The North – South Divide. A view from the shop floor.

Quality Initiatives fail because of the absence of safety culture measurement.
Dedication

This Masters Dissertation is dedicated to Stanley who has been at my side from the start to finish of this process.
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**Abbreviations**

AACN American Association of Critical Care Nurses

AHRQ Agency for Healthcare Research and Quality

AORN American Association of Peri-Operative Registered Nurses

ASAP Aviation Safety Action Programme

ASRP Aviation Safety Reporting System

CHFG Clinical Human Factors Group

CQC Care Quality Commission

CVC Central Venous Catheter

DH Department of Heath

FMEA Failure Mode Effect Analysis

GMC General Medical Council

GSTT Guys and St Thomas NHS Foundation Trust

HDU High Dependency Unit

HFE Human Factor Engineering

HSOPS Hospital Survey on Patient Safety

ICS Intensive Care Society

ICU Intensive Care Unit

IHI Institute for Healthcare Improvement

KHP Kings Health Partners

MaPSaf Manchester Patient Safety Framework

NHS National Health Service

NHSLA National Health Service Litigation Authority

NICE National Institute of Clinical Excellence
NMC Nursing and Midwifery Council
NPSA National Patient safety Association
NRLS National Reporting and Learning Service
OBM Organisational Behaviour Management
PIF Performance Inhibiting factor
PSF Patient Safety First
RCA Root Cause Analysis
RCN Royal College of Nursing
SAQ Safety Attitude Questionnaire
SMART Specific, Measurable, Achievable, Realistic and Timely
STEPPS Strategies and Tools to Enhance Performance and Patient Safety
THF The Heath Foundation
WHO World Health Organisation
Abstract

Since the dawn of the patient safety movement in the 90’s culture has been a constant focus and yet still incidents occur. Change is apparently on the shopping list of NHS Trusts and yet it’s clear there is a problem manufacturing the product. Culture, its measurement and change takes time and leadership both of which has been severely criticised recently.

Focus in the NHS is steering towards the culture of the service and has been publicly criticised by recent reports such as the Francis report 2013. Failure of reporting systems to identify the issues from the front line, and a failure to disclose pertinent information with regard to patient’s welfare and on-going care when in the system.

Although patient safety is climbing to the top of the agenda within healthcare, changes have been slow to take place. Safety culture is thought to contribute to this. Nuclear, Oil and Aviation industries have all established robust incident reporting systems in response to establishing their safety culture and have led the way in patient safety research.

Despite the regulatory bodies and their relevant codes of conduct stating the healthcare staff have a duty to report errors, it’s estimated that only 10% actually get reported leaving 90% of lessons unlearned.

Measuring safety culture has become an area for increasing research as evidently something needs to change within the NHS. Failing to establish the culture within the organisation is thought to lead to failure in its future development as an organisation, both at the organisational level and on the front line of health care delivery.

Patient safety is not solely reliant on error management, but is a pro-active system analysis of both clinical and non-clinical management of patients,
human factor engineering (HFE), the facilities in which they are treated, focusing on prevention rather than harm (Scanlon 2010).

The aim of this work is to measure staff attitudes to patient safety by using a validated survey tool that can be benchmarked against in one component of health care delivery.

The Intensive Care Unit (ICU) is thought to be one of highest areas of risk within the patient’s journey, the advancement of lifesaving equipment has proven to save lives and reduce errors simultaneously by automating the system, however at the heart of the system is people both patients and healthcare workers, and these are fallible.

The survey looks at key element of staff interpretation to identify areas for improvement within the system. Results were then collated into six themes, Teamwork, Job Satisfaction, Safety Climate, Stress recognition, Perceptions of Management and Working Conditions. The most relevant three themes were then analysed.

Permission had to be sought to change the validated tool into an updated electronic one, 200 nurses on the front line in a busy intensive care unit were sent the survey electronically, only 12% replied, some of the discussion will explore the contributing factors to that figure.

Recommendations will conclude in an attempt to acquire an exact measurement or if indeed the process is one worth repeating, if not what are the alternatives? And does the organisation really want to know the answers? 90% of lessons learned could no doubt increase patient safety but can the NHS afford it?
Chapter 1

1.1 Introduction

Over the last 10 years or so and since the report “to err is human”, the culture within health care has become a major concern. Building a safer NHS (2001) established the National Patient Safety Agency (NPSA) who in 2004 published the Seven Steps to Patient Safety, the first of which was to establish a safety culture.

The National Reporting and Learning Service (NRLS) was then established to identify trends and hot spots for change and practice improvement, however recent reports highlight that up to 90% of incidents are still going unreported. This equates to lessons not being learned and improvements in healthcare delivery being missed. A blame culture is said to contribute to this (Reason 1990, Peate 2011).

Figures released from the NRLS of incident data identify that in the six months from March 2010 - September 2010, a total of 1313 patients in England lost their lives to medical error. This is not only an increase upon the previous six months, but fails to elucidate that a further 3699 patients suffered serious harm (Peate 2011). Worryingly, these figures may only be a small representation of the scale of harm that patients are potentially subjected to.

Healthcare professionals have a legal obligation to report incidents both under Law and their governing bodies. Previously, this developed into a blame and shame culture. Reason (1996) identified that this drove down the number of reported incidents, most importantly it affected patient safety, due to that lack of culture change surrounding error reporting. Lessons from error reporting failed to come to light resulting in slow changes to patient safety improvements.
Incident reporting has always been the preferred method of gathering data pertaining to patient harm and has been identified by many across the world to be subject to culture difference. Many say that as little as 10% of incidents are reported leaving 90% of lessons unlearned. How we change this is the problem (Tingle 2011).

Adverse incidents without harm/near misses are said to be a risk management opportunity (Taylor 2011). Incidents that lead to harm are prevention opportunities. Injuries that occur not from error reflect where we are in the evolution of patient safety and the research and development of it. However, the down side of this is, how if we can gather the information how do we process it? Some of the areas surrounding this issue will be explored.

By establishing the level of safety culture, areas for development can be identified. The author in 2010 carried out a small survey regarding incident reporting and found that 85% of staff surveyed had only received training on the use of the electronic reporting system within their induction programme. Whilst most staff felt supported in reporting by their line manager however 70% still felt that a blame culture existed.
1.2 Research Questions

1. Can the survey identify safety culture throughout the trust in order to drive efficiency and quality initiatives?

2. If not, can it identify the barriers?
1.3 Limitations

The use of surveys to gather information have long been used in the NHS, patient experience and satisfaction surveys are currently used to improve care delivery.

Although the NHS runs a staff survey, it’s not specific to patient safety. The following work will focus on patient safety and the staff attitudes towards it. It is however a lengthy paper survey that will rely on staff giving their free time to complete it. It is proposed to gain permission to change this to an electronic one to allow for better access. By using an electronic tool the survey questions can be mandated for an answer before moving on to the next, although this will ensure that the survey is complete it may prevent some from filling it in at all.

Ultimately the responses will rely on the responder to complete it. It is anonymous to encourage response. The author works in a large teaching hospital, however due to approval the survey will be carried out in a similar sized unit in order for comparisons to be made.

The time limit of twelve months is too short to make a repeat survey for comparison, and the permission only allows for the survey to be circulated for three weeks. Equally the author works full time, a Gantt chart can be found in appendix 1 to demonstrate the use of spare time.
Chapter 2

Literature Review

2.1 Patient Safety

“Patient safety is the absence of preventable harm to a patient during the process of health care. The discipline of patient safety is the coordinated efforts to prevent harm from occurring to patients caused by the process of health care itself. Over the past ten years, patient safety has been increasingly recognized as an issue of global importance, but much work remains to be done” (World Health Organisation 2008).

Others, define patient safety as a “discipline in the health care sector that applies science methods toward the goal of achieving a trustworthy system of healthcare delivery” (Emmanuel et al 2008). Patient safety is also an attribute of healthcare systems; it minimises the impact of and maximises recovery from adverse events. This thereby encompasses both the art and science of healthcare delivery, the culture side being the art.

Patient safety is a global issue, since the landmark document, to ‘err is human’ Building a Safer Healthcare System (1999). Studies claimed to show that between 44,000-98,000 patient’s died in hospital in one year. Similar research carried out 5 years later in order to compare the results post the system changes concluded that they had not (Leape 2005). Recently the Harvard Medical School carried out a study in North Carolina and also concluded similar findings that in the last 10-12 years the differences in the incidents involving patient safety have remained static.

In the UK the Department of Health (DH) published in 2000 Sir Liam Donaldson’s report: - An Organisation with a Memory in an attempt to address ‘the safety culture’ in the National Health Service (NHS). More recently
campaigns such as the Patient Safety First (PSF) have developed and have complimented the efforts of the National Patient Safety Agency (NPSA) in an attempt for this culture to change from one of a blame culture to one of a just culture.

Other agencies in the UK (Health Foundation, NHS Institute for Innovation and Improvement) have recognised that patient safety must take priority at board level; they say that in order for any institution to develop safer systems, the executive leaders play a crucial role in setting the cultural norms or agenda.

Building A Safer NHS for Patients (DOH 2001) came out in response to the report and set out to implement the changes recommend via the DOH. It put patient safety within the government’s quality initiative enabling links to other key initiatives. The NPSA was at the forefront of this with the National Reporting and Learning System (NRLS). Its mandate is to identify patient safety issues, then find solutions for them. At the central office data is used to identify patterns and trajectory of avoidable incidents and therefore find the underlying causes/trends. For most institutions within the NHS this is recorded and uploaded via an electronic system. This system has speeded up the learning process dramatically. However, as with any reporting system, it relies on the willingness of the reporter to report, and its ease of use.

Recent figures from the NRLS have revealed that 57% of reported incidents are related to patient safety and represent events that have or could have resulted in death (Peate 2011). The NRLS has rapid response teams who review all severe harm and deaths reported, the Never Events List, recently updated (DOH 2012) provides guidance and policy on reporting these events.

The Seven Steps to Patient Safety (2004) further supported these changes by rolling out a framework and identifying patient safety managers throughout the UK, again initially focusing on culture, leadership, reporting and lesson
learning. The infrastructure of these systems is paramount in them working effectively and efficiently.

Integral to reducing risk and improving patient safety is improving the safety culture, singularly this can sound like an easy task, in an organisation as large and diverse as the NHS, it then becomes the elephant in the corner of the room. Safety culture effects every decision at every level. Taylor (2011) like many others exemplifies, “It is easier to measure culture than to change it” which in its self is one huge elephant (Braithwaite 2011).
2.2 Measurement Tools

In addressing the elephant, The Health Foundation (THF) 2011 produced a report on the measurement of safety culture. Contained within this report is a defining methodology of how patient safety culture is to be perceived. Regrettably, the report interchanges the terms culture and climate when referring to patient safety, leading to some confusion, then goes on to identify that many tools exist around the world to measure it. Tingle (2011) concludes that although this provided an interesting insight into the current usage of tools to measure patient safety culture, due to the diversity of healthcare one method alone does not fit all.

In 2005, Flemming identified that although safety culture was beginning to grow, there was little experience in the NHS with regard to measurement and implementation. Lessons would primarily have to come from other industries - aviation being a prime example.

A few years on in 2009 Watson identified that around a third of NHS trusts were carrying out safety culture survey(s) but discrepancies in measurable results arose because not all the trust used the same tool. Despite this flaw the results to individual trusts remained valuable, but they could not be benchmarked against. Consequently, they lacked transparency.

One example in the UK was the Manchester Patient Safety Framework 2006 (MaPSaF). Mannion (2009) found that almost half of the UK organisations had used it at some point; however it focused on culture at an organisational level. The report findings reflected poor cultural changes with regard to patient safety. Tingle, Sarac (2011) identified that the survey tool only had a moderate response rate implying that if culture is to change, and to create a safer NHS, surveys regarding patient safety culture should take a more prominent place.
This implied that there was room for more serious thought on the issue. It is also not freely available as some others are.

The Safety Climate Tool from the Royal College of Nursing (RCN), although not a validated tool, it is however, freely available. This tool is aimed solely at nurses, however, although the author also wants to survey staff on the front line. Consequently, a measurement tool which is more diverse could create versatility and longevity when data information comes from all levels of staff. Correctly carried out a survey would allow an organisation to see itself as others see it and therefore use the results to become superior in its culture towards patient safety (Hutchinson et al 2006).

The conduction of such a task is a major undertaking for an industry as big as the NHS, especially as now there are differences in core values between the trusts. The NHS reforms will add to independence from the system as a whole, which is one of the reasons the author has chosen to use an internationally recognised and validated survey tool that has been tried, tested and benchmarked in other healthcare organisations around the world.

For the purpose of this work the author has chosen to use a validated tool. The Hospital Survey on Patient Safety (HSOPS) tool, which was developed by the Agency for Healthcare Research and Quality (AHRQ) in America. This tool has been extensively used since 2006. A department specific version has been chosen for use in this project, the staff attitudes questionnaire (SAQ). Both can be found in appendix 2 and 3.

America has in place databases of results from both therefore results are available to benchmark against. Although lengthy, it does have a comprehensive cover of safety culture elements. It is based on a set of pilot studies from 21 hospitals across the USA and it is currently being adapted for use by the NPSA for use in the UK.
In order to collect both quantitative and qualitative data, the survey offers both a questionnaire and places for broader examination in the summary box. As it is aimed at frontline staff it can be completed in a relatively short period of time. Furthermore, it is user friendly. The University of Texas have also further developed the tool by making it specific to specialist areas e.g. ICU, Theatres, Medical etc. (Sexton et al 2006).

With the current advancement in informatics, permission has been sought to covert this survey into an electronic format to save cost and increase the quality of responses.
2.3 System Analysis

Patient safety is looking at systems thinking, not just about active errors. Active errors include distraction and tiredness for example on a night shift and completing the night drug round with the lights dimmed. However, active errors also encompasses latent factors that we design upstream in the system for example not communicating as a team on how to use a piece of equipment for example.

We, as a team are failing to see these flaws in our process design that we have created and put into place. By doing this we are creating our own hazards and near misses (Holden 2009). The top three incidents in the UK occur within our hospital services which are reported are falls; medication errors; treatment procedures (NRLS 2010). However, new ways of coding and collecting information has recently been launched from the CQC (2011). The patient safety thermometer will collect information on e.g. care bundles and pressure sores, and, both will account for an increase in reporting and results initially. The evidence in the rise will show that the tool has been taken up and successfully been implemented to full use. The checklist can be target led and now as a CQUINN target is financially driven to succeed.

As other industries (aviation, nuclear, oil and marine) have shown, error reporting provides an invaluable tool when it comes to error prevention, however it’s said that only 3-7% of medical errors are reported in the UK (Reason 2006). A blame culture is thought to be the biggest cause, although this is changing and the author, like many others, feel that there is still a considerable amount of work to be carried out (Taylor 2010, Tingle 2011).

Warring in 1996 also identified this by saying that as many as 10% of errors were reported and the blame culture contributed to this. Since then others (Maxfield 2009, AACN 2010) have also concluded with similar findings. By
not addressing the cause and solution to this problem, 90% of lessons are not learned or acted upon. If this is correct it’s not surprising then that safety statistics have been slow to improve.

A total figure taken from NRLS, derived from uploaded incidents that were reported from hospitals, mental health trusts and the ambulatory services showed that from March to September 2010 a total of 1313 patients in England lost their lives to medical error, an increase on the previous six months. A further 3699 patients suffered serious harm (Peate 2011). If correct then our underreporting is 10%. These figures are only a small (10%) representation of the scale of harm that patients are potentially subjected to.

