition we believe that our priority needs to focus on strengthening our safety culture.

Our model of patient and family centred care is underpinned by safety, quality and a commitment to ensure our patients and their families receive the best in cardiothoracic healthcare.

We recognise the importance of learning from mistakes and focus on the prevention of harm and the recurrence of harm events. Learning and changing practice from such incidents is pivotal to a patient and family centred learning organisation.

Within LHCH, our approach to care recognises each patient as part of a group of families, friends and carers. Improving the quality, safety and experience of care for patients and families is a key strategic objective which is underpinned by a commitment to learn and act to prevent harm and is aligned to the National Quality Board definition of quality.

## **Background to the Trust**

LHCH provides specialist services in cardiothoracic surgery, cardiology, respiratory medicine including adult cystic fibrosis and diagnostic imaging, both in the hospital and out in the community.

We serve 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 surgery.

Deaths from heart and lung disease continue to be amongst the highest in the UK within the communities we serve marked by increased prevalence of cardiovascular disease, higher levels of heart failure, hypertension, coronary artery disease, deprivation and an ageing population.

Our reputation for strong performance is important in delivering the best care for our patients whilst maintaining a high quality clinical service. This is underpinned by a culture of research and innovation, supported by a modern estate infrastructure and facilitated by technology. All new and upgraded

clinical areas are designed with patients and families fully involved in the decision making processes to ensure we have the best possible facilities to meet our patient and family needs.

As part of our long term plan, we will develop strong relationships with other health providers and stakeholders. There is clear evidence that partnerships improve patient care and enhance quality and we will collaborate with a range of other providers and professionals with the aim to extend access to services and improve quality.

Our vision is underpinned by five strategic goals:

- **Quality:** to deliver the highest quality, safest and best experience for patients and their families by providing reliable care
- **Service and Innovation:** to develop our service portfolio for patients by developing innovative models of care
- **Value:** to maintain financial viability, enhance service delivery and develop new models of care to improve the health of our patients and safely reduce costs
- **Workforce:** to be the best NHS Employer by 2019 by attracting and retaining the best staff to deliver excellent patient care
- **Stakeholders:** to develop productive relationships with key stakeholders in order to enhance our profile and reputation.

## **Patient Safety**

Patient safety is the top priority for LHCH. Our Safe from Harm vision sets out the standards we aspire to deliver in relation to safety. We believe that if we are to continue to deliver outstanding outcomes it is important to ensure our staff have the skills and competencies to make this happen. This is why we have invested in our staff who will lead on advancing improvement by supporting them in acquiring Masters level qualifications in Innovation and Improvement .

In addition, we have also invested in the Patient Safety Champions Programme run by the Advancing Quality Alliance and supported Patient Safety Champions who have attended the requisite training. The champions are mainly from the nursing and medical disciplines throughout the Trust and are key personnel in progressing the safety initiatives; to date, 15 staff have successfully completed this training.

We are keen to explore how families can act as safety champions and we have patient representatives on our patient safety group who are key to helping us to develop this principle. Safety is a priority for the trust and is a key element of our clinical quality improvement strategy. This strategy outlines the integration of all our quality, safety and patient and family experience priorities which will serve to further strengthen the culture and commitment of our staff to improving care and supporting the trust in its ambition to develop a culture of continuous quality improvement. This is a three year plan which will be reviewed and updated annually.

The Sign up to Safety campaign will enhance this established vision, ensuring LHCH has access to first rate experts in the field of safety and can learn and share in the networking opportunities a national campaign of this nature provides.

## **Patient Safety Challenges**

In June 2013 the Trust implemented an electronic patient health record. This has helped to support clear documentation, however, brings its own challenge of moving away from a paper based health recording system to a complete electronic integrated health record.

Clear concise documentation is critical when treating patients who have the potential to clinically deteriorate; the capture of real time information directly in the patient's electronic health record allows all clinicians immediate access to vital information from any area within the hospital. The review of a health record from any department within the Trust will facilitate quicker senior review and offers support for junior staff in the management of the clinically deteriorating patient.

Safety for patients and staff is our priority. We have recently commenced a daily safety huddle led by the Chief Executive where all clinical areas across the Trust are encouraged to attend each morning to raise and discuss any potential safety issues and concerns. We also discuss staff safety and equipment issues. Each person is encouraged to speak at the huddle with the intention that this will support people in speaking up about any concerns they may have.

Staff culture is a challenge for any organisation as the more open and transparent a culture, the safer the organisation. We have implemented the national Speak out Safely campaign and this has resulted in a positive reaction from staff with concerns being raised and actions taken.

