The
Health
Foundation
Inspiring
Improvement

Thought paper May 2012

Michael Leonard & Allan Frankel

How can leaders influence a safety culture?

In this thought paper, Dr Michael Leonard and Dr Allan Frankel explore how effective leadership and organisational fairness are essential for patient safety within healthcare services. They discuss how leaders can influence their organisations to help create a robust safety culture.

At the Health Foundation, we know that effective leadership is vital for the delivery of safe patient services. For a number of years, we have been running quality improvement and leadership development programmes, and working with healthcare leaders on the front line, to strengthen leadership within healthcare in order to improve patient safety.

Health Foundation thought papers are the author's own views. We would like to thank Dr Leonard and Dr Frankel for their work, which we hope will stimulate ideas, reflection and discussion.

About the authors

Dr Michael Leonard
Dr Michael Leonard is Co-Chief Medical Officer at Pascal Metrics, which applies software-driven data science to improving patient safety. Dr Leonard has advised senior clinical and executive leaders and has led clinical intervention and training in hospitals and healthcare systems in North America, Europe, and Asia. Most recently, he was named Adjunct Professor of Medicine at Duke University School of Medicine. In addition to extensive teaching and lecturing, Dr Leonard has written widely on patient safety.

Dr Allan Frankel
Dr Allan Frankel, is Co-Chief Medical Officer at Pascal Metrics.
Dr Frankel is senior faculty at the Brigham and Women's Hospital Patient Safety Center of Excellence in Boston and the Institute for Healthcare Improvement. He has advised clinical and hospital leaders worldwide.

Summary

A robust safety culture is the combination of attitudes and behaviours that best manages the inevitable dangers created when humans, who are inherently fallible, work in extraordinarily complex environments. The combination, epitomised by healthcare, is a lethal brew.

Great leaders know how to wield attitudinal and behavioural norms to best protect against these risks. These include: 1) psychological safety that ensures speaking up is not associated with being perceived as ignorant, incompetent, critical or disruptive (leaders must create an environment where no one is hesitant to voice a concern and caregivers know that they will be treated with respect when they do); 2) organisational fairness, where caregivers know that they are accountable for being capable, conscientious and not engaging in unsafe behaviour, but are not held accountable for system failures; and 3) a learning system where engaged leaders hear patients and front-line caregivers' concerns regarding defects that interfere with the delivery of safe care, and promote improvement to increase safety and reduce waste. Leaders are the keepers and guardians of these attitudinal norms and the learning system.

Introduction

High-reliability environments deal with risk and hazard on a daily basis, yet maintain impressive levels of safety through building a safety culture and continuous learning. One fundamental, but important, difference is that highly reliable environments relentlessly assure safety, while in medicine, we often assume safety. This assumption of safety – 'someone will see and communicate the abnormal test results' – is a very dangerous mindset and often leads to serious avoidable injury. Recent evidence in the USA shows that roughly one in three patients experience an adverse event, and in 6% of cases, the adverse event is severe enough to prolong the patient's hospitalisation and send them home with a permanent or temporary disability.[1]

The systematic delivery of safe and reliable care requires a safety culture, continuous learning, and improvement. The role of effective leaders is to support this work by defining the goals and values of the organisation, and making them live and breathe within the process of caring for patients. First and foremost, healthcare leaders have to clearly and relentlessly communicate that safe care is a primary, non-negotiable goal. Leaders need to be able to clearly articulate the behavioural norms that create value for the patient, clinicians, and the organisation. They need to communicate in concise, simple fashion what these essential behaviours look like, and act in ways that model and reinforce the desired behavioural norms.

Effective leaders must also address the behaviours that create unacceptable risk, such as disruptive or disrespectful behaviour, and send a very clear message that these behaviours will not be tolerated. The real test of leadership and organisational culture comes when someone does act in this way. It is really not a question of 'if, but rather when' this will occur. Leaders need to know that their response will be watched widely and closely, and will send a very powerful message within the organisation about its culture. If leaders are consistent in holding people accountable for unacceptable behaviours that create risk, they will have laid the foundation for a strong safety culture.

