Purpose: This study explored how hospitals can better support nurses to speak up when there is a patient care concern for the overall purpose of improving clinical outcomes, such as patient and safety and medical errors.

Medical errors occur on a regular basis in the hospital setting and are currently estimated as the third leading cause of death in the US (Makery & Daniel, 2016). Medical error is not unique to the US and has significant implications for healthcare on a global scale. For example, in Australia, medical errors have contributed to 18,000 deaths and even more disabilities (Weingart, Wilson, Gibberd & Harrison, 1999). Because medical errors have devastating effects that can lead to patient harm and death, initiatives to further understand this phenomenon are necessary (Leapfrog, 2016). Beyond patients and their families, it is well documented that medical errors negatively affect healthcare workers. Medical errors also result in unnecessary financial burdens totaling millions in the US, costs of which are then borne by healthcare systems (Andel, Davidow, Hollander, & Moreno, 2012).

Much of the healthcare industry’s attention to safety over the last decade or so can be credited to the 1999 Institute of Medicine (IOM) report entitled, To Err is Human. This pivotal IOM report stressed the occurrence of human error in the medical field.

It is well known that communication problems can increase the occurrence of medical errors. The Joint Commission, a healthcare accrediting body, determined that up to 80 percent of serious medical errors are due to issues with communication (2012). Other research studies have also shown that mistakes in interpersonal communication are associated with more than 60% of medication errors (Maxfield, Grenny, McMillan, Patterson, & Switzler, 2005).

Speaking up, a subset of communication, is recognized as a means of improving patient safety. As Kolbe et al. (2012) stated, “Speaking up is increasingly considered essential for error prevention and quality of care” (p. 3). Although it is recognized that a nurse’s willingness to speak up in the healthcare setting is paramount to properly functioning in the fundamental role as patient advocate to improve safety, studies consistently show that nurses are hesitant to speak up (Maxfield et al., 2010). Lyndon et al. (2012) found that 12 percent of nurses said they would not speak up even if they perceived a high probability of patient harm. Kaissi, Johnson and Kirschbaum (2003) found that while an overwhelming majority of nurses responded that members should speak up, 15 percent reported hesitancy in verbalizing safety concerns. Studies have identified a number of barriers that deter nurses from speaking up including fear of negative consequences, feelings of futility, and an individual’s lack of assertiveness (Kaissi, Johnson, & Kirschbaum, 2003; Schwappach & Gehring, 2014; Okuyama, 2014).

Methods: This research study used a mixed methods design and was conducted at one mid-sized community hospital. The explanatory sequential research design, a type of mixed methods study, requires quantitative analysis be concluded first, followed by qualitative to elaborate on the findings. Secondary data from the hospital's 2015 employee engagement (EE) survey were used and included hospital staff (n=321) from seven inpatient nursing units. Of these staff, 65% (n=208) were registered nurses (RNs), 30% (n=94) were nursing assistants and patient care techs, and the remaining 5% (n=19) were undefined. Spearman’s correlations were used to determine the strength of relationships between 63 survey questions and the outcome variable which focused on nurse willingness to speak up when there was a care concern.
Following the quantitative phase five interviewees (n=5) were selected using purposive sampling. All interviewees were RNs; two leaders and three bedside nurses. Interviews occurred over a four-day period in March 2017 and were conducted with one interviewee at a time. Using a semi-structured approach, each interview lasted about one hour. Coding was performed by the researcher with both unstructured and structured readings of the interview manuscript. A modified validity strategy was used and confirmed accuracy of coding.

**Results:** The Spearman’s correlation tests identified 42 of the questions on the EE survey as being moderately related and 21 questions as having strong relationships with speaking up. Results showed that the major factors influencing nurse willingness to speak up were perceptions regarding leadership, process improvement, quality, safety, and culture. Physician and staff relationships were found to have the lowest correlation with willingness to speak up.

Six major themes emerged from coding; they were professional integrity, charge and teaching, non-punitive, novice/young, positive recognition, and relationship. Analysis of theme emergence was conducted based on role, and may have signaled different priorities held by leaders versus bedside nurses. Theme frequency based on interview was also analyzed. These results showed evidence that specific influential experiences impacted the factors identified by individuals as being most important.