We have also undertaken a trust wide culture survey and have analysed the information and engaged with all departments and areas. The initial findings demonstrate:

- some positive cultures clearly exist within the Trust; the results indicate that staff are extremely positive about teamwork.
- perceptions of local management, safety climate and job satisfaction.

The areas for improvement highlighted include stress recognition, working conditions and perceptions of senior management; each area will require targeted action.

## **Past Campaigns**

LHCH was involved in the Patient Safety First Campaign and Matching Michigan.

## **Patient Safety First**

For the Patient Safety First campaign, the Trust concentrated on leadership within the organisation and the clinical signs of the deteriorating patient. Patient safety walk rounds were introduced and patient stories are used in all Executive Board and Committee meetings; this process continues to be relevant today.

The deteriorating patient element concentrated on reducing sepsis and reducing ventilator acquired pneumonia (VAP) in critical care. The critical care team introduced a 5 'why' approach for each VAP, investigating what led to the VAP occurring. Alongside the campaign was the introduction of evidence based care in the form of care bundles; the sepsis bundle remains in place.

The Patient Safety First campaign was used to highlight the improvement safety work that was occurring in the Trust – advertising it and ensuring a real focus on safety was reflected in all agendas.

Members of the Executive Team attended the Leading Improvement in Patient Safety (LIPS) course.

## **Executive Sponsor**

Sue Pemberton, Director of Nursing and Quality is the Executive Sponsor. The Board of Directors are committed to improving patient safety and are fully supportive of the campaign and all its elements.

## **Sign up to Safety Lead**

Helen Martin, Governance & Safety Lead will lead the campaign at LHCH. Members of the established Patient Safety Group (PSG), who are also Patient Safety Champions, trained via the AQuA programme will monitor and lead the areas of focus within the campaign. The PSG members also contain patient representatives, who provide insight from a patient perspective which is invaluable when implementing changes.

## **The core areas of focus for the Sign up to Safety campaign for LHCH**

**The Trust's overall aim is to reduce patient harm by 50% by delivering safer, higher quality care by 2017**

The learning from Berwick, Keogh and Francis highlights that when care is inconsistent this results in poor outcomes for patients. We believe that focusing on a series of 'always' events including vital signs being recorded in a timely fashion; risk assessments being completed and documented fully and in a timely manner and daily clinical reviews will ensure that care needs are met.

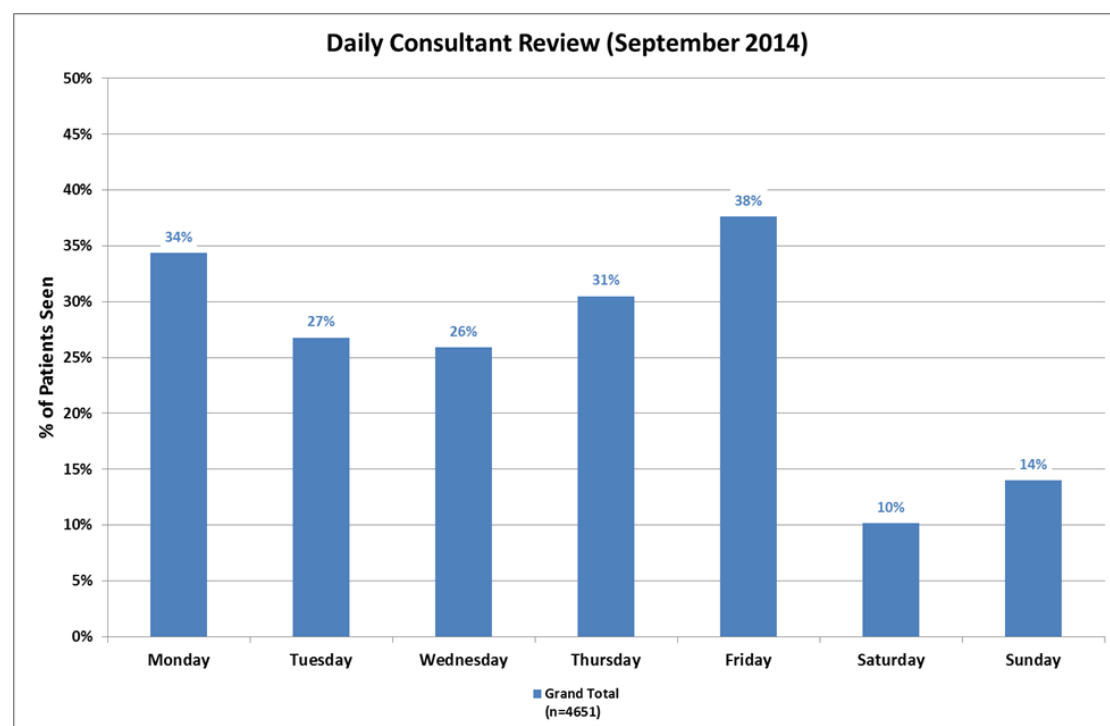
A review of past NHSLA claims highlights that a large proportion of our claims relate to issues with communication and documentation.

