Exploring the Impact of Personal, Emotional, and Relational Elements That Influence the Decision to Speak Up During Critical Safety Moments

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EXPLORING THE IMPACT OF PERSONAL, EMOTIONAL, AND RELATIONAL ELEMENTS THAT INFLUENCE THE DECISION TO SPEAK UP DURING CRITICAL SAFETY MOMENTS

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education

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ABSTRACT


This qualitative study focused on exploring the relationships between personal, emotional, and relational elements and the decision to speak up during critical safety moments. A phenomenological single site case study was employed using semi structured interviews to examine the healthcare professionals’ stories. The participants shared their lived experiences when making the choice to speak up or not, and the consequences – positive and negative, for themselves, their patients, and the organization. Results showed the decision to speak up is complex. There are many components that influence the decision to raise voice in the face of known risk. Personal elements, including sense of competence and psychological safety, relational elements including team trust, and emotional elements - especially fear, anger, and anticipatory regret, play a role. Findings include implications for leaders to implement modeling and principles of transformational leadership to proactively create a culture where raising voice is not only accepted but expected.
# TABLE OF CONTENTS

**CHAPTER 1: INTRODUCTION**

- Problem Statement: To Err Is Indeed Human ........................................... 1
- Research Question .......................................................................................... 7
- Purpose and Significance of the Study ......................................................... 7
- Focus of the Study and Design Limitations ................................................. 15
- Background and Role of the Researcher .................................................... 20

- Researcher as Instrument ........................................................................... 20
- Axiology ........................................................................................................ 22
- Assumptions ................................................................................................... 26
- Definition of Relevant Terms ....................................................................... 28

- Definitions Related to Virtues and Courage ............................................. 28
- Working Definitions Related to Medical Error ......................................... 28
  - *Elements That Influence Speaking Up* .................................................. 31
  - *Specific Elements of Propensity* ............................................................. 32

**CHAPTER 2: LITERATURE REVIEW**

- The Decision to Speak Up .......................................................................... 46
- Elements of Speaking Up ............................................................................ 48

- Personal Elements ...................................................................................... 48
- Emotional Elements .................................................................................... 52
- Relational Elements ..................................................................................... 54
Courage as a Virtue: Physicians and Nurses ................................................................. 58
Nursing and Speaking Up ................................................................................................. 60
Diagnostic and Demographic Studies .............................................................................. 65
Failures in Patient Safety ............................................................................................... 67
Data Collection and Reporting Problems that Influence Safety ................................. 67
Contributing Quality Factors Which Impact Patient Safety ............................................ 68
Medical Error ................................................................................................................ 69
Disclosure of Error ......................................................................................................... 73
The Five Practices of Exemplary Leadership ................................................................... 80
Relation to Previous Work .............................................................................................. 81
Summary and Implications ............................................................................................. 82
CHAPTER 3: METHODS ................................................................................................. 83
CHAPTER 4: FINDINGS AND CONCLUSIONS ................................................................ 95
Description of Themes and Propositions ...................................................................... 98
Limitations of the Study ................................................................................................. 134
CHAPTER 5: DISCUSSION, IMPLICATIONS, AND CONCLUSIONS .............................. 138
Discussion of Findings ................................................................................................. 139
Application of Implications to Other Settings .............................................................. 151
Table 4 ......................................................................................................................... 153
Relationship of Findings to Previous Literature ............................................................. 153
Implications for Future Practice .................................................................................. 157
Implications for Future Research ................................................................................ 158
REFERENCES .............................................................................................................. 160
<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Logic model for the positive impact of courage on safety outcomes.</td>
<td>11</td>
</tr>
<tr>
<td>2. Kobuck model of moral courage implementation</td>
<td>76</td>
</tr>
<tr>
<td>3. CODE model</td>
<td>77</td>
</tr>
<tr>
<td>4. Transformational leadership model</td>
<td>80</td>
</tr>
<tr>
<td>5. Methodology Flow Model</td>
<td>89</td>
</tr>
<tr>
<td>6. Coding Process</td>
<td>132</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Summary of Codes</td>
<td>96</td>
</tr>
<tr>
<td>2. Personal Elements that support speak up</td>
<td>99</td>
</tr>
<tr>
<td>3. a-b. Emotional Elements that Support the Decision to Speak up or not</td>
<td>107</td>
</tr>
<tr>
<td>4. Relational Elements that Support the Decision to Speak up or not</td>
<td>122</td>
</tr>
<tr>
<td>5. Dichotomous List of Conditions that either support speaking up or not</td>
<td>128</td>
</tr>
<tr>
<td>6. Impacts of Covid on Patient Safety</td>
<td>144</td>
</tr>
<tr>
<td>7. Relationship of Findings to Previous Literature</td>
<td>153</td>
</tr>
</tbody>
</table>
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CHAPTER 1: INTRODUCTION

Problem Statement: To Err Is Indeed Human…

The issue of safe practices in U.S. hospitals initially came into focus in 1999, when the Institute for Medicine (IOM) (Kohn, Corrigan, & Donaldson, 2000) completed a landmark study reporting preventable medical errors in hospitals resulted in approximately 98,000 deaths across 33.6 million hospital admissions. In more recent studies as described above, it is estimated that 440,000 people die in the United States each year due to preventable medical error, attributing these mistakes to the third most common cause of death (Makary & Daniel, 2016). Although human error is a significant factor contributing to poor patient safety outcomes and medical errors, systemic problems such as fragmented and poorly coordinated care, reluctance to report incidents, fear of retaliation, lack of transparency of data, concern regarding litigation, and worry about accreditation and regulatory fallout are also issues in healthcare settings across the U.S. (Kohn et al., 2000; see also Chassin, 2013; Redhead, 2005). Some of the negative outcomes that result from these issues were the same in 1997 as they are today: rising healthcare costs due to adverse events and the subsequent need for repeat tests, readmissions, increased length of stay, rising insurance premiums, and the lack of trust in healthcare providers and institutions among the American public. Other indirect costs that result from poor safety outcomes in America include loss of income to patients and sometimes-preventable intermediate or long-range disabilities or other chronic healthcare challenges.
To grasp and frame the problem of errors made in healthcare settings across the United States, Kohn et al. (2000) made a series of recommendations. First, the authors stated that a national systemic approach to focus on, evaluate, and implement a change in practice to protect the American public is indicated (Gooden, Syed, Rutter, Dixon Hightower, & Kelley, 2014). “First do no harm” is part of the Hippocratic Oath that physicians take when they graduate from medical school and is an espoused value by healthcare professionals as part of an implicit promise made to their patients. Inaction to correct known risks is not an acceptable stance, and healthcare professionals, the government, and other stakeholders must work together to reduce medical error (Jaffe et al., 2007; Lachman, 2008). Research, tools, leadership, and protocols are necessary to address the problem of medical error and poor safety outcomes.

Second, Kohn et al. (2000) highlighted that a comprehensive approach to improve patient safety is needed. While healthcare systems are obliged to undertake the recommendations made in Crossing the Quality Chasm (Kohn et al., 2000) and to conduct due diligence to evaluate opportunities within their institutions, to implement a strategic plan to address the deficiencies, the inclusion of external partners and stakeholders is necessary. Because the delivery of healthcare involves the coordination of many elements, including regulatory and accreditation oversight, relationships with payers including private insurance companies as well as the Centers for Medicare and Medicaid (CMS) and collaboration with other providers who are involved in the care of the patient is important. Including these stakeholders is essential to providing safe and efficient care (Mosad, Jonas, & Valentina, 2014; Slater, Lawton, Armitage, Bibby, & Wright, 2012; Vian, Kohler, Forte, & Dimancesco, 2017).
The scope of the challenge to provide safe care is not limited to healthcare providers. For example, third party payers (i.e., insurance companies) can exert pressure on hospitals to put measures in place to improve their safety outcomes. Although the practice of insurance companies penalizing hospitals for unsafe care by reducing their reimbursement is increasingly prevalent in 2023, the initial movement toward consideration of what is now commonly referred to as *pay for performance* began because of the IOM study (Kohn et al., 2000; see also Chassin, 2013; Kerr, 2007; Redhead, 2005). Pay for performance entails third party payers evaluating patient outcomes against a set of metrics. These metrics include cost effectiveness and safety. For example, did a patient have to stay in the hospital for five extra days because (s)he got a hospital acquired infection? If (s)he did, the insurance company is unlikely to reimburse the hospital or the provider for that care episode.

Another example of exercising leverage to improve safety outcomes is the use of increased regulatory oversight (i.e., The Joint Commission, state and local health departments, and medical subspecialty boards such as the American College of Obstetrics and Gynecology), and the consequences that may result from non-compliance with these regulatory standards. The consequences include fines and failure to recertify or accredit institutions including hospitals. Consequences may be employed by these governing bodies because of poor patient and organizational outcomes that serve as a deterrent to inaction.

Third, Kohn et al. (2000) argued that the focus of examining error must shift from blaming individuals for mistakes to understanding what happened, why it happened, and how it can be prevented in the future. This is known as a key component of creating a *just culture* (Boysen, 2013; Reason, 1997). It is only then that people will feel safe to come forward and talk
openly about the factors that contribute to errors and unsafe conditions. Working towards the creation of a just culture includes several areas of consideration that should be addressed every time a medical error occurs. Incident reviewers should examine (1) the medical error itself, (2) conditions under which the error occurred, (3) the context in which the error occurred, and (4) the intent of the person(s) who committed the error. After such a review, organizational leaders develop an appropriate accountability plan that addresses both individual and systemic actions or consequences.

Voluntary and mandated reporting of safety incidents is also important to improve safety outcomes in hospitals (Boysen, 2013; see also Forrest, 2016; Redhead, 2005). Reporting creates data transparency that not only acts to hold healthcare organizations accountable for their safety outcomes, but also serves to educate the public, both professional and individual, about the safety factors present in healthcare in the United States today. Further, as we now see, the availability and use of data transparency drives competition between healthcare providers and organizations, as potential patients—consumers of healthcare—now have ready access to such information. It is estimated that 34% of healthcare consumers use online data to make choices about individual and organizational providers of their healthcare (Press Ganey and Associates, 2018).

In 2001, a subsequent IOM report, building on the 1999 study, highlighted a tremendous gap or “chasm” existing between the desired state of safety improvement initiatives in America and the actual safety infrastructure. Essentially, the report captured the dire state of safety conditions in U.S. hospitals and healthcare systems, in light of the desired conditions described in Kohn et al.’s (2000) recommendations. The report concluded that quality and safety could not
be improved by simply asking for more and greater participation from healthcare providers; rather, the entire healthcare system, including safety processes, would need an overhaul to achieve the desired outcome of safe patient care (IOM, 2001).

In the last two decades, significant efforts have aimed to improve safety processes, policies, procedures, reporting, data collection, transparency, and increased awareness and priority of improving safety outcomes for patients and organizations. Significant focus in terms of dollars spent, professional quality and safety jobs created, as well as data collected and publicly reported, has increased.

Yet ironically, we have not achieved a significant reduction of patient safety incidents in the United States, and in many ways, patient safety outcomes have NOT significantly improved since Kohn et al.’s (2000) original findings (Kellogg et al., 2017; see also Forrest, 2016). In fact, some studies suggest that patient safety outcomes are worsening (Makary & Daniel, 2016).

This trend is very puzzling, because health care providers currently have more policies, procedures, protocols, tracking, trending, and reporting mechanisms in place, as well as more data collection and transparency of reporting data. Many health care organizations have embraced the movement toward creating a just culture where individuals are encouraged to report incidents and openly discuss errors and unsafe conditions. Yet, in spite of these efforts, the same patterns in errors, and the same failures of process continue. Clearly, progress in our safety outcomes and error rate remain an opportunity for improvement (OFI) (Forrest, 2016; see also Eisenberg, 2017; Gooden et al., 2014; Kellogg et al., 2017).
The Importance of Speaking Up

In this study, I address the issue of reducing medical error through a focus on the individual unit of analysis. In particular, speaking up, the decision of an individual to talk with other when they see a potential medical error, is among the most important known factors in improving patient safety (Makary & Daniel, 2016).

My examination of the individual behavior of speaking up during critical safety moments provides increased appreciation of the contextual factors that have a significant impact on safety outcomes. As I will show in this dissertation, the decision to speak up is influenced by relational, personal, and emotional elements. For example, team trust is a relational factor that occurs when healthcare actors who feel supported by their teammates and may help people to speak up. A perceived sense of self efficacy is a personal element, also referred to as personal competence, that is especially important to some key players present in the critical safety moment. Emotional elements including fear, anger, and anticipatory regret can serve as powerful influences on the decision to speak up or not.

In sum, my work shows that while there are multiple reasons why medical errors persist, systemic and organizational improvement efforts are only part of the solution. Human decision making clearly impacts safety outcomes as well. The events and emotions that lead up to the moment an error is made are also factors. Some errors can be anticipated in advance of their occurrence, such as the risk of a wrong site surgery or medication mistakes. Policies and protocols exit to prevent these errors from happening, and, when followed, have a high degree of success in mitigation. But no organizational effort will be entirely effective if it does not support the ability of individual health care actors to share their professional judgment, ask questions,
and participate in critical decision-making processes to intervene and speak up in the moment when their perspectives can make a significant difference in patient outcomes.

**Research Question**

What are the personal, emotional, and relational elements that influence a member of the healthcare team to speak up in a critical moment? A *critical moment* occurs when a member of the healthcare team becomes aware that an error is about to occur, has occurred, or may occur. This is the moment in time that a decision must be made to speak up. An example would be when a medication is about to be given to the patient but someone notices that the marking on the medication packaging does not match the physician’s order. There are many examples of critical safety moments that occur in hospitals every day. These are critical moments as the safety outcome for the patient may be impacted by the decision to speak up.

**Purpose and Significance of the Study**

I examined individual level factors that have not been thoroughly studied and which provide some insight about why medical error continues to be pervasive.

Previous studies often focus on systemic and organizational flaws that contribute to poor safety outcomes. These flaws include policies, protocols and processes which are intended to minimize the chance for error to occur but frequently do not.

Thus, individua-level human factors also play a significant role in error. Many human factors, such as inattention, bias, and fatigue, create conditions under which errors are more likely to occur. I was interested in looking at other possible explanations for why errors continue to occur in situations where there are known measures to prevent or mitigate them.
For example, why, when a person sees that something dangerous is about to happen or may already occurring, do they not speak up to raise others’ awareness of the situation? When they do speak up, does speaking up change the outcome? Is the willingness to use voice to speak up during a critical safety moment a potential solution to reduce error in hospital procedural settings? If so, what inclines an individual to speak up? What prevents them from doing so? Specifically, what personal, relational, and emotional factors create a propensity for individuals to speak up during a critical moment to address a safety concern?

The exercise of the virtues of prudence, or practical wisdom, and courage, are critical links between the awareness of a critical safety incident and the decision to speak up. Many behaviors, leadership characteristics, and organizational virtues that contribute to safety outcomes; however, there can be a reluctance of healthcare leaders, systems, and providers to take the necessary steps to reduce error. Behaviors including teamwork, collaboration and participation in simulated learning can positively or negatively impact safety outcomes (Kothari et al., 2017). When the leadership style is just and compassionate, a positive impact is seen in safety outcomes resulting in nurses making fewer errors and reporting less emotional distress and distraction (Squires, Laschinger & Doran 2010). In healthcare organizations in which there is perceived empathy, safety outcomes are positive overall (Leana & Lamberton 2018).

Addressing these factors of influence can be costly and time-consuming for healthcare systems and leaders. Examining situations in which healthcare professionals have felt empowered to speak up as well as times where they have been unsupported to use voice was the focal point of this research. I examined critical incidents in which safety outcomes were impacted by acts of speaking up. This study may be relevant to healthcare professionals, hospital
systems, and leaders aiming to reduce medical error and improve quality of care through better safety outcomes. Understanding what personal, relational, and emotional factors influence an individual to speak up during a critical moment may facilitate the provision of a road map for leaders to guide the recruitment, training, and development of healthcare professionals who are more inclined to intervene to improve safety practice and outcomes in hospital settings. This aim is the most significant objective for the contribution of this research.

**Local Context**

My phenomenological study took place in a Midwestern United States hospital as a single-site, qualitative, applied case study. It was descriptive and based on retrospective findings. I explored the real-life problem of patient safety events in the context of the setting where they occurred. I share descriptive data as I tell the story of the safety culture in this hospital and I describe the experiences and perspectives of a targeted sample population.

I anticipated that personal, relational, and emotional elements would contribute to and likely drive the decision-making process during a critical moment to speak up to intervene and influence the outcome of a safety event.

**Conceptual Framework and Logic Model**

Figure 1 illustrates my logic model for examining the contextual factors that influence a person in a critical moment. For my research, the people in this setting who may or may not elect to step forward and speak up during a critical safety moment were actors working in a healthcare setting.

A *critical incident* occurs when a person (a) perceives there is a threat to patient safety because of an error or omission in a patient care episode that may result in harm, (b) may feel at
risk for raising the awareness of others to the unsafe condition, and (c) is faced with a choice about communicating their concern in spite of the potential for personal, social, or professional consequence.

The *decision to speak up* is when a person chooses to communicate to their perspectives. Speaking up can occur in real time during a critical safety moment, soon thereafter, which is further defined as latent speaking up, in discussion with the team or administration, or in writing concern, nonverbally with gestures to get the attention of others who are present, or in writing to document an incident. However, my research focused only on spoken and written communication as part of filing an incident report. Speaking up may be done verbally using words to convey concern, nonverbally with gestures to get the attention of others who are present, or in writing to document an incident. However, my research focused only on spoken and written communication.
Figure 1: Logic model depicting conceptual framework showing elements of influence on decision to speak up during critical moments.

Situational awareness is the perceived or actual risk to the actor and this decision is influenced by personal, relational, and emotional elements. The fear of personal, professional, or social consequence is a deterrent to speaking up (Edmondson, 2019; Kish-Gephart, Detert, Trevino, et al., 2009). Because it is documented that actors are frequently aware that an unsafe condition exists (Edmondson et al., 2016; Wong & Ginsburg, 2017), it is important to encourage and support speaking up to improve patient safety and save lives (Edmondson, 2003; Ginsburg & Bain, 2017).
Personal elements are the cognitive perceptions that might influence the decision to speak up. I anticipated that these would include perceived psychological safety defined as a shared belief by the team that it is safe to take interpersonal risks (Edmondson, A., 1999). The personal elements I investigated in this study were self-confidence, also known as self-efficacy, and psychological safety.

The importance of psychological safety as it influences trust and the healthcare team’s willingness to take risks is discussed at length in the literature (Edmondson, 2004; Edmondson et al., 2016; Roussin et al., 2018). Risk, defined as the perception of opportunity for consequence to reputation and relationships (Detert & Edmondson, 2005), is an important consideration when actors choose whether or not to speak up (Davenport et al., 2007; Detert & Edmondson, 2005). I expected consideration of the uncertainty of the influence of speaking up on organizational outcomes and the potential for damage to one’s professional reputation were factors that would carry considerable weight as the individual chooses to assume risk, or not. Also, self-efficacy, which in this context is the belief that an individual has something of worth to contribute to the safety discussion (Roussin et al., 2018), would impact an individual’s choice about whether to assume risk.

Relational elements include those factors that address the state of connections with others in the work context of the critical incident. I examined trust among the team and between individuals. Having a sense of trust is important when communicating with an individual or the team (Akbar Zaheer et al., 1998; Edmondson, 2004; Lee, 2017). Trust can be defined as the willingness to be vulnerable based on perception of the other person’s trustworthiness (Rashid & Edmondson, 2012).
Emotional elements address the internal state of a person at the moment of the critical incident. For my purposes, emotional elements include factors or phenomena that generate discrete emotions or emotional experiences. Examples of emotional factors include fear, anger, and anticipatory regret (Detert & Bruno, 2017). Fear can be defined as an emotion induced by a perceived danger or threat and it endangers psychological safety and trust (Edmondson, 2019). Anger, defined by the American Psychological Association (APA) as an emotion characterized by antagonism toward someone or something (in this context an organization, for example) the actor feels has deliberately done wrong to them (retrieved from apa.org, 2020). Anger can be an antecedent for growth and change or it can create destructive patterns of silence and withdrawal (Lachman, 1998). Anticipatory regret is described as knowing what you have to say may change the outcome of the situation and understanding the consequences of choosing to remain silent (Detert & Bruno, 2017).

Frustration and anger may be felt in response to knowing and observing that the policies and protocols are either being ignored or are not at the forefront of the healthcare team members’ minds and critical thinking process in the moment. During critical moments when the team is functioning at a high level and collaboration and communication are present, team members may feel a greater sense of psychological safety and trust (Edmondson, 1999, 2004). This may predispose them to be more inclined to speak up during a critical moment.

Speaking up is critical in a healthcare setting where the opportunity for error and the risk to patient safety are high. The stakes are often higher in a healthcare setting than they are in other settings given human life is at stake. My research was done in a hospital where there are hundreds of care episodes that occur every day and the potential for things to go wrong is
disturbing. Examples of particularly high-risk areas within a hospital context include labs, procedural areas including the operating room and labor and delivery, the pharmacy, the intensive care units, and the emergency room. While errors can occur anywhere, these are hospital settings where patient acuity is high, and the volume of care providers give increases the opportunity for miscommunication. Speaking up during a critical safety moment is especially important in these areas because the awareness of the unsafe condition or error can result in correction and avoidance of an adverse outcome, thus improving patient safety (Edmondson, 2003, 2015; Edmondson et al., 2016).

In this study, I refer to several professional roles who better define the context for speaking up. It is important for the reader to understand who the participants are in patient safety events, where speaking up is desired to raise awareness and concern about an unsafe action or situation.

The actors are the cast of people that comprise the group in a patient safety event. Those who communicate a concern or perspective are the speakers, and those present are the receivers of the speaking up action and include the offender(s) who is the target of communication.

I define the offender as the person who is engaged in unsafe behavior and/or who needs to be aware of and act on unsafe conditions. An example would be a surgeon who fails to confirm the right site before making the incision, i.e., the left leg, not the right. There are formal policies in place that must be followed in surgical procedures, and verbal confirmation of the correct surgical site in the operating room prior to incision is required. In this scenario, the surgeon is engaging in unsafe behavior. In a different example, the surgical instrument count, which must be done with two-party verification before and after the procedure, is off at the end.
It is determined there is a missing lap sponge. The policy dictates that everyone stop and find the missing sponge before the patient is sutured closed. When the surgeon is informed that the surgical instrument count is off and continues to suture and close, (s)he is the offender by virtue of being aware of an unsafe condition and yet ignoring it. It is my experience as a quality and safety professional that actors acknowledge often having observed an error or had a concern that one was about to occur but did not speak up.

