Invited Contribution

East Lancashire Hospital Trust creates an open culture paving the way for service improvement ‘Below ten thousand’

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Abstract
Reacting to a never event is difficult and often embarrassing for staff involved. East Lancashire Hospitals NHS Trust has demonstrated that treating staff with respect after a never event, creates an open culture that encourages problem solving and service improvement. The approach has allowed learning to be shared and paved the way for the trust to be the first in the UK to launch the patient centric behavioural noise reduction strategy ‘Below ten thousand’.

Keywords
Never event / Shared learning / Communication / Below ten thousand

Introduction
East Lancashire Hospitals Trust (ELHT) patients have endured four never events within a six month period. Rather than punish staff, ELHT have supported them and taken an approach reminiscent of a statement made by health secretary Jeremy Hunt in 2015 ‘the NHS is only as good as the support we give the staff’ (A Better NHS 2015). This article discusses how after the last never event, ELHT gave support and enabled staff to address and improve two preventive systems in place to prevent harm. The approach has given way to a service improvement called ‘Below ten thousand’. Created by Gibbs and Smith (2016), ELHT will be the first trust in the UK to officially employ this noise reduction strategy.

Preventive measures explored
Professor Lucian Leape was a paediatric surgeon for 25 years who went on to become a pioneer of patient safety in the United States. Leape (2008) wrote how nearly all serious incidents are derived from system flaws not character flaws.

The fourth never event was a wrong site surgery from a standard operating procedure. Taking Leape’s philosophy enabled us to identify how the surgical site marking was sub-standard and how implementation of the ‘time out’ was against guidelines given by the National Patient Safety Agency (NPSA 2010). The NPSA recommended that the ‘time out’ is undertaken immediately before skin incision. Staff involved in the incident estimated that the ‘time out’ was conducted 25 minutes before skin incision, meaning that staff were relying on memory due to the absence of adequate skin marking.

The NHS England (2015) publication on National Safety Standards for Invasive Procedures (NatSSIPS) highlighted how key elements of patient care need to be

Reaction
Never event number four was met with great upset by all the theatre staff involved. Spath (2017) describes how both staff and healthcare providers can be devastated and embarrassed by their mistakes; to have four never events in six months exemplifies this. Immediately after the latest never event, staff involved were instructed not to perform any clinical duties but to spend time together to discuss what had happened away from theatres. The brief was informal but the message was clear: how can we improve culture and stop these incidents from happening? Dlugacz (2017) wrote how the occurrence of never events may indicate a lack of a culture of safety in a healthcare organisation.

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standardised so that staff can be educated to create harmonisation enabling effective implementation. NHS England (2015) wrote how a workforce where both clinicians and nurses work in a standard way reduces stress and produces a safer environment for the patients. The never event showed how both nurses and clinicians were not implementing and interpreting the surgical site marking policy and WHO checklist in a harmonised way.

A roundtable discussion was held after the never event, where the senior clinicians, trust directors and theatre staff responsible discussed and gave explanations about what went wrong that day. It was agreed that the site marking policy not being robust enough and the poor implementation of the ‘time out’ were the major contributing factors to the never event.

Cantrell (2017) described how never events can be very embarrassing for staff the involved, an opinion that I sadly have the experience now to agree with. The Royal College of Nursing (2015) explained the 6 Cs of nursing including courage which is described as ‘having the personal strength and vision to innovate and to embrace new ways of working’. I have yet to hear of a ‘never event’ presentation but felt my character was strong enough to break down this historical barrier and write one. My actions can also be supported by these statements:

- All patient safety incidents and near misses should be documented and reported to the organisations incident report system. Learning should be fed back to staff for continuous improvement (NHS England 2015).
- Encourage openness and transparency and support learning from incidents and sharing lessons learnt (ELHT 2017).
- After serious incidents, solutions should be found to prevent repeated harm (NPSA 2009).

**Lessons learned**

The roundtable discussion at times felt like a scene from ‘Sully’, the film about the plane that landed on the Hudson River in New York. Since the accident and inquest, the pilot of the plane Captain Chesley Sullenberger (affectionately known as Sully) has worked with numerous healthcare agencies in the United States with attention to service improvement. ‘Captain Sully’ writes in Healthcare Financial Management Association Magazine (2013): ‘We need effective and very personal storytelling; tell a story of a patient who had an entirely preventable healthcare accident your institution and demonstrate how it could happen again’.