Based on the above, the two action areas we will focus on in our Sign up to Safety campaign will be:

### Action Area One:

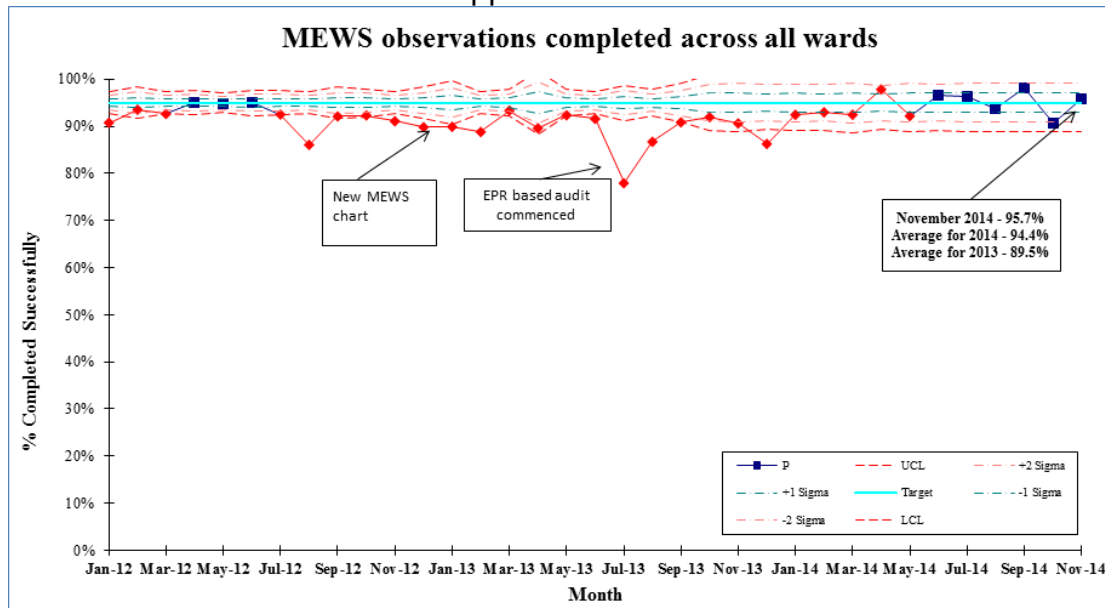
#### **Develop a reliable care bundle to improve documentation of care by 50% by 2017**

- We will develop then audit the use of this bundle which will enable clinicians to identify where timely care has not been given and to improve upon this. This will enable the development of improvement cycles to be embedded in practice.
- The reliable care bundle will consist of a set of 'always' events which will be:
  - All patients will be reviewed by a Senior Clinician, Registrar or Consultant, with clear medical plans documented.



The chart above demonstrates the variation in Consultant review data across the week for September 2014. Example used is taken from the Consultant review document on EPR however does not take into account reviews by SpR or ANP at present. Consultants may also document review of the notes of a patient in progress, as opposed to Consultant review document. This requires further refinement and training of the Senior Clinical Team.

- The modified early warning score will be recorded when each set of observations is recorded, calculated correctly and when necessary escalated to a senior clinician to review the patient and there will be clear documentation to support that this has been done



- There is clear documentation when a patient is transferred to another ward or home in the information shared on transfer/discharge. The chart shows data regarding discharge documentation completion. Documentation when a patient is transferred to another ward is under development