Audit tools and checklists alone will not be the solution to error management. Scanlon (2010) would say that although important, patient safety is more than checklists and that if we are to improve the system we first need to have learnt that 90% of lessons are out there, the science is in how as a profession we do that.

Due to the thoughts that patient safety has been slow to improve over the last 10-12 years, the way we think about preventing adverse incidents are said to be the way forward. In order to make inroads into the patient safety challenge, one way to do this is initially is measuring the safety culture of the organisation (Pronovost 2005).

The data would then see competition in healthcare delivery when shared within the organisation, Makary (2012) would promote the idea of transparency through then publishing figures nationally.
2.4 Law

All developed countries are regulated by law, both criminal and civil. This regulation is a form of social control and dominates us as a group. Within the law there are understood and enforceable consequences to some of our actions. In society there is an expectation of how people should act within. In healthcare, patients have expectations of our abilities to care for them.

The most recent within healthcare is the Health and Social Care Act 2012, the most extensive reorganisation of the health service structure. Other forms of control are regulating bodies such as the General Medical Council (GMC) and the Nursing and Midwifery Council (NMC). Both require practitioners to meet the requirements to join and subsequently register. As a regulating body it can, and does, hold us accountable for our actions by a code of practice. If broken consequences are enforceable. These might include suspension or withdrawal from the register and therefore an inability to legally practice.

The NMC, in their code of conduct (2008) set out a requirement that all nurses and midwives must:-

- 32. You must act without delay if you believe that you, a colleague or anyone else may be putting someone at risk
- 33. You must inform someone in authority if you experience problems that prevent you working within this Code or other nationally agreed standards
- 34. You must report your concerns in writing if problems in the environment of care are putting people at risk

Most health care complaints that go through the court process do so through the civil court. This is the proceedings between two parties and requires the prosecuting party to prove fault on the balance of probabilities. This is not a criminal court, and sanctions are often in the form of costs/damages. For an individual case, this is often an expensive, lengthy process, which often doesn’t
yield satisfying results however. Since 1995, there have been some highly publicised cases including that of Leslie Ash who was awarded five million pounds for her case regarding the super bug MSSA.

The cost of litigation is predicted to rise. The National Health Service Litigation Authority (NHSLA) handles claims between the public and the NHS. In 2009/10, 6,652 claims of clinical negligence and 4,074 claims of non-clinical negligence against NHS bodies were received by the authority, up from 6,088 claims of clinical negligence and 3,743 claims of non-clinical negligence in 2008/09. £787 million was paid in connection with clinical negligence claims during 2009/10, which is up from £769 million in 2008/09. The coroner’s office can also enforce changes in practice by the issue of a rule 43, however this is always a reactive change born from hindsight.
2.5 Culture

The National Health Service is an organization made up of people from multiple different cultures within society. Developed cultures are enriched in history, having developed over time and have established groups within, known as subcultures. They have beliefs/patterns that will influence their behaviour within the group and these behaviours will influence their interpretation of society outside of the group (Ezirim et al 2010).

Culture can and is challenged every day by organizations and situations that challenge and question our beliefs and ideologies. Within the workplace this can be split into two categories; organizational culture and corporate culture. Both will affect the running of the service (Wines, Hamilton 2009).

An organizational culture describes the beliefs and attitudes and experiences that are collectively shared by the people and groups within the organization which in turn controls the way people interact within and to each other. It’s defined by its “upbringing” of staff within i.e. the education, training and by its previous experiences as an organisation. This shared way of thinking and behaviour is said to define the organisation by its deep seated values and beliefs ideologically conceptualised as “the way we do it round here” (Mannion 2009).

Vincent (2010) sort of agrees with this by saying that although “it is the way we do things around here” this concept could apply to any size of group from a small team to a whole organisation. This complicates thing when trying to measure the culture on a large scale.

A corporate culture on the other hand, is described as the character of an organisation made up from values, customs and traditions. It’s more fluid and difficult to describe as it has no fixed definitions. Flow is defined by the characters within, subcultures, or smaller groups break off from the collective
group but will come together with core values, people with flow through these sub groups depending on culture shift at the time (Hamilton et al 2009).

Others Reason et al describe an organization as what is and its character as what it has.
2.6 Safety Culture

A relatively new term, the AHRQ as part of the Health and Safety Commission of Great Britain describe it as: “The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour that determine the commitment, to, and the style and proficiency of, an organization’s health and safety management”.

It’s been said that safety culture will influence healthcare providers to perform behaviours that will enhance rather than reduce patient safety (Nieva et al 2003)

The term safety culture was first introduced in 1988 following the Chernobyl nuclear power disaster. It has since been adopted by several industries especially high risk ones such as the oil and aviation industries. More recently, a growing focus within healthcare is to develop a safety culture.

Halligan and Zecevic (2010) found that the majority of studies did not define a safety culture. A clear separation between organisational and corporate culture was identified in the terms that were used. Common terminology of a safety culture often referred is a safety climate, this is defined by them as “surface features of safety culture from attitudes and perceptions of individuals at any given point in time” and this falls within the concepts of a corporate definition of culture in dealing with what people ‘are’. Whereas others defined safety culture as “The product of individual group values, attitudes, competencies and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organisation’s health and safety programmes. Organisations with a positive safety culture are characterised by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measure” (Health and Safety Commission 1993), rather than an organisational view of culture that focuses on the method of how this is achieved.
The NHS has adopted a framework originally developed for the oil industry by Ron Westrum in 1993 and further added to for health care by Reason in 1997/2000/2003. It focuses on five stages of cultural maturity,

1. Pathological: - who cares about safety as long as were not caught?

2. Reactive: - we take a patient seriously and do something when we have an incident.

3. Calculative: - we have systems in place to manage all hazards.

4. Proactive: - we try to anticipate safety problems before they arise.

5. Generative: - managing patient safety is an integral part of everything we do.

Samner et al (2009) went on to further identify seven subcultures within safety culture as they all contributed to the overall patient safety.

Leadership: - Identified by the National Quality Forum focused is on leadership structures and systems. The forum reports that leadership should come from the top. If this is lacking or misdirected then the system below will inevitably get tainted in some way. This is the first year that within the NHS patient safety has been at the top of the priority list and this will surely have an impact towards the promotion of patient safety. Yates and Dickey (2005) support this by saying that clinical leaders are critical to its development. That it should begin at top levels of management. Yet these leaders have previously had no involvement with patient safety and probably no formal training. This has previously been attributed by Buerhaus (2004) as contributing to barriers within patient safety. The NSPA (2008) published the Leadership Safety Checklist, a guide for board members on how to approach and maintain quality health and safety for it employees. It includes an overview of the Health and Safety at Work Act 1974.
Teamwork: - Is described as the collaboration between all caregivers that crosses all ranks within the organisation.

Evidence Based: - This is compared against the aviation industry in their models of safety and is beginning to use checklists. Within the NHS care bundles and standardised guideline are starting to be introduced to promote patient safety. More recently the use of pathways and checklists provide an audit trail with which to benchmark against.

Communication:- As part of the multi-disciplinary handover of patients, getting the correct information across has previously been problematic and now in a multicultural/multiracial service it’s important to identify communication issues, one solution is to use electronic systems. Patient’s such as the elderly with comprehension and communication difficulties may not understand treatment plans, this can affect all aspects of their care from taking and understanding medications to rehabilitation and care packages on leaving the hospital.

Learning Culture:- Is said to create a safety awareness amongst staff and uses root cause analysis to promote and mature a culture its says that as staff will gradually become more proactive in identifying and averting incidents by evaluating and sharing lessons learned (Blake et al 2006).

Just: - Is thought of as a two-sided scale one on side being the individual and the other the system. Marx (2008) says that a just culture is based on trust and sets out four questions to determine if the system or the individual is at fault. Previously Reason (1997) had said that a Just culture would whilst recognising human error would set out clear expectations and responsibilities and therefore will not routinely blame or punish ones who make mistakes. Just culture is a set of values beliefs and norms designed to balance the need to learn from mistakes with the need to take corrective action if required.
Just culture is not “blame free”, it’s a culture that relies on full disclosure of mistakes, errors and near misses in order for learning to take place. It’s one in which people identify the risks/hazards around them in order to contribute to system design (Marx 2008).

It is also a culture of accountability identifying deliberate errors and has a robust system designed to deal with such errors in the legal punitive system.

Although patient’s should rightly be our focus, it is also becoming apparent the organisations must make a fundamental move towards ensuring the balance of the safety of not only the patients but the workforce, environment and the organisation (Taylor 2011).

Patient Centred: - The final subculture is used to promote health and wellbeing by sharing patient stories with the community. Foundation Trusts empower patients and give a sense of pride within the community by allowing members of the community to become involved in the planning of services within the organisation. In the development of a safety culture, Wines et al (2009) say that implementing ideologies can bring about culture change.
2.7 Error

Blame culture is said to be one of the biggest barriers to building a positive safety culture. It is argued that the fear of blame inhibits participation in incident reporting and it is argued that a deep seated assumption pervades that individuals will be held responsible or punished for the event, rather than identifying the cause and learning from said event (Waring 1996).

Oil, Aviation and Nuclear industries have all established robust reporting systems as a result of improving their respective safety cultures. Their goals surrounding reporting are similar. They are based on the collection of data and the seeking to elucidate events which would otherwise lain undiscovered, thereby potentially reducing the risk of reoccurrence (Vincent 1996).

Healthcare has closely followed especially around risk management and patient safety. An example of this is the NLRS which developed from the aviation safety reporting system (ASRS 1985). This was further developed into the aviation safety action program (ASAP 1996). This is a direct voluntary reporting system which takes a proactive approach to the reporting of events by pilots and relies on the non-jeopardy principles to promote reporting (Halligan & Zecevic 2010).

Unlike many countries America doesn’t include adverse incidents in their statistics which is thought by Reid (2011) to contribute to the reason that their patient safety has failed to improve. As these events are not included vital lessons have failed to be talked about and learned from. In addition no evidence base has come from it.

A recently published report from the American Association of Critical Care Nurses (AACN) and Vital Smarts called “The Silent Treatment” published recently has revealed that up to 88% of incidents go unreported.
Whilst this study is based on behavioural culture of incidents, it does however highlight that many incidents and near misses go unreported, because of this incidents have enormous potential for being repeated.

The initial study, Silence Kills is a study looking at the behaviours of doctors and nurses in clinical practice. The initial study was carried out in 2005 and found that of 1,700 clinical staff (doctors, nurses and administration staff), more than half had witnessed colleagues break rules, be unsupportive, make errors, be incompetent or disrespectful, have poor teamwork and micromanage.

Poor clinical judgement was observed by 88% of doctors and a further 84% have been reported to have been taking shortcuts when caring for patients. Despite these revelations only 10% of clinical staff had confronted their colleagues.

This 2010 study uses a larger body of 6,500 nurses and included were the AACN and the Association of Peri Operative Registered Nurses (AORN). Mostly the study looks at communication breakdowns.

Risks that are widely known but not discussed are known as the “undiscussables”. It uses patient safety checklists, and claims that they alone do not create safety, however “people do.” Argyris some time ago in 1980 (cited in the Silent Treatment study) wrote that breakdowns in communication fall into two groups, honest mistakes like hand writing and language barriers and undiscussables such as rule breaking and incompetence.

The study has shown to demonstrate that health care professionals fail to raise concerns surrounding three areas when there are clear guidelines in place therefore undermining the effectiveness of safety checklists. The three areas highlighted were:-

- Dangerous shortcuts.
• Incompetence.
• Disrespect.

As few as one in ten nurses expressed their concerns, from an organizational point the study says that silence leads to communication breakdowns that results in patient harm and points out that:

• More than four out of five nurses have concerns about dangerous shortcuts, incompetence, or disrespect.
• More than half report shortcuts have led to near misses or harm.
• More than a third report incompetence which has led to near misses or harm.
• More than half say disrespect has prevented them from getting others to listen or respect their professional opinion.
• Fewer than half have spoken to their managers about who concerns them the most.
• Less than a third have spoken up and shared their full concerns with the person who concerns them the most.

Considering the main difference in the studies were the nursing environments the results are staggering, the 2010 studies were in high patient acuity settings such as the intensive care unit, theatres, recovery and the accident and emergency departments whereas the 2005 data came from randomly selected nurses working on medical and surgical general wards. Despite this the figures are quite remarkable. These are, of course, highly stressful areas in which to work and you cannot always plan for every emergency that happens, which is why safety checklists are in place, to remind us of techniques to use and give us a framework to work within.
The NPSA seven steps to patient safety want the organisation to create a reporting culture that is open and honest. In the DH (2002) report “Learning from Bristol” which looked into children’s heart surgery, it said that incidents within the NHS were routinely overlooked due to the lack of openness with safety culture. It says that firstly we need to break down barriers to reporting by dispelling two key myths.

1, The Perfection Myth - that if people try as hard as they can, they will not make mistakes.

2, The Punishment Myth - that if we punish people for their mistakes they will not make as many and that by issuing disciplinary actions this will lead to improvement.

However, this does not rule out accountability. It’s designed to look at the root cause analysis and look at the system that preceded the event as this can then predict and further prevent a similar incident happening again. It is not an excuse for clinical negligence (Marx 2008), which he identified arose into three behavioural categories in 2009:- 1. Normal error. 2. At risk behaviour. 3. Reckless behaviour.

Root cause analysis (RCA) has been the standard approach of identifying the cause of incidents, the five why’s developed by Reason (1990) is a reactive way of analysing errors and how they came about. Patient safety is concerned with a systems approach in a pro-active way, whilst recognising that incidents do happen the pro-active thing do identify its prevention of happening again.

Failure Mode Effect Analysis (FMEA) can be applied in order to pro-actively identify errors and in effect, to Poka Yoke (error proof) them (Gosby 2010). Used together with HFE, this combination has the potential to effect a culture change in near miss reporting.
FMEA has been tried and tested in other countries with positive results. It was used following an incident regarding over sedation in the recovery unit. The report carried out by Cronrath et al (2011) found that during the RCA the patient controlled analgesia pump had been incorrectly programmed allowing for double the dose to be administered resulting in the respiratory arrest of the patient due to an opioid overdose.

Human factor engineering (HFE) would have found that the pump design could have been improved by not allowing multiple presses of the setting buttons without warning, for instance a bleep sounding or pumps specifically programmed for one drug only.

Adverse incidents without harm or near misses are said by Taylor (2011) to be a risk management opportunity. Incidents that lead to harm are prevention opportunities and lastly policy is quality control. Injuries that occur not from error reflect where we are in the evolution of patient safety and the research and development of it.
2.8 Human Factors

Human error theory goes some way to finding the causes of human factors in errors and near misses by looking at the ways in which humans behaviour is affected by self and surroundings (Morris 2011). The Health and Safety Executive (2011) defined human factors as "Human factors refer to environmental, organisational and job factors, and human and individual characteristics, which influence behaviour at work in a way which can affect health and safety " by looking at three interrelated aspects 1, The job 2, the Individual and 3, the Organisation.

Human Factor Engineering (HFE) has been used successfully in the other leading high risk industries, despite being around since the 1950’s HFE is a relatively new introduction to healthcare, by providing evidence based research to support human guidance it has contributed to the system design of equipment, tools and technologies (Crosskerry 2010). It has contributed to developing standards, policy and guidelines, to enable safer practice.