The message I wanted to convey to my colleagues was that, if preventive measures in place to prevent incidents such as these are not strengthened, they will happen again. With this in mind, pictures were taken of staff acting out the time out, scrubbing up, prepping the patient (me), and setting up equipment to the point of skin incision. This showed how the time out was done around twenty five minutes before skin incision.

Many people who are involved in the aftermath of serious incidents often do not work in clinical settings so I felt it was important for them to understand clearly what went wrong. Two video clips were also used: one clip showed how to implement the WHO checklist and one clip showed how not to. Surgical site marking was also addressed with a picture of how the patient was marked for the actual never event and a picture of how the patient should have been marked. The failing of the preventive systems in place to prevent serious incidents such as these was glaringly bold to see, even to the untrained eye.

In the immediate aftermath of the never event I was guilty of being quite emotional and, along with Captain Sully’s words, I was inspired to include three slides in my presentation. One was an aircraft where no robust checklists were in place whose airline is responsible for six air disasters and 624 fatalities. The next was an airline that has had no air disasters or fatalities and that employs a sterile cockpit and robust checklist. The next slide was a picture of my three year old daughter, which posed the question ‘Which airline or hospital do you think I would use for my daughter: one with never events/poor checklist, or one with no never events and robust checklists?’ With many similarities to the airline industry, my memory reverted to a concept written about in this publication.

**Below ten thousand**

‘Below ten thousand’ was reported in this journal in June 2016 (Gibbs & Smith 2016a). Gibbs and Smith (2016b) described this concept as an ‘effective behavioural noise reduction strategy’. The concept is a simple language based safety tool which is used to reduce noise and to encourage staff to focus at critical times.

In 1981 the Federal Aviation Administration (FAA) regulations were enacted to reduce accidents by prohibiting non-essential activities during critical phases of a flight. Commonly known as the ‘sterile cockpit’, the FAA (2008) defined the critical phase of a flight as all flight operations conducted below 10,000 feet. The FAA cited the main offending violations being extraneous conversation, distraction from flight attendants and non-pertinent radio calls. Kapur et al (2015) suggested that the sterile cockpit is one of a number of reasons why aircraft fatalities have decreased significantly, even though worldwide flight hours have more than doubled.

The airline industry is often compared with the theatre environment in that both industries are highly technical and need interventions in a timely manner.
This comparison has influenced Gibbs and Smith (2016b) to recognise that the sterile cockpit can be applied in theatre at times such as these:

- Scrub count
- Time out
- Induction and emergence of anaesthesia
- Multidisciplinary communication
- Critical incidents
- When a moment to think is needed

The service improvement we have introduced is encouraging any member of the theatre team to call ‘10,000 feet’ at any point when staff feel noise reduction or more patient focus is needed. This fits perfectly with a culture described in NHS Improvement publication Our approach to safety (NHSI 2018), where anyone concerned about patient safety is encouraged to speak out. The following are examples of when patient safety concerns were voiced by using the ‘safe phrase’ ‘10,000 feet’ at Royal Blackburn Hospital:

1. Incorrect swab count during a laparotomy. A scrub nurse called ‘10,000 feet’. This resulted in a very quiet theatre; the surgeon stopped operating until the swab was found.
2. Patient under spinal analgesia after four hours needed a general anaesthetic. It was 6.30pm and handover time when day and late staff were finishing and starting duties. The theatre was very noisy and ‘10,000’ feet was called by the scrub nurse. As a result, the patient received a general anaesthetic in a very calm peaceful environment.
3. At 3am in the morning the consultant was leaving theatre before ‘sign out’. A student nurse who was scrubbed called ‘10,000 feet’. As a result, the consultant remained in theatre and all staff participated in the ‘sign out’.
4. Several procedures where the surgeon needed to have complete focus (which was not apparent to staff outside the sterile field). 10,000 feet created complete silence and an environment free from distraction.
5. At the end of a long procedure, the scrub staff, support workers and surgeons were all in conversation in the theatre when a patient was to be extubated. Using 10,000 feet created a peaceful environment for the patient and prevented the use of more abrupt language. This led to engagement rather than resistance from staff.