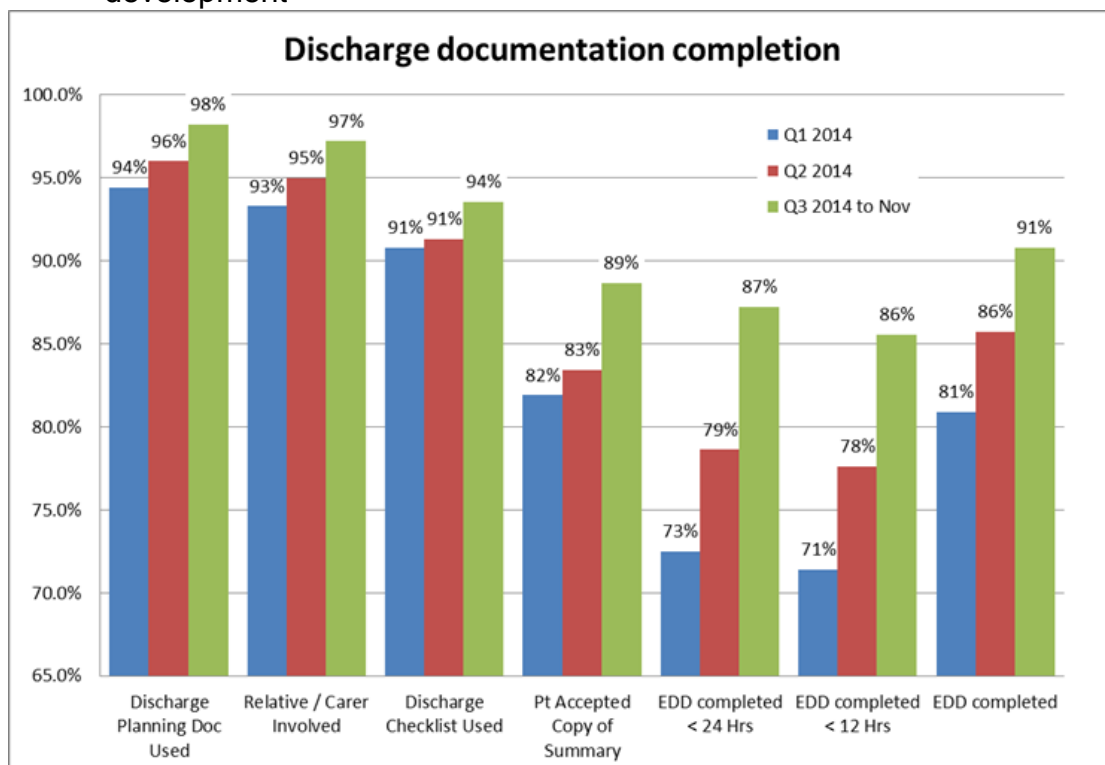


Chart demonstrates discharge only.

In addition we will implement:

- Advanced training on an electronic health record for all SpRs, Clinical Fellows, Advanced Nurse Practitioners and Consultant grades (linked to NHSLA bid included in this document)
- Development of an electronic alert which will flag to a Senior Registrar and Consultant deranged haemodynamic and MEWS scoring. This is predicated on the development of the technology
- The trust is keen to develop the use of the electronic information available and for this to be used in real time to help identify care required for patients and improve timely delivery. Clinical leaders will be able to monitor this information on a facilities board which will be available on a computer screen in each clinical area.

Example Facilities Board (patient names are for training purposes only)

## Action Area Two:

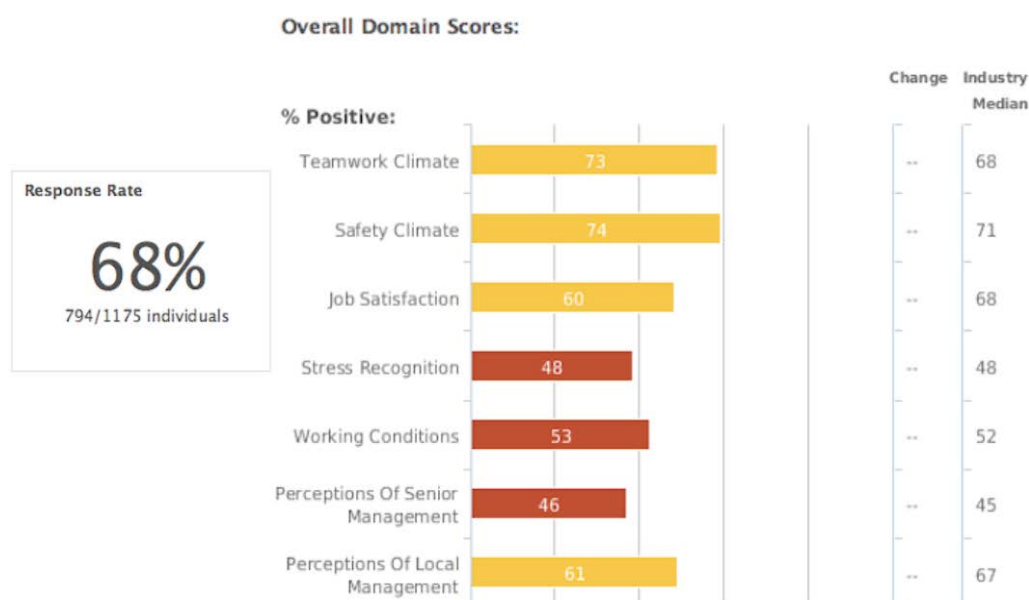
### Improving the Safety Culture within the organisation

We have conducted annual culture surveys since 2009 recording the safety culture within the organisation. In 2014, an external company who are experts in conducting safety culture surveys administered and supported the safety culture survey. From this information the Trust established a good baseline data from staff responses to the culture within their specific areas of work. We are working with the leads within the Trust to support staff in implementing the improvement plans from their responses to the culture questions. The specific actions we will take include:



