# Patient Safety and Engagement at the Frontlines of Healthcare

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#### **Abstract**

Since the release of the seminal work To Err Is Human in 1999, there has been widespread acknowledgement of the need to change our approach to patient safety in North America. Specifically, healthcare organizations must adopt a systems approach to patient safety, in which organizations take a comprehensive approach aimed at building resilient barriers and ensuring a culture of open communication and learning. Here in Canada, the patient safety movement gained momentum following the publication of the Canadian Adverse Events Study in 2004, which concluded that close to 40% of all hospital-associated adverse events were potentially preventable. Baker et al. (2004) argued for the need to modify the work environment of healthcare professionals to better ensure barriers were in place, as well as the need to improve communication and coordination among healthcare providers. The changes proposed a decade ago required greater healthcare worker engagement in patient safety and the creation of a culture of patient safety.

# **Patient Safety Culture**

Patient safety culture has been defined as "an integrated pattern of individual and organizational behaviour, based upon shared beliefs and values, that continuously seeks to minimize patient harm that may result from the processes of care delivery" (Kizer 1999). The creation of a positive safety culture involves promoting the desired healthcare provider attitudes and

perceptions through frontline provider participation in the setting of patient safety and organizational objectives, as well as through leadership to ensure stakeholder involvement. Research has previously shown the importance in engaging frontline healthcare providers for hospital performance, including correlations between work engagement, patient-centred care and safety culture (Lowe 2012). In addition, hospitals and healthcare organizations need to promote engagement on a number of levels, allowing frontline care providers to have input into decision-making processes, leadership structures and ownership of patient safety strategies. Lack of frontline engagement, especially with physicians, may explain some of the disparities seen between management perceptions of safety culture improvement and actual improvements seen in the trenches (Parand et al. 2011).

Given what we do know about a systems view of patient safety, why are we not providing more mechanisms for provider involvement in the setting of patient safety strategies? In this paper we will discuss where the road to frontline engagement has taken us since the release of the Canadian Adverse Events Study a decade ago, some of the challenges encountered along the way and where we need to go in the next 10 years.

# **Building a National Dialogue**

Since the establishment of the Canadian Patient Safety Institute (CPSI) in 2004, the organization endeavoured to provide healthcare organizations with evidence-based interventions aimed at assessing and improving the safety of care received by Canadians. CPSI's flagship program Safer Healthcare Now! (SHN) has especially helped to improve provider input and knowledge regarding patient safety practices at the frontline of healthcare. SHN has set 11 priority directions for Canadian healthcare organizations wishing to improve patient safety, with a number of them aimed directly at frontline provider engagement and activation, including medication reconciliation, safe surgery, infection prevention and control and rapid response teams (Safer Healthcare Now 2012). Frontline staff also have the opportunity to participate in the Patient Safety Education Program, designed to provide an interprofessional team of healthcare providers with the ability to be patient safety trainers within their organization (Canadian Patient Safety Institute 2012).

Accreditation Canada has also served to bring about national attention to the role that patient safety plays in promoting highquality and safe healthcare provision. Currently, Accreditation Canada has four required organizational practices relating to safety culture, including adverse events disclosure, adverse events reporting, client safety quarterly reporting and client safety-related prospective analysis (Accreditation Canada 2013). Accreditation results from 2008 to 2010 suggest that organizations are becoming more aware of the need to proactively ensure client safety and safety culture, with the greatest grounds of improvement being the use of prospective client safety analyses with a compliance increase of 30% over the three years studied (Accreditation Canada 2011). National results from the Patient Safety Culture Tool in 2009 also indicate that 71% of respondents (n = 35,901) gave their unit a positive overall grade on patient safety, while only 62% gave their organization a positive overall grade, suggesting that local process improvements at the frontline of care may be more readily seen (Mitchell 2012).