ELHT is having a very positive response by all staff to the concept of 10,000 feet. Comments are received on how the phrase encourages staff to focus on the patient at critical times, gives a team based response to patient safety, and enables everyone in theatre the opportunity to have ownership of the environment.

Previously there had been no language based tool other than people asking or ‘exploding’ a request for a quieter environment. Gibbs and Smith (2016b) explained that people do not respond well to such abrupt language and it can only be detrimental to teamwork.

However, not all experiences have been positive. One anaesthetic nurse called 10,000 feet whilst trying to conduct a time out. She had heard of the concept I was trying to implement and called 10,000 feet in a theatre where staff were unaware of the concept. Some staff laughed resulting in the nurse feeling very embarrassed. This highlighted how education and harmonisation as recommended in the 2015 NatSSIPS publication (NHS England 2015) is vital to its success.

Implementing change

Introducing a service improvement does present challenges to a novice in this area like me. ‘Hey, this 10,000 feet you want to introduce, we just think it's silly and no one will call it’, is one of the comments I heard in our coffee room. Hewitt-Taylor (2013) explained how people opposing change are extremely useful in that they make you think things through thoroughly. As yet no one has proposed an alternative safe word/phrase. The phrase ‘10,000 feet’ has been proposed for now because:

1. The patient will not know what 10,000 feet means, so is unaware that extra focus is needed which may prevent distress for them.
2. Theatres often have numerous visitors. To explain why we use the phrase ‘10,000 feet’ is simple when we explain the concept itself. Using a different phrase may complicate the explanation.
3. The phrase is unique and cannot be mistaken for anything other than patient centred focus.

The Healthcare Quality Improvement Partnership (HQIP) (2016) stated that when patients and the public co-design for quality improvement, developments are more successful as they incorporate the experience of service users. It was for this reason that a patient group has been invited to ELHT to agree to the guidelines of 10,000 feet. Along with a ‘Below ten thousand’ presentation, the guidelines are to be written and displayed for all staff to see to help the educational part of the implementation.

Incident reporting

As far back as 1999 the Institute of Medicine's 'To Err is Human' and the 2013 Mid Staffordshire Trust Enquiry (Francis 2013), it has been reported that the true number of serious incidents such as never events are unknown due to a culture starved of incident reporting. After the publication of ‘Ranked by learning from mistakes’ (Hazel 2016) Mike Durkin, National Patient Safety Director at NHS England said: 'Learning from mistakes saves lives. In order to properly learn from
mistakes, we need to create a culture with openness and transparency at heart'.

Recent reports on transparency, such as one from the National Patient Safety Foundation's Lucian Leape Institute NPSFLLI (2015), are all very similar in that when hospital leaders respond positively to incident reporting, employees are further motivated to report them and a greater level of trust and openness is cultivated ultimately creating a safer culture for patients.

NPSFLLI (2015) gave details of a well-known example of how detrimental a culture of non-incident reporting and lack of sharing data sharing can be. In 2004 Mary McClinton died after receiving an injection of chlorhexidine, an antiseptic solution, instead of intravenous contrast dye at the Virginia Mason Medical Centre. Sadly, it was discovered that this same error had occurred previously at another organisation nearby, but no mechanisms were in place such as our National Reporting and Learning System to share such information. Leape (2008) openly stated how leaders in an organisation can use a patient story to emphasise the importance of transparency. The tragic incident of Mary McClinton made me firmly believe that my response to sharing details and lessons learned from the never event was crucial to the future safety of the patients of ELHT.

The trust is creating a culture where both clinicians and nurses can report and discuss errors without fear of punishment or embarrassment. This will produce positive outcomes. Fisher and Scott (2013) wrote how the biggest barrier to reporting incidents is a blame culture. The senior management at ELHT can be applauded for taking an approach described by NHS Improvement (2018) as: ‘a just culture, where the whole system works to reduce the chance that patient safety incidents occur and individuals are not inappropriately blamed’.

**Thank you**

ELHT could have quite easily responded with punitive measures directed at staff with the latest never event. Instead they demonstrated that a model of thinking to solving problems through methodology works better than simply assigning blame. Berger et al (2015) discussed within their systematic review of never events how the culture of blame is primarily responsible for the under reporting of incidents. The approach taken at ELHT will hopefully see more ‘near misses’ reported in under reporting of incidents. The approach taken at ELHT along with ‘Below ten thousand’ could help in the future prevention of never events.

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