Monitoring the improvement plans via the Patient Safety Group, who will discuss the plans and offer direction on taking the plans forward. We will monitor the outcomes from the actions identified and carry out a further safety culture each year with the expectation of seeing an increase in those scores below that scored less than 60%

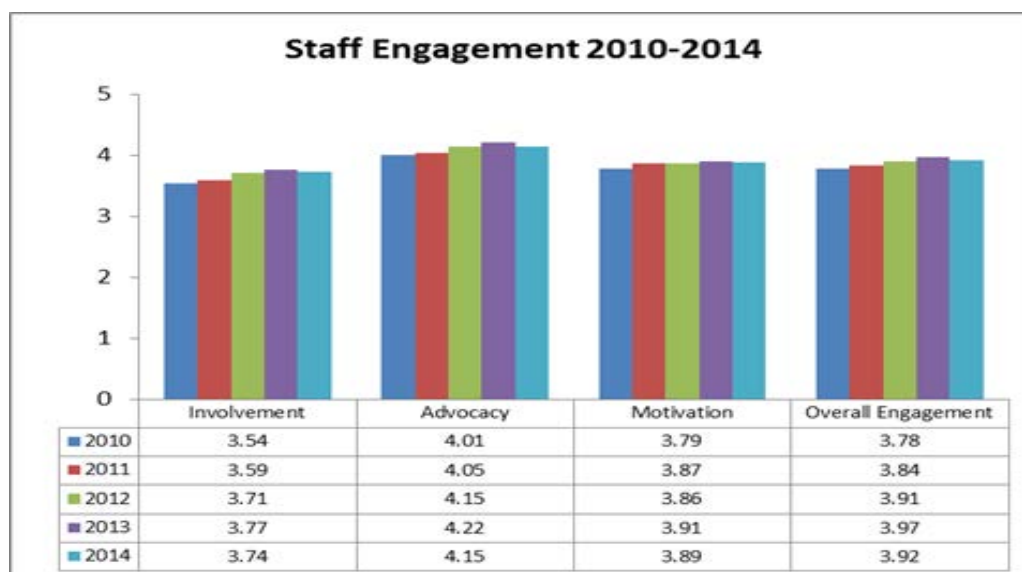
## Overall Data: Liverpool Heart & Chest Hospital



Red= <60%

The chart above demonstrates the results of the culture survey undertaken in the summer of 2014.