The Clinical Human Factors Group (CHFG) 2011 focuses specifically on health, within this looking to enhance clinical performance by understanding the effects on teamwork, tasks, equipment, workspace, and culture organisation on human behaviour and finally the application of that knowledge within the clinical setting. Scanlon (2010) explains human factors in a simpler to understand format by placing people in the middle of the concept with four influences on them 1, Task 2, Technology 3, Environment, and 4, Organisation.

Scanlon’s work (2010) within the Intensive Care Unit (ICU) focuses on medication errors; it demonstrates that safety, efficiency, quality and performance are directly related to how the individual interacts with the system in which they work, is paramount to the properties of the system working rather than errors being the fault of the practitioner.
Human Factor Engineering (HFE) is not about telling people to work harder and make fewer errors, instead it pro-actively looks at supporting the individual to perform better with less errors. By optimising the Performance Influencing Factor (PIFs) which are the characteristics of the job, the organisation and the individual, this will reduce the likelihood of human failure.

Ideally you want to achieve a culture where by a nurse for example would have the sense of security to report a near miss with the knowledge that they would not be blamed, but would be expected and want to be at the centre of the learning exercise, to contribute to solving the problem rather than the inheritors the problem system. The author believes that healthcare workers came into health care to essentially help people, different roles, skills and disciplines all contribute to that, none of which deliberately cause harm, however people do change and for one reason or another do cause harm. Famously Beverly Allitt and Harold Shipman, both of whom lessons have been learned from regarding patient safety. Furthermore, due to its high profile the culture change in prescribing was considerably quicker than the reporting system and the changes in the technology surrounding medical devices were also applauded. Some of the swift changes in practice were driven by social change, the media coverage and general public outcry demanding an improvement in practice.

Don Berwick (2010) from the National Centre for Human Factors in Healthcare supports this by quoting that “Most serious medical errors are committed by competent, caring people doing what other competent, caring people would do”

HFE in its way it looks at human failure identifies two clear types inadvertent and deliberate, Just culture works within these rules.

Within the nursing group Feng et al (2008) have established that there are four sub-dimensions of patient safety culture that all link in with human factors,
system, personal, task-associated and interaction. This would support Scanlons work in the clinical area with his work on medication errors in 2010.
2.9 Leadership within the Organisation

Traditionally men have always led the way in industries business management structure, the NHS is no different in this, as it is after all a business. Leadership and its models have started to include more female qualities encouraging business to be more open and proactive towards change (Exton 2009). Women can lead as demonstrated by Margaret Thatcher, acceptance of women leaders can be debatable.

Given that the driving focus towards patient safety is directed at the front line, one would then assume that as women make up around 80% of the workforce that they would be leading the project, however these figures turn on their head when it comes to the people at the top. Studies have found that gender stereotyping is still present in the way that women are selected and promoted in to the management structure (Kniveton 2008, Armitage 2009).

If this is so then why when Gallos in (1989) that women were more people-orientated by focusing and attachment and affiliation rather than the men who typically are characterised by Loden (1995) as more competitive, hierarchical and controlling. Management styles are also linked to gender (Mukhtar 2002) implied that there was an interesting difference between to two that when male managers opt for an emphasis on control, female managers tended to have more of a centralised style being less focused on delegation. Alimo-Metcalf (1995) identified a specific theme when considering male and female management specifically when it came to empowerment, males with their masculine profile bestowed power on staff whereas women with their female profile shared the power by co-operation and connectedness. She has since built a feminine leadership model around her findings.
2.10 Education

One of the challenges of meeting the needs of patients today is educating the professionals who deliver that care. As a nurse for the last 25 years the author has seen many changes within the NHS and an increasing demand on responsibility. Evidence based practice and education has allowed nurses to catch up professionally. The Darzi report (2008) asks that all nurses qualifying are now graduate nurses. These nurses will have an academic understanding of research and its effect on evidenced based practice (Clegg 2010). However is this advancement at the cost of the underlying culture and values of the NHS?

It’s been long thought that the nursing profession has a direct link to patient safety as they are ideally placed within the healthcare system, more recently Bargolotti and Lancaster (2007) have described the nursing profession as a ‘strong, secure, safety net for the consumers of healthcare’ and yet the DH has had to launch the Compassion in Practice document (2012) which looks at the strategy and vision for nursing and midwifery focusing on the six C’s in healthcare delivery. Care, Compassion, Competence, Communication, Courage and Commitment.

Carroll (2005) attributes this to safety being an integral part of the role with nursing care resting on a foundation of safe practice. Both suggest that nurses are the key to patient safety; however they are little prepared for the recognition of the role. Nurses currently use checklists to contribute to patient safety, more recently the development of care bundles have been introduced, however to initiate change, leadership, teamwork and collaboration is required. That said, given the changing pace of modern healthcare, the development of a specialist role dedicated to patient safety has yet to be developed.

Wong and Cummings (2007) have found increased patient satisfaction and a reduction in adverse incidents are directly linked to positive leadership styles.
and patient safety. Open communication and participation in decision making were some of the key practices in their research. Robinson (2010) highlights that in nurse leaders must come passion for the profession and dedication to quality patient care.

In the chief nursing officers report (DH 2010) Dame Christina Beasly launched the position paper on advanced nursing, to address the wide ranging needs of patients and communities new nursing roles have been developed.

However, Richardson (2010) would argue that gaps remain in relation to the role of the nurse in patient safety improvement; he says that huge potential lies within the development of leadership within nurses’ roles, which through empowerment the development of tools will support the influential role of the nurse towards patient safety. He therefore supports the notion of further research to address the gaps, as he explains that patient safety is an evolving science with many remaining unknowns.

During the last decade health care settings have begun to realise that patient safety should be taken more seriously and have begun to recognise related issues such as leadership, team working and culture (Bowie 2010).

Simulation training has brought with it new ways of improving patient safety by offering the acquisition of skills and attitudes of medical personnel through simulation based training, originally taught with mannequins for practicing cardiopulmonary resuscitation techniques. Advances in equipment and facilities allow for procedure-based techniques that range from basic manual handling to full major incident scenarios and robotic operations Aggarwal et al (2010). The standardising of patients however remains an area for concern as although theoretically two procedures can be the same and simulated as so, when performed by, and on, two different people they then become different by the very nature of it being performed by humans (Wass 2010).
Chapter 3

Methodology

3.1 Methods

The author is employed in a large teaching hospital which employs around 12,000 staff, Guy’s and St Thomas NHS Foundation Trust (GSTT) would be, due to its close links with research and the Kings Heath Partnership (KHP), a great place to establish a benchmark for the rest of the country. The results would identify staff awareness of patient safety whilst measuring the current culture. The hospital has 1500 beds in 48 wards. The current staff survey carried out by the CQC highlighted that although the reporting of errors had increased; the potential of witnessed harmful errors has risen making the trust above the national average.

A time limit of twelve months in which to complete the project thoughts steered the author towards using an established survey tool that is able to be benchmarked against. By targeting frontline staff (these are the group most commonly talked about regarding culture change and due to the size of the Trust) the proposal is to concentrate the research within the ICU by sending 500 surveys to the multidisciplinary team with an aim of attaining at least a 40% return. It is hoped this will encourage a wider understanding of the trusts safety culture.

On approaching the Intensive care clinical research leads, the project was presented at the weekly research meeting for the department. At this point it was left to be considered to be put forward. In time the feedback was that whilst this would be of value to the unit, other funded projects that are also part of Guys and St Thomas’ portfolio would take priority. The unit also wanted to carry out a quality survey rather than a culture survey in the near future and were looking into survey tools that would facilitate this.
After some discussion it was suggested to facilitate this project, the recent intake of junior nurses should be interviewed at regular intervals of three months. Two cohorts of 12 nurses would be arriving in the next six months, given the time frame for this project; it would make that data poor given that there would be only two sets of interviews. The option was then to approach another trust within Kings Health Partners.

Kings College Hospital’s head of intensive care research Dr Phillip Hopkins agreed readily to facilitate this project. This added to the bias factor as the author was not employed by this trust, therefore not known to staff members. The research lead agreed to send the survey to 200 nurses of varying level of skill and banding at the time it would be the only survey current on the unit. Due to its length this would give it the best opportunity for a good response. The Trust has a research centre dedicated to patient safety which would explain its support, as this is an independent researcher, facilities such as the onsite research team could not be accessed. As this was a survey reliant on staff ethical approval was not required (see text box).

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**From:** Bowen Will (KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST)
**Sent:** 14 May 2012 14:58
**To:** Marshall Tara
**Cc:** Hopkins Phillip (KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST)
**Subject:** RE: Patient safety survey

Hi Tara

If you are not funded then you will not be eligible for portfolio adoption. We will need to confirm with Phil that this is feasible considering the lack of funding.

I am more than happy to assist with the IRAS application which covers approvals at all sites. If you are not having any contact with patients, their tissue or data then you will not require NHS Research Ethic Committee Approval.

Regards
Will
This is the only survey of its kind that has been carried out in the UK with a focus on nurses. According to some, this is the group of people who are the eyes of the front line, the group who are most aware of the culture within a hospital as these are often the static workforce. All other surveys have been larger and been aimed at the multi-disciplinary team (US, Taiwan).

200 electronic surveys went out electronically to 200 nurses over a period of three weeks between Dec 2012 and Jan 2013. Despite being over the Christmas period, it was the only survey on-line at the time. The Intensive care unit worked to full capacity over this time. It has 18 beds caring for respiratory, cardiac and renal emergencies.

The use of SMART (Chamberlain 2011) objectives has been employed in order to keep the work to an achievable level that will produce the best results in order to show a clear reflection across the trust.

The data information will be analysed using Excel as it will take on mainly a quantitative nature, however it survey does allow for qualitative data to also be recorded so the end result will be a culmination or triangulation of the two. The AHRQ are currently using the survey in the UK via the NPSA. If this study fits within the criteria it has the potential to be uploaded to the national database in line with other leading NHS trusts for national analysis.

In order for the survey to take on the format of an electronic survey permission was sought by the author Dr Peter Pronovost. A meeting was set up in London with Dr Eric Vohr who started the original research whist he was here for further meetings, at that time he agreed and supported the idea of changing the survey to an electronic format.

Due to time constraints, an online survey assistant was used. The on-line facilities allowed for adaptation of the survey and one of the advantages was that restrictions could be put in place in order to facilitate compliance with the
survey, one of these measures was to restrict the omission of answers thus improving the quality of responses. The question flow design was one that only one question could be answered at a time and answers could not be skipped as the survey would not move on to the next question without the previous being answered. Survey monkey provided a link to the survey which could be sent out with the trust email system, the trust system is encrypted which provided the added bonus of security as opposed to other email providers.

The online survey although slightly shorter, allowed for adaptation to the clinical area, as the clinical setting changed in the organisation of the survey. The survey tool allowed for easy adaptation by simply changing and adding questions, it also facilitated the language change. A five point unipolar Likert scale on the continuum from strongly disagree to strongly agree was used for the psychometric properties. This allowed for individual degrees of expression that is pre-coded within the survey when entering the questions rather than a simple yes/no. There were 70 questions in total with the last question allowing for a quantitative answer, this question was allowed to remain unanswered if the responder wished to leave it blank see appendix 4.

24 of the 200 questionnaires were responded to in full over the three week period. These responses came from 3 nursing bands, staff nurse, senior nurse and charge nurse/sister. There was provision for the band 8 (matron) and head of nursing, however, this group maybe due to the timing failed to answer. This is thought to be the first survey carried out in this way in the UK, to confirm this a question was added to the questionnaire asking if the respondents had filled in this questionnaire before. All of respondents replied that they had not.
Question 68 asks whether the survey has been completed before.

Survey Monkey also facilitated the collation of the surveys as the author was not on site within the trust; it also provided an unbiased platform. No incentives were used to promote the survey response suggesting that all responses were genuine. It also collected and processed the data via excel and at a higher premium could download the results in SPSS depending on the format the user required.
3.2 Costing

Financially the use of this service was economic at £25 per month non-contracted. From the time that the survey was written, distributed and collated a total of four months went by costing £100.00. Compared to the estimated printing costs and time dedicated to the distribution and collection this is considered to be a small cost to outlay. The printing was estimated at £250.00 and administration time taken as annual leave would have amounted to an estimated £1500.00. Again to ease time with constraints, a data allowance only a contracted blackberry smartphone facilitated the monitoring of replies. Survey monkey automatically emailed when a survey was filled out, so when a slack period came an email could be sent to the unit to remind staff to complete the survey. The cost of this was £10.00 a month, this was again considered minimal compared to doing it manually. The use of the service became and added advantage.
Chapter 4

Results

4.1 Who Replied

24 nurses replied to the survey, all results were then converted to a percentage.

Of the 100% of nurses who replied 52.2% were staff nurses. 30.4% Sister/charge nurses and 27.4% were nurses working as senior staff nurses.

Nurse ratios would imply that this is a broad and even number of replies, or even top heavy as you would expect a higher percentage of lower grade nurses in the establishment. In the intensive care unit, each patient is nursed by a single nurse equating to 1:1 nursing. As patient’s improve that nursing ratio is reduced, for example, the high dependency unit (HDU), a step-down from the ICU would be staffed on a 2:1 ratio and the wards much less depending on the clinical need of the patient.

Traditionally 90% of nurses are women (RCN). Question 3 attempts to clarify that by asking the responder what gender they are, 91.3% of respondents were female.
Question 3 asked about the gender gap in nursing.

Equally some hospital rely on agency staff to bring them up to a full complement of staff, highlighting that these results are specific to that one unit and should not be applied as a general rule throughout the NHS. The survey can be tailored to specific units, equally can be expanded to accommodate many units in hospitals that run different specialities in the ICU such as surgical, medical and burns. The findings would probably differ in all and at different times. No one that answered the survey were agency staff as clarified in question 69. Most nurses (75%) worked full time on the unit which, although the survey has asked for age groups, traditionally teaching hospitals run on a younger generation of staff who are less likely to have young families and can therefore work full time.
What is your Job Status?

Large city ICU’s are often perceived to be busy due to the high turnover of patient’s, depending in the speciality of the hospital this will differ. Kings College Hospital has a busy trauma unit, as a result of this the admission rate to the ICU is high this is also reflected in the discharge rate rather than the mortality rate as trauma patients generally have a speedy initial recovery, then on going treatment and therapies can be continued outside the ICU.

This is reflected in the amount of nurses who say that there is a high workload in the unit.

The survey results have been collated into six themes with additional questions that are specific to the chosen area.