**Focus of the Study and Design Limitations**

Because there are many factors that may influence safety outcomes in a hospital beyond those that I have listed, I chose to use a qualitative design to examine a full range of factors that might impact the decision to speak up on safety outcomes. I used personal, one-on-one interviews to collect stories of critical incidents. My goal was to collect stories in which participants either spoke up or did not speak up. The logic of this design allowed me to compare the factors that were active when actors spoke up with the factors that were present when the actors did not speak up. This comparison allowed for a clear differentiation of factors that make the difference for a person to speak up.

As indicated earlier, the scope of data collection in this study was limited to a single hospital case study. The hospital is a 900+ bed, tertiary care, level 1 trauma center located in the Midwestern United States. The location of the study provided a rich context for the exploration of personal, relational, and emotional elements that result in the propensity of a member of the healthcare team to speak up during critical moments and which can influence safety outcomes. The size and scope of the hospital practice provided many opportunities to collect information on
discrete critical incidents by eliciting feedback and analyzing safety data while maintaining a continuity of setting.

The focus in this research included both a scope of study as well as variable constraints. First, the scope was limited by the types of errors that I examined, where I gathered stories on three error types: negligence, egregious errors, and near misses.

*Negligence* is an error where there was a failure to execute a rule, policy, or procedure because of distraction or other issues that prevented due diligence in the moment (“Aviation Knowledge and Human Error,” n.d.).

*Egregious errors* are rule-based planning or execution errors where there is willful commission or omission of actions despite having rules in place and the knowledge that such an action or inaction may result in significant harm (The Joint Commission, 2018). Both negligent and egregious errors can result in a category of safety incidents classified as *sentinel events*. Sentinel events are defined as any unanticipated event in a healthcare setting resulting in serious physical or psychological injury to a patient or patients not related to the natural course of the patient’s illness (The Joint Commission, 2018). For example, a retained foreign object following surgery is a sentinel event because there are many national and hospital-specific guidelines, protocols, and policies that are designed to ensure that a verified count of all instruments is done before and after the procedure. If the count is wrong following the procedure and the object cannot be found, the patient is not sutured closed and should receive an x-ray to determine if the object was in fact left behind.
Near misses are situations where harm may have easily occurred but did not reach the patient, where conditions existed that could have predictably resulted in a bad outcome (The Joint Commission, 2018).

This design limitation was necessary to facilitate conversation and exploration of the elements that influence the decision to speak up in the moment. Therefore, I did not collect stories on unobservable errors such as slips and lapses that were not called out during a critical moment.

Second, the number of personal, relational, and emotional elements that I specifically asked about were limited to allow for a focused review commensurate with the purpose of the study. The personal, relational, and emotional elements of propensity frequently observed in healthcare settings served to guide the decision-making process about the most germane and influential construct variables. This study was limited to a hospital environment within the context of all healthcare settings.

In addition, I chose not to ask specific questions about the virtues that may be relevant to the decision to speak up. For example, the virtue courage is woven throughout the voice literature (>). When examining the impact of speaking up on patient safety outcomes, the virtue of prudence or practical wisdom also appears (>). Common sense decision-making, i.e., making choices based on what we know to be appropriate in the moment, is relevant. As self-efficacy is defined as the belief that one has something of value to contribute in a particular situation, prudence is germane. Other virtues can most certainly impact healthcare professionals throughout the hospital, including justice, honor, pride, and truthfulness (to name a few of Aristotle’s list of 12 moral virtues). A specific study of such virtues is beyond the scope of this
study and, therefore, intentionally excluded. However, the outcomes of this study are relevant virtue literature.

Additional design limitations over which I had no control included the organizational policies which may have influenced the data shared with me during the interviews. Further, people with whom I had a limited prior relationship could have been more reserved in what they were willing to share with me. Trust in the research process and the researcher was likely a factor in the actors’ decision to contribute to the study. Overall, the participants indicated they felt very comfortable with me and appeared to share their stories very freely.

There were also design limitations to my choice of utilizing the philosophical paradigm of qualitative inquiry and a constructivist and interpretivist framework which came from the philosophy of Edmund Husserl’s phenomenology paradigm. Although qualitative research is frequently critiqued as being less rigorous than quantitative research, this approach was a logical choice given the factors I chose to explore, which are the lived experiences of those actors in this case study setting who deal with patient safety almost constantly.

Recall bias was a consideration as many of the subjects’ recounted stories that happened a long time ago. I found that subjects seemed to have a vivid recall of the salient details of the critical safety moments they were describing. The minute details they could not recall were not relevant and the actors were able to identify which details were lost over the years. The essence of my research interest was to explore the influence of personal, relational, and emotional elements on the decision to speak up during critical safety moments. Exploring healthcare professional’s willingness to speak up can help improve our understanding of why safety outcomes are not improving despite many resources and efforts in place designed to improve
safety outcomes. As I explored how personal, emotional, and relational elements influenced the propensity of a person to speak up during a critical moment through the lens of the participants, much insight was gained. Unconscious bias on the part of the interviewer was accounted for by using an interview script to ensure consistency amongst the interviews. Subject bias was accounted for by having the participants review results and offer clarification.

Researcher subjectivity is both a strength and limitation given the challenge of personal bias.

There were no experimental controls present in this qualitative methods study, and the research was completed using a case study methodology where the phenomena of personal, relational, and emotional elements were examined. In addition, there was the limitation in my research design of single site study data being relevant and applicable to other hospital settings where culture will be variable. However, the absence of proof of generalizability does not mean the findings are not relevant to a broader constituency. The delivery of healthcare in a hospital setting is a complex process not easily reduced to numbers and statistical analysis. There is value in understanding the descriptive and narrative experience of healthcare professionals even in the absence of quantitative verification. Thus, these design limitations do not preclude the possibility that my findings may apply to other hospitals with similar operating parameters and demographics.

The culture of the organization was beyond the scope of this research design and could not be established, given I looked at team dynamics within the context of critical safety moments. While the participants provided a picture of the team culture they operate in, the patterns I observed could not be generalized to the organization based on my design.
My personal experience enhanced my confidence in the research design, given that I work in the field of patient safety full-time in a leadership role. Because my research was conducted through interviews, I did not anticipate that the scope of participants would limit the findings. Given that I know many of the subjects I interviewed, my researcher bias was a more pressing consideration. I managed this bias by (1) utilizing my dissertation co-chair’s perspective during data collection as a check-and-balance to verify findings, (2) reviewing key interpretations with the subjects that I interviewed, and (3) reviewing with my dissertation committee the consistency of procedures for conducting the qualitative analysis.

**Background and Role of the Researcher**

**Researcher as Instrument**

Reflexivity is an important concept for consideration when using a qualitative approach that is both reflective and iterative (Goleman et al., 2017; see also Goldstein, 2017). A brief examination of the researcher as an instrument is warranted. The biases I have as a researcher include a professional career in the field of quality and safety in healthcare. I am surrounded on a daily basis with the realities of patient safety outcomes. I have had the opportunity to see the positive and negative results for patients, providers, and leaders in a real-world context, and I collect, analyze, and interpret data and findings as a part of my daily work. Further, there is a teaching component to my work that predisposes me to create a case and curriculum for improving patient safety and reducing medical errors.

As the meaning of the narrative and historical data emerged, it was important to examine my training, assumptions, and biases. My full-time professional role is as the director of patient
safety and quality improvement in graduate medical education at Wright State University, Boonshoft School of Medicine. I therefore have a considerable amount of training in the subject and teach others both at the student and faculty level. I knew most of research participants to some extent, and my role as a researcher was disclosed.

While a foundational knowledge base in patient safety and quality improvement as it relates to medical error and a culture of safety in the hospital setting is important to consider, training and background in working with and understanding the elements which influence a member of the healthcare team to speak up during a critical moment is important as well. As a doctoral candidate pursuing an Ed.D. in organizational studies and leadership, I have training and background in leadership and organizational theory as well as exposure to the concepts of organizational virtues. If it were not for my passion about the topics as described, I would not have pursued this as a dissertation topic. With that understanding, I had no investment in the outcome of the study. The data gathered was sought in the context of the environment in which it was occurring; thus, a naturalistic approach was employed. As a naturalistic inquiry approach requires, I had an awareness of the existence of multiple, contextually bounded realities. The phenomena I examined, which in this case were personal, relational, and emotional elements that influence the decision to speak up, could only be understood within their setting. Plausible inferences were made; however, this falls short of meeting the criteria for establishing causality. My research design was quasi-experimental and allowed for defining the elements that were examined without the expectation of applying scientific control by manipulating the independent variable.
Participants included existing groups of healthcare team members functioning as a medical team providing patient care during a single episode of patient care, groups of healthcare professionals including the quality and safety department, senior hospital leadership including physicians and administrators, nursing teams at various levels throughout the organization, and selected individuals chosen for interviews based on their position in the hospital. Thus, random selection did not occur, and purposive sampling was utilized. This design method allowed for the inclusion of propositions which correlated emotional, relational, and personal elements that incline a person to speak up during a critical safety moment. A rigorous study design was not required or desired given the naturalistic inquiry approach, as the detailed design itself emerged and cascaded during the research process (Lincoln, 1985). The method that was used in support of this approach was semi structured interviewing. Although self-awareness and examination were an important part of the iterative and reflexive processes, acknowledgement of the potential shortcomings of these experiences and a plan to address them was important and was addressed with my committee. Discussion with my dissertation co-chair and confirming my understanding of the data collected with the subjects was used to ensure integrity.

Axiology

The role of values and ethics in research has special prominence in the context of qualitative studies (Klenke, 2014). The researcher is part of the construction of reality and what will come to be a shared and mutually agreed upon meaning at the end of the study. I aimed to improve process and reflection as well as policy around patient safety practices, thereby making hospitals safer places to receive care. My personal value of contributing to my profession, as well as safeguarding the patients we as healthcare professionals provide care for and support to,
is reflected in my study design, as it was focused on improving the safety of patient care. Because improving patient safety conditions and outcomes contributes to individual and societal good, my research was focused on exploring elements that positively contribute to reducing error and poor outcome. By looking at a combination of elements not previously studied, the possibility of contributing alternative solutions to the problem of patient safety existed.

Another important value that influenced my approach to and engagement in this study included the belief that most people are well intended and want to do the right thing. Particularly in the field of healthcare, people tend to be compassionate, caring, and have a strong desire to contribute to the process of physical and emotional healing. Understanding this underlying framework is highly relevant to appreciating why I aimed to explore the elements that influence the decision to speak up during critical moments. These are key elements that I hypothesize will have influence on patient safety outcomes in hospitals.

While I operated primarily as a researcher during this study, I am also a healthcare quality professional with a credential that binds me to a set of existing ethical standards. The Certified Professional in Healthcare Quality credential requires that I adhere to the National Association of Healthcare Quality (2017) ethical standards in my practice. These ethical standards include:

- A primary commitment to the health, well-being, and safety of patients while being mindful of confidentiality, relationships, performance improvement, and trust;
- To honor my moral obligation to all stakeholders including clients, patients, physicians, employees, healthcare team professionals, regulatory agents, organizations (hospitals in this case), and the public;
• To practice with honesty, integrity, and responsibility;
• To take appropriate required action in cases of incompetent, unethical, illegal, or impaired practice; and
• To honor and uphold all laws and to report cases of fraudulent, deceptive, or unethical behaviors.

By providing a set of guiding principles that clearly define my moral and ethical obligation to my profession as well as to the patients my organization serves, these ethical standards served as a foundation and underpinning of my research.

My training and experience with qualitative research is limited to the two advanced research methods classes I completed in my doctoral training and the research reviewed in this paper in preparation for creating and executing this study (Coffey & Atkinson, 1996; Creswell, Packendorff, Crevani, & Lindgren, 2010). As the data emerged, journaling and creating memos in ATLAS Ti. as well as including my dissertation co-chair in data exploration and discussion, was essential to promote and maintain the integrity, credibility, and trustworthiness of this research so that the potential for bias was raised and addressed.

Philosophical Paradigm

Ontology – The study looked at concrete outcomes of safety events and abstract ideas of the actors participating in them. Reality is internal to the knower (phenomenology). This underpinning provided the base for interpretation of data gathered through narrative inquiry and the transcendental experience as the story was told.

Epistemology – Interpretative and constructivist. The actors’ phenomena, which is their reality, was socially constructed and interpreted by the actors. There were many realities within
the case study. These realities were formed in interaction with other realities. Constructivism was linked to the theoretical perspective and ontology of interpretivism (Crotty, 1998). Understanding behavior and human interaction was derived from the process of sense-making (Weick, 1963). An individual’s lived experience, or phenomena, shed light on the ontology, or worldview, of how leaders and healthcare providers experience their world and interpret meaning as it relates to patient safety and how safety practices are influenced by personal, relational, and emotional factors of propensity that influence one’s choice to speak up.

There were multiple realities that existed within the same situation, as the participants socially constructed the meaning of their lived experience within the context of this case study. An example can be seen when doing an after-action case review where an incident report has been filed. There may have been ten people bearing witness to the same event in the hospital setting. Although there will almost certainly be some consensus on certain accounts of what happened and when, there will be discordant reports of various details. Reality is constructed by the people experiencing the phenomenon and is contextually bound based on a number of factors (Denzin & Lincoln, 2019). These factors may include things like where they were standing in the room, their professional discipline, their previous experiences with similar situations, their relationships with others in the room, and their values and professional training. Any or all of these variables served to influence their concentration and scope of focus. Creating truth and reality was based on social interaction and interpretation of their experience in the moment.

These meanings and how participants came to a sense of knowing were contextually bound and subject to change as the environment and cast of players changed. As Egnon and Guba (1979) proposed when they shared their model of naturalistic inquiry (Guba & Lincoln,
1981), using the real-world setting (in this case, a hospital) instead of a laboratory allows for examination of what happens to evolve naturally, which promotes themes and phenomena to be elicited rather than derived from experimental control or manipulation. It promotes inductive discovery and eventual analysis of social phenomena such as the demonstration of leadership through the exercise of raising concern, and the personal, relational, and emotional elements which influence the propensity of a person to speak up during a critical moment. These behaviors could then be observed through the lens of the participant and the researcher. The product generated is descriptive, and the data are primarily presented through words and pictures rather than numbers.

**Assumptions**

For the purposes of this study, I generally accepted the following conditions and assumptions:

1. Patient safety is a priority in hospitals.
2. Medical errors are undesirable, and efforts should be made to reduce and eliminate them.
3. Most people are well intended and want to do the right thing.
4. Virtuousness is the condition that exists when individuals aspire to be their best and (in this case) the choice to exercise virtuous behavior and speak up impact’s safety outcomes.
5. Organizational virtue will impact, positively or negatively, individual decisions to act with courage and prudence.
6. Leadership style influences organizational outcomes. In this case, the hospital is the organization and outcomes are related to patient safety.

7. Personal values impact the workplace culture, including the decisions made to exercise courage and prudence.

8. Secondary costs of errors include financial consequences and emotional toll on patients, healthcare providers, and leaders.

9. Individual behaviors influence organizational outcomes and can be changed.

10. While there are many variables that influence the safety culture in a hospital, this study is limited to examining key personal, relational, and emotional elements that influence the exercise of speaking up in critical moments and influence safety practices in hospitals.
Definition of Relevant Terms

Definitions Related to Virtues and Courage

Actor. The person exercising courage (Detert & Bruno, 2017).

Cardinal virtues. As defined by Aristotle, courage, justice, temperance, and prudence (Hackett & Wang, 2012).

Courage. Acting intentionally and voluntarily in the face of risks, threats, or obstacles in the pursuit of morally worthy goals (Gould, 2005).


Prudence. Practical wisdom and good judgment; works with all other virtues and is necessary for leadership (Pellegrino, 1995).

Workplace courage. An act that happens in the workplace done for a worthy cause despite significant risk perceivable in the moment to the actor (Detert & Bruno, 2017).

Working Definitions Related to Medical Error

Critical safety incident. A sudden unexpected event that puts the safety of the patient at risk.

Lapse. A failure that occurs most frequently due to cognition and memory. Examples might include forgetting to check vital signs on the hour or not recalling that the doctor asked for a call back if there were changes in certain lab levels (“Aviation Knowledge and Human Error,” n.d.).

Slip. Often includes recognition and selection failures where inattention frequently contributes to the error. For example, a nurse fails to recognize the onset of symptoms of sepsis.
or a pharmacist selects the wrong medication from a list of sound-alike, look-alike options in a computer-based drop box selection process (The Joint Commission, 2018).

*Negligence.* An error where there was a failure to execute a rule, policy, or procedure because of distraction or other issues that prevented due diligence in the moment (“Aviation Knowledge and Human Error,” n.d.).

*Egregious error.* A rule-based planning or execution error where there is willful commission or omission of actions despite having rules in place and the knowledge that such an action or inaction may result in significant harm (The Joint Commission, 2018).

*Near miss.* A situation where harm may have easily occurred but did not, where conditions existed that could have predictably resulted in a bad outcome (The Joint Commission, 2018).

*Commission.* Willful action (Merriam-webster.com).

*Omission.* Something that was neglected and left undone (Merriam-webster.com).

*Sentinel event.* A “never event;” something that should never happen as there are processes in place to firmly prevent it from occurring. Sentinel events in hospitals require reporting to The Joint Commission, a root cause analysis be performed, and any care provided in the context of such an event may not be billed to insurance or the patient (The Joint Commission, 2018).

*Preventable error.* Something that occurs when processes, systems, rules, and policies are in place to prevent the error from happening, yet failing to adhere to a guideline contributes to the error.
**Just culture.** A condition that exists when errors and mistakes are analyzed with a non-punitive approach, and where improving safety is the goal within the context of the belief that most people are well-intended and working hard to do the right thing. In this framing, people are more likely to be honest, transparent, forthcoming, and willing to be part of the discussion and the solution (Boysen, 2013).

**Organizational safety outcomes.** The results of the metrics an organization uses to measure its safety performance.

**Patient safety outcomes.** The results of the metrics used to measure patient safety.

**Adverse event.** A situation that results in an undesired outcome (The Joint Commission, 2018).

**Behavior.** The way in which one acts or conducts oneself, especially in relation to others (Merriam-Webster Dictionary, 2017).

**Safety culture.** The product of individual and group beliefs, values, attitudes, perceptions, competencies, and patterns of behavior that determine the organization’s commitment to quality and patient safety (The Joint Commission, 2018).

**Risk management.** A plan to prevent situations that can result in losses or liability to the organization. In a hospital setting, these situations can include but are not limited to patient privacy breaches, diagnostic, surgical or medication errors, and hazardous conditions (American Society for Healthcare Risk Management, 2017).

**Patient safety breach.** An act or omission that increases the risk of accidental or preventable injuries produced by medical care (Martinez et al., 2017).

**Stakeholder.** One who is affected by an outcome or course of action.
Third-party payer. A commercial or federal insurance organization that makes payment to a healthcare entity on behalf of a patient.

Pay for performance. A payment structure that incentivizes quality outcomes; value not volume driven (AHQR, 2018).

Morbidity. Ill health or condition; often reported in incidence and prevalence numbers but may be a single incident that occurred and may be a complication as a result of a medical error or incident; the condition of being ill, diseased, and unhealthy (The Centers for Disease Control and Prevention [CDC], 2018).

Mortality. Death; often reported in incidence and prevalence rates but, in this context, may be a single incident as a result of medical error or complication (CDC, 2018).

Healthcare team. Any professional who supports the provision of medical care to a patient, including but not limited to physicians, nurses, midlevel providers, therapists, and administrative support staff.

Elements That Influence Speaking Up

Leadership. Utilizing the process of influence to maximize the efforts of others toward the achievement of a greater good and optimizing organizational results (Goleman et al., 2017; see also Kumar, Adhish, & Reddy, 2015).

Transformational leadership. When one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality (Burns, 1978).
**Moral leadership.** A component of Burns’ (1978) definition of transformational leadership that includes being morally uplifting. There are four components of moral leadership which include setting high standards for emulation (idealized influence), inspiring motivation in followers with challenge and shared meaning and goals (inspirational motivation), generation of questioning assumptions and creative solutions (intellectual stimulation) and being altruistic and mentoring others (individualized consideration); (Bass & Steidlmeier, 1999).

**Leadership characteristics.** The behaviors, traits, styles, and theories leaders employ in their work that influence others.

**Courage.** Acting intentionally in the face of risks, threats, or obstacles in pursuit of a morally worthy goal (Gould, 2005; Koerner, 2014).

**Prudence.** Following Aristotle, practical wisdom that guides a person to choose what is right to achieve good (Haslam, 1991).

**Specific Elements of Propensity**

**Personal.**

**Self-efficacy.** Expectations of personal effectiveness which determine whether coping behavior will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and aversive experiences (Bandura, 1977).

**Competence.** Knowledge and skill acquired from direct experience, observation of others and the resulting consequences, (Bandura, 1977 & 1986).
Relational.

Collaboration. When a group of autonomous stakeholders of a problem engage in an interactive process using shared rules, norms, and structure to act or decide on an issue (Wood & Gray, 2001).

Sense of team. A feeling that members of a team are a community with personal interrelatedness in which they have belonging, they matter to each other, and they have a shared faith that their needs will be met through their commitment to each other (McMillan & Chavas, 1996).

Interpersonal trust. Confidence in or reliance on the reliability, predictability, and fairness of a person; it is relational, likely based on one’s experience with another (Zaheer, McEvily, & Perrone, 1998).

Organizational trust. Confidence in or reliance on reliability, predictability, and fairness of the organization; based on organizational behavior. Interpersonal trust does not automatically expand to the organization (Zaheer, McEvily, & Perrone, 1998).

Communication. The practice of producing and negotiating meaning which takes place in specific cultural, political, and social conditions (Shirato & Yell 1997).

Emotional.

Team psychological safety. A shared belief held by members of the team that the team is safe for interpersonal risk taking (Edmondson, 1999).

Individual psychological safety. Perception of consequences of taking interpersonal risk in a particular context (Edmondson, 1999).
Risk. Exposure to adverse event or circumstance with potential consequence; may be physical, social, psychological, economic, or occupational; necessary component of courage (Detert & Bruno, 2017).

Failure. Deviation from expected and desired results (Edmonson, 2001).

Emotional antecedents. Emotions that occur before the event (Burke & Cooper, 2012); in this case, prior to the exercise of voice and courage.