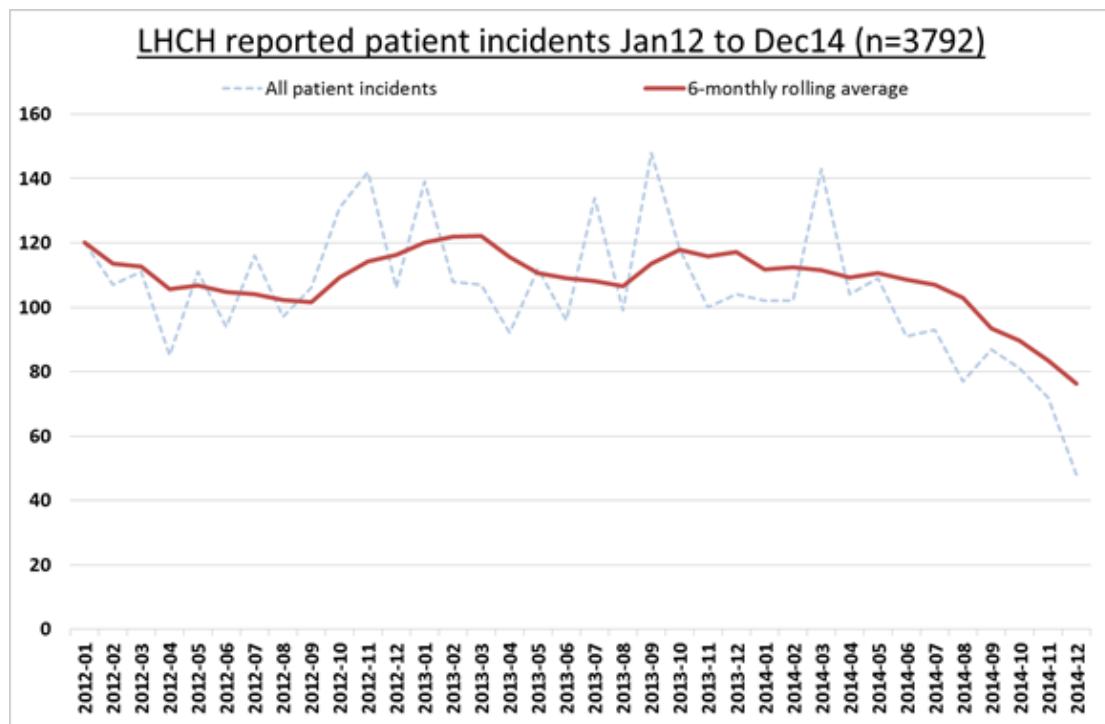
### Staff survey



The chart represents an overview of the current staff survey results. The Friends and Family test is also undertaken and scores collated. Triangulation of the results from the surveys will be gathered and the cross over results such as job satisfaction, feedback from incidents and staff feeling happy with the standard of care being given to patients will be assessed and added to action planning to improve safety culture.

## Improve incident reporting by 50% by 2017

### Incidents by category Q1 and Q2 2014



Incident reporting is an excellent indicator of an organisation's safety culture. Feedback from staff has indicated that the methods for incident reporting in the organisation could be improved. The aim is to improve incident reporting by 50% by 2017. The specific actions we will take include:

- Review our current software system and carry out a specification procurement exercise early 2015 to improve our current reporting system.
- Continue to promote the Speak out Safely campaign. We will promote this as a means of raising concerns to encourage staff to raise any patient or staff safety issues.
- Our daily safety huddle is a further means of raising concerns and/or safety issues. We will work on strengthening this process and understanding the themes that emerge from the huddles so we can build our safety culture.

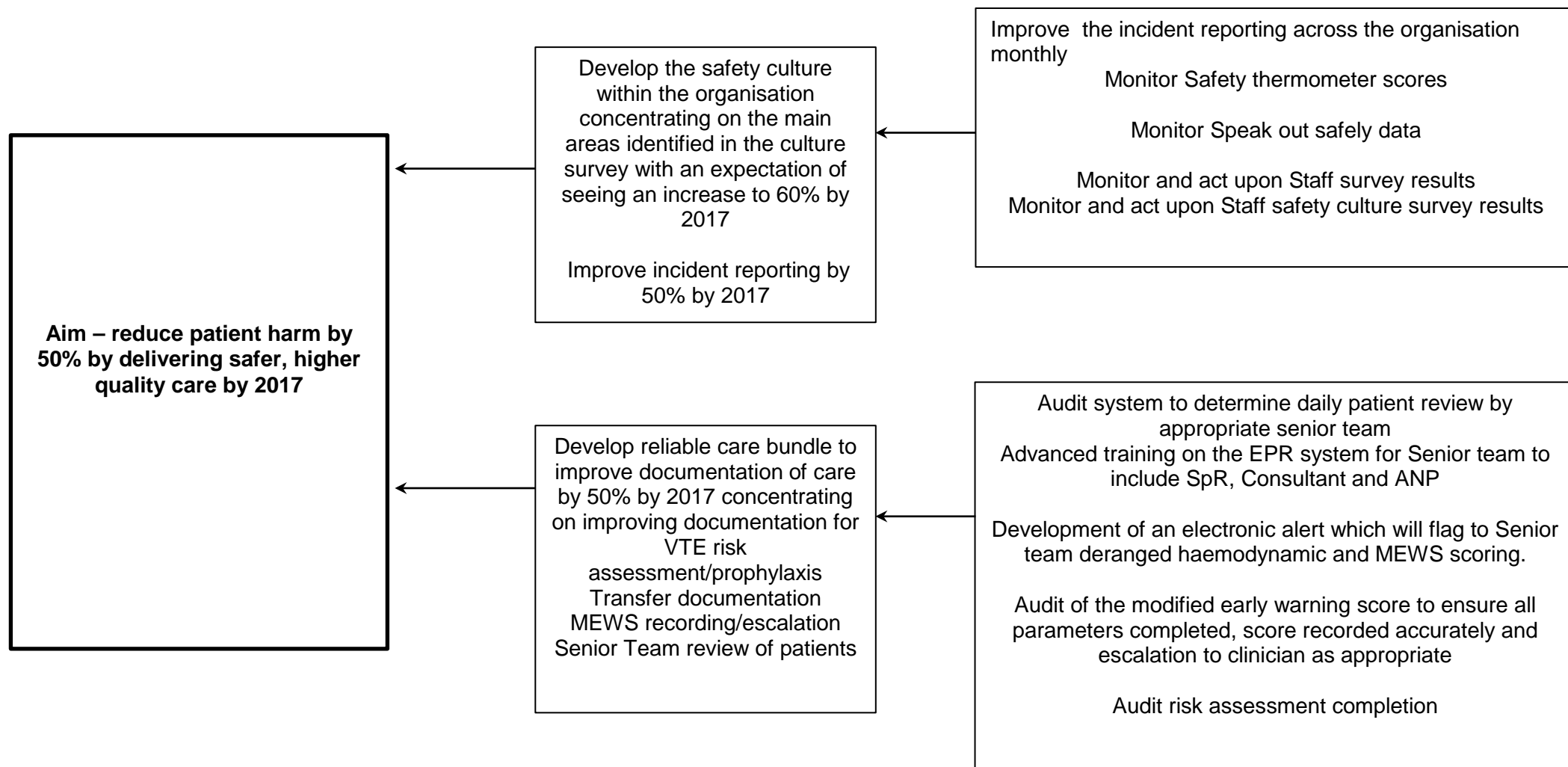
- We are focussing on feedback from incident reporting and have in place plans to include this in our monthly team brief and in communications to all staff groups.