Three of the six themes have become the focus for analysis to allow depth as 70 questions have proven to be too many or the study, the remaining groups can be found in appendix 5.
4.2 Safety Climate

Q8 Medical errors are handled appropriately in this ICU
Answered: 24 Skipped: 0

Q14 I receive appropriate feedback about my performance
Answered: 24 Skipped: 0
Q15 In this ICU, it is difficult to discuss errors

Answered: 24  Skipped: 6

- Disagree Strongly: 4.17% (1)
- Disagree Slightly: 12.50% (3)
- Neutral: 25% (6)
- Agree Slightly: 25% (6)
- Agree Strongly: 33.33% (8)

Q20 All the personnel in my ICU take responsibility for patient safety

Answered: 24  Skipped: 6

- Disagree Strongly: 4.17% (1)
- Disagree Slightly: 29.17% (7)
- Neutral: 25% (6)
- Agree Slightly: 33.33% (8)
- Agree Strongly: 8.33% (2)
Q25 I am encouraged by my colleagues to report any patient safety concerns I may have

Answered: 24  Skipped: 0

Q26 The culture in the ICU makes it easy to learn from the errors of others

Answered: 24  Skipped: 0
Q32 I have seen others make errors that had the potential to harm patients

Answered: 24  Skipped: 0

- Disagree Strongly: 45.83% (11)
- Disagree Slightly: 15.87% (4)
- Neutral: 4.17% (1)
- Agree Slightly: 29.17% (7)
- Agree Strongly: 4.17% (1)

Q33 I know the proper channels to direct questions regarding patient safety in this ICU

Answered: 24  Skipped: 0

- Disagree Strongly: 58.33% (14)
- Disagree Slightly: 29.17% (7)
- Neutral: 12.50% (3)
- Agree Slightly: N/A
- Agree Strongly: N/A
Q44 I am frequently unable to express disagreement with staff, physicians/intensivists in this ICU

Answered: 24  Skipped: 0

58.33% (14)  
16.67% (4)  
16.67% (4)  
8.33% (2)

Q50 I have made errors that had the potential to harm patients

Answered: 24  Skipped: 0

41.67% (10)  
12.50% (3)  
12.50% (3)  
25% (6)  
8.33% (2)
Q54 If necessary, I know how to report errors that happen in this ICU

Answered: 24  Skipped: 0

Q55 Patient safety is constantly reinforced as a priority in the ICU

Answered: 24  Skipped: 0
Q59 Personnel are not punished for errors reported through incident reports
Answered: 24  Skipped: 0

Q60 Error reporting is rewarded in this ICU
Answered: 24  Skipped: 0
Q61 Information obtained through incident reports is used to make patient care safer in this ICU

Answered: 24  Skipped: 6

Q63 Personnel frequently disregard rules or guidelines (e.g. hand washing, treatment protocols/clinical pathways, sterile field, etc.) that are established for this ICU

Answered: 24  Skipped: 6
Q66 A confidential reporting system that documents medical incidents is helpful for improving patient safety

Answered: 24  Skipped: 0

Q67 I may hesitate to use a reporting system for medical incidents because I am concerned about being identified

Answered: 24  Skipped: 0
4.3 Stress Recognition

Q19 When I am interrupted, my patients’ safety is not affected
Answered: 24  Skipped: 0

Q30 When my workload becomes excessive, my performance is impaired
Answered: 24  Skipped: 0
Q36 I am less effective at work when fatigued

Answered: 24  Skipped: 0

- 54.17% (13)
- 29.17% (7)
- 8.33% (2)
- 8.33% (2)

Q37 I am more likely to make errors in tense hostile situations

Answered: 24  Skipped: 0

- 50% (12)
- 29.17% (7)
- 12.50% (3)
- 8.33% (2)
Q38 Stress from personal problems adversely affect my performance

Answered: 24  Skipped: 0

Q45 Very high levels of workload stimulate and improve my performance

Answered: 24  Skipped: 0
Q46 Truly professional personnel can leave person problems behind when working

Answered: 24 Skipped: 6

Q52 Fatigue impares my performance during emergency situations (e.g., emergency resusitation, seizure)

Answered: 24 Skipped: 6
Q53 Fatigue impares my performance during routine care (e.g. medication review, ventilator checks, transfer orders)

Answered: 24  Skipped: 0

- 29.17% (7) Disagree
- 20.83% (5) Slightly
- 16.67% (4) Neutral
- 29.17% (7) Agree
- 4.17% (1) Agree Slightly

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly
4.4 Teamwork and Communication

**Q6 Nurse input is well received in this ICU**

Answered: 24  Skipped: 0

- Agree Strongly: 62.50% (15)
- Agree Slightly: 29.17% (7)
- Disagree Slightly: 4.17% (1)
- Disagree Strongly: 4.17% (1)

**Q16 Briefings (e.g. patient report at shift change) are important for patient safety**

Answered: 24  Skipped: 0

- Agree Strongly: 70.17% (19)
- Agree Slightly: 16.67% (5)
- Disagree Slightly: 4.17% (1)
- Disagree Strongly: 4.17% (1)
Q17 Thorough briefings are common in this ICU
Answered: 24  Skipped: 0

Q23 Decision-making in this ICU utilises input from relevant personnel
Answered: 24  Skipped: 0
Q24 This hospital encourages teamwork and co-operation among its personnel

Q29 In this ICU, it is difficult to speak up if I perceive a problem with patient safety
Q35 Disagreements in this ICU are resolved appropriately (i.e. not who is right but what is best for the patient)

Answered: 24  Skipped: 0

Q39 I have the support I need from other personnel to care for patients

Answered: 24  Skipped: 0
Q40 It is easy for personnel in this ICU to ask questions when there is something that they do not understand

Answered: 24  Skipped: 6

Q41 Disruptions in the continuity of care (e.g shift changes, patient transfers, etc) can be detrimental to patient safety

Answered: 24  Skipped: 6
Q42 During emergencies, I can predict what other personnel are going to do next

Answered: 24  Skipped: 0

- Agree Strongly: 33.33% (8)
- Agree Slightly: 50% (12)
- Disagree Slightly: 8.33% (2)
- Disagree Strongly: 8.33% (2)

Q43 The physicians and nurses here work together as a well co-ordinated team

Answered: 24  Skipped: 0

- Agree Strongly: 75% (18)
- Agree Slightly: 16.67% (4)
- Disagree Slightly: 8.33% (2)
- Disagree Strongly: 8.33% (2)
Q49 I know the first and last names of all the personnel I worked with during my last shift

Answered: 24 Skipped: 0

Q51 Staff physicians/intensivists in this ICU are doing a good job

Answered: 24 Skipped: 0
Q56 Interactions in the ICU are collegial, rather than hierarchical

Answered: 24  Skipped: 0

Q57 Important issues are well communicated at shift changes

Answered: 24  Skipped: 0
Q62 During emergency situations (e.g. emergency resuscitations) my performance is not affected by working with in experienced or less capable personnel

Answered: 24  Skipped: 0

Q64 Communication breakdowns which lead to delays in delivery of care are common

Answered: 24  Skipped: 0
Q65 Communication breakdowns which negatively affect patient care are common

Answered: 24  Skipped: 0

(No label) 8.33%  28.33%  37.50%  25%
Chapter 5

Analysis of Results

5.1 Safety Climate

In general nurses are divided in their answers to safety culture, all agree that training has taken place although not all feel encouraged to make a report. Most report that they have been witness to error as in question 32, and yet because they feel unable to discuss this, subsequently lessons are failing to be learned.

Changing the culture from one to what we “did” around here to one of what we “do” is clearly still in progress as most answers in the category are divided. Change takes time to embed in a unit.

Checklists have been introduced as an aid memoire to improve safety such as the WHO’s surgical checklist, more recently care bundles have been added such as the recent acute kidney injury bundle derived from the recent publication of the NICE guidelines.

Matching Michigan originated in America and focused on reducing the rate of infections associated with central venous catheters (CVC) of which most patient’s in the ICU have. A care bundle was introduced, and one part of that was the introduction of nurses speaking up if a doctor failed to instigate all parts of the bundle e.g. washing of hands. 33% of the nurses who answered question 63 report that poor practice still goes on. Unless feedback is seen as in a positive light that will contribute to change and improvements are visible people will continue to not report. Bion (2012) reports that the Matching Michigan project now stopped in the UK, improved infection rates dramatically by the use of bundles, teamwork and communication. It also served to change the culture and behaviours around CVC insertions and further provided a platform for which other studied could be performed.
Question 33 asks if nurses are aware of the proper reporting channels are known to them. Whilst 58% say yes, 58% also disclose in question 44 that they are unable to express any disagreements with staff. A disjointed team may contribute to this. Large teaching hospitals often have a high turnover off staff and trainees, this is reflected in question 49 which asks if staff know their fellow workers on shift only 25% can recall the first and last names of all the members of staff on a given shift. City hospitals also rely on a percentage of agency and locum staff.

Clearly the positive culture of a team working together in present on the unit as 75% of nurses replied in question 43 that they along with the doctors worked as a well-co-ordinated team.

More positively staff feel that patient safety is constantly reinforced in their ICU and most identify that lessons are learned from error to improve patient safety so clearly things are moving in the right direction.

Effective feedback derived from the incident is essential if lessons are to be learned from incidents that are reported. Benn et al (2009) identified fifteen requirement for an effective feedback system that would deliver timely results. Ineffective or lack of feedback is well documented as a barrier to incident reporting. Given that the reporting system is computerised, it should have the capacity to deliver feedback in a timely fashion.
5.2 Blame

Fear of reprimand has continually been linked to under reporting of errors, professional identity, the loss of reputation and perceived incompetence, the hesitancy about reporting someone else’s error and fear of exposure when unsupported are all linked in with the fear factor of reporting. Due partly to the lack of feedback, people often don’t see the benefits of reporting (Benn 2009). Poor standards should not be tolerated and a just culture should prevail, however as nurses are said to make the most reports, it’s important for the organisation to look at different systems in order to gather information with regard to error. HFE looks particularly at behaviours and teamwork rather than individual acts. Medications errors have also been attributed to human factors, analysis of people’s behaviour has resulted in error proofing many issues especially controlled drugs and devices (Scanlon 2010).

The survey results show that 73.9% of staff know how to report errors less than half feel encouraged to do so, this doesn’t however clearly identify that they have been officially reported through a systematic process. Interestingly the same percentage say that their culture makes it easy to learn from the errors of others, which would agree with the more than half that replied saying that they have a problem speaking up when confronted with a patient safety issue, this is demonstrated in question 29.

Incident forms have a tendency to filled out inappropriately, people often are not aware there are other channels with which to report through when there a say personality clashes within the teams, when this happens forms are used to blame and shame rather than finding a solution to the issue. Often these issues are better dealt with by following a grievance policy with human resources rather than the risk department. This not only wastes the time of the incident
manager but delays the mediation process between the staff contributing to low staff moral and high resignation rates.

Only 24 nurses completed the survey, despite it being anonymous and independent of their trust could this fear contributed to the poor response rate? Only 37.5% answered in question 8 that they thought medical errors were handled appropriately in their ICU, is that because of a reactive process that serves to blame rather than change the system in order to prevent future failures?

In question 25, the majority of staff say that they feel encouraged to report safety concerns and indeed in question 44, nearly 50% of staff admit to having made an error that had potential harm to a patient, however a fewer number feel that lessons are learned. This could be attributed to inadequate feedback, equally it could be attributed to naming and shaming people who make and report genuine errors. 60% of the nurses feel that a confidential reporting system would encourage reporting. Given that in question 67, 33% of nurses hesitate to report for fear of being identified, naming and shaming clearly is an issue.

An example of this has happened recently locally, as an attempt to reduce medication errors, any health care professional who made a medication error was stopped from administering intravenous drugs to patients and asked to complete a competency document that would be overseen by the practice development team.

In itself it looks to be a proactive process, however it lacked some thought. Nurses in the ICU deliver care on a 1:1 basis and errors are high, by removing the capacity to deliver intravenous drugs you effectively remove the nurse from service. Most ICU patients are on continuous infusions of drugs to keep them sedated and their airway safe. This process resulted in a much higher risk
situation as one nurse inevitably got given the responsibility of delivering all the intravenous drugs to three or four patients.

Despite having to leave the allocated bedside of the given patient, the nurse will be at higher risk of performing a drug error by potentially giving the wrong drug to the wrong patient whilst having put their own patient at risk by their absence in observing them.

Another example of the reactive process is another staff story form the ICU. A highly trained nurse at 06:00 hours checks on an electronic drug chart and administers a drug to a patient, later realises that the electronic chart at the bed space belonged to another patient resulting in a medication error. That nurse was reported and prevented from working until she had been reassessed as competent.

The nurse obviously distressed, followed the correct procedure thing by reporting and informing the doctors, pharmacists and senior nurses involved in the patients care. However none of those actions were acknowledged and recognised as a competent practice.

One of the flaws of a computerised system is that the patient’s records can be viewed at any bed space, the system fails to alert the bed side staff if the record has been changed to another patient.

In order to prevent this reoccurring the system would have to alert the bed side staff to that change, a simple adjustment to the system. However the practice development team have not contacted the IT team as the error is found to one of a nursing issue.

Whilst in agreement to some extent as the prescription was clearly not checked against the patient, this incident demonstrates the fallibility of people and the latent errors that contribute to the error. Encouraging feedback should also come
from reports, the nurse has clearly followed due process in reporting, has clearly identified the error and prevented any further harm to the patient by the actions that followed.

Recommendation would be that within the system a warning would come up on the screen to check it chart was for the right patient as the prescription was accessed, a simple IT change.
5.3 Stress Recognition

The ICU is a highly stressful area to work within the hospital, having said that most of the emergencies are predictable and the teams are all highly trained and experienced personnel. Varying patient demands will contribute to the workload. Junior staff perception of these demands will differ depending on the level of training they have received. Over half the nurses in question 36 have identified that fatigue contributes to error. E-Rostering is a system designed to advert staff tiredness by only allowing a set shift pattern, NHS staff have to opt out of the working time directive due to the shift pattern on the front line as many shift are 12.5 hours long and over 37.5 hours a week. Due to staff shortages bank and agency staff will regularly exceed these hours.

Skill mix on the unit adds to the stress levels as senior staff are expected to support the junior staff as a teaching hospital you could expect to have a number of junior staff on a shift at any time. These will contribute to the overall risk of error to patients.

As professionals, nurses and doctors are expected to leave their personal lives behind when closing the front door. That said, in the survey, nurses are not unanimous in their reply, demonstrating that this perception does not always take place. Contributing to this indecision is empathy for the patients and their families, there are bound to be circumstances that nurses are familiar with in their everyday lives, nurses who live in the local community. In order to build trust nurses must build a relationship with their patients, this potentially involves the sharing of personal information clouding the boundary between the professional and the patient and shadowing everyday live stresses.

In the survey results, nurses clearly thought that they were more likely to make an error and are less effective when fatigued. Most disagreed with this statement when clinical emergencies are taking place on the ICU such as a cardiac arrest,
this may be due to the adrenaline pumping at a higher level. As in the example earlier the 06:00hrs drug round can be a precarious one for patients especially on the wards as the lights are dimmed and patient asleep, however drug regimens demand that patients are woken instead of giving the drug later after the change of shift when fresh alert eyes are on the ward.

Berwick in his report (2013) fails to stipulate any recommendations for staffing levels saying that this should be decided at local level and dependent on the acuity of the patient. Normal nursing levels for a level three patient in the ICU is one to one, however in a large teaching hospital, senior staff are often found to be supervising junior members whilst also providing care for their own patient. This can and does contribute to the overall risk to the patient and equally the stress levels of the nurses concerned.
5.4 Teamwork and Communication.

Transition from one department to another is widely recognised as a time of vulnerability for patients. This time is also closely associated with errors and adverse events. Handover or handoffs are the transference of responsibility for the patient from one team to another. In order to aid the process checklists have been devised to allow a systematic transfer of information. That said, this can only happen in the correct environment and circumstances (Payne et al 2012).

The handover of patients on admission to the unit is something that the nurses feel strongly about. In question 16, 79.2% say that this is an important part of the safety process and yet in question 17 only 41.7% of nurses felt that this was constant in the ICU, yet most felt that nurse input was well received in the unit implying that teamwork does exist in the unit. They also believe that as a team they are doing a good job as demonstrated in question 51.

Carroll et al (2012) also identifies that communication breakdown happen because handovers are performed on different levels. Nurses handover to nurses, doctors to doctors, often the consultants having done this earlier prior to them accepting the patient. Consistency and quality in communication differs between the teams. Carrol looks at the social processing of the information given and finds that they vary in expertise level and organisational level.