Fear. An unpleasant, often strong emotion caused by anticipation or awareness of danger (Miriam-Webster.com)

Anger. Feeling of annoyance, displeasure, or hostility (Miriam-Webster.com)

Anticipatory regret. Negative emotion experienced when realizing or imagining that a situation would have turned out differently if we had acted differently (Detert & Bruno, 2017; Zeelenberg, 1999).

Other definitions.

Policy. A set of ideas or a plan to generally guide people’s actions in particular situations that have been previously officially agreed to (CambridgeDictionary.com).

Protocol. A system of rules explaining expectations for conduct in certain formal conditions (e.g., a plan for a medical treatment; Merriam-Webster.com).

Process. A series of actions or steps taken to achieve a particular result (Merriam-Webster.com).

Speaking up (using voice). Upward directed communication serving to challenge the status quo to promote (promotive voice) process improvement (Edmondson, 2014).
Invited voice. In a group context, where individuals are invited to contribute and participate to make a decision or to solve a problem (Burke & Cooper, 2012).

Discretionary voice. An individual chooses to speak up in some situations and not in others (Burke & Cooper, 2012).

Prohibitive voice. Speaking up to stop something.

Silence. Withholding ideas, suggestions, and concerns about people, products, or processes that may have been communicated to someone with the authority to act (Kish-Gephart et al., 2009).

Organization of the Study

In Chapter 2, I review the literature pertaining to factors that influence the decision to speak up focusing on personal, relational, and emotional elements. Some review of the impact of courage exercised in the workplace on patient safety outcomes and prudence or practical wisdom related to decision-making during critical safety moments is important, as the discussion of these virtues is interwoven in the study of using voice and speaking up.

In Chapter 3, I present the research design for the qualitative methodology that I used to conduct the study. To reiterate, I gathered qualitative data through semi-structured interviews. Prior to the inception of my study, I sought and obtained approvals from the HIRC (Hospital Institutional Research Committee) and the Wright State University IRB. The analysis and correlation of themes in interview findings resulted in an implicit inductive approach to look at speaking up in a hospital-based procedural setting.
In Chapter 4 I present the results and findings of my qualitative study. I explain the relational, personal, and emotional elements that emerged through thematic analysis, and I highlight five factors that clearly play a role in helping people to speak up during a critical incident.

In Chapter 5, I explore limitations of the study results. I also address the implications and potential actions that can be taken as a result of this study.
CHAPTER 2: LITERATURE REVIEW

Introduction

In a study focusing on surgeons and resident physicians in training (Sur et al., 2016) communication during 122 surgical procedures was analyzed. The hierarchical difference between the trainees (residents) and supervising physicians was the most noted barrier to speaking up. The conclusion was that more research is needed to determine what other factors influence a person’s decision to speak up. Patient safety is truly a matter of life and death. Adverse outcomes, whether a result of negligence, error, or failure to ensure the proper safeguards and policies are in place, can create much harm to patients, families, organizations, healthcare providers, and the leaders who serve in the hospitals where they occur. The damage can be personal, professional, emotional, and financial. Although financial consequences can be devastating and are certainly worthy of mention, they are largely beyond the scope of this inquiry. In institutions like hospitals where the stakes are high every day and the intent is to provide and promote health and healing, it is also important to note that despite the role of human error in these adverse outcomes, the concept of just culture should prevail, acknowledging most people are well intended and want to do the right thing.

My literature search examined factors that contribute to patient safety outcomes and the safety culture that exists in U.S. hospitals. I reviewed what we know now as well as lesser-explored areas for future consideration. As previously mentioned, despite considerable effort and investment during the past 20 years to improve patient safety outcomes, there have not been
significant advances in the reduction of error (Aultman, 2008; Bonney, 2013; Edmonson, 2010, 2015; Karakas, Sarigollu, & Uygur, 2017; Lachman, 2007; McGee, 2009).

There has been a two-decade focus on process improvement, including the development of protocols, policies, and other guidelines. These recommendations serve to inform standards to guide the practice of healthcare professionals, as well as a multidisciplinary, collaborative effort to align government, private, and public-sector stakeholders. There has been an extensive collaboration of patient safety and quality improvement professionals who have a full-time responsibility to investigate and mitigate unfavorable outcomes. Because outcomes are not improving, other possible explanations for the lack of progress in decreasing adverse safety events must be considered.

**Theoretical Framework**

As discussed in chapter one’s conceptual framework, I posit there are personal, relational, and emotional elements which contribute to and likely drive the decision-making process during a critical moment to speak up to intervene and influence the outcome of a safety event.

Speaking up, in the context of this study, is the act of using voice to raise awareness about a safety concern. There may be perceived or actual risk to the actor and this decision is influenced by personal, relational, and emotional elements. My literature review focuses on these elements within the context of examining speaking up. These elements are color coded in my review and correspond to the color block in the logic model. Related concepts are also reviewed.

**Scope of Literature Review**
The scope of my review included patient safety literature, and anything related to the elements that I define as personal, relational, and emotional, which influence the decision to speak up during critical safety moments. Excluded from my review are non-U.S.-based studies where culture could have a significant influence on speaking up decision-making, specific demographic studies, and safety studies outside of the healthcare, automotive, and aeronautics industries. Although the level of analysis in this study is the individual, it is impossible to ignore the culture in which the healthcare team operates. Individual actions, behaviors, and choices are made in the context of a larger setting. Broad examination of the environmental factors is necessary to understand more fully and appreciate the contextual circumstances that contribute to patient safety outcomes.

My initial query included the keywords, combinations, and phrases specified below. I found over 870,000 total references available that hit on any one of the variables I described in my study, but no source that specifically addressed the combination of personal, relational, and emotional antecedents that effect an individual’s choice during critical safety moments to speak up and the subsequent impact on safety outcomes in hospitals. Further, while emotional antecedents to speaking up such as fear, anger, and anticipatory regret in the workplace were mentioned (Detert & Bruno 2017; Schulz, 2010), a specific combination of personal, relational, and emotional elements as they relate to the exercise of voice could not be found.

I conducted a review of the literature using multiple databases available through Wright State University including Access Medicine, BMJ Best Practice, Cambridge University Press, ProQuest Dissertation Database, Health and Psychosocial Instruments, Healthsource–Nursing and Academics, Medline (Ebsco), Medline (Pubmed), Psychology and Behavioral Science
Collection, Sage Journals, Ovid Journals, and Google Scholar. I cross-referenced sources found in Google Scholar with the Wright State University online library. The keyword query included patient safety, speaking up, using voice, organizational behaviors, organizational virtues, patient safety and leadership, patient safety and organizational values, organizational values in healthcare, organizational behaviors influencing a culture of safety in hospitals, safety culture in hospitals, factors influencing safety culture (also practices) in hospitals, best safety practices in high performing hospitals, lack of progress in improving safety outcomes in America, leadership characteristics/traits/styles/behaviors influencing outcomes in hospitals, and factors influencing safety outcomes in hospitals. I also searched risk management and safety practices, emotional antecedents to courage, emotions impacting courage, relational factors and courage, virtues impacting safety outcomes, self-confidence, training and courage, the effects of courage and prudence on patient safety, temperance and courage, trust/teamwork/collaboration/communication impact on courage, and impact on patient safety. Further, I searched Aristotle and moral values, the relationship between courage and prudence, the use of voice, and transformational leadership. Unless the research provided significant foundational value, work that is more recent was cited.

There is a paucity of literature available on emotional antecedents to speaking up and the impact of emotions on the choice to use voice at a particular point in time. Edmondson (1999; 2003; 2004) and Detert and Bruno (2017) briefly discussed fear and anger, while Detert and Bruno (2017) addressed anticipatory regret as an emotional antecedent that drives one to speak up. There are articles on the power of voice in healthcare settings (Aultman, 2008; Berlinger & Dietz, 2016; D’Agostino et al., 2017; MacDougall, 2016). There is also substantial literature on
the virtue of courage as well as courage in the workplace (Amundson, 2015; Aultman, 2008; Berger, 2015; Cavanagh & Moberg, 1999; Cole, 2017; Comer & Sekerka, 2018; Crigger & Godfrey, 2011; D’Agostino et al., 2017; D’Eon, 2018; Detert & Edmondson, 2005a; Edmondson, 2003; Edmondson & Feldman, 2002; Edmonson, 2010, 2013, 2015; Haidrani, 2017; Hall, Quick, & Hall, 2016; MacDougall, 2016; Quinn & Worline, 2008; Shelp, 1984, 1983; Worline, 2010, 2012; Worline & Dutton, 2017a). There is a fair amount written on the impact of teamwork, trust, collaboration, and communication on patient safety outcomes (Edmondson, 1999, 2003, 2004, 2015; Edmondson, Dillon, & Roloff, 2008; Engelland, 2018; Goleman, Boyatzis, & McKee, 2002; Lee, 2017; Rashid & Edmondson, 2012; Schippers, Edmondson, & West, 2014). Finally, self-confidence or self-efficacy as well as competence and training (personal factors) were briefly mentioned (Goethals & Allison, 2012; Goleman, Boyatzis, & Group, 1999; Hall et al., 2016; Oelke, Thurston, & Arthur, 2013), but not directly addressed as factors of propensity influencing the decision to speak up.

Review of Literature Strands

As I explored the various literature strands, it was difficult to neatly extract and separate themes and ideas. For example, the concepts of speaking up and courage are interwoven throughout the literature. Emotional antecedents (fear, anger, and anticipatory regret) are embedded in the review of the concepts of speaking up. I have organized the literature review thematically focused on predominant literature in relation to each concept while noting and appreciating the interrelationships.

Organization
The early literature, which identifies the problem of patient safety to inform the reader of the historical progression of the movement to improve safety in medicine in the U.S., is reviewed first. Other articles are thematically categorized so that both convergent and divergent data could be examined. The color-coded headings correspond to the element illustrated in my logic model.

**Critical Incidents- Historical Perspective of Patient Safety**

A look at the historical evolution of patient safety issues relates to my research question because, despite all the work done to improve outcomes, very little has changed in the last two decades. In fact, conditions are worsening. Therefore, it is important to explore other reasons to explain why there is a rise in the number of serious safety events and what might be done differently to influence results. In their landmark study, (Kohn et al., 2000) reported that preventable medical errors in hospitals in the U.S. result in 98,000 deaths each year across 33.6 million hospital admissions. The two-year meta-analysis study of secondary data was gleaned primarily from a 1984 Harvard medical practice study and a study done in 1992 with data from Utah and Colorado. “To Err is Human” (Kohn et al., 2000) also included data from Congress, government agencies, professional groups, insurance companies and regulatory and accrediting bodies. The collective results indicated that a major system overhaul was necessary to address improving patient safety outcomes from three perspectives: prevention, recognition, and mitigation. Examining processes, tasks, training, and environmental conditions that contribute to human error was essential. The study acknowledged that error could no longer be a problem studied only on an individual level. The culture and climate surrounding the discussion of medical error and patient safety was one of fear and mistrust. Concern regarding professional
disgrace, license loss or suspension, lawsuits, administrative blame, and personal shame were significant deterrents to creating and maintaining a culture of transparency. By examining medical error from a system perspective, the intention was to create what is now known as “just culture” (Boysen II, 2013) and encourage and reward open communication about conditions that create risk to patients. The next step was to identify what specifically needed to be examined to address the gap that existed between the current safety outcomes and the desired state.

Situational Awareness - Crossing the Quality Chasm (Crossing the Quality Chasm : A New Health System for the 21st Century, 2001) was published a year later and outlined specific recommendations for how to approach systemic change, which the study described as not just a gap but a chasm. The following is a high-level overview of recommendations from that study:

- A fundamental redesign of healthcare in the U.S. is indicated as care is poorly designed and fragmented resulting in underuse, misuse, and abuse of services. Healthcare disparities, which prohibit some of the neediest people from obtaining services, are rampant.

- Resident physicians who provide much of the care in U.S. hospitals today are under-supervised and working while fatigued, thus contributing to medical error.

- Patient care should be safe, effective, timely, patient-centered, efficient, and equitable.

- There are four key contributors to poor quality care: growing complexity and fragmentation of patient care, rapidly advancing technology, which presents an implementation challenge, an aging population with increased prevalence of chronic conditions, and information technology constraints.
• Reimbursement for services should include a quality component that must be met to receive payment.

• A mechanism to build accountability and mandated reporting of certain outcomes and events must be developed to ensure public safety and awareness.

**Current Practices to Address Patient Safety**

Over the past 20 years since these studies were published, all the requisite recommendations and mandates have been implemented. Processes for data collection and subsequent reporting of results are in place. Analysis and reporting of the findings take place at the individual hospital, healthcare system, and insurance and government levels. Reimbursement by Centers for Medicare and Medicaid (CMS) to hospitals for services provided has a quality component called value-based purchasing, where quality and safety metrics which tie back to the bullet point list of recommendations above are reported and scrutinized by CMS. The hospitals’ subsequent reimbursement is impacted by performance (Ryan et al., 2017). Recently, a number of private insurers (United Healthcare and Anthem Blue Cross Blue Shield) are following suit. The first 30 months of data did not show that value-based purchasing was improving quality outcomes (Ryan et al, 2017). Depending on the size of a hospital, millions of dollars are at risk every year for each organization. There is not only an incentive to earn back the dollars the facility billed for, but also the opportunity to earn additional dollars beyond because not all hospitals will earn back their money. So, the leftover pot of dollars is available as an incentive for (approximately) top decile performing hospitals to earn additional money based on their performance (Ryan et al., 2017). Hospitals are operating on the leanest margins in history. Every dollar counts so the
opportunity to compete for additional money is enticing. Yet and still, quality and safety outcomes are not improving (Makary & Daniel, 2016; Ryan et al., 2017).

In the journal article “Medical error: The third leading cause of death in the U.S.” (Makary & Daniel, 2016) the authors reported the way data are reported is a significant contributor resulting in the underreporting of the severity of the problem of medical error. The researchers contend that the initial number of 98,000 deaths in America due to medical error was underreported then and because medical error is not listed as a cause of death on death certificates in the U.S., the real problem is much more significant. Makary and Daniel (2016) go on to report that a 2004 study done by the Agency for Research and Quality, (AHRQ), the U.S. Department of Health and Human Services, (DHHS), and the Office of Inspector General (OIG), the actual number of deaths exceeds 400,000 deaths a year: more than four times the estimate of the IOM.

In the journal article “Why reporting is not enough: Improving the patient safety and quality act of 2005” Forrest (2016) describes a safety culture in the U.S. that has not improved since the landmark studies To Err is Human (Crossing the quality chasm : a new health system for the 21st century, 2001) and Crossing the Quality Chasm (Crossing the Quality Chasm : A New Health System for the 21st Century, 2001) were published. Forrest reports the actual annual deaths due to preventable medical errors in the U.S. are even higher than Makary and Daniel (2016) reported; 440,000 compared to 400,000. He describes the creation of Patient Safety Organizations, (PSOs), (Kellogg et al., 2017) which are designed to encourage hospitals to engage in voluntary reporting of adverse events in order to benefit from collaboration with other hospitals to facilitate learning and process improvement. This is currently a no-harm, no foul
agreement where the reporting of these events does not negatively affect the individuals, hospitals, or their reimbursement. Forrest (2016) asserts that reporting is important, but it is not enough. While he advocates for all hospitals to participate in PSOs, he reports that creating a culture of accountability by hospital leadership is difficult. Using checklists like the WHO surgical site checklist and focusing on process improvements to avoid staff creating workarounds to save time and resources when the existing processes are problematic and inefficient are important steps that must also be taken. Further, creating conditions that encourage healthcare providers to speak up to identify and prevent adverse events is critical. Forrest (2016) goes on to describe fear of professional reprisal, lack of trust, creating team conflict, lawsuits, and personal retribution as deterrents to speaking up. The author states that it is important to create conditions that provide the opportunity to hear the voice of those who are closest to these events.

**The Decision to Speak Up**

The end of Figure 1 illustrates the need to speak up. In research about speaking up for patient safety in healthcare, Okuyama et al. (2014) defines speaking up as healthcare workers raising concern and awareness of high-risk patient care situations for the protection of patient safety. For my research, the people in this setting who did or did not elect to step forward and speak up during a critical safety moment are actors and include anyone working in a healthcare setting. Speaking up occurs when a person (a) perceives there is a threat to patient safety because of an error or omission in a patient care episode that may result in harm, (b) may feel at risk for raising the awareness of others to the unsafe condition, and (c) chooses to communicate concern in spite of the potential for personal, social, or professional consequence. The act of speaking up can occur in real time during a critical safety moment, soon thereafter, which is further defined
as latent speaking up in discussion with the team or administration, or in writing as part of filing an incident report. While speaking up may be done verbally using words to convey concern, nonverbally using gestures to get the attention of others who are present, or in writing to document an incident, my research focuses only on spoken and written communication. The literature shows that speaking up can be an effective intervention to stop unsafe practices and raise awareness of conditions others may not be attuned to (Adams, 2016; Alingh et al., 2019; Hamric et al., 2015; Lachman, 2009; Martinez et al., 2017). Because we know that speaking up can contribute to safety outcomes, understanding more about what inclines one to speak up may help healthcare professionals work to create a culture where speaking up is supported. Speaking up after a critical safety moment may also occur. Incident reports can be made, critical conversations can be had with those who witnessed and/or participated in the event, and the power of those in leadership positions who may be able to affect change can be utilized.

In this study, I refer to several roles that define the context for speaking up and I will further organize my literature review by role. It is important for the reader to understand who the participants are in patient safety events where speaking up is desired to raise awareness and concern about an unsafe action or situation. The actors are the cast of people that comprise the group in a patient safety event. Those who communicate a concern or perspective are the speakers, and those present are the receivers of the speaking up action and include the offender(s) who is the target of communication. I will define the offender as the person who is engaged in unsafe behavior and/or who needs to be aware of and act on unsafe conditions. An example would be a surgeon who fails to confirm the right site before making the incision, i.e.,
the left leg not the right. There are formal policies in place that must be followed in surgical procedures, and verbal confirmation of the correct surgical site in the operating room prior to incision is required. In this scenario, the surgeon is engaging in unsafe behavior. In a different example, the surgical instrument count, which must be done with two-party verification before and after the procedure, is off at the end. It is determined that there is a missing lap sponge. The policy dictates that everyone stop and find the missing sponge before the patient is sutured closed. When the surgeon is informed that the surgical instrument count is off and continues to suture and close, (s)he is the offender by virtue of being aware of an unsafe condition and yet ignoring it.

Elements of Speaking Up

It is my experience as a quality and safety professional that actors acknowledge often having observed an error or had a concern that one was about to occur but did not speak up. Because it is documented that these actors are frequently aware that an unsafe condition exists, (Edmondson et al., 2016; Wong & Ginsburg, 2017) it is important to encourage and support speaking up to improve patient safety and save lives (Edmondson, 2003; Ginsburg & Bain, 2017).

Referring back to my logic model in Figure 1, I suggest there are a set of personal, relational, and emotional elements that influence an individual’s decision to speak up during a critical safety incident.

Personal Elements

As outlined in Figure 1, the personal elements explored in this study are self-efficacy (Goleman et al., 1999; Roussin et al., 2018) and psychological safety (Allan & Carroll, 2017;
Perceived psychological safety is defined as a shared belief by the team that it is safe to take interpersonal risks (Edmondson, A., 1999). Psychological safety, which includes the perception of risk to patient and self, threat, and fear of retaliation and relational consequences, is an important consideration as it likely influences the decision to speak up (Horrigan, 2017; Hudon, 2014; Kish-Gephart, Detert, Trevino, & Edmondson, 2009). Edmondson and Detert assert that self-preservation is the reason people remain silent (Detert & Edmondson, 2007). The importance of psychological safety as it influences trust and the healthcare team’s willingness to take risks is discussed at length in the literature (Edmondson, 2004; Edmondson et al., 2016; Roussin et al., 2018). Risk, a component of psychological safety, may be defined as the perception of opportunity for consequence to reputation and relationships (Detert & Edmondson, 2005). Another definition of risk is exposure to an adverse event or circumstance with potential consequences. These consequences may be physical, social, psychological, economic, or occupational, and risk is a necessary component of courage (Detert & Bruno, 2017). Perception of risk is an important consideration as actors choose whether to speak up (Davenport et al., 2007; Detert & Edmondson, 2005). Self-efficacy, defined as the belief that one is competent and therefore has something of value to add to a situation, can be a deterrent of fear (Roussin et al., 2018).

In the case of exercising voice during a critical safety moment, the risks in the literature that I address are psychological: the risk of reputation, career impact, work relationships, trust, and possible retaliation, which can include financial harm. Especially under conditions that require challenging authority, personal factors such as psychological safety and self-efficacy
may become a consideration for the participant as (s)he weighs the risks and benefits of speaking up. For example, in a scenario where a nurse or technician is speaking up to a physician, the action may result in personal, relational, or emotional consequences. Examples of consequences include peer disapproval, professional scrutiny, and, in severe cases, economic punishment by loss of wages or employment. This decision to speak up becomes more complex as an individual weighs the morally right choice of advocating for the patient and speaking up against the option for personal preservation (Aultman J, 2008; Bagozzi et al., 2013). Risk is inherent in every industry, but especially in healthcare where the stakes are high and the opportunity for error is significant, thereby making it a priority to proactively manage the risk of loss to the organization (American Society for Healthcare Risk Management, 2017).

Psychological risk occurs when a person perceives there is danger in a situation where they feel they are in a double-bind and choosing to speak up (promotive voice), or remain quiet; both have consequences (Detert & Edmondson, 2005b). Speaking up after the fact or using latent voice can still be risky but may be easier than confronting the issue publicly in the moment (Detert & Edmondson, 2005a). Fear and concern about retaliation presents a barrier to a person making a choice about speaking up (Detert & Edmondson, 2007). Self-censorship is assumed to be a safe choice and is frequently the default position chosen (Detert & Edmondson 2011). Risk during care transitions poses a number of threats to the patient and generally involves a large number of healthcare providers, so risk during these periods can be especially pronounced (Kieke, 2016). Perception of character strength (efficacy) can have an impact on an individual’s decision to accept risk, use voice, and speak up as an exercise of courage (Macatee, Young & Kashdan, 2015). Taking a risk on behalf of another demonstrates social courage and caring; this
action may have greater consequence in the workplace (Meyer, 2009). Silence produced by fear happens when the perceived risk is too great to take (Kish-Gephart, Detert, & Edmondson 2009). Taking a risk to trust a multi-entity team is especially challenging but not impossible; interpersonal trust does not automatically translate to team trust (Rashid & Edmondson, 2012).