# **Patient Safety Culture Progress**

## **Perception surveys**

There have been a number of safety culture perception surveys used in healthcare within the past 10 years, including the Safety Attitudes Questionnaire (Sexton et al. 2004), the Stanford Instrument (Singer et al. 2003) and the Hospital Survey on Patient Safety Culture (Sorra and Nieva 2004). While these surveys have been widely used since their release, the surveys each have their own weaknesses that inhibit the ability for organizations to properly measure and evaluate frontline provider perceptions of patient safety culture. For example, these questionnaires tend to be rather lengthy in the number of survey items needed to complete the survey, as well as having sometimes low or non-existent reliability measures (Fleming 2005). However, measurement of provider perceptions, as well as psychometric properties of these survey instruments,

is improving. The Canadian Patient Safety Climate Survey (Can-PSCS) helps to overcome some of the issues that arise when using past safety culture surveys for a number of reasons: it has been used and tested in a variety of care settings, it has robust psychometric properties and it contains a small number of dimensions with only 19 items (Ginsburg et al. 2014). Although the Can-PSCS has good psychometric properties, it, like other perception surveys, lacks evidence of predictive validity. Additionally, Can-PSCS is now being used by Accreditation Canada across healthcare organizations through its Qmentum accreditation program, thereby allowing for direct comparisons and better tailoring of national education and intervention programs to suit the needs of Canadian hospitals and further employee engagement. Recently, due to feedback from participating healthcare organizations, Accreditation Canada has also started to provide additional direction on how to design and implement changes stemming from the use of the Can-PSCS survey.

#### **Frontline Provider Interventions**

There have been few intervention studies looking at frontline engagement in patient safety in the past decade. Within Canada, Ginsburg et al. (2005) found statistically significant improvements in nurse perceptions of safety culture following two patient safety workshops aimed at educating senior clinical nurses regarding adverse event rates, human factors principles, learning from errors and the importance of teamwork and communication. Research conducted in Atlantic Canada with 123 frontline healthcare providers showed that providers' perception of threat of adverse events and barriers versus benefits influences provider participation in organizational patient safety practices (Bishop and Boyle 2014). Furthermore, although many healthcare providers in the study agreed that patient safety was a priority, only 53 (43.1%) providers agreed that employees generally participate in the setting and implementation of patient safety practices, and only 32 (26.0%) agreed that employee suggestions for improving patient safety are listened to (Bishop 2012). Walsh et al. (2009) highlight the importance of engaging physicians in quality and safety practices while also accepting the inherent barriers that exist due to time, remuneration structure and autonomy. Encouraging a team approach and ensuring that physicians and other frontline providers are incorporated as leaders and change agents was also a major insight from the intervention, which speaks to the need to greater incorporate clinicians in the initial processes of implementation. Professional peer involvement can also have significant influence on physician perceptions of and involvement in patient safety behaviours (Wakefield et al. 2010). Ensuring that frontline providers, especially physicians, are engaged in safety leadership positions is vital to ensuring more widespread adoption of safety behaviours by healthcare professionals.

## **Organizational Interventions**

At the organizational level, leadership commitment and support has been identified as a required precursor to greater adoption of safety culture behaviours by employees (Griffiths 1985; Zohar 1980). At its core, patient safety requires organizational change. In their study of patient safety changes in the intensive care unit, Pronovost et al. (2008) stress the importance of engaging at levels of the organization, including executive leaders, team leaders and staff. The research team used a collaborative model that sought to engage, educate, execute and evaluate patient safety culture at all three employee levels, underpinning the importance of stakeholder engagement throughout the process of safety culture implementation. Interestingly, research has also shown that perceptions of quality and safety differ between frontline staff and managers who work in the same health setting (Parand et al. 2010). One way that these differences can be broached is through leadership walkarounds that can provide a means for many healthcare organizations to link senior leadership goals with the realities of frontline care (Budrevics and O'Neill 2005). Improving communication channels from the sharp end of healthcare to the hospital boardroom is vitally important when trying to align patient safety goals and can help to ensure that frontline staff feel that they not only have a voice in setting patient safety priorities, but also in contributing to overall system improvement.

Results from the Safer Patients Initiative in the UK found that while organization-wide impacts may have been small, gains were seen at the micro-system unit levels and within organizational safety culture perceptions (Health Foundation 2011). Perceptions of multi-professional engagement and communication were found to positively respond to the interventions undertaken during the initiative (Benn et al. 2009). However, physician engagement was still found to be an underlying issue. A qualitative follow-up study suggested a number of dimensions that affect physician engagement, including resource allocation and availability, perceptions of the purpose of the initiative and the presence of local champions (Parand et al. 2010). As such, while large-scale organizational initiatives may help to raise awareness of patient safety and improve certain dimensions of safety culture, local area improvements and clinical practice changes are still very much reliant on frontline education and engagement to ensure that organizational objectives are translated appropriately and improvements can be seen at the level of care.