HFE is gathering pace in the UK. The Martin Bromley story is an excellent example of how patient feedback can drive an initiative and demonstrates the advantage in story telling as a driver of change. Martin Bromley is an airline line pilot whose wife died tragically during a routine operation in a “can’t intubate, can’t ventilate situation”. He has since strived to bring safety lessons from the aviation industry into medical practice by using HFE and is the founder of the CHFG.
The recent Berwick report (2013) identifies that HFE could be used as a solution to teamwork and communication issues at a local level.

Similarly organisational behaviour management (OBM) has used techniques to improve patient safety. OBM’s focus is on what people do in a given situation then applies an evidence-based intervention to it. Cunningham et al (2011) have shown to reduce injury by using training, goal setting and feedback.

Team STEPPS is another initiative led by the AHRQ that delivers tools to look and enhance teamwork in the workplace. Originally developed by the US defence agency it delivers training on leadership, situational monitoring, communication and mutual support to develop efficient team working. Jones et al (2013) found that team training alone did not provide high enough results to improve patient outcomes. What the organisation did post training to sustain the initiative contributed higher to patient outcomes, to turn what was training into routine culture.
5.5 Simulation in Health Care.

Simulation training has brought with it new ways of training with no risk to the patient’s by offering the acquisition of skills and attitudes of medical personnel through simulation based training. Originally taught with mannequins for practicing cardiopulmonary resuscitation techniques, advances in equipment and facilities allow for procedure-based techniques that range from basic manual handling to full major incident scenarios and robotic operations (Aggarwal et al 2010).

Resuscitation has long been simulated in the NHS, the survey addresses the teamwork approach to resuscitation as this is common practice in the ICU. In the survey, whilst 75% of nurses agree that teamwork goes on between the nurses and doctors, only 50% can say that they can predict the process of events.

Resuscitation simulation updates are mandated across the NHS and require a yearly update this is about to change, in some trusts to a three yearly update depending on the course that is taught.

Simulation provides opportunities that are both immersive and experimental, that ultimately enhance patient safety. Simulation training and objective structured clinical examinations (OSCE’s) are now becoming part of the curriculum for nurse training due to its safe environment. The standardising of patients however remains an area for concern as although theoretically two procedures can be the same and simulated as so, when performed by, and on, two different people they then become different by the very nature of it being performed by humans.

Wass (2010) addresses that by balancing out the top of the pyramid with Validity versus Reliability. Validity being whether the test succeeds in testing
the competencies that it’s designed to test whereas; reliability focuses on the measure of consistency of a test.

More recently motor racing has been used as a comparison tool, Catchpole (2009) likened the handover of patient’s to the team work in the pit lane during a grand prix and again highlighted the at risk areas as communication, poor team co-ordination, time constraints and lack of consistency. He concluded that lessons could be learned from the motor racing industry especially with regard to checklists and communication, clearly there is a funding issue when it applies to health care however simulation would prevent patients being put at risk. His research carried out by interviews identified themes which were then broken down in to three areas; pro-active prevention; active management; and learning from analysis.

Applied to the handover of patient’s this translates to secondary data i.e. scans and blood results, current management and what could have been done differently and would it have changed the management.

Just under half of the respondents agree that interruption impede their patient safety and this is equally linked to workload with 54.2% saying that workload can also impede their patient’s safety. Team work in the ICU can be simulated to enhance working practices clinically, again human factor engineering demonstrates this, a prime example of this can be found at Camp Bastian in Iraq where the armed forces have done considerable work in to the teamwork and handover of injured soldiers in both the battle field and theatres. They have to work to a limited amount of resources and staff are often put together from both the forces and the public sector.

Simulation training for this is carried out in an airfield in Oxford prior to the tour, often this is the first time that many of the team have met. It is reported that after only a few hours a team is working efficiently together.
With regard to team working, just over half of the nurses feel proud to work for their unit a quarter of staff would not know the names of colleagues working with them. London hospitals use a high proportion of agency staff compared to the rest of the country. Unfamiliarity with local policy contributes to patient safety incidents and compromise teamwork and efficiency. High turnover of staff is also prominent within big city hospitals, often due to the high cost of living whilst training. This however will contribute to low morale in the department of which only 1:5 people say is high.

Work carried out by Farley et al (2008) also claims that incident reporting systems are underused for many reasons; one is that of the misperception that incident reporting falls under the nursing role. Even if that was the case now in order for nurses to report they must be able to access the reporting system and be able to use it efficiently. During observations within the clinical areas, the author found that computer terminals were always in high demand, therefore, always in use. Training for the electronic system is not mandatory at present within the trust, it’s only given on the trust induction along with many other items, the author would therefore argue as to how much of that information is retained especially for the health care personnel new to the NHS and this country.
Chapter 6

6.1 Discussion

Over the last 10-15 years Patient Safety has been gaining speed and agility, however Professor Gladsby pointed out during the recent Francis report (2012) “the trouble with culture is everyone blames it when things go wrong but no-one really knows how to fix it”.

Vincent in the same report said that if our challenge is to change the culture within healthcare, we must first understand it and then define what we mean by it. Reports such as the earlier Enquiry into Mid Staffordshire by Lord Donaldson, Bristol etc. all point to a lack of culture and yet there is no clear definition. The report mirrors many others, however the things that set it aside are the recommendations all 290 of them, they focus on key areas, one of which is culture, it highlights the need for assessment, how it’s achieved and the benefits from it.

The need for assessment would imply that the leaders really don’t have a hold on what is really happening with the safety culture on the front line, television programmes such as undercover boss has on a weekly basis highlighted the assumption of knowledge gap between the organisation and its staff.

The recent Berwick report (2013) talks a lot about blame culture and system failure saying unlike the Francis report that the regulators can’t alone fix all the problems within the NHS, and that culture and staff attitude will contribute greatly to the changes that are needed in order to create a place of safety for all patients above all other aims.

Mr Berwick reports that a blame culture has instilled fear in the staff and that this is toxic for patient safety and quality improvement. The report exonerates
staff and encourages their leaders to rethink their priorities with regard to goal setting such as targets.

That the actions of a few staff should be punishable but using blame as a tool will not achieve better results but will just destroy the goodwill and intentions of staff along with public confidence in the service.

Both Berwick and Francis further report that staff should be heard and listened to, that gagging clauses have no place in the system and that staff should feel that they can raise their concerns without fear of reprimand.

With regard to staff surveys he recommends that validated tools are used on a local level such as culture and teamwork surveys, Having carried one of these validated tools out further recommendation would be to expand on the results by benchmarking them over time also at local level but allow the results to be transparent to the ward staff to demonstrate continuous improvement.

The survey was answered by 24 of the 200 nurses who were emailed over a three week period. Whilst the period of time was short, the survey was the only one open for responses at that time, it was over the Christmas period when some staff take extended annual leave and a proportion would be on sickness leave, the exact figures were not available to the author.

A debate that was set up on a social networking site within the trust asked the question “is it fair to say that the people who fail to complete surveys also fail to complete incident reports?”

The results quickly came in with varying answers all from senior managers mostly working within the governance department, one highlighted that as nurses we have a legal obligation to report and another whilst agreeing said that surveys were not seen as important as incident forms (see text box).
Given that the patient experience is becoming ever increasingly important in the planning of health care, is it not just as important to hear from the staff how have to deliver the changes? In order to listen to the public, locally the emphasis has been placed in patient satisfaction surveys, does the reply from the management imply that they feel that same way about these too?

In light of the Francis report, it is apparent that the views of the management will also contribute as they clearly don’t value the measurement of culture as yet it’s a recommendation to do so.

As staff feel their voices are not heard morale falls and demotivation sets in. Mid Staffs is just the trust that was highly published, other are not far behind. The Berwick report implies that demotivation is evident in most trusts due to the toxic fear of reporting.

Hanging out people to blame as examples do little to encourage public confidence in the service, the media will always report on poor practice rather focus on the good, this also does little for global staff morale, at times like this it’s important for the leaders to take the lead by supporting the good that the service does. As leaders the regulatory bodies have also to set precedent and example not so in the recent news regarding withholding of information within the CQC.

A survey previously carried out by the author offered a local insight into the failures of incident reporting, not only did the staff find the forms lengthy and
time consuming when no allocated time was given for completing them, they also highlighted a lack of training and most importantly poor or lack of feedback contributed to the negativity of filling them in. Staff failed to view them as a learning tool although the management clearly expect them to be completed because of regulation.

Both Francis and Berwick further say that working towards an ideal common culture through the NHS will be something to always aspire to, but on the shop-floor in practice this fails to happen. That we must find a way to ensure that the positive effect of culture outweighs the negative. At present that balance is uneven due to so many factors. Both fail to define what that common culture actually equates to in either report, although both highlight training and staff attitudes contribute to it.

Damming reports such as the Francis report focuses on key issues lacking in front line delivery of nursing care and do little to encourage morale within the culture of the service. Media response to these reports always fails to remind us of the many successfully treated patients using the glass half empty effect. The nursing leadership however have been slow to respond. Recently the NMC have stipulated that all nurses joining the register must have indemnity insurance, although this is provided by the Trust as most work for the NHS, it does however imply that a blame culture is indeed set to continue rather than focusing on improving standards through reporting.

Like other surveys this one has good intention but shows that although lengthy there are discrepancies in the ranks. Whilst saying that every person knows how to report an incident and that there is support available, not all reporters feel that they won’t be blamed for the incident reported, this would imply that there is some degree of blame culture existing in that area.
The NRLS also have identified that on a trust level reporting culture is directly linked to the percentage of incident reports, a higher reporting trust represents a better reporting culture.

Better use of this survey could have been facilitated and therefore would have delivered better quantitative results, this in part may be due to the survey being carried out independently, and it also relies on some element of organisational support. Whilst the work was applauded by the unit there are many other surveys which are carried out mostly regarding clinical activities for patient’s e.g. drug therapies. Culture is often seen as the woolly part of health care as it is so difficult to define. Healthcare personnel can see its importance in the workplace, however its values differ between the organisation and the shop floor.

In the future if linked to quality initiative both the organisation and the shop floor will be able to communicate thereby reflecting Francis whereby listening to the concerns of staff is paramount to the safety of patients. Equally staff have to feel supported in raising their concerns. Leadership should provide that support. Its psychometric properties have already been used in other countries, the USA has an established database to build a benchmarking process from.

It could also be due to the patient safety movement not being high enough on the priority list when it comes to health care delivery. Historical facts of patient safety demonstrate that safety in healthcare is on a different level than for instance aviation, the diversity of the system is said to contribute to this. Equally in the current climate, government spending is to reduce by 10% and the individual organisations have to find that saving, the risk of patient harm becomes higher as the focus changes to one of quality rather than safety and yet safety is said to save money.
The Francis report although damming has provided an opportunity for culture measurement to take place as potentially this can be achieved quickly and in a small budget. Following the cost of this project, it has proved to be more cost effective using up-to-date technology to generate on-line surveys and gain a quick report.

Studies using that survey have been carried out in other countries, response rates have been higher than this one, however they have been initiated at higher level and distributed trust wide/nationwide. In the UK, there is only minimal evidence that this survey tool has been used (Waterson et al 2010).

As mentioned earlier the ICU is amongst one of the highest area of risk for patients to be in, equally it has some of the most highly trained healthcare personnel. In a stressful environment such as this, it is inevitable that error will take place. Why not then introduce the role of the Patient Safety Nurse? This would be a highly trained member of the clinical team, working in a proactive role, trained in risk management, system failures, HFE. They would be identifiable to all the team, working with the bedside staff, who would join the ward round, identify any issues/errors, report them, investigate them and feed the results back.
6.2 Training

It has been estimated (Warring 1996) that up to 96% of incidents were not reported. However, as with any reporting system, it relies on the willingness of the reporter to report, and its ease of use. The modern system has now moved from a lengthy paper trail to an electronic datix system. Training for this system is currently disseminated down and the system is available for all levels of health care provider’s to access. A small in-house audit that the author carried out in 2011, showed that 84% of people who replied to the questionnaire said that they had not received any training on how to use the reporting system, this was felt to contribute to its lack of use. Other issues included the lack of available work space and protected time with which to complete the forms, almost all the respondents complained about the poor feedback that they received.

Training on the system was provided at local induction when joining the trust, the induction was two days long and covered multiple systems such as laboratory results, electronic xray, and other reporting systems, and it is easy to understand how the focus is to understand patient information systems and which takes precedent over others. However, it shows that although given training people have failed to retain the information due to two days of information overload and naturally people will pick out what they are going to require first. Focus should be given on dedicating specific time to training of the on-line system, equally as Pronovost (2005) recommends trained personnel in risk management and HFE should be the main investigator of reports. Middle managers often investigate reports from their specialities, however they receive little training in who to extrapolate the lessons from the incident. This adds to the poor quality of feedback.
Professor Keogh talked at the patient safety congress 2013 of tolerating poor
standards and practice. Lack of reporting would contribute to our tolerance of
poor standards, nothing can change if the message for change cannot get
through to the relevant people, one could argue that the current reporting system
as a communication tool is not what it was designed for and therefore isn’t up to
the job.

In changing this culture Professor Keogh also says that unless the attitude of
mind is changed, change will not take place. This is likely to be exacerbated as
many organisational values/mission statements say that they are putting the
patient first, and with the attitudes of staff are one of “why am I going to work
today” the cultural challenge of change will inevitably fail.

Positive deviance has been used in areas such as the prevention of hospital
acquired infections; the promotion of an established safety culture could also be
applied. Members of the focus group in Hartnell’s 2012 study felt that they
would like to be more involved in the process and recommended that clear
guideline of what, how and when to report would contribute to achieving better
standards of reporting.

Positive deviance comes from the basis that in each community there are certain
people who will use uncommon behaviours and strategies to enable them to find
solutions to problems that are better than their peers, whilst having the same
resources or less. As drivers of culture change, their behaviours would prove to
be a positive and pro-active.

Berwick (2013) talks of spreading innovations and good ideas amongst the
leading groups, therefore standardising training across the NHS with regard to
patient safety. Communicating this would also bring the leading groups together
encouraging collaborative working.
The underpinning of culture is agreed by many to start at home, therefore embedding strategies such as these should surely start in the universities? We can then simulate the gold standard, equally new processes and practice which on qualifying could be brought forward. The strategy would however rely heavily on organisational support and collaborative working between the university and the NHS trust.

Modules dedicated to patient safety taught by patient safety nurses would embed good practice prior to clinical skills being taught. As the trained patient safety instructor training would be up-to-date and current with the new initiatives and care pathways. This would generate change at the shop floor level of the need to risk asses, seeing the global picture of how one intervention can effect so many others. When researching this Master’s Degree only three universities in the UK offered dedicated courses into patient safety management. In order to drive the patient safety movement forward more would have to come forward and develop similar courses.

Although you cannot mandate change you can mandate training, the changing of culture will embed that change by changing the way teamwork and behaviours are carried out, reporting is delivered and patient’s will automatically benefit from it, changing from what we “did” around here to what we “do” around here remains the art behind culture change and the science is how it is measured to ensure the change take place and continues to grow in a proactive manner. This will need to include training of senior staff in risk management as most have learnt as instructed from the person they have taken over from. Hospitals run courses on RCA’s but few run course on HFE. If we want to change the “did” to “do” training has to come from both ends.