Consideration of the uncertainty of the influence of speaking up on organizational outcomes and the potential for damage to one’s professional reputation are factors that carry considerable weight as the individual chooses to assume risk, or not. Individuals make choices about whether to speak up based on their sense of personal psychological safety as well as whether they perceive the team as a safe and supportive entity. Personal trust does not always translate to a sense of psychological safety in work teams. Team behavior can change the dynamic of trust, thus bolstering or eroding one’s sense of psychological safety as teams learn together (Edmondson, 1999). Psychological safety is an important component for learning organizations who prize collective learning and progress. This team learning is viewed through a group-level lens, not on an individual basis, and team debriefs are an important part of the team learning process (Edmondson, 2004). Psychological safety in healthcare organizations can have a set of challenges unique to the field. Because the stakes in healthcare are very high and the risk to a patient’s well-being poses uniquely serious consequences, the psychological burden of trust and teamwork is significant. The same or similar is true in educational settings because of the importance of and responsibility for teaching others (Edmondson, Higgins, Singer, & Weiner, 2016). Accepting psychological risk in the pursuit of caring for others may be more acceptable to some people who value the importance of extending oneself to others (Meyer, 2009). In healthcare, surgery is a field where burnout rates are very high. The high-risk procedural nature
of the care they deliver requires teamwork and trust. Feeling comfortable taking risks to address problems and confront situations as they arise is important and in the absence of feeling psychologically safe, may contribute to burnout (Swendiman, Edmondson, & Mahmoud, 2018).

**Emotional Elements**

Figure 1 also draws attention to the literature about emotions in the workplace and emotional intelligence as it relates to self-regulation and leadership is not hard to find (Fineman, 2000; Goleman et al., 1999, 2002; Goleman & Boyatzis, 2017; Lord, Klimoski, & Kanfer, 2002; Mazzone, 2014; Peter, 2017; Rafaeli & Worline, 2001; Scherer, 2001; Segon & Booth, 2015; Tee, 2015). Emotions in the workplace can serve to facilitate empathy, compassion, and awareness (Goleman et al., 1999, 2002; Lord et al., 2002). Goleman defines emotional intelligence as being comprised of four domains: self-awareness, self-management, social awareness, and relationship management. Emotional competency can also drive change and visionary leadership (Goleman & Boyatzis, 2017), influencing the choice to take an interpersonal risk by speaking up during a critical moment as a manifestation of courage.

An *emotional response* may occur as an antecedent to the decision to speak up. (Carnevale et al., 2018; Fineman, 2000; Kirrane et al., 2017). Emotional factors that affect the speaking up decision include fear, anger, and anticipatory regret.

Fear (Edmondson, 2019; Hudon, 2014; Kish-Gephart, Detert, Treviño, et al., 2009) is a nearly universally agreed upon condition that must exist in order to exercise courage (Beck, Emery, & Greenberg, 1985), anger (Lachman, 1998; Purdy et al., 2007; Schwappach & Gehringer, 2014; Tiffany Taylor & Barbara J. Risman, 2006). Fear can be defined as an emotion induced by
a perceived danger or threat, and it endangers psychological safety and trust (Edmondson, 2019). Fear of retaliation, hierarchy, professional reputation, and trust are phenomena frequently mentioned (Adams, 2016; Alingh et al., 2019; Berlinger & Dietz, 2016; Bert Schreurs et al., 2015; Horrigan, 2017; Kish-Gephart, Detert, Trevino, et al., 2009). The fear of personal, professional, or social consequence is a deterrent to speaking up (Edmondson, 2019; Kish-Gephart, Detert, Trevino, et al., 2009). Kish-Gephart, Detert, Edmondson, and Trevino (2009) report that fear is the single largest underlying factor that results in people’s silence (Kish-Gephart, Detert, Trevino, et al., 2009). The authors go on to assert that socialization and habituated silence as well as threat assessment are powerful determinants that affect one’s decision to speak up. Fear is a strong and compelling emotion that drives personal and professional decision-making (Bagozzi et al., 2013; Crossan et al., 2013; Group Process in the Challenger Launch Decision (A), 2002; Horrigan, 2017; Kish-Gephart, Detert, Treviño, et al., 2009; Ordóñez & Connolly, 2000). Fear can be created by a lack of trust, and fear in the perceived absence of compassion can produce anxiety in the workplace (Russell Mannion & Huw TO Davies, 2015; Schwappach & Gehring, 2014). Anxiety and fear due to feeling intimidated and bullied can have a paralyzing effect on the actor which may perpetuate silence (Lachman, 2014; MacMahon et al., 2018). Anxiety as a condition related to burnout and fatigue of healthcare workers is a positive indicator of patient safety issues and reluctance to discuss them (Entwistle et al., 2010; N. Hall et al., 2018; S. Hall et al., 2016; Swendiman et al., 2018). Anxiety experienced while working within the interprofessional team in healthcare can reduce speaking up action (Edmonson, 2003).
Anger, defined by the APA as an emotion characterized by antagonism toward someone or something (in this context, an organization, for example), you feel has deliberately done wrong to you (retrieved from apa.org 2020). Anger can be an antecedent for growth and change or it can create destructive patterns of silence and withdrawal (Schwappach & Gehring, 2014). While anger may be perceived as a negative emotion, there is research that supports when a person experiences anger in the healthcare context of endangering a patient with unsafe practice, a sense of social injustice can give rise to speaking up behavior, even in spite of perceived personal, relational, or emotional consequences (Bocchiaro et al., 2012; Tiffany Taylor & Barbara J. Risman, 2006). Anticipatory regret is described as knowing what you have to say may change the outcome of the situation and understanding the consequences of choosing to remain silent (Detert & Bruno, 2017).

Situational variables that create tension and evoke emotion can emerge. Emotional antecedents will produce one of two responses. Either the healthcare team member will overcome the fear and avoidance instinct and speak up, or the individual will act in a self-preservation manner that reduces or eliminates the risk and threat of social disapproval, relational consequences, and workplace conflict (Detert & Edmondson, 2011).

**Relational Elements**

The relational elements indicated in Figure 1 may include several themes. Speaking up may require courage because it carries a risk involving *relational elements* including trust and the fear of professional, personal, and social consequence (Pury et al., 2007). Relational elements include interpersonal and team trust. Having a sense of trust is important when communicating

Other conditions which impact sense of team and trust and may evoke an emotional response and incline or dissuade a person from speaking up include the presence of other healthcare providers who may have a negative impact on the team dynamic, as well as hospital pressures to stay on time and move patients through the procedure and recovery process in order to increase revenue (Blanchfield, Demehin, Cummings, Ferris, & Meyer, 2018; Hill, 2002).

Trust can be defined as the willingness to be vulnerable based on perception of the other persons trustworthiness (Edmondson, 2004). Finally, while trust is a dimension that can be examined independently, there is a great deal of literature that discusses trust as a factor which decreases fear and increases a person’s propensity to speak up to improve patient safety outcomes (Jones, 2015; Martinez et al., 2017; McComb et al., 2017; Morrow et al., 2016; Schmitt et al., 2009)

**Contextually Related Concepts**

**Actors Roles in a Critical Safety Moment**

**Physicians and Speaking Up**

There were a number of physician-based publications that discussed their perspective on patient safety and speaking up (Lee, 2017; Norris, 2016; Shelp, 1983, 1984; Shelp et al., 1981). Lee (2017) wrote about the transformational journey of Nationwide Children’s Hospital as they endeavored to create physician leaders (Norris, 2016). Physicians using performance data to regain public trust and confidence and to improve safety culture and transparency were
positively received. The focus of the study was the importance of morality and courage in medicine especially as it relates to relationships with patients, asserting that clinical outcomes deteriorate in the absence of courage and physician presence (Shelp 1983, 1984; Shelp et al., 1981).

In a study that looked at effective communication among providers in the operating room where oncology patients were having surgery (D’Agostino et al., 2017), themes elicited included role relations and hierarchy, staff rapport, perceived competence, perceived efficacy of speaking up, staff personality, fear of retaliation, institutional regulations, and time pressure. Findings suggest training has potential to improve team communication.

In a related study, results showed that physicians may in fact be most reticent to speak up to their peers (Srivastava, 2013). In an empirical study done to examine using one’s voice (speaking up) in the context of courage in physician patient relationships (Shelp, 1984), results indicated that relational factors such as fear, trust, and safety impact both the patient and the physicians decision to speak up in the moment.

In a study done by Northwestern University’s Feinberg School of Medicine in collaboration with University of Chicago’s pediatric hospital, similar results are found (Eppich, 2015). Pervasive failure of clinicians to speak up during critical safety moments was observed. Factors noted as contributing to the decision to speak up were social authority and hierarchy structure, as well as previous experience with disruptive and rude behavior. Another study examined speaking up behaviors of physicians (anesthesiologists) and nurses in simulated procedural learning situations (Weiss et al., 2014). Participants’ choices to speak up or not were analyzed. There was not a statistical difference between the numbers of physicians who spoke up
verses nurses, suggesting perhaps that hierarchy may not play as large a role as previously thought.

In a study of secondary data gathered from a search of Medline, evidence-based medicine reviews, and PsycINFO databases (Pattni et al., 2019), terms related to challenging authority, speaking up, communication, patient safety, gradients, and hierarchy were examined. The search identified 4,822 publications, out of which 31 multidisciplinary studies were included. The study concluded that barriers and enablers to speaking up vary and may be modified within institutions; however, education regarding the importance of speaking up will need to accompany these modifications for sustained change.

Speaking up as a manifestation of courage is examined in a number of articles (Aultman J, 2008; Berger, 2015; Comer & Sekerka, 2015; Fugelli, 1999; Horrigan, 2017; Jarosz, 2017; Lachman, 2007, 2010). There are common themes in these research articles, which include facing the potential repercussions for exercising voice and the contextual factors which often influence an individual’s decision to speak up. Nursing is highlighted in these examples but the cast of those involved does extend beyond the profession. There are also differences. Aultman’s (2008) research suggests there is inclination to rally support and mobilize collective voice, whereas Berger’s (2015) work suggests that evaluating what is at stake is a more important determinant. Fugelli (1999) discusses speaking up as being only one of many acts of courage used to improve patient care by challenging the status quo. Comer and Sekerka (2015) approach speaking up from the vantage point of understanding the antecedents of using voice after a demoralizing organizational action. Mobilizing the courage to speak up is more likely when there is a perceived injustice.
A new approach to examining speaking up behavior was developed by Martinez et al. (2017) by creating two scales. The first one was designed to measure climate for speaking up about traditional patient safety concerns (SUC-Safe). Some examples include improper sterile techniques, incomplete transitions of care handoffs, and observed non-compliance of safety steps in a process. The second scale focuses on perceptions of speaking up about professionalism-related safety concerns (SUC-Prof), such as covering up an error, false documentation, or disruptive behavior. Using a multivariate analysis, indicators of low speaking up behavior included resident physicians using upward voice, lack of understanding of the potential impact not using voice may have, and perception that speaking up is unlikely to change the outcome. Speaking up behaviors occurred less frequently in instances of professionalism concerns than they did in situations where safety conditions were under scrutiny.

**Courage as a Virtue: Physicians and Nurses**

While this literature does not focus exclusively on physicians and nurses, there is frequent mention of the concepts as they relate to the healthcare profession. Curzer (1997) wrote about Aristotle’s perspective on Nicomachean ethics and the virtue of courage. Courage as a virtue can be learned if the learner is ready and is developed by habituation (Curzer, 1997). How did Curzer come up with this finding? The desire to act virtuously comes from pleasure derived by engaging in courageous acts. However, exercising the virtue of courage may be best learned when there is pain as a result of not choosing courageous action (Curzer, 2002). Courage is a skill that can be learned and developed over time (Reardon, 2007). Courage is learned over time through the process of pushing beyond personal struggle, and courage positively impacts
interpersonal and intrapersonal relationships (Finfgeld, 1999). There is a positive correlation between emotional intelligence and courage (Segon & Booth, 2015) and there are strategies required for the exercise of moral courage (Lachman, 2010). The strategies include engaging leadership in moral and ethical discussions, creating and developing strong partnerships and collaborations in the workplace, and providing education in the workplace about moral courage. Leaders make conscious choices about ethical practice and moral courage, and those choices are evident to those who work in the organization (McMurray, 2005).

Morally courageous behaviors exhibited in the workplace are a significant asset to organizations as they positively impact culture (Worline & Duton, 2017b; Pury & Lopez, 2010). Ethical choices in the workplace where the exercise of courage is weighed against the ramifications of not speaking up are difficult and not uncommon in workplace settings (Lachman, 2009). Workplace courage differs from personal courage as the stakes may be higher in terms of reputation and professional and financial consequences (Pury & Lopez, 2007). There are many challenges associated with acting courageously which include fear of consequences and social ostracism (Sekera & Bagozzi, 2007). Further, demonstrations of workplace courage are not always successful in terms of resulting in the desired outcome (Pury & Hensel, 2010). There are factors that drive the movement from a desire to act (courageously) and the decision to do so (Sekera, 2007). In organizations where there are leaders who lead with values of positivity and virtue, there is high performance (Sekera, 2007). Anger, ethical culture, and patient safety can drive the decision to act with courage, which, for the purpose of this study, is seen as the act of speaking up in healthcare organizations (Lachman, 1998; 2006 & 2007).
Delivering compassionate care can involve the need to be courageous on behalf of the patient (Worline & Dutton, 2017a & b). Organizations can act with values, virtues, and vision much like people do (Pruza, 2001). Healthcare organizations can be transformed by virtuous character rooted in truthfulness and vision (Persky, 2012). Virtues of particular importance are prudence, justice, and fortitude (Cavanaugh, 1999). Prudence facilitates wisdom about what is prioritized. Justice helps to ensure honesty, and fortitude provides resilience for healthcare organizations to remain steadfast in the face of constantly changing expectations and regulations. There are many ethical challenges in healthcare, like choosing to confront a doctor or nurse about an unsafe practice or whistleblowing about unsafe practices across the organization (Lachman, 2008c; 2009 & 2010). Being a physician, in particular, requires courage to manage patients, administrators, families, and clinical decisions for which there are no easy answers (Fugellie, 1999). There is a toll taken on healthcare providers who routinely make choices about exercising moral courage and ethical practice in terms of moral distress, moral residue, or the aftermath of tough choices, and resilience can be strengthened or eroded (Lachman, 2016b).

**Nursing and Speaking Up**

Much of the voice literature on speaking up is centered on the role of nurses on patient safety outcomes, including using voice and looking at speaking up as a manifestation of courage (Hardin, Dutton, & Worline, 2017; Lachman, 2008, 2016; Lilius et al., 2008; Munro & Savel, 2015; Murabito, 2016; Quinn & Worline, 2008; Worline, 2012; Worline & Dutton, 2017). Nursing errors frequently occur due to being overworked and distracted, failing to confirm physician orders, and failing to call out high-risk situations for fear of reprisal.
Nurses have a unique and important perspective to share on patient safety, as they are responsible for the majority of the patient’s care. There is little divergence in the literature reviewed. Nurses are frequently in the position to observe safety concerns and have the opportunity, perhaps even moral duty, to call it out (Aultman, 2008; Bagozzi, Sekerka, Hill, & Sguera, 2013; Bonney, 2013; Comer & Sekera, 2018; Edmonson, 2010; Kobuck, 2015). Based on the literature findings, nursing as a profession seems to be moving toward a moral courage model where the expectations of speaking up as part of a duty to patients is becoming more common. Indeed, much of the literature cited has been written in the past five years.

Amy Edmondson, Monica Worline and Vicki Lachman are three key contributors to the field of literature on speaking up during critical moments. Worline frequently discusses speaking up as an act of courage that is laden with emotional responses such as feeling disengaged and devalued at work, which are forms of suffering. Using courage to speak up is an individual response to address threats to collective group welfare. Compassion as a response to these experiences is the extension of empathy and presence, which can promote communication and healing, and seems especially important to nurses. Organizations that promote speaking up and compassion will flourish (Worline, 2010, 2012).

Other Healthcare Actors as Part of the Team

When candor and transparency are encouraged and reinforced by leadership, speaking up becomes a more common behavior ((D. Robert MacDougall, 2016; Edmondson, 2019; N. Hall et al., 2018). Developing a workplace environment where people feel safe to speak up candidly is
complex, as there are multiple factors which influence psychological safety and the decision to speak up (Edmondson, 2019). Edmondson (2019) describes a number of variables that contribute to creating an environment of psychological safety, which in turn can promote speaking up and result in organizational improvement. These variables include the following:

- leadership support of candid communication, positive reinforcement, and appreciation for the decision to do so;
- leadership’s willingness to be humble and say “I don’t know;”
- willingness to share ideas, fail, and risk being wrong for the benefit of organizational safety and improvement;
- working to improve psychological safety which, when absent, decreases speaking up behaviors and thereby creating a false sense of organizational success when only good news is invited;
- awareness of excessive confidence in leadership, which can reduce speaking up behaviors. This in turn is why managers must invite and appreciate feedback; and
- not dismissing undesired feedback as this behavior creates a culture of silence, which is dangerous.

Edmondson has also studied speaking up in the context of healthcare and as it relates to teamwork (Amy Edmondson, 1999; Edmondson, 2003, 2012, 2015). Reputational concerns and fear of losing one’s job were significant factors that frequently reduced individuals’ willingness to step up and challenge upward. Teamwork and the sense of psychological safety also affected individual decision-making to speak up. Interpersonal trust, however, does not automatically translate to team trust; thus, any change in the group composition can result in a different choice
about whether to speak up. Outcome improvement, task mastery, and group process can also be powerful motivators to speak up (Edmondson et al., 2008). As teams learn together, speaking up in the future becomes more likely. Similar factors were identified in an article looking at the importance of starting with speaking up as a primary method to improve safety outcomes (Spruce, 2014). The concept of challenging authority was the central theme in Carmeli et al.’s (2012) work looking at the influence of communication by the CEO as setting the tone for what is expected of and accepted by staff when taking the risk to speak up.

Based on the results of this literature search, the importance of speaking up in healthcare is a commonly accepted premise among these studies. There is empirical data that supports the act of speaking up as positively impacting safety outcomes; however, there is little statistical evidence in these studies that shows the impact on the reduction of medical error.

In the book *Voice and whistleblowing in organizations: Overcoming fear, fostering courage and unleashing candor* (2013), authors Burke and Cooper describe complex challenges as organizations struggle to act with courage and speak with candor. They assert that organizational transformation does not occur in a fearful organization where candor is not welcome. As the company becomes less fearful and people feel safe to speak up, a quantum organization is born where speaking up results in transformation.

Amy Edmondson asserts that a culture of psychological safety and speaking up can be created by changing the narrative and reframing how employees review and examine error. For example, choosing to look at medical systems as complex, error prone environments where the opportunity for error is high, rather than blaming individuals for being fallible, helps to create a
workplace community where members are invited to participate in the discussion and the
generation of solutions (Edmondson, 2013).

It is important to create an environment in the workplace where the risks of speaking up are
reduced. Psychological safety encourages open communication and facilitates ownership for
outcomes. Finding a way forward can be achieved by tapping into ones’ personal values and
morals to propel past the fear of speaking up and to act with courage to speak up (Aultman J,
2008; Bagozzi et al., 2013; Horrigan, 2017).

Reframing dimensions that influence a person’s decision to speak up is also important. In
the context of a team, Edmondson addresses three dimensions that facilitate speaking up. First,
uncertainty, which encourages people to be curious and ask questions early to assure safety.
Second, interdependence as a condition of teamwork. If people are part of a team working
together to deliver and oversee patient care, the impact of individual error and responsibility is
lessened.

**Root Cause Analysis**

How do we deep dive incidents so that we can prevent them from reoccurring? In a 2017
study by Kellogg et. al., the authors describe a state of affairs where, despite several decades of
efforts to reduce the adverse safety events in healthcare, the rate has not improved. Root cause
analysis (RCA) is a process used by hospitals to reduce adverse event rates by analyzing cases to
determine what happened, why it happened, and how it can be prevented from happening
again. In this study, 302 RCAs were subsequently reviewed. The most common event types
involved a procedure complication, followed by cardiopulmonary arrest, stroke recognition, and retained foreign body. In 106 RCAs, solutions were proposed. Of the 731 proposed solutions, the most common solution types were training (20%), process change (19.6%), and policy reinforcement (15.2%). The study identified that despite RCA review, many of the same reasons for the RCA continued to reoccur. The study found that the most proposed actions did not lower event recurrence. These findings suggest a different approach is needed to look at ways to decrease serious patient safety events.

**Diagnostic and Demographic Studies**

The majority of nonfiltered patient safety diagnostic and demographic articles that I initially reviewed did have tangential relevance to patient safety. Reading them was part of my due diligence in reviewing relevant literature. However, these studies did not relate to my research question about looking at personal, relational and emotional elements that may incline an actor to speak up during a critical safety moment. All these studies were excluded from my study because of the contextual limitations these specific factors imposed on my research.

**Safety Practices in Other Industries**

Because the study of safety in healthcare stems from other industries, it is appropriate to review the literature. Amy Edmondson’s work is multi-faceted as she examines speaking up from many viewpoints. Case studies on safety in the space and automotive industries notably described the effects of speaking up on safety outcomes in Edmondson’s study of the *Columbia* and *Challenger* launches as well as what she describes as the weak safety culture of General Motors (Edmondson, 2014; *Columbia’s Final Mission.*, 2004; *Group Process in the Challenger Launch Decision (A)*, 2002). In all these situations, there were varying levels of speaking up that
were ultimately ignored. In both the *Challenger* and *Columbia* space shuttle cases, concerns had been voiced by many to NASA’s leadership team; however, the feedback was dismissed. Eventually, even those who spoke louder remained silent and did not escalate the situation by whistleblowing or voicing concern outside the organization to a higher authority. In the General Motors study, organizational culture was very different from NASA. Speaking up was infrequent as the top-down hierarchy of authority prevailed. Known safety concerns on the lines were frequently discussed in small groups, but rarely with management for fear of reprisal.

Edmondson also studied speaking up in the context of situation specific conditions. She found that potential consequences influenced one’s willingness to come forth. Financial, social, and legal ramifications were deterrents to using latent voice. Building trust under risky conditions in the construction industry was examined by looking at the role of management to cultivate trust and transparency and to ensure psychological safety to promote speaking up (Rashid & Edmondson, 2012). In this scenario, personal intention, competence, teamwork, and support of leadership were optimized to build trust in a traditionally low trust industry.

In a quasi-experimental study looking at 142 interactions involving speaking up or remaining silent, the authors looked at fear as the potential primary deterrent to speaking up. The data suggested that this was not the case and that there was a range of emotions and behaviors that drove silence. Also, the experience of intense emotion is more likely to increase speaking up behavior than silence. Managers need to be aware that factors motivating silence can be quite different depending on the individual (Kirrane et al., 2017).