It is necessary that both leaders and organizations recognize their role in facilitating a nurse’s willingness to speak up because it has the potential to prevent medical error and improve patient safety. Knowledge of themes on the part of hospital leadership may help them be more receptive to and supportive of nurses when they speak up.

**Conclusion:** Speaking up is a means to improve patient safety yet it is not an established practice. While the decision to speak up is complex, organizational leadership at every level can encourage staff nurses to do so.

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**Title:**
Study Exploring How Hospitals Can Support Speaking Up to Reduce Error and Enhance Safety

**Keywords:**
communication, patient safety and speaking up

**References:**

Institute of Medicine. (1999). *To err is human: Building a safer health system.* Retrieved from
https://www.iom.edu/~/media/Files/Report%20Files/1999/To-Err-is
Human/To%20Err%20is%20Human%201999%20%20%20%20report%20brief.pdf

Joint Commission. (2012). *Sentinel Events (SE).* Retrieved from
http://www.jointcommission.org/assets/1/6/CAMH_2012_Update2_24_SE.pdf


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**Abstract Summary:**

Using a mixed methods approach, this study identified how hospitals can better support nurses to speak up when they are faced with patient safety concerns in the clinical setting.

**Content Outline:**

1. **Introduction:** Medical error is prevalent in healthcare on a global scale and nurses speaking up when they have concerns can be a means to improve patient safety.
   1. Medical error occurs on a regular basis in the hospital setting and was recently calculated as the third leading cause of death in the US ranking just below heart disease and cancer (Makery & Daniel, 2016).
      - Medical error has devastating effects that lead to patient harm and death (Leapfrog, 2016).
      - Beyond patients and their families, medical error negatively affects healthcare workers.
      - Medical error results in unnecessary financial burdens reaching into the millions and possibly trillions (Andel, Davidow, Hollander, & Moreno, 2012).
   2. While important points to make, the major focus of this research was how lack of communication, in particular speaking up, relates to medical error.
   3. Speaking up, a subset of communication whereby concerns are verbalized is accepted in the healthcare industry as a means for improving patient safety (Kolbe et al., 2012).
   4. And though it is recognized that a nurse’s willingness to speak up in the healthcare setting is paramount to his or her properly functioning in the fundamental role as patient advocate to influence safety, studies consistently show that nurses are hesitant to speak up (Maxfield et al., 2010).

2. Further understand the phenomenon of speaking up in the hospital setting and how hospitals can better support nurses to do so.
   1. The study employed a mixed-methods approach, with quantitative analysis of secondary data from an Employee Engagement (EE) survey and qualitative analysis of individual interviews.
   2. EE survey data was analyzed to calculate Spearman's correlations between survey items and the outcome variable which was focused on nurse willingness to speak up.
      - Results showed that the major factors influencing nurse willingness to speak up were perceptions regarding leadership, process improvement, quality, safety and culture.
      - Physician and staff relationships were found to have the lowest correlation with willingness to speak up.
   3. Interview questions were derived from the factors identified during quantitative analysis as influencing willingness to speak up and posed to five nurses, two leaders and three bedside nurses.
      - The six major themes that emerged were professional integrity, charge and teaching, non-punitive, novice/young, positive recognition, and relationship.
      - Theme emergence differed based on nurse role as a leader or bedside nurse.
Analysis of data showed evidence that influential experiences impact the factors identified by individuals as being most important.

4. Importance of recognizing that speaking up can help prevent medical error and improve patient safety and that leaders and organizations influence a nurse's decision to do so.

Conclusion: Speaking up is a means to impact patient safety yet it is not an established practice.

1. Hospitals can educate organization leadership at every level on the multiple factors nurses consider when deciding to speak up.
2. Future studies that narrow research on speaking up to nurses in specific groups or turn to an international focus are warranted.

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Author Summary: Nicole Hall has been in the healthcare industry for nearly 15 years as a labor and delivery nurse, educator, and quality professional. She has been published on topics such as adjunct clinical staff and ways to support nurse educators. Most recently she has completed her Doctorate of Education degree and moved to a university academic setting where she was hired to teach in the nursing undergraduate and graduate degree programs.