Psychological safety

Creating psychological safety is a fundamental responsibility of leadership in creating a safety culture. Psychological safety is an environment where no one is hesitant to voice a concern about a patient or anything that puts the organisation at risk.[2] If you think of the people you are always comfortable going to when you have a question or problem, it is because it is psychologically safe to do so. Not only are they going to help you, but you also know that they will treat you with respect. The individuals you are hesitant to approach because it will be unpleasant or demeaning personify a lack of psychological safety. Unfortunately, there are numerous examples of serious, avoidable harm and death occurring in hospitals because a caregiver felt intimidated to voice their concern because it was psychologically unsafe to do so.[3]

Leaders contribute to psychological safety and a collaborative care environment in a number of important ways. High-performance safety cultures hire individuals with positive attitudes with regard to collaboration, treating others with respect, and working toward a common goal. While technical skill is necessary, healthcare is a profound social process for patients and caregivers. Leaders need to continuously message the cultural values of the organisation. A good example of hiring for attitude is the Mayo Clinic, where people are selected and evaluated for their ability to practice in 'the Mayo way, where the needs of the patient come first'.[4] As Berry and Seltman noted in their article about the Mayo Clinic, one of the senior Mayo physicians interviewed remarked, 'I don't recall a speech or meeting I attended where the core values of the institution were not mentioned.'[5]

Building a safety culture

In addition to the importance of the manifestation of core organisational values and behaviours, there is a fundamental need to measure and understand safety culture at a clinical unit level. The use of a validated survey instrument, with a high response rate greater than 60% that reflects the perceptions of individual caregivers at the unit level, is important. Units where caregivers have very positive, concordant perceptions of psychological safety, teamwork, and leadership, and feel comfortable discussing errors, provide safer care environments for both caregivers and patients.[6,7] The concordance, or similarity,

in perceptions among caregivers is quite important, as it indicates that different caregiver types are having similar, positive social interactions. When scores are quite disparate, that is a strong indicator of a dysfunctional culture and significant clinical risk. To put it simply, if you are in a relationship where both parties see it positively and in similar fashion, good things happen. If you have very different perceptions and someone is not happy, there is always a price to be paid.

High-quality safety culture data should be debriefed and acted upon. First, the broader organisational themes around psychological safety, discussing errors, perceptions of teamwork, and perceptions of unit level and senior leadership should be analysed. Areas of cultural strength can be leveraged and messaged across the organisation. When significant numbers of caregivers are hesitant to speak up, fearful to disclose errors, or have suboptimal perceptions of leadership, these are key areas to take broad action. Within the numerous units in a hospital or trust, there will be units with outstanding performance that should be analysed to see what can be learned and spread to other clinical care areas. Is there an opportunity to partner some of the highest performing units with the lower ones to enhance learning and improve culture?

Unit-level safety culture data should be debriefed in an open, safe manner with the absolute emphasis on opportunity.[8] Frame the conversation with 'You're all highly skilled caregivers who get out of bed every morning to do the right thing for patients.

What are the one or two areas of our culture where we have the opportunity to improve and provide a better care environment for everyone?' If it is not psychologically safe to debrief and learn, the ability to drive improvement will be compromised. Unit-level debriefs are translated into actionable plans that are quite specific as to who owns the work, when is it going to happen, and how will we measure any improvement? Leaders of high-performing healthcare organisations drive action based on unit-level debriefing.

As culture is behaviour over time, the adoption of consistent teamwork behaviours is a powerful mechanism to improve safety culture. Every unit in the care system, clinical or otherwise, should start the day or procedure with a briefing or huddle. 'What are we doing today? Here's what we're thinking… Who's here to help us? Do we have what we need? What information will we need? And what are the barriers or constraints in our way?'

Effective team leaders use people's names and consistently invite the other team members into the conversation, both to benefit from their expertise and to hear their concerns. Not only does the team share information and leverage their collective expertise, but the leader also makes themselves approachable and makes it easier for others to speak up.[9] Clarity as to the plan of care and psychological safety are important predictors of caregivers voicing concern if the patient is going in the wrong direction.[10]

Two additional team behaviours are critical language and debriefing. Critical

language refers to a phrase, that when heard, requires the team to stop and take one minute to reassess and ensure that they are going in the right direction. In the absence of critical language, caregivers may not speak up or engage in mitigated speech – the proverbial 'hint and hope'. This is dangerous, as a busy clinician focused on a problem or procedure may miss this signal, and errors could occur. A very nice critical language term is 'I just need a little clarity'. This can be voiced in front of a patient or their family without causing undue alarm or stress.[11] Leaders effectively impact the use of critical language and psychological safety by being clear that everyone must speak up if they have a concern or are unclear as to the plan of care, and making it clear that they will always be treated with respect if they do.