The study of safety in aeronautics (“Aviation Knowledge and Human Error,” n.d.; Edmondson & Feldman, 2002; Edmondson, Ferlins, Feldman, Roberto, & Bohmer, 2004; Tamuz
& Thomas, 2006) and the automotive and naval industries (Gaba et al., 2003) blazed the trail for looking at the complex conditions which exist in U.S. hospitals (Edmondson, 2014). Safety cannot solely be the responsibility of an individual; rather, the attitudes, beliefs, and values that influence individual and collective actions are a matter of culture (Boysen, 2013; Eisenberg, 2017; Milstead, 2005; Smits et al., 2012; Tucker & Edmondson, 2003). These organizational expectations result in standardization of practice, thus reducing variation of process, a known deterrent to quality outcomes (INSERT Edwards Deming Reference).

**Failures in Patient Safety**

Failures in patient safety have been studied to determine why they occur and what can be done to prevent them from happening in the future (Cannon & Edmondson, 2001, 2005; Edmondson, 2011; Kellogg et al., 2017; Schippers et al., 2014). Failure can be a powerful motivator for individuals to improve, and it promotes organizational learning. However, teams learn best when they are given the chance to process mistakes after the fact (Schippers et al., 2014), although this opportunity is not always extended. When teams do not debrief after safety incidents, cohesion and a sense of belonging does not improve, which can erode shared vision of improved safety outcomes (Cannon & Edmondson, 2001). Active learning strategies are important if learning is to occur (Edmondson, 2011; Redhead, 2005).

**Data Collection and Reporting Problems that Influence Safety**

The AHRQ (2018) and CDC (2018) have reported that data collection and transparency in reporting are critical factors to help reduce patient safety incidents. Hospitals must be willing to collect data and share their outcomes publicly, in part so that metadata can be gathered and analyzed by agencies acting on behalf of the greater good of the public. A secondary reason cited
was the protection of the American public from hospitals that may act irresponsibly and without
the intention of self-monitoring and correction.

In a congressional report issued in 2005 written by a specialist in life sciences from the
Domestic Social Policy Division (Redhead, 2005), the importance of voluntary reporting of
smaller incidents resulting in minimal or no harm to the patient was deemed significant as this
allows for identification of vulnerabilities and the development of preventative strategies. A non-
punitive response must be assured in order to protect those coming forward and promote
transparency, which is equally important. Further, mandated reporting of events that are more
significant is required so that prevention and accountability measures can be enacted to reduce
error (Spath, 2011).

**Contributing Quality Factors Which Impact Patient Safety**

Deming, a founding father of the quality improvement movement, said variation is the
enemy of quality improvement (https://Deming.org). Processes that are not controlled result in
error. This is certainly true in U.S. hospitals (IHI, 2016; Karnon, Partington, Horsfall, & Chew,
2016; Newswire, P., 2018; Goeschel, Provonost, & Wachter, 2010). Getting healthcare team
members to follow procedures and protocols consistently is a challenge, and using work arounds
is a frequent contributor to poor outcomes. Work arounds involve bypassing known safety
practices, so the opportunity for error increases. For example, an Alaris Infusion smart pump is
down. Instead of waiting for a new one to arrive on the unit from central supply, the nurse
decides to override the pump instructions for the medication she needs to add and start. The
pump is designed to be in charge of mixing and infusing multiple other medications
simultaneously and that data is stored in the pump. Because she is busy and other patients are
waiting, she manually hangs the new medication and begins an infusion rate without
crosschecking the other medications (the main reason the pump exists is to reduce human error
by accounting for all medications, possible interaction, and dosing error by using a computer).
This workaround causes a significant medication dose error. This is just one of many examples
of errors attributed to workaround solutions.

*Medical Error*

Returning to my logic model, medical error is the most frequent example of a critical
safety incident. The foundation for examination of error in healthcare comes from the roots of
rigorous study of safety practices in aeronautics (“Aviation Knowledge and Human Error,” n.d.).
It is important to bolster the reader’s understanding of the complexity of error and definition of
terms used as it is critical to understanding the topic in its entirety. Safety culture is influenced
by behaviors (inclusive of the choice to speak up during a critical safety moment), leadership
characteristics, and organizational values.

According to Reason (2000; see also Peltomaa, 2012), error is defined as a series of
planned actions that fail to achieve an intended outcome when the failure cannot be attributed to
chance. Classifications of error can be examined in the context of asking the questions what,
where, and how. Both the World Health Organization (WHO; “Learning From Error,” 2012) and
the flight safety organization (Gaba et al., 2003) discuss error in terms of the following
classifications. Skill-based (auto mode- I know what I am doing), rule-based (an “if then”
algorithm that guides the users thinking), and knowledge-based (I am trying to figure it out and
acknowledge I do not know), all of which can lead to mistakes. The Cleveland Clinic Patient
Safety Foundation has studied the concept of error as well (Nazdam et al., 2005) and asserts that
error occurs under a complex set of conditions that are comprised of human, system, and organizational factors. Mistakes are made when a person believes they are acting on the correct information but in fact are not. Errors can also occur when someone intends to do the right thing but does the wrong thing. There are thus two types of failures that result in mistakes: actions that do not go as intended or where the intended action is the wrong one.

While there are many types of error that can affect patient safety culture and outcomes, I focused on error and potential error during procedures. This involved looking at incidents where one of two conditions existed. The first is when there is the potential for an error to occur which can be observed. Most often, these circumstances involve a lack of compliance with policy and protocol or the lack of awareness that something has or is about to go wrong. Failure to follow a policy or protocol may be intentional (i.e., “I know the rules but I am choosing not to follow them”); generally observed in the spirit of a timesaving work around) or unintentional (i.e., “I did not know what was required in the moment”). The potential of error in these circumstances could also be attributed to bias (implicit, anchoring, and confirmation bias are examples). In the second condition, there is an error in a real-time process or one discovered after the fact. In other words, I examined situations where something was happening that was potentially unsafe and may have yielded a poor outcome, where something was going wrong at the time, or where an error was identified after the procedure was over. I chose to focus on this limited scope of error because I aimed to examine the factors influencing an individual’s choice to speak up during a critical safety moment. For this to occur, the awareness of the potential for or an actual error was required.
When a person speaks up, the likelihood increases for an error to be prevented or intervened upon and corrected (Edmondson, 2003; Ford, 2015; Martinez et al., 2017). Whether or not the act of speaking up results in action being taken to address the concern will vary. Further, even when action is taken to intervene to prevent or correct a safety error, a positive patient outcome is not guaranteed.

There are many other opportunities for error in a healthcare setting. In order to more fully inform the reader, here are three brief examples.

1. Forgetting to check the monitor for lab results.

2. Being very busy and not recognizing that the onset of a new set of symptoms has occurred (unintentional and a result of omission) is very different than

3. Failing to ask patient name and date of birth as a confirmatory process before administering a medication or marking a site for surgery (intentional and a result of commission; “I knew it was wrong not to follow policy and I did it anyway”).

In the light of these examples, we can begin to see that in organizations where ignoring safety practice and policy is accepted, we may find there is a difference in behaviors and virtues from organizations where individuals do not tolerate lack of adherence to rules and policies (Bellini & Dublan 2001; Bonney 2013; Borkowski 2009). It may be more difficult to speak up in an institution where accountability measures are not high, because the workplace norm is not to confront the behavior.

Recent research suggests that the reticence of physicians to admit they do not always know the answer, combined with a lack of institutional humility, could result in significant diagnostic error (Forbes, 2018; Schulz, 2010). In this article about medical error, the rate of
medical error had researchers concerned. Advancements in the field are not reducing error rates. Schulz (2010) similarly posited that the margin of error can indeed be wide and safety incidents can occur when overconfidence prevails (Worline & Dutton, 2017 b). The notion that overconfidence of physicians due to the fact that they are rarely questioned and they often assume the position of “no news is good news” is a key contributing factor to poor safety outcomes. News should result in the presumptive stance of, “I don’t know, so I better find out.” (Forbes, 2018).

An error occurs when there is unintended outcome. Human error is inevitable; however, many errors are preventable (Bonney, 2013; Cunningham & Geller, 2011; ECRI, 2014; IHI, 2016; Kohn et al., 2000; Mosad et al., 2014; Peltomaa, 2012; Reason, 1990, 2000). There are also process-related errors that influence safety outcomes (Whittingham & Oldroyd, 2014). Process-related errors include things like equipment technology, information technology, and data-interpretation errors.

While a just culture (Boysen, 2013) where blame is not the goal must prevail to encourage transparency and process improvement, accountability to prevent errors is also important (Botkin, 2018; Emanuel, 1996; Johns Hopkins Ascribe Newswire, 2010; Jaffe et al., 2007; Lee, 2017; Masselink & Van, 2015; Norris, 2016; Vian et al., 2017). It is the ethical responsibility of leaders in hospitals to hold people accountable for patient safety (Frolic, Jennings, & Seidlitz, 2013; Goeschel et al., 2010; Hahn, 1975; Hoyk & Hersey, 2008; Newhouse & Baloyosky, 2013; Speck et al., 2014).

Learning from error should be a team mandate (Edmonson, 2015; Edmondson et al., 2008; Edmondson & Feldman, 2002; Edmondson, Heaphy, & Bohmer, 1999; Edmonson &
Harvey, 2016). Team learning can also be effective in promoting discipline-specific improvement (Emmott, 2001). Teams must work together to deliver care; therefore, they must debrief together to learn from error (Cooper, 2014; Cunningham & Geller, 2011). When this occurs, a shared meaning and sense making can occur (Giolito & Verdin, 2017; Weick, 1995), which can lead to a commitment to improvement.

Resident physicians who are, by definition, physician learners, are at high risk for error due simply to their inexperience. Residents learn through a variety of modalities, including direct observation of others, practice, supervised skills labs, and didactic education. How we teach residents about patient safety is a question of some focus in the field of graduate medical education (Anderson, Davis, Hanna, & Vincent, 2013; D’Eon, 2018; Pian-Smith et al., 2009; Putnam et al., 2015; Putnam et al., 2016; Shelp, 1983, 1984; Shelp, Russell, & Grose, 1981). Resident participation in mortality and morbidity conferences, commonly known as “M&M,” and in root cause and intensive analysis case reviews are appropriate. Many disciplines contribute to safety culture and each specialty contributes, in their own way (Singer et al., 2009). A systemic approach to how patient safety culture is created across disciplines is indicated.

**Disclosure of Error**

As part of situational awareness in my logic model, and akin to the topic of transparency, disclosure of medical error (Liang, 2002) is an important concept at the individual, organizational, and system levels. The disclosure is legally required and ethically the right thing to do. Further, there is a cathartic benefit derived from the act of disclosure itself to both the patient and the provider. Forgiveness can be extended through this act and it is a powerful process that empowers providers. The role of forgiveness and hope (organizational virtues) in
disclosure was addressed in four articles (Claibourne, 1997; Peto, Tenerowicz, Benjamin, Morsi, & Burger, 2009; Wenzel, Anvari, de Vel-Palumbo, & Bury, 2017; Zahasky & Collier, 2012). Organizational forgiveness has also been discussed in the context of punitive intent (Salvador, 2009). Zahasky and Collier (2012) reviewed forgiveness in the healthcare context of error. When an apology was made after a serious mistake took place, forgiveness and grace were often extended. The power of the apology as well as the grace with which it was accepted served to strengthen the provider-patient relationship. The authors reviewed the journey of a large healthcare system to develop and implement a disclosure and apology program. Findings were confirmatory of Zahasky and Collier (2012), where the act of apologizing took courage but served to build interpersonal trust. Claibourne (1997) wrote from a nursing perspective and focused on forgiveness and hope as it pertains to believing in possibilities moving forward. Much has been written about the moral obligation for errors in healthcare (Bonney, 2013; Emmott, 2001). The literature clearly supports the need for healthcare professionals on an individual basis as well as healthcare organizations as an entity to be transparent and accept responsibility for errors while including process improvement activities that can help to reduce errors in the future with the morally worthy goal of transforming practice. This is consistent with Burns’ definition of raising one another to higher levels of motivation and morality. The welfare of the patient and family, the healthcare team, and the organization as a whole are well served by these disclosures and discussions. In fact, disclosure of adverse events is a Joint Commission requirement, and training and practice in having disclosure discussions is an expectation of the Accreditation Council of Graduate Medical Education, the governing body of resident physicians. It is also an expectation of each medical specialty and addressed in their policy.
statements. Although an understanding of disclosure is highly relevant to the concept of the moral obligation to report error, I will not proceed with further explanation as disclosure is a requirement by these accrediting bodies. Recall that the working definition of courage, (in this case speaking up as a manifestation of courage), is acting intentionally and voluntarily in the face of risks, threats, or obstacles in the pursuit of morally worthy goals (Gould, 2005). Therefore, I eliminated the act of disclosure from further examination as it is a required, non-voluntary action.

**Courage**

While the act of speaking up is the focus of my research, courage as a related and interwoven concept must be included in the discussion as it is a component of much of the literature on the use of voice and speaking up.

**Courage and Prudence as They Relate to Speaking Up**

The person who chooses to exercise voice to speak up during a critical safety moment is enacting the virtues of courage and prudence, or practical wisdom. Several studies have examined moral courage in healthcare settings (Berger 2015; Berlinger & Dietz 2016; Detert & Bruno, 2017). Speaking up is also frequently discussed as an example of courageous behavior (Aultman J, 2008; Berger, 2015; Cavanagh & Moberg, 1999; Cole, 2017; Comer & Sekerka, 2015; D’Agostino et al., 2017; Detert & Bruno 2017; Detert & Edmondson, 2005, 2007; Hamric et al., 2015; Lachman, 2007, 2008, 2009, 2010, 2014).

Kobuck (2015) described a process of decision-making in healthcare where virtues, values, and attributes are the central force that initially provides guidance (see Figure 2). Once an act of moral courage is enacted, it “spirals” toward the goal of having moral courage and
becomes a skill for ethical leadership. As this process continues to flourish, a transformation occurs when there is clarity and action for moral courage to speak up, which becomes engrained in leadership style and permeates culture. Positive change is then enacted and becomes sustainable (Kobuck, 2015).

![Figure 2. Kobuck model of moral courage implementation (Kobuck, 2015, p. 293).](image)

The CODE model by Lachman (2007) is an acronym that describes the components of the moral courage process: “The **courage** to be moral requires **obligation** to honor the right thing in the face of **danger** to me to manage my own fear and **express** my concerns/take action to maintain my integrity” (see Figure 3). Lachman has written frequently about moral courage in nursing and asserted that doing the right thing in service to the patient by speaking up and raising awareness of a patient safety concern is one example of moral courage. However, the offender as an individual who steps forward to admit his or her own wrongdoing is also courageous. This perspective is an important contribution to the literature as most work focuses on courageous actors giving voice to their concerns as being observers of the digression, not the offender him-or herself. Further, Lachman stated communicating and expressing fears and concerns is, in fact,
a conflict resolution skill that, when practiced, becomes improved and more frequently utilized, thus transformational. These models are closely aligned with Burn’s transformational leadership theory.

![CODE model](image)

*Figure 3. CODE model (Kobuck, 2015 p. 285).*

**Speaking Up as a Manifestation of Leadership**

Speaking up in the context of a critical safety moment is act of leadership. As an actor gives voice to a concern, (s)he is raising awareness of others on the healthcare team that an intervention is necessary to keep the patient safe. The immediate desired outcome is to protect the patient, either in the moment if the actor is speaking up in real time, or moving forward, if the speaking up occurs after the incident. A desired secondary outcome includes changing the safety culture to one that promotes speaking up as a routine course of action. It can be assumed that if speaking up improves safety outcomes and is seen as a desired action, using voice may become more normative and leaders can reinforce the behavior by encouraging, rewarding, and recognizing speaking up as a positive and desired action. As leaders encourage and model speaking up, there is an opportunity to significantly influence patient safety outcomes. Transforming safety culture to higher levels of accountability requires leadership in the moment by speaking up. It also requires leadership at higher levels in the organization to model the
behavior and reinforce it. When this happens, speaking up becomes safe to do and there is real opportunity for change.

**Transformational Leadership**

The lens through which I viewed my research is transformational leadership. Although the level of analysis is the individual, as previously discussed, I posited the choice to speak up would impact and be impacted by safety culture in hospitals. The exercise of voice in and of itself requires leadership, a concept that has been frequently written about with few universally agreed upon definitions. The theoretical framing of transformational leadership defined by Burns (1978), occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality. This definition comes alive in a hospital setting. The actor who chooses to speak up aligns him- or herself with the morally worthy goal of stopping a medical error, thus protecting the patient. Because the delivery of medical care to a patient during a procedure requires a team, the exercise of an individual’s willingness to speak up at a specific instance in time is an act of leadership. This act of transformation occurs at the moment one chooses to speak up. Others may then be raised to a higher level of motivation to intercede in the pursuit of patient safety. Whether or not the act of using voice in the moment to speak up changes the safety outcome, is not what defines the transformation. Transformational leadership exercised in the moment inspires other to raise their standards in pursuit of morally worthy goals. Healthcare professionals want to provide excellent care resulting in safe and positive outcomes for the patient. Therefore, understanding what personal, relational, and emotional elements may incline an actor to speak up during a critical moment is important to transform a safety culture to one where errors can be averted when
people feel confident speaking up. Based on Bass’s transformational leadership theory, (Avolio & Bass 1995) it was asserted that an individuals’ behavior will impact organizational change and transformation and therefore should be examined at the individual, team, and organizational levels of analysis to understand leadership and influence.

By setting an example that inspires followers to take greater ownership for their work, the leader can align followers with behaviors that will optimize their performance (Bass, 2007; Burns, 1978). Bass (2007) described four elements of transformational leadership:

**Individual consideration.** The leader, broadly defined, gives empathy and support, and encourages individual contributions.

**Intellectual stimulation.** Intellectual stimulation is the degree to which the leader challenges assumptions, takes risks, and asks for input.

**Inspirational motivation.** Leaders articulate a vision that is inspiring to followers.

**Idealized influence.** When exercised, transformational leadership provides a model for ethical behavior and builds trust and respect with others. In the context of a healthcare setting, the team of actors may then be empowered to speak up when seeing others doing so.
The Five Practices of Exemplary Leadership

A model that supports the theory of transformational leadership and challenging the process is the five practices of exemplary leadership (Kouzes & Posner 2008). When applied to the field of patient safety, behaviors that support the improvement of safety practices are exemplified. The exercise of courage is frequently associated the decision to speak up and take a stand to advocate for improved safety practices.

1. Model the way: Leaders need to behave in a way that is consistent with the behavior they want to see.
2. **Inspire a shared vision**: As a leader exercising voice begins to see a vision of how safety practices can be improved by empowering others to speak up, that vision is then shared with others.

3. **Challenge the process**: Challenging the status quo is required for growth and improvement both on a personal and organizational level. Leaders (formal and informal) who are willing to step outside of their comfort zone and boundaries can change outcomes.

4. **Enable others to act**: The focus of this research examined speaking up on an individual level; however, team influence is important in the context of safety outcomes.

5. **Encourage the heart**: Inspiring others to act in a way that is aligned with the mission—in this case, safe patient care—requires recognizing and rewarding positive contributions.

**Relation to Previous Work**

Many of the generalized findings about patient safety and the key contributing factors that influence outcomes (most notably errors) were addressed in Chapter 1. As previously discussed, since the landmark patient safety report was published (Kohn et al., 2000), many improvements have been made to processes, protocols, procedures, and policies that require increased scrutiny and monitoring of patient safety activities. Despite the dedication of resources and data collection on the topic of patient safety, outcomes have not improved, and actually have declined (Chassin, 2013; Makary & Daniel, 2016). Due to a lack of research found on the impact
of speaking up during critical safety moments and the personal, emotional, and relational antecedents that predispose an individual to speak up as they relate to patient safety outcomes, I used a qualitative methodology case study approach to explore these phenomena that influence speaking up and patient safety outcomes in a single site, Midwest hospital setting. The insight gained offered a potential alternative performance improvement focus area for this hospital. Broader implications for other hospital settings also emerged. Using this process to elicit themes through the lens of healthcare professionals and in the context of their natural practice setting, my goal was to explore the specific combination of personal, emotional and relational elements described to examine alternative explanations for why actors choose to speak up during critical safety moments. In the absence of real progress to improve patient safety outcomes in the light of current efforts, these elements may help hospital leaders target performance improvement initiatives using a different approach than relying solely on primary outcome data and secondary studies.

**Summary and Implications**

While much effort and dedicated resources have been spent against the pursuit of a safer healthcare system in the U.S., an increasingly complex and fragmented model of care delivery has resulted in the opposite outcome. More research is needed approaching the problem of medical error and safety issues from a different lens.
CHAPTER 3: METHODS

Research Question

The research question is what are the personal, emotional, and relational elements that influence a member of the healthcare team to speak up in a critical moment?

Qualitative Research Design

I conducted a basic qualitative study based on applied research principals with the goal of understanding and describing the actors, in this case healthcare professionals, lived experience related to patient safety and informing healthcare professionals about the personal, relational, and emotional elements that influence an individual’s decision to speak up during a critical safety moment. Using a phenomenological case study approach, the focus was on deepening my understanding of the actors’ experiences and the processes surrounding those events within the context of a single case study site (Denzin & Lincoln 2017).

Organizational Context

As indicated in Chapter 1, the case study site was a non-profit 501(c) 3 hospital located in the Midwest and is part of a large healthcare system. It is a Level I Trauma Center, a regional adult burn center, and a Level 3 neonatal intensive care unit. The hospital employs approximately 8,000 staff and has over 900 licensed beds. The hospital's emergency and trauma center contain 70 + beds and had over 90,000 visitors in the emergency department in 2021. The hospital operates a number of air ambulances and is a top 100 hospital in the United States for clinical excellence. The hospital holds awards from Healthgrades, Forbes, and U.S. News &
World Report. The hospital also enjoys an academic affiliation and serves the community as a partner in teaching and education of healthcare professionals.

The hospital in this case study site has Magnet (a quality nursing distinction) and The Joint Commission (TJC) accreditation. A number of specialty programs within the hospital have distinction as Joint Commission certified centers for care. In order to maintain TJC certification, annual compliance training of all hospital employees is required. This is a national requirement for all accredited hospitals and an industry standard in most healthcare facilities. Comprehensive training takes place at the time of hire and orientation. This training entails content such as safety precautions, hazardous material handling, patient privacy laws, how to file incident reports, federal compliance regulations and rules pertaining to patients’ rights. Patient safety monitoring is a key element of everyday operations, and all staff are routinely reminded of this priority. The hospital maintains robust committees and work groups devoted to the pursuit of examining error and safety events and developing solutions to mitigate risk and improve outcomes.