# **Challenges Faced**

While many strides have been made with regards to patient safety and frontline engagement in the 10 years since the release of the Canadian Adverse Events Study, there undeniably remain a number of challenges to ensuring ongoing cultural changes.

## **Readiness for Change**

With the large-scale use of patient safety and quality initiatives set forth by national and international research organizations, often healthcare organizations have a difficult time adopting one-size-fits-all strategies when their organizational cultures are so disparate. If an organization's culture is resistant to change, or fails to set realistic expectations, then program failure is almost a foregone conclusion. As the end-users of change often determine its success, it is imperative to ensure that individual motivations and perceptions are properly activated for change to succeed (Armenakis and Harris 2009). The role of organizational support and self-efficacy are important dimensions to consider when undertaking organizational change and ensuring frontline engagement. Research has shown that a bottom-up leadership style and transformation approach is associated with a high level of organizational readiness, suggesting that organizations that do not already favour this leadership style may have trouble adopting patient safety strategies that require provider involvement (Burnett et al. 2010). The role of staff empowerment in promoting change is not a new concept (Kotter 2007); however, many healthcare organizations fail to understand the impact that having a disengaged and disenfranchised frontline can have on the success of patient safety initiatives. Engaging frontline employees at the beginning of the change process is essential but is often overlooked in an age where many change interventions are not locally produced.

### **Organizational Resources**

Although time and money are hard to come by these days, there is evidence that greater engagement can be garnered through the realignment of financial and organizational incentives (Walsh et al. 2009). In short, if you compensate healthcare providers for their roles in safety and quality initiatives, there is more impetus for engagement and ownership. Additionally, mutual expectations should be defined between healthcare providers and the organization to properly define the provider role within safety initiatives and to help bridge the gap of the traditional autonomous healthcare provider to the needed interdisciplinary teamwork approach of providing safe care (Taitz et al. 2012). However, these changes require healthcare organizations to adopt new financial structures and realignment of performance evaluation measures, which can be difficult and lengthy to implement.

## **Behavioural Commitment**

While organizational culture is often touted as a panacea to patient safety and frontline engagement issues, culture can also undermine change efforts and create blind spots within a healthcare organization. In the aftermath of the Bristol Royal Infirmary inquiry, researchers and investigators outlined what they saw as a culture of entrapment (Weick and Sutcliffe 2003). Essentially, although red flags abounded, the mindset of the organization was one where negative performance was explained away and dismissed (Weick and Sutcliffe 2003). As such, although frontline providers may well be engaged, they are engaged in behaviours and norms that are counteractive to the adoption of a safety culture. Collective mindfulness, the ability to have organization-wide awareness of potential failures and see opportunities for improvement, is a hallmark of high-reliability organizations (Weick et al. 2008). As such, healthcare organizations need to be aware of their current organizational culture, as well as the perceptions of frontline staff, to ensure that frontline engagement is supporting a culture of safety, or whether the prevailing culture is one that favours suppression.

## **Opportunities Ahead**

With patient safety rhetoric focusing on the need for leadership in promoting patient safety, the leadership roles of frontline staff have been diminished in favour of a more traditional senior leadership stance on what constitutes safe patient care. While many healthcare organizations in Canada have begun to collect data on safety culture dimensions and safety practices as they related to required organizational practices and SHN priority areas, we need to stop and think whether or not measurements are meaningful at the frontlines of care. How do frontline care providers feel about our current patient safety strategies? How well do we involve them in the setting of patient safety strategies, or are they merely consulted? Who are the patient safety leaders in our healthcare system? While many healthcare organizations measure employee engagement in a general sense, more emphasis on frontline provider engagement in patient safety, including the measurement of provider perceptions and organizational safety culture, is necessary to ensure that all members of the care team have defined roles in the provision of safe patient care. In fact, in many ways, the patient safety movement has moved beyond provider engagement due to the many difficulties organizations face and has gone directly to the patient. However, patient engagement in patient safety inherently requires frontline engagement in patient safety - if we are asking patients to question the care they are receiving, we will get nowhere if providers are unwilling to be challenged. Building professional capacities for frontline staff to become leaders in patient safety and improve interdisciplinary teamwork and communication is necessary if we are to see continuing improvements in the coming decade. HQ

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