Mandating what to report and when would drive better reporting as staff would be clear on when to report, currently the never events list is published by the
department of health. At local level there is the risk register which is more
difficult for staff to access. The current datix system has two categories one for
incidents and the other for near misses. The AORN Silence Kills study 2010
showed that near miss reporting would become the future of reporting as so
many process are automated therefore actual harm from incidents are low. A
separate system would allow for better capture of these especially if renamed
and launched in a positive light, one of progress and research rather than fear
and lacking in definition. Employing trained people in near miss recognition
would go some way toward that goal and would open an unbounded area for
research into patient safety and clinical effectiveness.
6.3 Communication

Communication failures account for the majority of adverse events according to Leonard (2004). Then how is that behaviour to change? Mandated checklists can change practice such as the WHO surgical checklist.

Question 64 in the survey asks if communication breakdowns contribute to the delays in the care of patients. Most who answered agree with this statement, in addition (question 65) say that it also has a negative effect on patient safety by compromising their care.

How do we get the ideas from the shop floor to the board? Focus groups have already been mentioned as a form of facilitating feedback from the shop floor. Patient safety focus groups develop small changes in care delivery and act as a communication tool for the organisation to feed information down, they are also innovators of the safety drive growing ideas amongst the group.

The use of positive deviance could assist in the identification of staff. These groups, or as titled link nurses, rely on the giving of spare time. Part of the problem is allocation of time, junior members of the team are often expected to participate in their own time whilst the facilitator is allocated time. Valuable feedback will be lost due to poor attendance and yet as many reports have said, it’s the voice from the shop floor that needs to be heard.

The NHS has again got to make savings, if groups such as the above remain unsupported by the organisation, staff will not engage wholly in the idea. Berwick (2013) says the good will of staff will change the culture, yet if the organisation fails to support that good will the staff stop providing it?

Studies into medication error reporting like the one Hartnell et al (2012) used focus groups to identify the barriers to reporting. The average length of the focus group was 60 minutes and consisted of between six and nine members. As
cost of medication errors are soaring and have been associated with increased length of stay it was felt that the cost of the study far outweighed the financial cost long term and ultimately the cost to those patients who received the error. It was found through the study that part of failing to report was that the system failed due to the lack of immediate feedback when reporting an incident. The cost of medication errors runs in to millions of pounds, a patient safety specialist at band 7 level would surely contribute to reducing that cost whilst improving safety. A small cost compared to the cost of error especially to the patient. With the average compensation award being five thousand pounds, error identification and prevention has to become a consideration of the future.

There were incentives to reporting but these were outweighed by the burdens, similar to those identified in the author’s local study. Fear of reprisal, poor communication and lengthy processes were all reported by junior staff with all not confident that anything comes of reporting as no feedback was given and changes slow to take place. One of the recommendations was to involve the reporter in the process of the root cause analysis and engage them in positive solutions to the error through researching alternatives and then asking them to feedback to the other members of staff through communication boards for example. Working alongside the patient safety specialist the investigating team would receive a proactive analysis into the system which has failed, get support in finding the solution and then communicating it proactively to encourage change rather than reprisal.

When asked about the reporting system the focus groups in the author’s survey highlighted that at a local level that now the system was computerised there was not enough availability of computer ports. The recommendation that came about was to allocate on each ward a dedicated computer port solely for incident reporting with a shorted version of the form as it could be set up to be pre-completed as it was ward based. Unlike the general wards, in the ICU there are
computers at every bed space. To complete the form though relies on nurses and doctors moving away from the patient’s bedside, therefore potentially compromising patient care or completing them in their own time at the end of the shift. Not surprisingly not many want to do this and forms will often have to wait or not be completed at all equating to that error although identified never reported.

If organisations bought into key issues following survey results, budgets would become more cost effective. Outcomes from the culture measurement is divided into themes, the lowest scoring theme would become a key area for improvement and so on, the themes change when that benchmarking takes place in order to facilitate a broader overall improvement over time.
6.4 Feedback

If reporting is viewed as a learning process as it should be, then feedback should be the cornerstone to it, and yet most report that this is failing to take place. Feedback helps to build strong productive relationships between the leaders and the shop-floor. Expecting people to meet targets, without reporting feedback causes people to become un-responsive to change and ultimately to fail to learn valuable lessons from both parties.

Historically the feedback system has failed in the reporting process. In 2006 Evans et al highlighted that this contributed to the barriers of reporting and since then others have too and yet little has changed.

Failing to witness change in response to an incident contributes to poor compliance as people think that the forms are sent in to the ethos and never processed. In other words they don’t see any reward for their efforts. Equally those 90% of lessons are not learned and patient safety is again compromised.

The NRLS feedback to hospital boards analysis of incidents reported, the figures are also publically available on the internet. Equally to are reports from the HSMR. So often these are reported by the media to have a negative effect, also driving how the public view a trust that they may well have treatment in.

The media as a feedback system has done little to instil public confidence in the NHS. Equally it contributed to the blame culture through increasing the fear of reprimand when speaking out. Whistle blowers are regularly exposed, tracked down and written about both locally and nationally when unsupported by the Trust, therefore unable to cope with the pressures of reporting.

The top down approach verses the bottom up approach, leadership plays a vital role in setting the culture of an organisation, realistically without leadership the organisation would drift in the wrong direction such as Mid Staffs. Good
leaders won’t tolerate poor culture but will allow a voice from the bottom to be heard. Francis talks of a listening exercise, in some trusts focus groups have been established to facilitate discussion. Leaders will however have to give time to that discussion which is expensive. This has contributed to a gap in feedback, whilst demonstrating that they want to hear feedback and have failed to facilitate its delivery by not allocating time to it.

In contrast, the author of the “one minute manager” Ken Blanchard would say that “feedback is the breakfast of champions”. By the use of effective and clear feedback Blanchard has written several books about managing and leading change by encouraging ownership and team working. Taking ownership of a report and its solution would encourage the use of positive feedback as the reporter has reported, analysed and found a solution that would be something positive to feedback to the team, encouraging engagement rather than distance in the reporting process. It proactively form a group of people who want to see that change take place and will become the drivers of it.

The Francis report 2013, discusses how “positive safety culture at front-line level could be evidenced by thorough and thoughtful information provided to patients, clear identification of staff and their roles, open and receptive staff interaction with patients and visitors, meticulous attention to cleanliness, hygiene, nutrition and hydration of patients, production of and adherence to standard procedures, and insistence on proper discharge arrangements.” Surely included at the heart of this should be patient feedback and this used as evidence for improvement and the standard of delivery.

The report describes how trusts rely on their performance figures as a benchmarking tool, clearly showing disregard for patient’s opinions. The new movement towards the patients experience has gone some way towards this.
however staff engagement must also be evident for this process to be complete. Equally the procedures in question need to be not only in place but also robust.

Patient stories will have a place in making that change, the instigator of the complaint at Mid Staffs was a patient group, why then did the staff not speak up if poor practice was clearly in operation? If Keogh is correct then acceptance of poor standards and the fear of reprisal is what led to the downfall of Mid Staffs.

Pro-actively this example must surely lead the organisational leaders to develop larger patient groups in order to gain feedback from services instead of relying solely on survey reports, better engagement with patients would provide an in-depth view from within the service, equally involving front line staff in similar focus groups would achieve better results than surveys providing that they were supported adequately by the organisation.

Vincent (2009) would say that in order to maintain a safety culture leadership, ongoing work and commitment is required from everyone involved. Collaborative working within the groups to share lessons and provide effective feedback that instantly informs the front line will encourage ownership from results. Learning from error is seen as a priority, the presence of a poor reporting culture will prevent those key lessons getting across the divide.

As recommended in the Berwick report a validated survey should be used as culture measurement. The survey if used in organisations across the UK the survey would enable transparency within both the local organisation and the wider organisation of the NHS. Figures would remain anonymous to encourage compliance, feedback could be focused on themes rather than figures highlighting the areas with which focus should be on. The results of these should be shared to achieve collaborative working groups and local focus groups.
Post measurement, the concept of a barometer to demonstrate the culture is new. Derived from the NHS Commissioning Board, Compassion in Practice document (2012) it aims to measure the culture thorough asking a series of questions that are fed into a focus group. The idea of demonstrating the pressure in regard to culture will be both informative and destructive. Again the tool fails to measure the attitude on the shop floor as it fails to measure each working part. Surveys allow for an individual response that if anonymous and if people are given both time and confidence to complete opens a window onto the shop floor. It enables the organisation to see into its grass roots and bring change from listening to it.

Acceptability of poor practice was evident in Mid Staffs; poor practice was tolerated on all levels leaving the patients to complain. Therefore allowing poor practice to become the norm and patients to suffer, the organisation failed to listen to the concerns of staff. A barometer still fails to listen to staff as it fails to ask individual staff on the shop floor their opinion, the properties of the psychometric survey should been seen as vision for improvement rather than seen as negative feedback.

The commissioning group looks at delivering the 6C’s of values and behaviours: care, compassion, competence, communication, courage and commitment. In response to consultation it then looked at the themes, one of which was: creating the right culture. How you encourage staff to go the extra mile and challenge the acceptability of poor practice in order to achieve higher standards? Encouragement and drive to increase standards must come from our leaders, through pro-active positive feedback, involving staff in bringing change will create ownership and reinstall pride in the service.
The barometer should have inbuilt indicator when the pressure is reaching unacceptable levels, the document fails to inform of a level at all and if there was one, what is acceptable?

As risk managers we talk of a Just culture, how can that come about if staff are not supported to be open and honest act with candour and transparency.

Candour – how when speaking to a patient can one act with candour if one is afraid of reprimand for what is said, if a blame culture is present will one act with the integrity to tell the truth when an error is made, and act in a manner that is both open and honest.

Transparency – how can the NHS become transparent when so many services rely on targets being met, the quality of delivery cannot be measured fully if not transparent enabling a distorted view and one that one would have to question why it has remained hidden. Patients access the NHS from all areas, surely they should all be entitled to the same standards, and one way this can be achieved is through the sharing and feedback of information. That should include errors, 90% more is what should be achieved however to start with 10% would double the amount we know.
6.5 Lessons from the Olympics

There are thousands of volunteers in the NHS, equally there were thousands of volunteers who applied to become games makers, few had little insight at the time of what their contribution would be, indeed some did not make it through the selection process. Can the NHS take some of the vision instilled into the culture of the games makers and turn volunteers from the shop floor into patient safety makers, make a voluntary scheme that would empower front line staff to get involved.

Rewards from the games came in self-satisfaction and the countries recognition of their contribution to a great games. Can the NHS do a similar thing? Is its leadership strong enough? If such a thing could be achieved, recognition from the positive outcomes would be vital, presentations for all but not to encourage ward/departmental competition but working cohesively toward an organisational goal.

Selection would be a crucial thing, however the service would need to be over prescribed in order to have a selection process, volunteers could be matched to their skills that would encourage ownership of the extra role, and time should be set aside for planning and facilitation of goals.

Opportunities such as formal training in proactive system thinking and analysis would be on offer, not just as an incentive to volunteer but at higher levels, trained people are then carrying out the root cause analysis. As Pronovost points out in his work, healthcare personnel are not formally trained in risk management or human factors, how then do the organisation expect change when as Vincent says, this culture is little understood and not clear in its definition.

Value – how do we value them in the long term, we remind them of their positive contribution to the changes and reflect on life before, not how many
negative reports the trust had, newsletters and good ending stories due to timely intervention should be published, thus rejuvenating the feeling across the whole team of “why we come to work”. As the front-line staff is often the easy target why not make them the solution too.
Chapter 7

7.1 Recommendations

Mandatory actions would facilitate compliance but would it encourage honesty? If monetary reward was to be offered, would it only drive quantity rather than quality?

The safety thermometer is currently a CQINN target, however not mandated as Trust’s choose whether to participate or not, therefore as a target the survey would fail to capture all NHS Trusts. The survey used could be mandated through the government, meaning that all responses could be collated together and collectively stored.

This is just the beginning of culture measurement, whilst only providing a snapshot within a window of time. It does proclaim to show the benefits of measurement. In order to move the work further on, benchmarking the same questions in a year’s time would indicate whether changes are starting to take place. The data collected could be expanded for use in many various projects both locally and nationally as a measurement of the service whilst providing up to date information to the public.

Undoubtedly the culture needs to change on the front line as all the previous reports have documented. Whilst it is the shop floor that needs to change, equally so does the leadership of the shop floor, one will not change without the other.

One of the questions placed in the survey was would I feel safe being treated here as a patient? This was number 7 and the response was 60.9% just over half. The answer speaks volumes towards feelings on the shop floor and cannot help but wonder what the response would be if this question was asked again at the end of the questionnaire, one which would be an interesting reflection of a, the
survey and b, what it reveals. What is more disturbing is the 8.7% who reveal they would not want to be treated there. This is the group that will have a negative impact on the rest of the team, therefore impeding culture change.

On a wider scale, the NMC would capture a wider set of qualified nurses and if mandated the NMC would be a portal in which to achieve compliance. As the registration is now updated yearly this would provide a benchmarking base that can be expanded if band 2/3/4 health care staff are to join the register. Equally the GMC would capture the Doctors response, with both aiming to protect the public so it should share a common interest in the health of safety culture amongst its members.

Although a massive undertaking, it would establish the database from which research projects could thrive along with providing feedback to individual trusts. Analysis of the emerging themes would drive both local and national training initiatives much as others have done in infection control as central figures would be available. This would encourage continuous improvement through training.

Another way of communicating a message is patient stories, a film that would touch all levels of the organisation, by including both patients and staff, the information would explain the categories of incidents and act as a feedback tool by explaining the process and the results of a given process. Patient centred event scenarios have been shown to change the attitude and behaviours of staff. National campaigns such as “act fast” are used as an information tool on all levels as it’s visual and broad enough to apply to all. Locally in the authors trust a mandated film describing the hospital visit and its difficulties at an anxious time has been shown. Positive changes in staff perceptions of the general public have been noted.
From the project itself, the survey online tool allowed for all answers to be answered before going on to the next, due to the length of the survey this may have put some off before completion however those that have completed them did so in full allowing for more accurate comparison. From the one answer that allowed for a qualititative reply, all 24 filled in all the 3 sections that were available. It also proved itself to be cost effective and quicker than conventional paper, although the option to reply on paper was available to download, it was also better for the environment.

Some of the slow response was felt to be lack of organisational by in, it’s only recently and the back of the Francis report (2013) that organisations are beginning to seriously look at developing tools to assess the culture of their organisations.

Scotland is already running a similar questionnaire amongst the General Practitioners although it has mandated it in order facilitate. Since this has been introduced it has encouraged participants to analyse their own culture and how they work within a team, it has also highlighted the role that others play within an organisation with some positive results reported (Patient Safety Congress 2013). They found that the tool introduced a reflective cycle to the participants which altered some behaviour within the teams, positive changes due the understanding of others roles.

The incidents that need to be reported should be clearly defined in order for the reporter to know exactly what to report. The never event list contributes to a change in practice not the reporting culture.