Design Principles

Phenomenology is a field that was founded by Edmond Husserl and strongly influenced by Franz Brentano, Martin Heidegger, Jean Paul Sartre, and Merleau Ponty as noted in the book *Four Phenomenological Researchers*, 1st edition, by Christopher Macann. The authors discuss descriptive phenomenology as both a philosophy aimed at understanding the lived human experience of an individual in a particular context and a methodology as a broad approach to using interviews, storytelling, and description to learn about the actors’ experience.

The goal of this study was centered on understanding the phenomena of each actor’s experience. My goal was to gain a deeper understanding of personal experiences regarding
patient safety incidents in this hospital. My aim was to capture mostly descriptive data. The limitations of a qualitative study were taken into account by this researcher and interventions to improve the credibility and trustworthiness of the data were implemented. Generalizing the findings to other situations was not a goal of this study.

**Instrumentation**

I created a semi-structured interview plan was employed to support an inductive process for examining contextual knowledge, and cognitive and motivational dimensions of meaning making. Interpretive phenomenological analysis (IPA), originally founded by Jonathan Smith, is a blended approach designed to provide detailed examination of the lived experience of a phenomenon through a participant’s personal experiences and personal perception of objects and events. In contrast to other approaches, in IPA the researcher performs an active role in the interpretive process (Neubauer, Witkop, & Varpio 2019). Speaking up is the phenomena that supports my logic model.

The interview protocol found in Appendix A was created to facilitate trust and a willingness on the part of the interviewees to share their experiences, both positive and negative, about times when they chose to speak up as well as times when they did not. I organized the flow of questions to allow for and encourage interpersonal sharing and rapport building. I began the series of questions with an invitation for each person to share what called them to the profession of healthcare as well as their reflections about their journey to the position they now hold. I asked about what they found most meaningful in their work. This served to set the stage for the questions I then asked them about what they were experiencing two times when they chose to speak up as well as two times when they chose not to raise voice. I assumed that talking about
situations when they chose to speak up would be easier and less emotionally risky than sharing their story about times when they chose not to speak up. Therefore, the question sequencing was designed to promote sharing.

Specifically, I asked the interviewees to elaborate on the personal, emotional, and relational elements they experienced at a moment and time when they made the decision to speak up or not. I asked questions that addressed personal, emotional, and relational elements that influence a member of the healthcare team to speak up in a critical moment. The design goal was to collect information that would help me to compare and contrast the influences that shaped their decision to speak up or not. In an effort to gain a deeper understanding of the phenomena that impacted their decision, I also asked them to tell me about what was on their mind and in their hearts when they were making the decision. I ended the series of questions by asking them for their general thoughts on how patient safety could be improved and if there were other elements they felt may influence one’s decision to speak up that I did not address.

All semi-structured interviews occurred virtually using the Zoom platform given ongoing intermittent COVID precautions were in place at the hospital. I recorded each interview using a password protected device. Each interview was transcribed using Otter.AI, a secure cloud-based transcription service. Per commitments made in the consent process, all copies of audio files and transcripts were destroyed after the analysis for this study was completed. Participants’ confidentiality and privacy was protected by aggregating the data results and ensuring de-identification of any information shared that may be attributable to an individual or small group of individuals.
When conducting the interviews, I followed Patton’s (2015) ethical issue checklist for the consent process. Respondents were informed of the research procedures. I obtained full consent and permission to record the interview. I explained why the research was being conducted, how it will be used, who would have access, and how their participation might contribute to improving patient safety outcomes through enhanced understanding. A debrief at the end of the interview took place to ensure preliminary accuracy and understanding of the participants’ responses. Further, the opportunity to clarify anything that was misunderstood as well as the chance to ask questions and/or offer additional information was given at the conclusion of the initial interview and again after the data were coded as a validity check. Informed consent was obtained from all participants.

**Sampling Strategy**

I utilized a non-probability purposeful sampling strategy. This can be described as a two-tier sampling approach where the hospital site was tier one and the personnel or “the actors” (participants) within the hospital comprised tier two. Put another way, to qualify for inclusion, a participant had to work at the hospital site itself, and a participant needed to have a clinical or administrative role.

I selected participants from three populations: (1) physicians, residents, and other clinical support staff, (2) hospital leaders including managers, directors, vice presidents, and chief executive officer roles including the chief executive officer, the chief operating officer, the CMO, and hospital support staff, and (3) quality and risk management teams at the hospital who routinely review incidents and cases where safety was a concern and/or where there was a poor
outcome. Participants were initially selected by consideration of their role, title, exposure to patient care operations, and safety data. The clinical staff participants were selected from the service-line areas from which I gathered data. As previously described, these areas included the emergency department, surgery, ICU, and maternity.

There were no exclusion criteria for anyone in the groups described above. These participants were chosen due to their proximal involvement with patient safety events on a regular basis. By inviting healthcare staff from a variety of professions within the case study sample to participate, I obtained data from a variety of disciplines, education levels, and experience within the realm of patient safety. This broad perspective provided a more descriptive picture of the culture of safety influencing the decision to speak up during critical safety moments.

The possibility of theoretical sampling as data were collected and themes emerged was considered as it may not have been possible to plan fully for and predict everyone who may be included in this sample population; as any good detective follows the evidence, a narrative inquiry requires that data emerge through peoples’ stories and lived experience. However, as the analysis emerged, I determined that additional sampling was not required to uncover or test additional themes.

There were no additional exclusion criteria and participants who were included are described above. Participants shared demographic variables such as years of experience, education, age, gender etc.
Plan for Data Analysis

I conducted data analysis using a thematic analysis and code development approach (Boyatzis, 1998). The interview data were organized using the coding software ATLAS.ti. My approach was consistent with Richard Boyatzis’s methodology as described in his book, *Thematic Analysis and Code Development: Transforming Qualitative Information*, (1998). The stages and steps are outlined in Figure 3, as follows:

**Stage one – sampling and data collection**, was based on my own applied theory-in-use, as derived from my professional experience. The elements of an initial coding scheme came from my assumptions about what was occurring in the context of the hospital (i.e., Boyatzis, 1998, p.33). It was further informed by the literature on speaking up and patient safety.

Subjects shared their deeply personal stories and lived experiences during times when they chose to speak up and times when they did not. The data collected was designed to support the creation of a dichotomous list for comparison of conditions that support and discourage
speaking up behavior (see. p.168). Themes were labeled according to language used in the healthcare field and the applied literature on speaking up.

**Stage two – developing themes and initial codes** (Boyatzis, 1998, p. 36) refers to the process of data analysis. I read all the interview transcripts and broke the data into discrete pieces assigning a code to those data, using Atlas.ti to capture the emerging analysis. I then reviewed and interpreted the data and revised codes as needed to reflect the subjects’ stories and narratives more accurately. When analyzing the data, I began with open coding, then axial coding, and finally, selective coding to generate thematic analysis. Summarized, the three steps of this analysis were as follows:

a. First, generate a code. This was generated from my literature review and the application to the context of my research in the healthcare and safety space as the code related to the phenomena of speaking up in a critical safety moment. As themes were converted into code, this created the opportunity to enhance reliability, defined in this context as consistency of judgment, count presence, frequency, and intensity. Examining divergence or convergence of interrater reliability was essential to establish credibility (Creswell 1994). I reviewed my findings and interpretations with the interview subjects to ensure accurate coding.

During the process of creating codes, a new, Artifical Intelligence (AI) tool that became available in Atlas.ti to have Atlas.ti code the interview transcripts as an autonomous exercise. This process generated additional codes and themes that were included in subsequent analysis.
b. Next, I reviewed and revised the code in the context of raw data. Questions addressed included whether the words and description made sense. If not, code modification was implemented. Throughout this process outlined above, a constant comparative method in which words, ideas, and thoughts (the data) are continuously being compared and categorized was employed to develop a codebook.

c. Finally, I determined the reliability of the codes. Reliability in this context references consistent observation, interpretation, and labeling (Boyatzis, 1998, p.144).

**Stage three – validating and using the code** helped me to develop an interpretation of my data and establish an emergent theory. Validation occurred as I looked at the percentage of time that my application of emergent codes agreed with each subject’s interpretation of my coding. I determined accuracy of the codes I created by applying them to all the interview transcripts looking for similarity and divergence. Greater similarity across interviews provided reassurance that the coding was accurate. Divergence resulted in going back to the transcript and reviewing. In most cases, the experience of the subject was quite simply different, and had been accurately captured in the coding.

Revised and refined codes were then applied again to all interview transcripts. This step was repeated three times to ensure all themes had been captured and no new data or codes were emerging which indicated data saturation had been achieved. Validity was again checked by doing a second round of communication with the subjects to verify my accuracy. On four occasions, I reached back out to the subjects for clarification.

Nexus was axial coding where I began to relate codes to each other, looking at relationships between the codes and emerging themes resulting in categories. I accomplished this...
using the ATLAS.ti tools to track my growing thematic analysis. Once a code book was created, I then used quotations from the interview transcripts, memos, and comments I had collected from my reflections along the way to establish parent and subordinate codes which provided categories and subcategories within the participants’ collective voice.

**Stage Four: Analysis of overall data** was performed by looking at the frequency of occurrence in the themes. As phenomena emerged, it helped me gain deeper insight into the relationships between codes. I then created network groups to follow and map the relationships.

I also created a dichotomous classification list of times when the actor chose to speak up as compared to times when they did not. I compared the codes that described the speaking up incidents with the codes that described the non-speaking up incidents. I used this approach to identify the discriminating factors that determined what mattered most to people when making the choice between speaking up or not speaking up. This approach provided a defensible case for identifying which elements of influence were essential to the decision to speak up versus the decision not to speak up.

I then moved to interpret the results. In the following order, I utilized the available tools in ATLAS Ti. to conduct analysis and data interpretation. This resulted in the final stage, selective coding, and the generation of a single overarching theme.

**Credibility of Analysis**

Just as with the review and evaluation of a quantitative study, there must be review criteria to lend credibility to qualitative research. There are two procedures I employed to verify my research. In Guba and Lincoln’s (1981) work, they described four elements that improve the
trustworthiness of a research study: credibility, transferability, dependability, and confirmability. These concepts correspond approximately with validity, reliability, and objectivity in a quantitative study (Guba & Lincoln, 1981). I thematically summarized each subject’s interview and sent it to them offering to conduct a second interview if I had misinterpreted any of their responses. These actions helped to demonstrate the trustworthiness and credibility of the data. This entailed careful consideration of the time I was collecting data, which took approximately three months.

In addition, I shared my analysis and initial results with interview subjects, 22 participants, only three offered minor clarification of the codes I had created. One asked that I include a theme that the individual had not talked about but wanted me to add given there had been time to further reflect on the interview. Two participants asked me to change a single word in the code I ascribed to their responses. The first person asked me to change the word “sanction” to model in the context of speaking up. The second participant asked me to change the word “accept” to expect. In sum, in three of the four interviews, I captured the sentiments of the subject accurately, but the data were simply outlier experiences compared to the rest of the sample. In the one remaining case, I had misinterpreted the word appreciate. In the context it was used, I interpreted it to mean being grateful for the feedback. What the subject meant was that the participant understood the challenge of the safety issue yet did not support the way the situation was managed. These activities of constant comparisons ensured a high degree of confidence in the coding.

Reflexivity ensured that I as the researcher allowed data to emerge, and member checking, which was conducted by summarizing and verifying what I heard during their
interviews, provided the interviewees an opportunity to clarify my coding and analysis of their stories. This helped to confirm the accuracy of data interpretation. The second method I utilized comes from the Creswell verification process that includes eight actions that can be employed to verify accurate and credible data interpretation. The method I utilized is the negative case analysis, where data obtained that does not support the emerging ideas and concepts is also disclosed (Creswell et al., 2010).

**Ethical Considerations**

Full disclosure of my research purpose and intention was essential prior to obtaining consent from interview and survey participants (SEE APPENDIX A FOR CONSENT FORM). Prior to the COVID-19 pandemic, direct observation of the patient care encounter had been anticipated. At the time the study was conducted, this form of data collection was not allowed thus it is not discussed in the sections above.

Because the subject of my research is the healthcare team and not the patient, the fact that I was there doing research did not need to be expressly disclosed to any patient whose encounter may be involved in my review. Clarifying my role as a researcher and not a staff member was essential at the time of the interviews. My introduction to the interviewee was scripted and details can be found in Appendix A.
CHAPTER 4: FINDINGS AND CONCLUSIONS

The purpose of my research was to examine personal, emotional, and relational elements that influenced a member of the healthcare team to speak up during a critical safety moment. Having a deeper understanding of the factors that encourage and discourage speaking up behavior can help to improve patient safety outcomes. Gaining insight into the contextual conditions where the actor chooses to raise voice or not may help leaders transform the culture to one where speaking up is the norm.

Demographic Data

I interviewed 22 healthcare professionals. Eight males and 14 females. All participants had an advanced degree of either a masters or doctoral equivalent. The mean average years of experience in healthcare was 13.2 years. The lowest number of years in the healthcare profession was 5.3. The greatest number of years in the profession was almost 40. 100% of participants stated they had a love of science and learning from the time they were young children. 85% (rounded to the nearest tenth), reported they had immediate family members in healthcare while they were growing up and stated this was an important influential factor in their own decision to pursue a career in healthcare. 33% reported always knowing they wanted to go into healthcare. 67% said they landed in healthcare as an evolution of their love for science. Only 10% reported having a career prior to being in healthcare. When I asked them what they found most compelling about their work when they are at their best, 100% reported the desire to help people and make a difference in others’ lives.
Overview of Axial Coding Results

As shown in Table 1, the open coding process, based on emergent theory and prior experience, led to the identification of 454 codes and themes to emerge as data are analyzed. From these open codes, I generated eleven coding groups. The most prominent of these were dangerous conditions (52 open codes), tools and tactics to encourage speaking up (47), barriers to speaking up, influences that resulted in choosing to speak up (27), and influences that resulted in choosing not to speak up. Personal influences, (5), relational influences (15), and emotional influences (14) were among the least mentioned themes. Details regarding the patterns demonstrated in these coding groups are provided later in this chapter.

In addition to these eleven themes, I created five networks of codes to explain the factors that contributed to (1) speaking up; (2) not speaking up; (3) transformational leadership as an element of speaking up; (4) personal, emotional, and relational factors; and (5) tools and tactics to encourage speaking up. A network is a visual display of related constructs and their potential links.

Table 1

Summary of Open Axial Coding Groups and Networks

| Codes – 454 open codes generated. |
| Code grouping- eleven groups were created. |
| • Barriers to speaking up – 39 of the 454 codes applied to this group. |
| • Influences that resulted in choosing not to speak up – 21 codes applied. |
| • Influences that resulted in choosing to Speak up – 27 codes applied. |
- Dangerous conditions – 52 codes applied.
- Dysfunctional communication – 11 codes applied.
- Personal Influences - 5
- Relational Influences -15
- Emotional Influences -14
- Silence - 12
- Tools and Tactics to encourage speaking up -47
- Transformational Leadership - 19

Networking – five networks
- Speaking up
- Not speaking up
- Transformational leadership
- Personal, emotional, and relational factors
- Tools and tactics to encourage speaking up

Word frequency analysis examining mentions of personal, emotional, and relational elements as they related to my research question showed that self-efficacy (competence), team trust, personal trust, fear, anger, and anticipatory regret were primary factors for the decision to speak up or not.
Description of Themes and Propositions

The research question for this study focuses on the personal, emotional, and relational elements that influence a member of the healthcare team to speak up in a critical moment (See Figure 1). Word frequency analysis examining mentions of personal, emotional, and relational elements as they related to my research question showed that self-efficacy (competence), team trust, personal trust, fear, anger, and anticipatory regret were primary factors for the decision to speak up or not. Table 2 shows how these factors differentiate between speaking up and not speaking up. The codes are divided according to the elements they explore. Specific codes appear under the columns for speaking up or not speaking up, along with their frequencies in connection with each condition.

Based on my detailed analysis of these patterns I develop propositions about how the elements map to the decision of speaking up (Creswell, 2007).

Personal Elements

Table 2 shows frequency of mention of categories of thematic codes supporting conditions that influence speaking up behavior for personal elements.
There were 84 mentions of the two personal elements in my logic model. Self-efficacy and psychological safety were mentioned consistently in the 88 personal stories when people chose to speak up or not. The number 84 includes repetitive mentions by participants in a single transcript. This number suggests the strength of the participants’ experience related to these two elements. Whether the experience influenced the decision to speak up or not to speak up conveys valence- a positive and negative pull. The numbers in the above table represent the frequency of mention or number of times a participant shared a story when self-efficacy and psychological safety influenced their decision to speak up or not during a critical safety moment. The X in the column labeled “co-occurrence” indicates that the same element of influence appeared across the participants stories related to their decision to both speak up or not speak up.

**Self- Efficacy.** When participants felt a strong sense of perceived self-efficacy or personal competence, they were more inclined to speak up, thus a positive driver of speaking up behavior. A quotation from the transcript to support this data was: “I was sure the patients’ bleeding was not a result of the medication we administered earlier that day. I observed that
injection. There was minimal trauma to that arm. The bleeding that is happening right now is a result of some other condition, so I chose to confront the doctor about her assessment.”

However, when the participants lacked confidence in their knowledge of the situation and did not feel they may be perceived as credible, they were disinclined to speak up- thus a negative drive of speaking up behavior. An example of a quotation that supports this data was: “I really felt the nurse was not inserting the line properly, but I was just a few months out of nursing school, and she was a seasoned nurse. I was nervous because her experience was so extensive-what if I was wrong? I would be so embarrassed. That wouldn’t be good for my career.” In that situation, a lack of perceived competence was a driver of not speaking up. As the reader will note, there were 13 times feeling competent drove the actor to speak up and 12 when the lack of perceived self-efficacy influenced the person not to speak up. This is not a statistically significant difference and may suggest a dichotomous condition exists. When a person feels competent and credible, they will speak up. When they do not, they are more likely to remain silent.

**Psychological Safety.** Looking at psychological safety, a similar trend can be observed. When participants felt safe to address the safety concern, they were more likely to do so, frequency of mention was 12. A quotation taken from the interview transcripts that supports this phenomenon is: “I have known this cardiologist my entire career. We don’t always see eye to eye. He has mentored me and supported me. He has also corrected me, but always in a productive way. He is a big fish around here. He has a lot of influence and can make people’s lives better or miserable. I was so confident he had missed the boat in his assessment, I had to
raise concern with him. I trusted that we had weathered enough storms over the years, inspite of the power imbalance, it would be safe for me to speak up.”

When participants did not feel safe, they did not speak up, frequency of mention was 9. There is less distinction as the difference between the frequency of mention is greater. What is clear is that a sense of psychological safety is a greater driver of speaking up behavior. A quotation taken from the interview transcripts to support the phenomenon of not speaking up was: “She is not always nice. She has reprimanded a lot of people publicly. It’s shaming and embarrassing. If you get on her wrong side, she can make life miserable…it’s hard to choose self-preservation over patient safety but I have to admit, I did. Speaking up was just too risky.”

These factors were collectively mentioned by 85.6% of all respondents. 60.8% of participants stated psychological safety was critical and 39.2% reported a sense of self efficacy or competence was most important. Psychological safety was described as feeling emotionally safe to speak up about a safety concern with the team. Self-efficacy, which I use interchangeably with the term competence, is the self-perception that the actor feels confident in their knowledge about the situation and in offering their thoughts and expertise. There were other codes and themes that emerged related to personal elements of influence, and I have added them above to personal factors that influence one to speak up or not during a critical safety moment.

Moral obligation was also mentioned (7 times). This was described as feeling compelled to do the right thing and speak up to protect the patient. This phenomenon is further supported by the definition of moral courage in the literature as speaking up in the face of known risk to pursue a morally worthy goal (Detert and Bruno, 2017). An example of this taken from interview transcripts is the quotation: “I couldn’t let something bad happen to the patient just because I
was scared to speak up. We go into healthcare to help people and we have to do the right thing.”

This phenomenon was a distinct factor that either inclined speaking up or not speaking up.

**Honoring the patient** was mentioned five times. This was described as doing what was in the best interest of the patient to honor them and their voice, often when they could not speak up for themselves as a driver of choosing to speak up. There was an expressed relationship between wanting to honor the patient and being grateful to be in the field of healthcare and having the gift every day, of taking care of patients and their families. This sentiment was expressed in the following quotation from an interview transcript:

“This patient and his wife had been with us on the unit on and off for years. We were all so fond of them. It became clear he was going to die. Near the end, we weren’t doing a good job with pain medication and all his wife wanted was for him to be comfortable. All he wanted was to be able to see his dog and say goodbye. The (physician) service that had taken over his care was not onboard with either of those goals. They were concerned too much pain medication would hasten his death and they didn’t feel a dog should be on the unit. We (sic - the nursing team) rallied. We were determined to get these things in place for this patient and his wife, no matter what anyone had to say about it!”

**Duty to speak up** as mentors and teachers (5). This was described as the personal obligation to model the behavior that as preceptors and faculty, they want to teach residents and student nurses. Three participant’s shared stories about times when they may have chosen not to speak up about a situation that was unfolding but chose to do so because they had awareness their students were watching and much more likely to do what was shown to them in the moment
rather than what was said to them after the fact. Two participants simply stated they felt it was their duty to speak up when working with students.

“I really didn’t want to take it on at the time. The doctor was a colleague of mine, and I just didn’t feel right about calling him out. The situation wasn’t that serious. But I knew the residents were aware something wasn’t right by the look on their faces. How could I not address it? That’s my job as a teacher and mentor. I need to teach them to do the right thing for their patients moving forward and be a positive role model regarding how to have uncomfortable conversations...”.

Lessons learned from past cases (4). These were situations where the participants had learned something of value from a root cause analysis case review and had recalled it during a critical safety moment. In all four instances, the “lessons learned” involved personal awareness and were about procedure, policy and available resources.

“I remember last year we talked about where the backup supply of (intentionally left blank to protect the unit) would be housed moving forward in case the cart was out. I know we don’t use it that often, but I recalled we agreed to move it to a more central location where more people would have access to it. People were snippy and didn’t want to go hunt for it, but I spoke up because it really was the better option to use and should not have been hard to locate.”

That equates to 46 mentions of phenomenon that promoted speaking up behavior.

There were four additional elements listed on the table above that emerged as factors that inclined the participants not to speak up. There were 45 mentions of these phenomena.