Debriefing is the final teamwork behaviour that closes the loop and facilitates both teamwork and learning. Sustaining these team behaviours depends on the ability to capture information from front-line caregivers and take action as described in the section on 'The learning system', below.

Organisational fairness or 'Just Culture'?

In the aftermath of an adverse event or near miss, caregivers need a simple set of rules, that allows for the determination between unsafe individuals and skilled individuals set up to fail by an unsafe system. We have all been trained in a culture that says skilled, capable practitioners don't make mistakes if they try hard and pay attention. This makes it personally threatening to talk about mistakes – nobody wants to look stupid or incompetent – and the absence of a simple algorithm that makes it safe to discuss the events and learn from them reinforces a veritable wall of silence. Individuals need to be skilled, conscientious and play by the rules. They should not behave maliciously, perform their duties when knowingly impaired, engage in unsafe behaviour, or make mistakes that someone of similar skill and training would not make under similar circumstances. If they can answer the above questions correctly, the problem is a system-derived error.

Organisational fairness can only be successful when actively supported by leadership. Human error is pervasive, even among skilled practitioners, and complex systems also generate errors. In order to learn and improve, caregivers need to know that it is safe to discuss mistakes and near misses. Leaders need to create the safe space to have these conversations, model the right behaviours, and act in response to these events for organisational fairness to work. Discussing contributing factors and system thinking helps to identify opportunities and raises awareness among clinicians of system failures that need to be fixed. The ability to openly discuss errors and adverse events internally is a necessity for open, honest disclosure with patients and their families.

Most adverse events stem from a combination of factors, and often the shortcuts, or normalised deviance, are critical factors. Leaders must really understand how caregivers are providing patient care to effectively manage. For example, a patient receiving emergency care required antibiotics and pain

medicine. The nurse caring for the patient was abruptly pulled for a trauma case, and asked a colleague to give the medications to the 'patient in room 20'. The room number was incorrect, the medications were administered to the wrong patient, and an adverse event resulted. On learning that the nurse had failed to use the correct patient identifiers, the leaders asked several other nurses if they used room numbers as the primary identifiers, as opposed to the patient ID bands, and if they could have made the same mistake. The answers were 'We do it all the time, and yes, we could all have made this mistake.' Leaders then asked the nurse to stand before her peers and explain, 'what I did, so you won't make the same mistake'. They recalibrated the behaviour by noting that there would now be zero tolerance for any deviance from the patient ID band policy. This approach was far more effective than reflexively punishing the nurse concerned, which would have only reinforced a culture of fear. Humans will take shortcuts and normalise these behaviours, and leaders who can assess the real behaviours are far more effective in driving a culture of safety.

The learning system

Front-line caregivers routinely deal with defects and barriers to their ability to deliver optimal care, which leads to shortcuts and workarounds. The workarounds developed to get around these obstacles and take care of patients are valuable sources of learning, as they reflect the inherent system failures that are evident at the front line of care. Often,

these front-line workarounds not only deviate from policy, but often generate significant risk in themselves.

The general inability to systematically identify and fix these defects has two undesirable outcomes: it normalises shortcuts in safe procedure and reinforces the perception that leaders are not really concerned about these problems. As these sentiments reflect unsafe cultures, leaders must promote systematic learning and improvement that is visible and tangible to front-line staff. They must also be present and active, and consistent participants in the dialogue. As one astute observer of medical leadership has observed, 'Face time is the currency of leadership.'[12]

Leaders can profoundly influence a culture of safety through their support of a learning system: a visible structure that captures the concerns and defects from front-line caregivers, which demonstrates that leadership is interested in their concerns, the information is acted upon, and, when the issue is resolved, that there is systematic feedback to the people who gave them information.

In every unit, the learning system has three components: a process board that displays a limited number of metrics important to the delivery of safe, high-quality care; in the staff room, the annotated run charts that reflect the work done to improve the metrics, the tests of change and the dialogue among caregivers in working to drive improvement; and the learning board, where defects are collected, visibly displayed and caregivers can see the progress in resolving them.

The process board will have a maximum of 10 to 12 process or outcome measures that are relevant to the delivery of care on that unit. The goal is to remind caregivers every time they walk onto the unit about key aspects of care that are important and they need to pay attention to. On a medical ward, the measure – a single number reflecting what the current state is, next to the stated goal – could refer to hand hygiene rate, falls with harm, rapid response calls, percentage of patients at risk for pressure ulcers who were turned every 60 minutes, and medications administered within a given amount of time.