Near misses that bring a change in culture would fare better in an additional re-launched and redefined system. The system would be designed around themes identified in the culture survey, the small subtle changes that bring around culture change by altering the behaviours of a body of people attitudes rather
than policy. Used as an early warning tool, the system would score the event much as a patient’s medial observation chart does. The same tool could be used to report issues regarding patient care such as near misses, used as positive anonymous feedback for the team, the near misses reports rely on a trained member of staff in human factor engineering to interpret this, as most trusts are moving toward simulation as a patient safety tool, human factor engineering plays a key part in this process. Time could therefore be allocated to it experts. Pronovost (2010) supports this idea by his recommendation of training staff in risk analysis in incident reporting, so many staff are untrained or have leaned on the job that is easy to understand where the problems are, we need to also change the way we process incident reports promoting a just culture and rewarding admission in order to learn. Reward by way of positive reflection rather than penalisation more pertinently in near miss reporting. Drawing the themes from the safety attitude questionnaire would again make changes from the bottom up, however again this model is not possible without leadership and buy-in from the organisation, if small changes could be evidently seen over a short period it would demonstrate its value toward management of change.
Chapter 8

8.1 Conclusion

The journey through this project has proven just how difficult it is to be heard, one voice that wants to convince many cannot be achieved singularly. Focus groups have their place but equally if the organisation really wants to hear the voices from the shop floor they are going to have to be more convincing.

Feedback could drive a cultural change by mandating not only a standardised validated survey, but thorough training should be given to incident reporting. Clarification, getting the reporter involved in the process will serve to speed the learning process. The possibility of a new focus on near misses via a separate system that would be launched as a proactive tool rather than the reactive one that’s in place could also help the way that incidents are both reported and fed back.

The introduction of a clinical specialist nurse trained in patient safety management and HFE would have the potential to remove the majority of the barriers. Improve the quality of reports, speed up the process and provide effective feedback that would proactively act as a prevention to error rather than a longwinded slow learning process.

The survey although a validated one proved to be too lengthy for this project but did increase its versatility by becoming an electronic one. I have met and been positively encouraged by the support of people like Dr E Vohr who gave some of his precious time to meet in London, who agreed readily to the electronic change of the survey. Dr Hopkins, a research consultant in the ICU at Kings College Hospital how agreed to help by facilitating its distribution to 200 nurses.
Given more time and organisation support, the survey or a shortened version could go national as collating agencies have been identified.

By changing this to an online model, it has been proven to reduce the overall cost of running a staff survey, with rapid collection and processing of the survey, it can easily be used to start a yearly database that would produce results that could be benchmarked against. On-line surveys can be individualised to local and national requirements allowing for accurate measurement of a chosen area. By employing this system they will increase the outcome quality of the survey in this growing digital health service.

Overall the results are not that dissimilar to other larger survey, the same barriers come around when discussing the barriers of reporting. The survey although small is on par with larger multi trust surveys carried out in other countries and does support the theory that a blame culture exists.

The recent reports highlight again the need for constant monitoring and continuous improvement when it comes to patient safety, new guidelines, bundles and checklists have contributed enormously to its cause. New technology has increased the speed in which we react on receive information to patient safety issues for example: - Apps on a smartphone.

Ultimately though, given all the advances in health care, the tide remains to be turned to the proactive reporting of incidents and near misses. If fear of retribution is leading the delay, a poor system and training in it, then won’t it lead to also delay advances in evidence based practice?

Could this then be solved by the introduction of clinically trained staff with advanced training in patient safety to facilitate all aspect of the reporting system? To become part of the medical ward round and first hand identify, report and feedback incidents in a timely manner thus breaking down the
barriers of reporting by becoming visible on the shop floor (south) and has the ability to feed back to the organisation (north) therefore closing the divide.
References


Bargolotti L, Lancaster J (2007) Quality and Safety Education in Nursing: more than new wine in old skins. Nursing Outlook, 55, 156-158


Loden M (1985) Feminine Leadership: Or how to succeed in business without being one of the boys. Times Books. NY


National Reporting and Learning Service. London


Patient Safety First (2011) Patient safety thermometer/ It start with me. London


# Appendix 1

**Project Gantt Chart**

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<td>31/05/2013</td>
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Appendix 2

Hospital Survey on Patient Safety

Instructions
This survey asks for your opinions about patient safety issues, medical error, and event reporting in your hospital and will take about 10 to 15 minutes to complete.

If you do not wish to answer a question, or if a question does not apply to you, you may leave your answer blank.

- An "event" is defined as any type of error, mistake, incident, accident, or deviation, regardless of whether or not it results in patient harm.
- "Patient safety" is defined as the avoidance and prevention of patient injuries or adverse events resulting from the processes of health care delivery.

SECTION A: Your Work Area/Unit

In this survey, think of your "unit" as the work area, department, or clinical area of the hospital where you spend most of your work time or provide most of your clinical services.

What is your primary work area or unit in this hospital? Select ONE answer.

- a. Many different hospital units/No specific unit
- b. Medicine (non-surgical)
- c. Surgery
- d. Obstetrics
- e. Pediatrics
- f. Emergency department
- g. Intensive care unit (any type)
- h. Psychiatry/mental health
- i. Rehabilitation
- j. Pharmacy
- k. Laboratory
- l. Radiology
- m. Anesthesiology
- n. Other, please specify:

Please indicate your agreement or disagreement with the following statements about your work area/unit.

<table>
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<tr>
<th>Think about your hospital work area/unit...</th>
<th>Strongly Disagree ▼</th>
<th>Disagree ▼</th>
<th>Neither ▼</th>
<th>Agree ▼</th>
<th>Strongly Agree ▼</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. People support one another in this unit</td>
<td>□ 1 □ 2 □ 3 □ 4 □ 5</td>
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</tr>
<tr>
<td>2. We have enough staff to handle the workload</td>
<td>□ 1 □ 2 □ 3 □ 4 □ 5</td>
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<tr>
<td>3. When a lot of work needs to be done quickly, we work together as a team to get the work done</td>
<td>□ 1 □ 2 □ 3 □ 4 □ 5</td>
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<tr>
<td>4. In this unit, people treat each other with respect</td>
<td>□ 1 □ 2 □ 3 □ 4 □ 5</td>
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<tr>
<td>5. Staff in this unit work longer hours than is best for patient care</td>
<td>□ 1 □ 2 □ 3 □ 4 □ 5</td>
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</tbody>
</table>
SECTION F: Your Hospital (continued)

Think about your hospital...

5. Important patient care information is often lost during shift changes ...........  □ 1 □ 2 □ 3 □ 4 □ 5

6. It is often unpleasant to work with staff from other hospital units ............  □ 1 □ 2 □ 3 □ 4 □ 5

7. Problems often occur in the exchange of information across hospital units.................................................. □ 1 □ 2 □ 3 □ 4 □ 5

8. The actions of hospital management show that patient safety is a top priority .......................................................... □ 1 □ 2 □ 3 □ 4 □ 5

9. Hospital management seems interested in patient safety only after an adverse event happens ...................................... □ 1 □ 2 □ 3 □ 4 □ 5

10. Hospital units work well together to provide the best care for patients ....... □ 1 □ 2 □ 3 □ 4 □ 5

11. Shift changes are problematic for patients in this hospital........................ □ 1 □ 2 □ 3 □ 4 □ 5

SECTION G: Number of Events Reported

In the past 12 months, how many event reports have you filled out and submitted?

☐ a. No event reports  ☐ d. 6 to 10 event reports
☐ b. 1 to 2 event reports  ☐ e. 11 to 20 event reports
☐ c. 3 to 5 event reports  ☐ f. 21 event reports or more

SECTION H: Background Information

This information will help in the analysis of the survey results.

1. How long have you worked in this hospital?
   ☐ a. Less than 1 year  ☐ d. 11 to 15 years
   ☐ b. 1 to 5 years  ☐ e. 16 to 20 years
   ☐ c. 6 to 10 years  ☐ f. 21 years or more

2. How long have you worked in your current hospital work area/unit?
   ☐ a. Less than 1 year  ☐ d. 11 to 15 years
   ☐ b. 1 to 5 years  ☐ e. 16 to 20 years
   ☐ c. 6 to 10 years  ☐ f. 21 years or more

3. Typically, how many hours per week do you work in this hospital?
   ☐ a. Less than 20 hours per week  ☐ d. 60 to 79 hours per week
   ☐ b. 20 to 39 hours per week  ☐ e. 80 to 99 hours per week
   ☐ c. 40 to 59 hours per week  ☐ f. 100 hours per week or more
SECTION H: Background Information (continued)

4. What is your staff position in this hospital? Select ONE answer that best describes your staff position.
   □ a. Registered Nurse
   □ b. Physician Assistant/Nurse Practitioner
   □ c. LVN/LPN
   □ d. Patient Care Asst/Hospital Aide/Care Partner
   □ e. Attending/Staff Physician
   □ f. Resident Physician/Physician in Training
   □ g. Pharmacist
   □ h. Dietician
   □ i. Unit Assistant/Clerk/Secretary
   □ j. Respiratory Therapist
   □ k. Physical, Occupational, or Speech Therapist
   □ l. Technician (e.g., EKG, Lab, Radiology)
   □ m. Administration/Management
   □ n. Other, please specify:

5. In your staff position, do you typically have direct interaction or contact with patients?
   □ a. YES, I typically have direct interaction or contact with patients.
   □ b. NO, I typically do NOT have direct interaction or contact with patients.

6. How long have you worked in your current specialty or profession?
   □ a. Less than 1 year
   □ b. 1 to 5 years
   □ c. 6 to 10 years
   □ d. 11 to 15 years
   □ e. 16 to 20 years
   □ f. 21 years or more

SECTION I: Your Comments

Please feel free to write any comments about patient safety, error, or event reporting in your hospital.

THANK YOU FOR COMPLETING THIS SURVEY.
Appendix 3

Safety Attitudes Questionnaire (ICU Version)

ICU job category: (mark only one):
- Charge Nurse
- Respiratory Therapist
- Critical Care RN
- Nursing Assistant/Staff
- Critical Care LVN/PRN
- Ward Clerk/Secretary
- Critical Care Attending/Internist
- Fellow/Resident (Medical)
- Critical Care Fellow/Resident
- Fellow/Resident (Surgical)
- Attending/Staff Physicist (Med.)
- Other (specify)
- Attending/Staff Physicist (Surg.)

Type of ICU (mark only one):
- Med-Surg
- Med ICU
- Pediatric ICU
- Neuro ICU
- Cardiac surgical ICU
- Neurological ICU
- Other (specify)
- Surgical ICU

Please answer the following questions with respect to your specific ICU. Mark your response using the scale above.

1. High levels of workload are common in this ICU.
2. I like my job.
3. Nurse input is well received in this ICU.
4. I would feel safe being treated here as a patient.
5. Medical errors are handled appropriately in this ICU.
6. This hospital does a good job of training new personnel.
7. All the necessary information for diagnostic and therapeutic decisions is routinely available to me.
8. Working in this hospital is like being part of a large family.
9. The administration of this hospital is doing a good job.
10. Hospital administration supports my daily efforts.
11. I receive appropriate feedback about my performance.
12. In this ICU, it is difficult to discuss errors.
13. Briefings (e.g., patient report at shift change) are important for patient safety.
14. Thorough briefings are common in this ICU.
15. This hospital is a good place to work.
16. When I am interrupted, my patients' safety is not affected.
17. All the personnel in my ICU take responsibility for patient safety.
18. Hospital management does not knowingly compromise the safety of patients.
19. The levels of staffing in this ICU are sufficient to handle the number of patients.
20. Decision-making in this ICU utilizes input from relevant personnel.
21. This hospital encourages teamwork and cooperation among its personnel.
22. I am encouraged by my colleagues to report any patient safety concerns I may have.
23. The culture in this ICU makes it easy to learn from the errors of others.
24. This hospital deals constructively with problem personnel.
25. The medical equipment in this ICU is adequate.
26. In this ICU, it is difficult to speak up if I perceive a problem with patient care.
27. When my workload becomes excessive, my performance is impaired.
28. I am provided with adequate, timely information about events in the hospital that might affect my work.
29. I have seen others make errors that had the potential to harm patients.
30. I know the proper channels to direct questions regarding patient safety in this ICU.
31. I am proud to work at this hospital.
32. Disagreements in this ICU are resolved appropriately (i.e., not who is right but what is best for the patient).
33. I am less effective at work when fatigued.
34. I am more likely to make errors in tense or hostile situations.
35. Stress from personal problems adversely affects my performance.
36. I have the support I need from other personnel to care for patients.
37. It is easy for personnel in this ICU to ask questions when there is something that they do not understand.
38. Disruptions in the continuity of care (e.g., shift changes, patient transfers, etc.) can be detrimental to patient safety.
39. During emergencies, I can predict what other personnel are going to do next.
40. The physicians and nurses here work together as a well-coordinated team.
41. I am frequently unable to express disagreement with staff physicians/intensivists in this ICU.
42. Very high levels of workload stimulate and improve my performance.
43. Truly professional personnel can leave personal problems behind when working.
44. Morale in this ICU is high.
45. Trainees in my discipline are adequately supervised.
46. I know the first and last names of all the personnel I worked with during my last shift.

*Medical error is defined as any mistake in the delivery of care, by any healthcare professional, regardless of outcome.
Please answer by marking the response of your choice to the right of each item, using the letter from the scale below.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
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<tbody>
<tr>
<td>Disagree Strongly</td>
<td>Disagree Slightly</td>
<td>Neutral</td>
<td>Agree Slightly</td>
<td>Agree Strongly</td>
</tr>
</tbody>
</table>

47. I have made errors that had the potential to harm patients.  
48. Staff physicians/intensivists in this ICU are doing a good job.  
49. Fatigue impairs my performance during emergency situations (e.g., emergency resuscitation, seizure).  
50. Fatigue impairs my performance during routine care (e.g., medication review, ventilator checks, transfer orders).  
51. If necessary, I know how to report errors that happen in this ICU.  
52. Patient safety is constantly reinforced as the priority in this ICU.  
53. Interactions in this ICU are collegial, rather than hierarchical.  
54. Important issues are well communicated at shift changes.  
55. There is widespread adherence to clinical guidelines and evidence-based criteria in this ICU.  
56. Personnel are not punished for errors reported through incident reports.  
57. Error reporting is rewarded in this ICU.  
58. Information obtained through incident reports is used to make patient care safer in this ICU.  
59. During emergency situations (e.g., emergency resuscitations), my performance is not affected by working with inexperienced or less capable personnel.  
60. Personnel frequently disregard rules or guidelines (e.g., handwashing, treatment protocols, clinical pathways, sterile field, etc.) that are established for this ICU.  
61. Communication breakdowns which lead to delays in delivery of care are common.  
62. Communication breakdowns which negatively affect patient care are common.  
63. A confidential reporting system that documents medical incidents is helpful for improving patient safety.  
64. I may hesitate to use a reporting system for medical incidents because I am concerned about being identified.  
65. Have you completed this survey before?  
   - yes  
   - no  
   - don't know

Use the scales to describe the quality of collaboration and communication you have experienced with:

- Charge Nurse
- Nurse Manager/Head Nurse
- Crit Care RN
- Crit Care LVN/LPN
- Crit Care Attending/Intensivist
- Crit Care Fellow/Resident

Attending/Staff Physician (Medical)
Attending/Staff Physician (Surgical)
Pharmacist
Respiratory Therapist
Nursing Aide/Assistant
Word Clerk/Secretary
Fellow/Resident (Medical)
Fellow/Resident (Surgical)
Other (specify):

Adequate
Not Applicable
Low
Very Low
High
Very High

BACKGROUND INFORMATION

Gender:  
- Male  
- Female

ICU Job Status:  
- Full-time  
- Part-time  
- Agency  
- Contract

Ethnic Group:  
- Hispanic  
- Black (not Hispanic)  
- White (not Hispanic)  
- Asian/Pacific Islander  
- Multi-ethnic  
- Other:

"Optional" collected as part of a cross-cultural study
Citizenship (e.g., Canadian, Filipino, USA, etc.):

Country of birth (if different):________

COMMENTS: What are your top three recommendations for improving patient safety in this ICU?