Fatigue (4) was described as a condition that inclined the participant not to speak up. Fatigue as a personal factor is slightly nuanced from being tired/exhausted as an emotional state
of being as described above in the emotional element frequency. Fatigue was used in these transcripts to describe a state of perpetual tiredness. Energy is low and waning continuously without restored bouts of energy.

Fatigue was described as being tired (physically and or emotionally) and not having the energy to speak up in the first place and or deal with the outcome of that decision. Sometime self-preservation in the moment of just getting through a shift or not opening the can of proverbial worms, provided incentive to remain silent. An example of this was: “I was so tired. I just didn’t have the energy to deal with it so I hoped someone else would speak up or at the very least, nothing bad would happen to the patient.”

**I didn’t speak up because no one got hurt** (10). This was mentioned ten times. This correlates with the concept of a near miss. In chapter one, a near miss is defined as a situation where harm may have easily occurred but did not, where conditions existed that could have predictably resulted in a bad outcome (The Joint Commission, 2018).

In healthcare, we encourage reporting of unsafe conditions when an actor becomes aware of a situation where harm could have reached the patient but thankfully did not. This is important because if left unreported, more conditions can compile creating the “swiss cheese effect.” The holes of the swiss cheese align to create the perfect opportunity for harm to permeate the protective layer the stacked slices would create if their holes were not aligned. Preventing harm before an adverse event occurs is always desirable. It has been this writers’ experience that there is much work to do in healthcare to continue to encourage reporting near misses.

The concept and code of **“triaging”** (10) in healthcare is the activity designed to assess patient care priorities to ensure the most urgent or emergent patients are taken care of first. As it
emerged through my research, it turned out this is a concept sometimes used by participants who
needed to decide whether to speak up or not. This was often described as an internal dialogue.

“What is the most important thing I need to accomplish right now?” How important is it to
speak up about this?” “Is a patient in immediate danger? If not- it can wait.” “Maybe it’s
better I wait to speak up until others are more receptive to hear it.”

The AI coding which became available after the completion of my data analysis and
dissertation defense, raised a new possible framing and additional codes. The Category as named
by Atlas.ti was “Workplace Stress” with a combined code frequency of (20). Factors that Atlas.ti
identified were time constraints, hectic, workload, academic environment. Interwoven in the
codes I created were the concepts of time constraints and hectic (triaging) and workload
(fatigue). The academic environment was only raised as an element that inclined a person to
speak up due to the duty of being a teacher and mentor as described above. The framing of
“workplace stress” may be an area of interest for further research. Personal elements had 111
total mentions which is the least mentioned element of the three that I studied. The proposition
was supported by the data. Self-efficacy and psychological safety are elements that influence the
decision to speak up or not.

P1: The key personal elements that influence a member of the healthcare team to speak up
during a critical safety moment are self-efficacy, (competence) and psychological safety.

Emotional Elements (Open Coding)

As indicated in Tables 3a and 3b, emotions were mentioned 107 times in open coding,
but there were 373 (inclusive of repetitive reporting in a single transcript) mentions of specific
emotions, inclusive of feelings as described by the participant. To be clear, I am using the word “emotion” as a broad construct inclusive of feelings as described by the participants. In the context of a qualitative study, it is important to preserve the integrity of the actors’ stories as they share their lived experience. There were words the actors used to describe feelings (“I felt bad”) that I included in coding frequency chart on p. 130 because this was how they described their experience. I removed repetitive mention of the same emotion in a single transcript on the code chart. It is not my intention to use the term emotion in a manner consistent with psychological behavioral research.

These emotions and feelings as described by the participants were further analyzed and categorized as positive, negative, or neutral sentiments using the ATLAS.Ti sentiment analysis tool (which I describe in greater detail in Chapter 5), given sentiment analysis is not directly related to my research question. 32 sentiments were studied. Using the ATLAS.Ti word frequency tool, I looked at prevailing emotions and sentiments mentioned during the semi-structured interviews. Of 32 sentiments there were 21 attributed to influencing the decision not to speak up, and 12 attributed to influencing the decision to speak up. Valence - the positive or negative direction of the word was classified using Atlas.ti sentiment analysis. There were eight sentiments classified as positive (Happy, confident, gratitude, humility, compassion, hope and courage). There were 19 sentiments or emotions classified as negative (bad, fear, regret, pain,
tired/exhaustion, struggle, emotional, anxiety, scared, sad, burnout, nervous, disappointed, shock, depleted, grief, panic, loneliness, stress.) There were five co-occurring emotions (confident, appreciate, hope, fear and emotional) thus being deemed neutral which was context dependent.
Transcript excerpts that provide insight and evidence into how these sentiments were discussed are as follows.

**Emotional Element (Part B): Sentiment Analysis**

As indicated in Table 3b, there were 21 sentiments that influenced the participants not to speak up.

The word “bad” was used more frequently (62) than any other word evidenced by the frequency count in the chart on p.130. It seemed to be a catch all category to describe a general feeling of malaise. “I felt bad that the patient might suffer as a result of not catching the mass on his imaging.” “I felt bad, but I wasn’t willing to take the risk and speak up”. “It was bad that no one spoke up”. When I asked the participants to explain what they meant by the word “bad”, they couldn’t clarify. I pushed a little bit by asking did they mean “sad, scared, worried, anxious…?” and in essence, the participants responded saying - yeah- all of that. This exercise was repeated with subsequent participants who chose the word bad to convey their emotions when asked, “What were you feeling at the time?” The mix of emotions as ingredients combined to create the soup known as “bad” was different each time, but there was always a list.

The experience of fear as an emotion was akin to the feeling of being scared, yet there were some nuances. Fear (34): “I was afraid there would be retaliation for what I said, even if it was subtle.” The word fear was most often used in the context of describing an ongoing state of worry that something negative might happen because of speaking up. Scared (8) on the other hand, tended to convey an immediate response to what was happening: “I was scared the patient
might die if I didn’t speak up.” Fear was also a driver of speaking up which I will describe later in the text.

**Pain** (15) was used to describe one of two conditions. Either the patients’ pain because of inappropriate intervention or emotional pain experienced resulting from the decision to speak up or not. “I was thinking to myself- the patient’s pain is not controlled and we aren’t doing the right things to address it- someone needs to speak up” or as an existential state of crisis- “It’s painful to grapple with the decision about whether to speak up or not knowing the potential for a very poor outcome.”

**Struggle** (14) was most often used a verb to describe the action of trying to decide what to do in a critical safety moment. “I struggled to find an answer. If I spoke up, the team may not appreciate my feedback and I didn’t want to alienate my peers.”

**Tired and Exhausted** (13) was a description of the participants’ condition in the moment. “I was so tired I couldn’t think straight… speaking up wasn’t something I was concerned about in the moment.” As I discussed in the section on personal elements on p.143, fatigue had a different connotation. Fatigue was used to describe a perpetual state of being tired-more unrelenting and without periods of rest and relief. This is a condition that inclines one not to speak up.

**Emotional** (12) was used to consistently describe the participants state of emoting or expressing feelings – whether verbal or non-verbal. “I was just so emotional- I couldn’t stop crying.” “I was sick to my stomach I was so emotional.” “I was embarrassed I was so emotional.” In these situations, the participants chose not to speak up but rather focus on gaining control of their emotions, which they all described in various ways, as moments of weakness.
Emotional was also a driver of speaking up thus being a neutral or co-occurring element which I will describe in the next section.

**Appreciate** (12) is a co-occurring sentiment that can drive both speaking up and choosing not to speak up. In this context, appreciate was used to convey understanding of a dilemma. “I could appreciate the challenge of how busy the unit was, but that’s not a reason to ignore safety protocol.” “I always appreciate the value of having a collaborative relationship with coworkers but we can’t let that cloud our common sense (prudence)- we still have to speak up when something doesn’t look right.”

**Anxiety** or the state of being anxious (10) and nervous (5) appeared most often when the participants were describing the exact moment at which they were making the decision to speak up or not. The decision itself produced anxiety. “I had so much anxiety in the end, I just couldn’t bring myself to speak up.” “I was so nervous, I chose to stay quiet.”

**Confident** (9) was used in this context to describe several phenomena. “I felt confident the lab work was back, so I’m not sure why he didn’t check it- he was made aware by the other nurse.” The actor was certain the right information had been received by the offender, so she didn’t feel it was necessary to speak up. “I had a high degree of confidence that the right decision would be made once all the facts were known.” Choosing not to speak up because of the strongly held belief that actionable data were available. Finally, “I was confident that I would not be heard- that’s the pattern, so why speak up again?”

**Sad** (8) was an emotion conveyed most frequently in the context of how the participants felt about adverse outcomes that could have been prevented if someone had chosen to speak up. Sometimes, the choice not to speak up was understood in that moment to be potentially harmful.
to the patient. Other times, the recognition that something serious could go wrong, didn’t happen until after the event. The participants then described sadness that the risk had not been discovered earlier. “I felt so sad that if we had just done a double-check and verified the information, this would never have happened.”

**Burnout** (6) was a term used when participants shared their experiences related to feeling depleted. The word depleted (1) was also used. “I just got so burned out being the only one who spoke up, I stopped doing it.” This is where we see a clear emergence of the theme and inference a culture of silence is dangerous (Edmonsdon, 2019).

**Feeling hopeless** (5) was consistently used to describe circumstances where the participants lost faith in their ability to make a change. “I felt hopeless. I had tried many times to suggest changes to our process, but no one seemed to listen.”

**Disappointed** (4) was how participants described their feelings regarding how leadership reacted (or didn’t) to a safety concern. “I was so disappointed leadership didn’t do anything about the concern when it was raised, I decided it wasn’t worth the effort to speak up… I just stopped trying.”

**Shock** (4) was the feeling used to describe the reaction participants had to either the safety event itself as it was unfolding in front of them or, the reactions of leadership once they became aware of the situation. “I was shocked the checklist had not been used and this horrible safety event was happening right before my eyes… I froze. I just could speak up” or, “We have repeatedly informed the unit leaders about the problem, but it’s gotten to the point they don’t seem to care or even listen. I’m shocked at their reaction.” In both instances, shock drove people not to speak up.
Grief as an emotion was described in the context of talking about loss. The state of grief resulted in the participants withdrawal from the situation and divestment of interest in speaking up, at least for the time-being. “My grief for this family was so overwhelming, I couldn’t focus on anything else for a while.”

SENTIMENTS THAT DROVE THE DECISION TO SPEAK UP

As shown in Table 3, there were 14 sentiments that influenced the participants to speak up.

Appreciate, a co-occurring sentiment on the chart on p 138, was used very differently in the context of how it influenced participants to speak up. In these situations, actors described one of two conditions. First, having a deep understanding and awareness of how important speaking up was in the moment and the impact of failing to do so, or, feeling appreciated and believing that speaking up would be appreciated. “I could appreciate the complexity of the procedure and how many competing pieces of data there were to consider so I felt I had to speak up to help.” “I always feel my effort with the (intentionally left blank to protect identity) team is appreciated.”

Anger was a significant driver of choosing to speak up evidenced by frequency of mention. Anger was described consistently in one of two contexts. First, being angry that repeated attempts had been made over time or at the time to remedy the situation and no one appeared to be listening –so in other words, the participant felt dismissed and ignored. “There were three of us questioning why we were proceeding without having the imaging back, but he was in a hell-bent hurry to finish so we were ignored.” In the second scenario, anger resulted
from a sense of injustice about the risk to the patient. “How can she just ignore the warning signs that many of us have brought up? This is a real patient, not an academic exercise.”

**Happy** (18) was a sentiment expressed when there was a positive outcome attributed to the work the participant was engaged in. To be clear, that did not mean there was not an adverse outcome at some point. There were occasions where the person described a strong action plan resulting from a case review that would help to prevent similar adverse outcomes in the future. Sometimes, the participant was happy the error was avoided because someone caught a dangerous condition and chose to speak up. “I was happy that Susan caught the medication discrepancy and that we were able to change the order before something bad happened”. Other times, happy was used to describe the participants feeling about more people stepping forward to speak up during a critical safety moment thus creating pressure on the offender to reconsider his or her action “I was happy that Kathy said she agreed with Mary and Dr. Tomas; we needed to take a time out and review the imaging before proceeding...”. Happy was also used to convey participants’ feelings pertaining to leaders recognition of a safety win: “It was so gratifying to know that the manager understands the work we put into making this a safe experience for the patient. I was happy to see she recognized that.”

**Confident** (13) was a sentiment described above as appearing in both the drivers that promoted speaking up and those that did not. In the context of a promotive voice, confident was used to describe being sure something good would come from speaking up. “I was confident that once the director saw what was happening with the new medication reconciliation process, she would agree we need to return to our former policy or reevaluate and start over.”
Regret (12) was an emotion used to describe the participants’ feelings for past decisions not to speak up as they recalled what happened and how it might have been prevented if they had made a different choice in the moment. Anticipatory regret appeared as the interviewees described their decision-making process in the context of current and future situations where they become aware that not speaking up could result in an adverse outcome. The awareness of the impact of their decision then becomes the driver to speak up. This phenomenon was seen most prominently with physicians as they recalled stories where they regretted not having spoken up: “If I had confronted my colleague in the moment, we very well may not have lost two patients that day. Their deaths were preventable, and I carry that with me every day all these years later…” Another example- “I knew the patient was circling the drain. I wanted to give the resident every learning opportunity to make the call and get it right. We must teach critical thinking by allowing our learners to figure stuff out on their own. But I let it go too long. I needed to step in sooner. My delay in care caused harm to the patient and I still regret it, even though there was no permanent harm…”

We see that past regret commands a strong hold on providers. Awareness of that regret takes the form of secondary trauma, also known as vicarious trauma, which emerges when there are second victims of the situation where the harm was not just to the patient but also to the bystander (Nimmo and Huggard, 2013). This is a widely accepted phenomenon in healthcare. Repeated exposure to patient encounters where preventable harm occurred as well as trauma to the patient that was not avoidable, take its toll on the healthcare team.

Anticipatory regret then makes an appearance when the actor recalls what happened in the past because of not speaking up. Anticipating the potential impact of the decision not to
speak up now on the patient and on him or herself as the healthcare actor, influences the decision this time, to raise voice: “I remember thinking I know all too well what can happen if I don’t call this out. It’s always difficult to confront your peer but living with the regret is a much greater consequence.” Another excerpt for the transcripts: “If I don’t take a stand now on how we’re managing this policy, I run the risk of patient harm. I don’t want to have that on my conscience.” I included anticipatory regret in my logic model (see p.23), as an element that would influence speaking up. The data based on frequency of mention supports that proposition.

**Gratitude** (8) was a sentiment most often used to convey a sense of being thankful for the work the participants themselves get to do. “I am so grateful my career has been devoted to help people during their most vulnerable moments.” “The patient and his wife were so grateful to me, but it was me who felt grateful to them for being allowed to be part of their journey.” There were also two instances where the participants described their gratitude to the team for their support during a particularly stressful time on the unit. Gratitude seemed to influence the decision to speak up because of the participants awareness that speaking up fosters positive outcomes Because they were feeling grateful for their experience, they indicated they wanted to give back by doing things that would make patient care safer.

**Humility** (8) as described by the participants was the awareness that they are “but one voice,” *but one person* with a voice whose decisions can impact the quality of care provided to patients. “I realized I was only one voice but, in that moment, what I had to say might make a difference... I wasn’t a tenured member of the team, but my role was still important.” Understanding that everyone plays a role in the delivery of safe healthcare was a drive of the decision to speak up, no matter what the rank or the title of the participant was.
Emotional (5) was a sentiment that was co-occurring as both a driver of not speaking up and of speaking up. Above, examples were provided where the participants describe emotional in the context of feeling scared, nauseated, overwhelmed etc. In this context, feeling “emotional” was a driver of not speaking up. However, being emotional was also used to explain the sense of feeling very positive: “I was so emotional- I felt overwhelmed with happiness that this mom got to go home to her kids- she was going to be ok after all. I had to make sure we never repeated the same mistake again with another patient because we all deserve to be with our kids.” “I was so excited that we finally figured out what was wrong. The nurses were overcome with emotion that we played a role in figuring it out and that we were able to make a difference for this patient.” Emotional in this context as evidenced by the frequency and the quotations show it is a driver of speaking up behavior.

Compassion (5) was a clear driver of choosing to speak up. When healthcare actors felt compassion for a patient or staff member and there was an adverse condition known to the participant, the participant chose to speak up. “The patient was in so much pain... how could we just leave him like that? I know we didn’t have all the tests back, but we had to do something. Patients come to us for answers and treatment, but they also come to us for comfort and pain relief.” “Mary hadn’t had a day off in three weeks. She just kept covering for everyone who was out with Covid. She never complained, and it wasn’t anyone’s fault who was out sick... finally I spoke up to our director- we had to stop abusing her (Mary’s) kindness.”

Hope (3) conveyed the belief that the outcome would be positive. This didn’t necessarily mean there wouldn’t be an adverse event, but rather the participant had faith and believed good would come from the situation “I had to hope that someone on night shift would speak up this
time if the patient’s condition deteriorated. I was exhausted and had to get some sleep.” “I was hopeful after I spoke up to confront the situation, others would come forth an do the same.”

Hope supported the decision to speak up as evidenced by the transcript excerpts provided above.

**Courage** (3) has been described throughout this manuscript as a concept interwoven in the speaking up literature. There were three instances where the word courage was used, however many more times where courage was likely a factor of influence, however it was not labeled that way by the participant. Returning for a moment to the definitions used in chapter one, let’s examine two different descriptions:

*Courage, defined as* acting intentionally and voluntarily in the face of risks, threats, or obstacles in the pursuit of morally worthy goals (Gould, 2005) could be seen as the participants made choices under a difficult circumstance to speak up. Another definition of courage that applies in this context is *Workplace courage*. An act that happens in the workplace done for a worthy cause despite significant risk perceivable in the moment to the actor (Detert & Bruno, 2017). The lack of courage in the moment can then logically be seen in the decision not to speak up often in the context of being fearful of consequences. The three quotes where the word courage appeared were as follows.

“It took courage to speak up to a C-suite executive, but I was tired of hearing about money, budgets and how bad off we were... how did he expect we could fix the problem without resources?”

“I was on thin ice with this physician- we had not been on good terms for weeks. I had to make the choice whether to report him for conduct and professionalism issues or turn the other
cheek. He had the ability to make my life miserable and severely impact my career, but I mustered the courage to do the right thing for patients, the unit and for myself.”

“I had to find the courage to address the elephant in the living room. We kept doing the same thing again and again expecting a different result. I wasn’t willing to be the insane one any longer. People’s lives depend on our choices…”

Shame (1) was only used once, however, in the context of a powerful descriptive quotation. It was beyond the scope of my research question to dive deeper, however I was left to wonder if other participants experienced shame but didn’t share it, as it is a deeply personal, vulnerable experience. “I was publicly shamed by the other nurse. She clearly disagreed with me and made a point of telling everyone who would listen. It’s true that I didn’t have her experience or her knowledge of the evidence-based best practices, but what I did have was a conscience and I didn’t want her to shame me or anyone else again… speaking up doesn’t mean you have to know everything.” Specific sentiments were mentioned 110 times as elements of influence on both speaking up and not speaking up.

There were thematic codes related to emotional sentiment that I created as broader categories than a single emotion. Fear of retaliation (11), Feeling isolated (4) Feeling hopeless – nothing will be good enough (5), Feeling helpless (3), Not speaking up as expression of loyalty (3), and providers not feeling cared about. In these categories, there was a mix of sentiments that resulted in a more general sentiment that inclined the participant to not speak up. Here are some transcript excerpts.
Fear of retaliation: “I was scared she might retaliate. I didn’t trust her. She could be mean at times and at other times, as sweet as honey. Her motive was rarely clear... it wasn’t just me who stood to suffer if she rebelled. I just never knew which Susie I was going to get.” In this quotation, fear of retaliation is the overarching sentiment but there were other dimensions including trust, concern for others, and lack of predictability.

Feeling isolated was described as feeling alone in the matter and lacking support. Feeling hopeless was a co-occurring condition of feeling hopeful. Hopelessness influences the decision to not speak up, where, as described above feeling hopeful tends to promote speaking up, “No matter what I do, it won’t make a difference here.” This category was created to capture feelings about collective hopelessness pertaining to cultural transformation, not a sense of hopefulness about a personal situation.

Feeling helpless was used to describe conditions under which the participants felt they could not personally do anything to affect a different outcome in a given situation. Not speaking up as an expression of loyalty was a phenomenon that emerged in the physician transcripts. The sense of obligation to protect their peers and stay united as part of a select and exclusive tribe known as “doctors” was sometimes the reason for not speaking up. Finally, not feeling cared about seemed to include feelings of sadness, anger, regret, and frustration.

Overarching themes that influenced the decision to speak up included: Enough is enough (12), Feeling heard & respected (12), Bestowing peace & Compassion (4) and Resilience and insight gained through speaking up (4).
Enough is enough: The participants have endured significant anger and frustration, resentment etc., over processes and policy not being followed others not being held accountable and they have reached their tolerance limit. They decide to speak up. “We have talked about this and ‘educated’ staff to do the right thing over and over. Instead of moving to corrective action when performance doesn’t improve, we just keep repeating the same mistakes…. I’ve had it!”

The theme of leaders holding staff accountable emerges as a significant drive of speaking up behavior evidenced by frequency of mention and the intensity in which the participants shared their stories.

Feeling heard and respected: When participants felt their feedback had repeatedly fallen on deaf ears, they chose not to speak up thus creating a culture of silence. However, when participants were validated or providing feedback and sharing concerns, they chose to speak up in the future. “All I wanted was to be heard. When someone with positional power finally listened and acknowledged my concerns, it was easy for me to speak up then and moving forward.”

Bestowing peace and compassion: This category was created to capture the sentiment of how participants felt about the role they played in resolving conflict. “The whole team was arguing- it seemed no one cared about what anything or anyone else was saying. Most had just stopped listening. I felt I needed to jump in and be Switzerland. I reminded everyone that we all shared the same goal which was to help this patient. Once people started to think about that, everyone calmed down and was able to work together.”

Resilience and insight gained through speaking up: The past success realized because of speaking up inclined future speaking up. Resilience was gained through the process of choosing
to speak up no matter the potential for consequences and that something good came from that decision. “I was afraid to speak up in the past, but I learned I could do it and that most often, good things happened when I did.”

Collectively, the overarching themes driving the decision to speak up or not were mentioned 65 times.