## Driver Diagram

### Outcomes

### Primary Drivers

### Secondary Drivers



## NHSLA section

Heading	NHS Litigation Authority Bid - Content
<b>Area of focus</b>	<p><b>Improving the standard of documentation within the electronic health record, specifically medical admission, risk assessment, responding to alerts</b></p> <p>The Trust has implemented a comprehensive Electronic Patient Record project, with a successful go-live in June 2013. Central to the success of that project was the clinical leadership that was put at the centre of the project. A consultant is clinical lead for EPR and all clinical staff were engaged in the transformation project. The EPR design was informed by “shop floor” clinical staff, and more senior staff comprised the major component of the design decision making.</p> <p>The present project was actually conceptualised during the early stages of the main EPR project. It has been on our road map since then to progress as soon as practicable due to the patient and staff benefits that it offers.</p> <p>Improving safety, quality and efficiency form an important part of the strategy to deliver the Trust’s vision ‘to be the best’. Processing automation, with the efficiency and removal of error prone manual steps is fully aligned to corporate strategy, and hence ultimately our vision. Moving away from a junior medical review of patients to a senior led review will focus on the prevention of deterioration and re admission to a higher level of care. Improving the standard of documentation within the electronic health record would underpin the ultimate aim of reducing harm to patients by 50% by 2017</p>
<b>Number</b>	10 settled claims over the 5 years with a high value being over £50,000 all of which were in relation to communication and documentation.
<b>Value</b>	£2,117,051.43 settled claims that includes damages, claimant and defence costs. All 10 claims have poor documentation as a

	common theme.		
<b>Goal</b>	Is to improve the standard of documentation within the patient's electronic health record thus preventing miscommunication and improving patient's clinical care. This will be achieved by changing the model of medical assessment whilst using the EPR system to record the plan of care for every patient by dedicated training following a successful NHS LA bid		
<b>Actions</b>	<ol style="list-style-type: none"> <li>1. Undertake gap analysis to determine extent of training required</li> <li>2. Emphasise required standard for documentation incorporating professional bodies standards for clinical record keeping</li> <li>3. Recruit dedicated EPR trainer to concentrate on training Senior team including Consultants, Advanced Nurse Practitioners, SpR grades (NHSLA funding allowing)</li> <li>4. Advanced training on an electronic health record for all SpRs, Clinical Fellows, Advanced Nurse Practitioners and Consultant grades</li> <li>5. Use PDSA cycles to determine effectiveness of training with a service stream – cardiac and thoracic surgery</li> <li>6. Assign Consultant grade EPR training champions to assist with cascade training/progressing new innovations in EPR</li> <li>7. Development of an electronic alert which will flag to a SpR and Consultant deranged haemodynamic and MEWS scoring.</li> </ol>		
<b>Measures</b>	<b>How will the plan be measured</b>	<b>By when</b>	<b>By whom</b>
	Gap analysis to be conducted to determine level of training required by each senior member of clinical staff (Consultant, ANP, SPR grade)	January – February 2015	EPR Analysts
	We will audit risk assessment documentation completed by all senior	Monthly reports from March 2015 –	Information team/Audit team

	Clinical team	Annual audit from March 2016	
	We will audit medical admission documentation completed by all senior clinical team	Monthly reports from March 2015 – Annual audit from March 2016	Information team/Audit team
	We will monitor responses to alerts by senior clinical team	Weekly reports from March 2016	Information team/Audit team
	We will introduce a no blame process to feedback to staff results of audits for documentation that requires improvement.	April 2015	Governance team/EPR/Clinical teams
	We will obtain feedback about quality of care from patients/relatives/carers	Monthly	Information team