1.        
2.        
3.        

If more room for comments is needed, please provide your response on a separate sheet of paper.

Thank you for completing the questionnaire. Your time and participation are greatly appreciated.
Appendix 4

Safety Attitudes Questionnaire (ICU)

WHY FILL IT IN?

This survey will take 15-20 mins of your time to fill in and is aimed at the whole multi-disciplinary team.

As I'm sure your all aware Patient Safety is currently at the top of any agenda, however in the current financial climate, budgets are tight.

As medical personnel, no-one intentionally wants to harm a patient, however mistakes happen. In the past a blame culture has surrounded mistakes preventing them to become learning vessels.

I am currently working as a sister in a busy ICU and also completing a Master’s Degree in Patient Safety Management, for my dissertation I have chosen to assess staff attitudes to patient safety. I have chosen the ICU for two reasons:- Firstly, because I’m familiar with it and want the current climate to change and secondly, this is the area with the most incidents due to its nature so would provide the best results.

My reason for this survey is to assess the baseline culture towards general patient attitudes in a bid to improve the service and quality for our patients. This survey is designed around six key areas for continuous improvement, the analysis will enable the identification of any one key area.

Your help in completing this will be much appreciated by not just myself, but for the future of the ICU to go on delivering high quality care that we ourselves would want to be treated in.

The results of this survey will be fed back to your management team who have positively encouraged this project to take place within your NHS Trust so please for change sake fill it in.

Thank you

Tara M Marshall

Powered by SurveyMonkey

Check out our sample surveys and create your own now!
Safety Attitudes Questionnaire (ICU)

1. Job Category

<table>
<thead>
<tr>
<th>Nurse</th>
<th>Doctor/Intensivists</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Role

<table>
<thead>
<tr>
<th>Job Category Role Nurse</th>
<th>Doctor/Intensivists</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other (please specify)

2. Type of speciality ICU

Type of speciality ICU

3. Gender

- Gender Male
- Female

4. High levels of workload are common in this ICU.
<table>
<thead>
<tr>
<th>Agree Strongly</th>
<th>Agree Slightly</th>
<th>Neutral</th>
<th>Disagree Slightly</th>
<th>Disagree Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>High levels of workload are common in this ICU.</td>
<td>Neutral</td>
<td>Agree Slightly</td>
<td>Agree Strongly</td>
<td></td>
</tr>
</tbody>
</table>

5. I like my job

<table>
<thead>
<tr>
<th>Agree Strongly</th>
<th>Agree Slightly</th>
<th>Neutral</th>
<th>Disagree Slightly</th>
<th>Disagree Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like my job</td>
<td>Neutral</td>
<td>Agree Slightly</td>
<td>Agree Strongly</td>
<td></td>
</tr>
</tbody>
</table>

6. Nurse input is well received in this ICU

<table>
<thead>
<tr>
<th>Agree Strongly</th>
<th>Agree Slightly</th>
<th>Neutral</th>
<th>Disagree Slightly</th>
<th>Disagree Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse input is well received in this ICU</td>
<td>Neutral</td>
<td>Agree Slightly</td>
<td>Agree Strongly</td>
<td></td>
</tr>
</tbody>
</table>

7. I would feel safe being treated here as a patient

<table>
<thead>
<tr>
<th>Agree Strongly</th>
<th>Agree Slightly</th>
<th>Neutral</th>
<th>Disagree Slightly</th>
<th>Disagree Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would feel safe being treated here as a patient</td>
<td>Neutral</td>
<td>Agree Slightly</td>
<td>Agree Strongly</td>
<td></td>
</tr>
</tbody>
</table>

8. Medical errors are handled appropriately in this ICU

<table>
<thead>
<tr>
<th>Agree Strongly</th>
<th>Agree Slightly</th>
<th>Neutral</th>
<th>Disagree Slightly</th>
<th>Disagree Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical errors are handled appropriately in this ICU</td>
<td>Neutral</td>
<td>Agree Slightly</td>
<td>Agree Strongly</td>
<td></td>
</tr>
</tbody>
</table>

9. The hospital does a good job of training new personnel
10. All the necessary information for diagnostic and therapeutic decision is routinely available to me

11. Working in this hospital is like being part of a large family

12. The administration of this hospital is doing a good job

13. Hospital administration supports my daily efforts
Disagree Strongly    Disagree Slightly    Neutral    Agree Slightly    Agree Strongly

Hospital administration supports my daily efforts
Disagree Strongly

Disagree Strongly    Disagree Slightly    Neutral    Agree Slightly    Agree Strongly

I receive appropriate feedback about my performance
Disagree Strongly

Disagree Strongly    Disagree Slightly    Neutral    Agree Slightly    Agree Strongly

In this ICU, it is difficult to discuss errors
Disagree Strongly

Disagree Strongly    Disagree Slightly    Neutral    Agree Slightly    Agree Strongly

Briefings (e.g. patient report at shift change) are important for patient safety
Disagree Strongly

Disagree Strongly    Disagree Slightly    Neutral    Agree Slightly    Agree Strongly

Thorough briefings are common in this ICU
Disagree Strongly
Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

common in this ICU
Disagree Strongly

18. This hospital is a good place to work

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

This hospital is a good place to work
Disagree Strongly

19. When I am interrupted, my patients' safety is not affected

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

When I am interrupted, my patients' safety is not affected
Disagree Strongly

20. All the personnel in my ICU take responsibility for patient safety

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

All the personnel in my ICU take responsibility for patient safety
Disagree Strongly

21. Hospital management does not knowingly compromise the safety of patients

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

Hospital management does not knowingly compromise the safety of patients
Disagree Strongly

22. The levels of staffing in this ICU are sufficient to handle the number of patients
<table>
<thead>
<tr>
<th>Disagree Strongly</th>
<th>Disagree Slightly</th>
<th>Neutral</th>
<th>Agree Slightly</th>
<th>Agree Strongly</th>
</tr>
</thead>
</table>

- The levels of staffing in this ICU are sufficient to handle the number of patients
  - **Disagree Strongly**
  - **Disagree Slightly**
  - **Neutral**
  - **Agree Slightly**
  - **Agree Strongly**

23. Decision-making in this ICU utilises input from relevant personnel

- Decision-making in this ICU utilises input from relevant personnel
  - **Disagree Strongly**
  - **Disagree Slightly**
  - **Neutral**
  - **Agree Slightly**
  - **Agree Strongly**

24. This hospital encourages teamwork and co-operation among its personnel

- This hospital encourages teamwork and co-operation among its personnel
  - **Disagree Strongly**
  - **Disagree Slightly**
  - **Neutral**
  - **Agree Slightly**
  - **Agree Strongly**

25. I am encouraged by my colleagues to report any patient safety concerns I may have

- I am encouraged by my colleagues to report any patient safety concerns I may have
  - **Disagree Strongly**
  - **Disagree Slightly**
  - **Neutral**
  - **Agree Slightly**
  - **Agree Strongly**

26. The culture in the ICU makes it easy to learn from the errors of others
27. This hospital deals constructively with problem personnel

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

Disagree Strongly  disagree Slightly  Neutral  Agree Slightly  Agree Strongly

28. The medical equipment in this ICU is adequate

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

29. In this ICU, it is difficult to speak up if I perceive a problem with patient safety

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

Disagree Strongly  disagree Slightly  Neutral  Agree Slightly  Agree Strongly

30. When my workload becomes excessive, my performance is impaired

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

Disagree Strongly  disagree Slightly  Neutral  Agree Slightly  Agree Strongly
31. I am provided with adequate, timely information about events in the hospital that might affect my work

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

I am provided with adequate, timely information about events in the hospital that might affect my work

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

32. I have seen others make errors that had the potential to harm patients

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

I have seen others make errors that had the potential to harm patients

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

33. I know the proper channels to direct questions regarding patient safety in this ICU

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

I know the proper channels to direct questions regarding patient safety in this ICU

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

34. I am proud to work at this hospital

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

I am proud to work at this
Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

35. Disagreements in this ICU are resolved appropriately (i.e. not who is right but what is best for the patient)

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

Disagreements in this ICU are resolved appropriately (i.e. not who is right but what is best for the patient) Disagree Strongly

36. I am less effective at work when fatigued

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

I am less effective at work when fatigued Disagree Strongly

37. I am more likely to make errors in tense hostile situations

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

I am more likely to make errors in tense hostile situations Disagree Strongly

38. Stress from personal problems adversely affect my performance

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

Stress from personal problems adversely affect my
<table>
<thead>
<tr>
<th>Disagree Strongly</th>
<th>Disagree Slightly</th>
<th>Neutral</th>
<th>Agree Slightly</th>
<th>Agree Strongly</th>
</tr>
</thead>
</table>

**39. I have the support I need from other personnel to care for patients**

<table>
<thead>
<tr>
<th>Disagree Strongly</th>
<th>Disagree Slightly</th>
<th>Neutral</th>
<th>Agree Slightly</th>
<th>Agree Strongly</th>
</tr>
</thead>
</table>

**40. It is easy for personnel in this ICU to ask questions when there is something that they do not understand**

<table>
<thead>
<tr>
<th>Disagree Strongly</th>
<th>Disagree Slightly</th>
<th>Neutral</th>
<th>Agree Slightly</th>
<th>Agree Strongly</th>
</tr>
</thead>
</table>

**41. Disruptions in the continuity of care (e.g. shift changes, patient transfers, etc.) can be detrimental to patient safety**

<table>
<thead>
<tr>
<th>Disagree Strongly</th>
<th>Disagree Slightly</th>
<th>Neutral</th>
<th>Agree Slightly</th>
<th>Agree Strongly</th>
</tr>
</thead>
</table>

**42. During emergencies, I can predict what other personnel are going to do next**
During emergencies, I can predict what other personnel are going to do next Disagree Strongly

43. The physicians and nurses here work together as a well-co-ordinated team

44. I am frequently unable to express disagreement with staff, physicians/intensivists in this ICU

45. Very high levels of workload stimulate and improve my performance

46. Truly professional personnel can leave person problems behind when working
Truly professional personnel can leave person problems behind when working.

47. Moral in this ICU is high

48. Trainees in my discipline are adequately supervised

49. I know the first and last names of all the personnel I worked with during my last shift

50. I have made errors that had the potential to harm patients
Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

51. Staff physicians/intensivists in this ICU are doing a good job

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

- Staff physicians/intensivists in this ICU are doing a good job
  - Disagree Strongly
  - Disagree Slightly
  - Neutral
  - Agree Slightly
  - Agree Strongly

52. Fatigue impairs my performance during emergency situations (e.g. emergency resuscitation, seizure)

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

- Fatigue impairs my performance during emergency situations (e.g. emergency resuscitation, seizure)
  - Disagree Strongly
  - Disagree Slightly
  - Neutral
  - Agree Slightly
  - Agree Strongly

53. Fatigue impairs my performance during routine care (e.g. medication review, ventilator checks, transfer orders)

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

- Fatigue impairs my performance during routine care (e.g. medication review, ventilator checks, transfer orders)
  - Disagree Strongly
  - Disagree Slightly
  - Neutral
  - Agree Slightly
  - Agree Strongly

54. If necessary, I know how to report errors that happen in this ICU
If necessary, I know how to report errors that happen in this ICU

55. Patient safety is constantly reinforced as a priority in the ICU

56. Interactions in the ICU are collegial, rather than hierarchical

57. Important issues are well communicated at shift changes

58. There is wide spread adherence to clinical guidelines and evidenced-based criteria in this ICU
<table>
<thead>
<tr>
<th>Question</th>
<th>Disagree Strongly</th>
<th>Disagree Slightly</th>
<th>Neutral</th>
<th>Agree Slightly</th>
<th>Agree Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree Strongly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>based criteria in this ICU Disagree Strongly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59. Personnel are not punished for errors reported through incident reports Disagree Strongly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60. Error reporting is rewarded in this ICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61. Information obtained through incident reports is used to make patient care safer in this ICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62. During emergency situations (e.g. emergency resuscitations) my performance is not affected by working with in experienced or less capable personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

emergency resuscitations) my performance is not affected by working with in experienced or less capable personnel Disagree Strongly

63. Personnel frequently disregard rules or guidelines (e.g. hand washing, treatment protocols/clinical pathways, sterile field, etc.) that are established for this ICU

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

Personnel frequently disregard rules or guidelines (e.g. hand washing, treatment protocols/clinical pathways, sterile field, etc.) that are established for this ICU Disagree Strongly

64. Communication breakdowns which lead to delays in delivery of care are common

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly

Communication breakdowns which lead to delays in delivery of care are common Disagree Strongly

65. Communication breakdowns which negatively affect patient care are common
Communication breakdowns which negatively affect patient care are common. Disagree Strongly

66. A confidential reporting system that documents medical incidents is helpful for improving patient safety

67. I may hesitate to use a reporting system for medical incidents because I am concerned about being identified

68. Have you completed this survey before

69. Job status
70. Finally, what would your top three recommendations be for improving patient safety in your ICU?

Finally, what would your top three recommendations be for improving patient safety in your ICU? 1

2

3
Appendix 5

Working Conditions

Q9 The hospital does a good job of training new personnel
Answered: 24  Skipped: 0

33.33% (8)
50% (12)
12.50% (3)
4.17% (1)

Disagree Strongly  Disagree Slightly  Neutral  Agree Slightly  Agree Strongly
Q10 All the necessary information for diagnostic and therapeutic decision is routinely available to me

Answered: 24  Skipped: 6

Q27 This hospital deals constructively with problem personnel

Answered: 24  Skipped: 6
Q28 The medical equipment in this ICU is adequate

Answered: 24  Skipped: 0

Q48 Trainees in my disaplin are adequately supervised

Answered: 24  Skipped: 0
Management Perceptions

Q58 There is widespread adherence to clinical guidelines and evidenced-based criteria in this ICU

Answered: 24  Skipped: 0

- 6.33% Disagree Strongly
- 16.67% Disagree Slightly
- 37.50% Neutral
- 37.50% Agree Slightly
- 12.50% Agree Strongly

Q12 The administration of this hospital is doing a good job

Answered: 24  Skipped: 0

- 37.50% Disagree Strongly
- 37.50% Disagree Slightly
- 12.50% Neutral
- 12.50% Agree Slightly
- 12.50% Agree Strongly
Q21 Hospital management does not knowingly compromise the safety of patients

Answered: 24  Skipped: 0

Q22 The levels of staffing in this ICU are sufficient to handle the number of patients

Answered: 24  Skipped: 0
**Q31** I am provided with adequate, timely information about events in the hospital that might affect my work.

Answered: 24  Skipped: 0

- Disagree Strongly: 12.50% (3)
- Disagree Slightly: 25% (6)
- Neutral: 62.50% (15)
- Agree Slightly: 0%
- Agree Strongly: 0%

---

**Job Satisfaction**

**Q5** I like my job.

Answered: 24  Skipped: 0

- Disagree Strongly: 50% (12)
- Disagree Slightly: 0%
- Neutral: 0%
- Agree Slightly: 37.50% (3)
- Agree Strongly: 8.33% (2)
- Agree Strongly (2)
- Slightly: 4.17% (1)
Q11 Working in this hospital is like being part of a large family

Answered: 24 Skipped: 0

Q18 This hospital is a good place to work

Answered: 24 Skipped: 0
Q34 I am proud to work at this hospital
Answered: 24  Skipped: 0

Q47 Moral in this ICU is high
Answered: 24  Skipped: 0