The annotated run charts reflecting the story behind the work on process board lives in the staff room, where the annotations, or text, tell the story of what the staff talked about, the tests of change performed and how the process has improved over time. This narrative is very important, as improvement is a continual, iterative process. Being able to see what the team has talked about, what they have done, and how that relates to positive improvement is an important part of validating the work and sustaining the effort.

The learning board can be divided into the three boards: red for defects or opportunities identified; yellow for problems that are being addressed, with the individuals responsible clearly identified; and green for where the problem has been resolved.

A learning system that captures information and tracks improvement builds trust and the capacity to drive improvement. Leadership plays a crucial role in creating and maintaining the learning system. By ensuring that the learning system is visible and functional, leaders are sending an important cultural message – that the wisdom of front-line caregivers is valuable and needs to be acted on. Also, by spending time on the clinical units with staff in front of the learning boards, they validate and reinforce the improvement work already accomplished, and connect the attention and resources of leadership for problems beyond the scope of front-line caregivers to resolve by themselves.

Conclusion

In summary, leaders have a profound opportunity to enhance a safety culture. Creating an environment of psychological safety enhances the ability of caregivers to voice concerns – an essential component of safe care. Reflecting the perceptions of unit-level caregivers by debriefing safety culture data identifies opportunities that are important and actionable.

Organisational fairness, or 'Just Culture', makes it safe for members of the care team to discuss errors and near misses so that the organisation develops a strong learning culture. The learning system is an effective mechanism to capture defects and opportunities and visibly demonstrate that concerns are being addressed and resolved. Effective leadership is an essential component in every aspect.

To share your thoughts about this paper, please visit **www.health.org.uk/LeonFrankTP**. *You can also follow the Health Foundation on Twitter at* **www.twitter.com/HealthFdn**

References

1   Classen DC, Resar R, Griffin F, Federico F, Frankel T, Kimmel N, *et al*. 'Global trigger tool' shows that adverse events in hospitals may be ten times greater than previously measured. *Health Aff* (Millwood) 2011;30(4):581-9.

2   Edmondson AC. Managing the risk of learning: psychological safety in work teams, 2002. www.hbs.edu/research/facpubs/workingpapers/papers2/0102/02-062.pdf (accessed 19 April 2012).

3   Bognár A, Barach P, Johnson JK, Duncan RC, Birnbach D, Woods D, *et al*. Errors and the burden of errors: attitudes, perceptions, and the culture of safety in pediatric cardiac surgical teams. *Ann Thorac Surg* 2008;85(4):1374-81.

4   Berry LL, Seltman KD. *Management lessons from the Mayo Clinic*. New York: McGraw-Hill; 2008.

5   Berry LL, Seltman KD. Building a strong services brand: lessons from Mayo Clinic. *Bus Horiz* 2007;50:199-209.

6   Hansen LO, Williams MV, Singer SJ. Perceptions of hospital safety climate and incidence of readmission. *Health Serv Res* 2011;46(2):596-616.

7   Hudson DW, Sexton BJ, Thomas EJ, Bernholtz SM. A safety culture primer for the critical care clinician: the role of culture in patient safety and quality improvement. *Contemp Crit Care* 2009; 7:1-14.

8   Sexton JB, Paine LA, Manfuso J, Holzmueller CG, Martinez EA, Moore D, *et al*. A check-up for safety culture in 'my patient care area'. *Jt Comm J Qual Patient Saf* 2007;33(11):699-703.

9   Leonard MW, Frankel AS. Role of effective teamwork and communication in delivering safe, high quality care. *Mt Sinai J Med* 2011;78(6):820-6.

10 Lyndon A. Social and environmental conditions creating fluctuating agency for safety in two urban academic birth centers. *J Obstet Gynecol Neonatal Nurs* 2008;37(1):13-23.

11 Leonard MW, Frankel A. The path to safe and reliable healthcare. *Patient Educ Couns*. 2010;80(3):288-92.

12 Personal communication, Jim Conway.

The Health Foundation is an independent charity working to continuously improve the quality of healthcare in the UK.

We want the UK to have a healthcare system of the highest possible quality – safe, effective, person centred, timely, efficient and equitable.

We believe that in order to achieve this, health services need to continually improve the way they work. We are here to inspire and create the space for people to make lasting improvements to health services.

Working at every level of the system, we aim to develop the technical skills, leadership, capacity and knowledge, and build the will for change, to secure lasting improvements to healthcare.