Financial data	The cost of a mid point Band 5 working 9-5pm, Mon- Friday only would be £31k. The cost of a computer with software is approx £1.2k.	
	Therefore the full costs for 15/16 would be £32,200	
		Financial Year 15/16
		£
	Band 5 Trainer	31,000.00
	Set up costs including computer, software etc..	1,200.00
		<u><u>32,200.00</u></u>
Contribution	Organisation pays £720,953 total contribution to NHLA	
Timing	Action	By when
	Undertake gap analysis	January – February 2015
	Emphasise required standard for documentation incorporating professional bodies’ standards for clinical record keeping	Ongoing
	Commence training with senior team	March 2015
	Recruit 1 wte B5 dedicated EPR trainer for one year contract (NHLA funding allowing)	April 2015
	Commence advanced training with senior clinical team (NHLA funding allowing)	May 2015



	Commence PDSA cycles to determine effectiveness of training	June 2015
	Assign Consultant grade EPR training champions	June 2015
	Conduct audits to determine quality of documentation use/completion to Trust standard	June 2015
	Introduce feedback to staff based on audit results identifying areas for improvement	June 2015
	Development of an electronic alert which will flag to all SpR and Consultant grades.	Dec 2015
<b>Benefits:</b>	<p>By investing in a dedicated trainer for EPR, employed specifically to train the senior team on the use and intricacies of the system, senior staff will have the benefit of using the system to its potential. This will include being alerted when a patient is triggering on MEWS and putting steps in place to manage a deteriorating situation in a timely and cohesive manner. As previously determined, poor communication and documentation have been the subject of claims against the organisation in the past five years. By 2017 it is envisaged that an improvement in these two disciplines by upgraded use of the EPR will reduce harm by 50%.</p> <p>Staff do not currently receive feedback on the quality of their clinical record keeping. Staff are potentially unaware of the impact on patients of poor documentation. By training them to a required standard and thereafter monitoring that standard and providing feedback on performance, staff will appreciate the benefits that a high standard of clinical record keeping can achieve.</p> <p>Financially, improved clinical communication can have the potential to shorten a patient inpatient stay and increase efficiency of staff by concentrating effort where it is most required. Improvement in clinical admission documentation and risk assessment can identify issues earlier in the patient journey, allowing for timely intervention</p>	

## Safety Improvement Action plan

	What are the areas we could make the most difference	What does success look like	Measures	What do we need to do for that success to be realised	What resources do we need
1	Improving the staff safety culture	Improved incident reporting  Improved staff safety culture results in specified areas	Monitor the incident reporting across the organisation monthly  Monitor the effectiveness of the improvement plans monthly  Monitor Speak out safely information monthly  Monitor safety huddle themes to determine appropriate actions to be taken to support staff	Staff to report all incidents as they happen  Senior leads in the Trust to work with staff to improve outcomes	Improved staff awareness regarding incidents/near misses- Gauge the potential to change the Trust incident reporting system.  Dedicated time spent with staff in focus groups
2	Reliable care bundle	Clinical care is delivered safely and efficiently by all staff for all patients every day	Auditing of the EPR system to monitor completion of risk assessments, MEWS, and transfer documentation  Development of a	Ensure all staff know what standard is expected for record keeping  Clearly written and publicised policies regarding	Facility to deliver training on expected standard required within EPR  Development of programmes to audit the EPR system.

			facilities board	documentation and communication  Enhanced training on the use of the EPR system	Feedback mechanism of results of audit to improve and drive change in clinical practice
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### 90 day action plans

	Work stream	Goal	Actions – every 90 days	Lead
1	Improved incident reporting Monitor Speak out Safely  Staff safety culture results	Improve by 50% by 2017  Improve staff safety culture survey results in specified areas to 60%	Monitor incident reporting rate and report to Directorate Governance  Report Speak out Safely to Executive team and monitor actions  Work with Ward/Dept Managers to develop actions Plans to target areas of concern	Governance & Safety Lead  Governance & Safety Lead  HR Business Managers  Governance & Safety Lead
2	Reliable care bundle	Improve documentation within the EPR system by 50% by 2017	Audit system to determine daily patient review by appropriate designation of staff  Audit of the modified early warning score to ensure all parameters completed, score recorded accurately and	Audit team/Info team  Critical Care Audit team

			<p>escalated to clinician as appropriate</p> <p>Audit risk assessment documentation to ensure correct completion to required standard</p>	<p>Ward Managers via facilities board</p>
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## **Communications Plan**

The campaign safety improvement plan will be championed and monitored by the Patient Safety group, members of whom are the Patient Safety Champions. Each month a Patient Safety Champion will update at team brief how the topic they are leading on is progressing.

The Directorates will be kept up-to-date on progress from the campaign via minutes from the Patient Safety Group.

A section of the LHCH website will be dedicated to the campaign and updates/highlights added to it so staff/patients/visitors to the site/hospital can keep abreast of progress with the campaign.