The category that emerged through AI analysis was “Psychological distress” with a frequency of all combined codes totaling (92). The codes included burn-out, anxiety, challenges, conflict, defeated, ambiguity, uncertainty, frustration, helpless, inaction, insecure. As you can see, there was an overlap of codes with my list and a few new mentions (ambiguity, uncertainty, inaction and insecure). In a cursory review of the codes applied to the interview transcripts, in some instances it was unclear if the AI function consistently cued conditions directly related to the decision to speak up. As previously mentioned, this tool was discovered after my dissertation defense and submission of a near final manuscript so, this is being mentioned as a possible area of further interest.

The total codes ascribed to emotional elements were 267. As evidenced by frequency, that means emotional influences were the second most prominent factor inclining the participant to speak up or not. It is important to note that overall, negative emotions are greater drivers of not speaking up and positive emotions tend to positively influence speaking up behavior. The data supports the proposition.

P2: The emotional elements that influence a member of the healthcare team to speak up during a critical safety moment include fear, anger, and anticipatory regret.
Relational Elements

Results: Relational elements inclusive of team trust and interpersonal trust had 125 mentions broadly across the sample of 88 personal stories which equates to 85.6% of participants citing relational influences. Relational factors included team support (trust in the team to support the decision to speak up) and buy in from other healthcare providers that the situation was unsafe. Interpersonal trust was defined as the perception that the other individual will not do anything to harm you; the willingness to accept risk based on the other person’s behavior. There were 20 codes generated related to team and interpersonal trust.

<table>
<thead>
<tr>
<th>Relational Element - 22 codes / 316 quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking Up</td>
</tr>
<tr>
<td>Leaders speak up (27)</td>
</tr>
<tr>
<td>Interdisciplinary debriefing and education (27)</td>
</tr>
<tr>
<td>Building team trust (25)</td>
</tr>
<tr>
<td>Teamwork is imperative (23)</td>
</tr>
<tr>
<td>Felt supported by team (21)</td>
</tr>
<tr>
<td>Celebrating speaking up (15)</td>
</tr>
<tr>
<td>Interdisciplinary collaboration (12)</td>
</tr>
<tr>
<td>Relational trust (10)</td>
</tr>
<tr>
<td>Shared accountability (5)</td>
</tr>
<tr>
<td>Just Culture (4)</td>
</tr>
<tr>
<td>Building relationships through conflict resolution (3)</td>
</tr>
<tr>
<td>Policy to escalate safety concerns (2)</td>
</tr>
<tr>
<td>How do we get to “yes” (2)</td>
</tr>
<tr>
<td>Intentional creation of connections (2)</td>
</tr>
<tr>
<td>Total Codes – 14</td>
</tr>
<tr>
<td>Total quotations for speaking up - 178</td>
</tr>
</tbody>
</table>

The data suggest the single most influential element in determining a person’s willingness to speak up during a critical safety moment is team trust. Interpersonal trust (3),
defined in chapter one as confidence in or reliance on the reliability, predictability, and fairness of a person; it is relational, likely based on one’s experience with another (Zaheer, McEvily, & Perrone, 1998), appeared to play a minimal role in the participants’ description of what inclined them to speak up or not. This was only mentioned as a factor of influence when there was a particular person identified as the reason a participant chose not to speak up. This was not a common theme; it was only mentioned three times. During those three encounters, the offender was known to be one who could cause damage but, more importantly, was regarded as a bully with whom no one wanted to work. It was the anxiety surrounding the situation in which the offender would explode and create chaos and fear that was the primary impetus for not speaking up, not the fear of personal harm to reputation.

“He was a terror—everyone knew it. He could cause such disruption to the clinical space if you (expletive) him off. No one wanted to work with him so we all avoided anything that would set him off if we possibly could.”

“She was so moody. I just chose not to deal with her when possible. Avoiding her was my coping strategy—the team was my go-to resource.”

The participants’ relationship with the team was the primary driver influencing the decision to speak up or not. As we revisit the definition of team used in chapter one, the concept of team can clearly be seen in a hospital setting. Team Collaboration. When a group of autonomous stakeholders of a problem engage in an interactive process using shared rules, norms, and structure to act or decide on an issue (Wood & Gray, 2001).

Sense of team. A feeling that members of a team are a community with personal interrelatedness in which they have belonging, they matter to each other, and they have a shared
faith that their needs will be met through their commitment to each other (McMillan & Chavas, 1996).

Examples of the 17 remaining relational codes applied to teams are as follows.

**Participants chose to speak up under the following conditions:**

- Leaders speak up (27) – Leaders model speaking up behavior and demonstrate through their own behavior that speaking up is important. “I see ___ as an executive leader speaking up all the time. He’s showing us how to do it and that it’s what he expects.” Leader modeling then becomes a compelling influence on the actor’s decision to speak up.

- Interdisciplinary shared debriefing and education (27) – The team that learns together, stays together. “*When we learn a new concept or figure something out as a team, it’s easier to work together in the same way moving forward. It’s also easier to call something out if it’s not the way we learned.*”

- Building team trust (25) – team trust is built by working together and solving problems together. “If we are all part of finding solutions, we build trust. No one is alone or singled out.”

- Teamwork is imperative (23) - healthcare is a team sport. The days of paternalistic medicine where the doctor is in charge and makes all the decisions is gone forever. Medicine is too complex and requires the expertise of a collective team to care for the patient. Because the team is ingrained in the care plan, team collaboration and insight are imperative. “*We must depend on each other. No one or two or even three of us can do it alone.*”
• Felt supported by team (21) – When individual members feel supported by the team, it makes everything, including speaking up, easier to do.

• Celebrating speaking up (15) – “When we speak up and something good comes of it, we celebrate our success as a team.”

• Interdisciplinary collaboration (12) – Interdisciplinary work is essential because of the expertise each profession brings to the patient encounter. No one profession can possibly know everything required to care for patients.

• Relational trust (10) – when there is a high degree of trust in the team and their collective wisdom, speaking up is easier to do. “These people are my tribe- I trust them and they trust me. When something doesn’t feel right, I speak up. Everyone respects that.”

• Shared accountability (5) – Participants must count on each other to share the workload, identify safety concerns, and escalate issues as needed. The weight of being solely responsible for a patient’s well-being cannot be endured. “It takes a village.”

• Just Culture (4) – As defined in chapter one, is a condition that exists when errors and mistakes are analyzed with a non-punitive approach, and where improving safety is the goal within the context of the belief that most people are well-intended and working hard to do the right thing. In this framing, people are more likely to be honest, transparent, forthcoming, and willing to be part of the discussion and the solution (Boysen, 2013).

• Required escalation of safety concerns is a policy (2) – A policy exists where staff are required to escalate safety concerns if they feel they have gone through the proper channels to address the matter and the situation is not resolved. This policy makes it
easier to speak up. “I just said to ____, ‘hey guy this is the policy- I don’t have a choice. I am required to escalate the concern- it isn’t personal.’”

- How do we get to “yes” (2) – a belief in the team that they can work together to reach consensus and solve the issue at hand.

- Intentional act of creating a connection with others (2) – Intentionally making the effort to create a connection with the team to improve your relationship, collaboration, and outcomes. Both times this appeared it was a physician describing what they had one to cultivate positive team support. “I don’t always have the time to sit at the nurse’s station and chit chat, but I work to find it. Taking an extra 5 minutes to remember to ask about their pets or their children or a recent event goes miles towards building team trust. Sometimes even just being present without saying anything at all, works miracles.”

Participants chose not to speak up under these relational conditions.

- Accountability- failure to follow up and follow through (32). When action plans for improvement are put into place but leaders don’t follow up to ensure staff are held accountable for follow through, it strongly influences people to stop speaking up. “The same things keep happening because we aren’t holding people accountable.” By measure of frequency and context of the interview transcripts, this was one of the most compelling reasons participants either chose not to speak up or to stop speaking up.

- No one else was speaking up (31) – Speaking up repeatedly in a culture where others are not leads to a culture of silence. “I spoke up 100 times about the same thing... no one else seemed concerned. I can’t do this by myself. I’m going to shut my mouth- I’ve done my part.”
• Perceived culture of non-transparency (26) – the participants’ belief that the culture is really one that supports a “need to know mentality” where they only talk about what they have to with those who need to be aware.

• Powerlessness - (9) The sense that the participant felt what needed to happen would have to come from above- they did not perceive they would be able to impact change.

• Preservation of revenue stream (4) “We don’t call out safety concerns as strong as we should sometimes. There is a commitment to preserve resources. Regulatory and accreditation issues along with malpractice suites are expensive!”

• Latent Speaking up (12) – people who chose to speak up about a safety event were questioned by the leadership about why they waited to come forth with the concern, instead of being praised for doing so (“celebrate the wins”). When participants felt criticized for their efforts, they were inclined not to speak up again.

• Leaders do not speak up (12) Espoused values were perceived as genuine by the participants only if the leaders’ model what they are asking for.

• Science vs. intuition (12) Physicians are not likely to speak up based on a hunch or a gut feeling. Medicine is an evidence-based science. Even when doctor participants had been right based on their intuition in the past, when they didn’t have evidence to support their hypothesis, they were more inclined not to speak up.

These collective relational codes resulted in a total frequency of mention of 415. Team elements influencing the decision to speak up mentioned 178 times; Not Speaking up – 138. There were 99 AI generated codes. The AI category that emerged was “uncertainty and lack of clarity.” These codes tended to be applied to portions of the
participants transcripts where there was hesitance in making the decision to speak up or not. These words as factors of unique influence were not mentioned by the participants. Based on frequency, relational factors have the greatest influence on the participants decision to speak up during a critical safety moment. The evidence supported my proposition:

*P3: The relational elements that will influence the participant’s decision to speak up or not are interpersonal and team trust.*

**Results of Network Coding**

Looking at all the elements and emerging patterns, a dichotomous list of conditions that inclined the actor to speak up and circumstances that discouraged speaking up, was created:

**Table 5**

*Dichotomous List of Findings Depicting Conditions Under Which Actors Chose to Speak Up or Not for Each Category*

*Note: No direct relationship exists across each row in these two columns*

<table>
<thead>
<tr>
<th>Chose to Speak up</th>
<th>Chose not to Speak up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor felt supported by team</td>
<td>Actor was not confident she/he has the support of the team</td>
</tr>
<tr>
<td>Actor observed leader modeling of speaking up- <em>expected not just accepted</em></td>
<td>Actor doubted his or her own competence and self-efficacy; lacked confidence in his/her assessment</td>
</tr>
<tr>
<td>Accountability and follow-up/through is happening following adverse events</td>
<td>Actor did not perceive speaking up to be expected or that important to leadership. Leaders are either not modeling &amp;/OR not following through with accountability measures.</td>
</tr>
<tr>
<td>Secondary trauma due to prior times the actor did not speak up and there was an adverse outcome</td>
<td>Fear of retaliation by perceived threat to relationships with teammates- creating an unpleasant and uncooperative team space.</td>
</tr>
</tbody>
</table>
### Table: Influential Factors on Speaking Up Behavior

<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enough is enough</strong></td>
<td><em>I must act</em> closely tied to perceived confidence and competence*</td>
</tr>
<tr>
<td><strong>Futility</strong></td>
<td>I’ve spoken up before, nothing changes.</td>
</tr>
<tr>
<td><strong>Actor perceived threat to patient</strong></td>
<td>Emotionally exhausted. Self-preservation and resilience. Choosing one’s battles.</td>
</tr>
<tr>
<td><strong>Actor felt responsible to set the example for students who he/she is precepting.</strong></td>
<td>Triaging Speaking up behavior. There are many competing priorities. Speaking up may not be at the top of the list now or at all.</td>
</tr>
<tr>
<td><strong>Wins are celebrated</strong></td>
<td>Speaking up behavior is reinforced</td>
</tr>
<tr>
<td><strong>“Victim, Villain or Hero”</strong></td>
<td>Choosing to remain silent so as not to be perceived as the villain who gets others in trouble. Choosing to leave well enough alone.</td>
</tr>
<tr>
<td><strong>Fear of consequence</strong></td>
<td>Fear of harm to career, political fallout</td>
</tr>
<tr>
<td><strong>Science vs. Intuition</strong></td>
<td>Science vs. Intuition – especially with physicians, the practice of medicine is evidence based not intuition. “I’ve got a feeling” is not perceived as credible.</td>
</tr>
<tr>
<td><strong>Gratitude and hope for the patient</strong></td>
<td>Gratitude and hope for the patient as motivators advocated for them.</td>
</tr>
</tbody>
</table>

The data support relational elements are the most influential in shaping the actor’s decision to speak up during a critical safety moment. Feeling supported by one’s team and having a high degree of trust in them inclines one to speak up. Perhaps because healthcare is a highly team-driven and dependent service, the understanding and acceptance of this phenomenon makes it imperative to work collaboratively.

Emotional elements were the second most influential factor. Often, the participant would describe a list of emotions or feelings in the context of one safety story. Therefore, 107 is the number of times the actor attributed an emotion to his or her experience, not the total number of feelings shared. “Bad,” which is not an emotion but was a word that participants used to describe
their feelings, thoughts, reactions, and evaluations, was mentioned 62 times. Fear was the most frequently mentioned negative emotion (24 times). It was described as the emotion most likely to prevent speaking up. Anger, mentioned 21 times, was most likely to drive speaking up. I posited that anticipatory regret would be important. It was never mentioned using those exact words. However, referring to the definition of anticipatory regret on p. 50, *anticipatory regret* is a negative emotion experienced when realizing or imaging that a situation would have tuned out differently if we had acted differently (Detert & Bruno, 2017; Zeelenberg, 1999). Choosing to speak up as result of past experiences and the regret the actor had for not speaking up in the past can be construed as anticipatory regret. Particularly with physicians, the secondary trauma that reportedly still exists regarding past experiences where there was an adverse outcome was the most significant driver of speaking up. The physician interview transcripts tend to convey a focus on their perceived moral obligation to speak up based on past experiences rather than doing so for fear of regretting not doing so later. The two are clearly intertwined. These nuances in the relationships between elements of influence are interesting. Some participants were very willing to be vulnerable and speak in detail about everything they could recall about certain situations. Other actors were forthcoming yet guarded in terms of discussing past regrets.

Courage, defined as acting intentionally and voluntarily in the face of risks, threats, or obstacles in the pursuit of morally worthy goals (Gould, 2005), seems to play a role as it relates to moral obligation. Physicians indicated they often choose to speak up because it is their responsibility to do so, even when they perceive there may be relational harm with peers because of doing so. Five physicians used the word “brave” to describe what it took for them to speak up about a situation that may influence their career. This can be construed as an act of courage.
Situations they described as being the easiest for them to raise voice in were those where prudence, defined as practical wisdom that guides a person to choose what is right to achieve good (Haslam, 1991), prevails. Achieving good is centered around improved safety and clinical outcomes. Conditions that were reported as having a greater likelihood to use discretionary voice (speaking up in some situations but not in others) were those involving potential consequences to their physician peers.

There were 84 mentions of personal factors influencing the decision to speak up or not. Psychological safety was mentioned with greater frequency across all participants; however, self-efficacy (competence) was a more significant factor among nurses (most significant) and for physicians, particularly early on in their careers. While the relational element of team trust had a higher frequency of mention than the personal element of psychological safety, the two are related. The participants who spoke about the importance of team trust described sometimes feeling fearful or insecure, which can be construed as low psychological safety. Psychological safety is both an affective and cognitive state (Edmondson 1999). Therefore, there may be implications for exploring the possibility of focusing on increasing one’s state of feeling safe as a mindset, rather than an emotional experience. Overall, personal factors were the least important drivers of the decision to speak up or not according to frequency of mention.

**Network Coding Relationships**

The previous analysis all supports the following relationships between open, axial, and selective coding. Most importantly, five concluding themes are implied by the analysis as indicated in Figure 3.
1. Speaking up must be expected, not just accepted. Leaders at all levels, beginning at the top, must make it an expectation for people to speak up, not just make it ok to do so.

2. A culture of not speaking up is exhausting to those who do and will result in a culture of silence. A lack of accountability for follow-up and follow-through after one has spoken
up about a safety concern will decrease the willingness of those exercising courage and
prudence to do so in the future. Espousing support for speaking up and focusing on
patient safety is likely to fall upon deaf ears when the culture does not truly support
speaking up- culture eats strategy for breakfast (Drucker, P. 2006).

3. Hierarchical barriers to speaking up can best be reduced with leader-modeling. Leaders,
especially at the executive level, must model speaking up in public forums such as town
halls, management forum, root cause safety reviews, quality council, and other times
where there are large gatherings. Values must be modeled, not just espoused. Raising
voice in these situations promotes safety culture and creates the expectation that safety
and speaking up is everyone’s responsibility.

4. When there is an adverse outcome, past regret for not speaking up and the secondary
trauma resulting from choosing to remain silent is the biggest individual driver for
physicians to speak up. A strong sense of perceived self-efficacy and competence is the
most important individual factor inclining nurses to speak up. However, the most
influential cultural consideration to encourage and promote speaking up is team support.

5. Celebrate the wins. Speaking up must be acknowledged, recognized, and rewarded.

Connecting the dots between improved safety culture, speaking up and better outcomes is
vital to sustain a safety culture of transparency and high reliability.

Further, as shared by the participants, they perceived there is a strong relationship
between celebrating safety wins and reinforcing speaking up behavior. The healthcare actors
reported that when leaders reward and recognize the wins that occur because of speaking up,
they are more inclined to do so in the future. Sometimes, an adverse outcome is averted as result
of speaking up. However, at times even if a negative outcome did occur, a process change is made which will hopefully prevent harm the next time. This reinforcement and celebration of speaking up was described as a significant motivator for the participants.

Limitations of the Study

The scope of this study is limited to a single hospital case study. The hospital is a 900+-bed tertiary care, Level 1 trauma center located in the Midwest. The location of the study provides a rich context for the exploration of personal, relational, and emotional elements that result in the propensity of a member of the healthcare team to speak up during critical moments and which can influence safety outcomes. The size and scope of the hospital practice provides many opportunities to elicit feedback and analyze safety data, while maintaining continuity of setting. There are many factors that influence safety outcomes in a hospital. A qualitative methods design provides insight into factors that impact the decision to speak up on safety outcomes.

The limitations in this research include both scope of study as well as variable constraints. First, the number of personal, relational, and emotional elements that influence speaking up were limited to allow for a focused review commensurate with the purpose of the study. The personal, relational, and emotional elements of propensity frequently observed in healthcare settings served to guide the decision-making process about the most germane and influential construct variables. This study was limited to a hospital environment within the context of all healthcare settings.

Types of errors that I examined were limited to three error types: negligence, egregious errors, and near misses. This limitation is necessary to facilitate conversation and exploration of
the elements that influence the decision to speak up in the moment. Therefore, I did not examine unobservable errors such as slips and lapses that were not called out during a critical moment. *Negligence* is an error where there was a failure to execute a rule, policy, or procedure because of distraction or other issues that prevented due diligence in the moment (“Aviation Knowledge and Human Error,” n.d.). *Egregious errors* are rule-based planning or execution errors where there is willful commission or omission of actions despite having rules in place and the knowledge that such an action or inaction may result in significant harm (The Joint Commission, 2018). Both negligent and egregious errors can result in a category of safety incidents classified as *sentinel events*. Sentinel events are defined as any unanticipated event in a healthcare setting resulting in serious physical or psychological injury to a patient or patients not related to the natural course of the patient’s illness (The Joint Commission, 2018). For example, a retained foreign object following surgery is a sentinel event because there are many national and hospital-specific guidelines, protocols, and polices that are designed to ensure that a verified count of all instruments is done before and after the procedure. If the count is wrong following the procedure and the object cannot be found, the patient is not sutured closed and should receive an x-ray to determine if the object was in fact left behind. Finally, *near misses* are situations where harm may have easily occurred but did not reach the patient, where conditions existed that could have predictably resulted in a bad outcome (The Joint Commission, 2018).

As previously stated, the act of speaking up was the focus of this study. However, to reiterate, it needs to be acknowledged that the virtue of courage is woven throughout the voice literature. When examining the impact of speaking up on patient safety outcomes, the virtue of prudence or practical wisdom also makes an appearance. Common sense decision-making, i.e.,
making choices based on what we know to be appropriate in the moment, is relevant. As self-efficacy is defined as the belief that one has something of value to contribute to a particular situation, prudence is germane. Other virtues can most certainly impact healthcare professionals throughout the hospital, including justice, honor, pride, and truthfulness (to name a few of Aristotle’s list of 12 moral virtues). However, they are beyond the scope of this study and therefore, intentionally excluded.

Some limitations over which I had no control included the organizational policies which may have influenced the data shared with me during the interviews. Further, people with whom I had a limited prior relationship could have been more reserved in what they were willing to share with me. Trust in the process and the researcher was likely a factor in the actors’ decision to contribute to the study. Overall, the participants indicated they felt very comfortable with me and appeared to share their stories very freely. Safety incidents analyzed in this study were limited to procedure-based situations when a member of the healthcare team has awareness that an unsafe condition was present and that a risk to patient safety consequently existed. Participants may have experienced recall bias - the stories shared by some of the actors occurred a long time ago. Personal bias may also have been a factor - I know the research subjects. However, bias was accounted for by second source coding of data verification. The participants verified coding accuracy of their transcripts.

The delimitations of this study included:

- virtues beyond courage and prudence,
- factors beyond personal, emotional and relational elements that influence the decision to speak up,
• safety incidents that take place outside of the procedural areas in the hospital

• error types that cannot be observed or known such as mental slips or lapses in the moment.

There were no experimental controls present in this qualitative methods study, and the research was completed using a case study methodology where the phenomena of personal relational and emotional elements were examined. However, there is no reason to presume that findings do not apply to other hospitals with similar operating parameters and demographics.
CHAPTER 5: DISCUSSION, IMPLICATIONS, AND CONCLUSIONS

Patient safety and quality improvement have never garnered more attention from the field of medicine. Soaring costs to provide healthcare services, lower reimbursement rates by third party payers (also known as insurance companies) and increasing complexity of care delivery along with the need to manage multiple disease states in single patients have resulted in a fragmented and often poorly coordinated healthcare system. Healthcare providers are well-intentioned and want to do the right thing. However, as the complexity of care delivery increases and resources decrease, there is increased risk to quality and safety outcomes. Despite more resources being deployed to examine and improve patient safety and quality improvement, the rate of preventable medical errors is going up (Makary & Daniel, 2016.) Despite the dollars spent on healthcare in the United States, patient outcomes are highly variant and do not compare favorably to other countries of similar and often lesser means, (Dieleman, J. L., Kaldjian, A. S., Sahu, M., Chen, C., Liu, et al. 2022). So, what then might make a difference in patient safety outcomes?

Through my research, I set out to explore what personal, emotional, and relational elements influence the healthcare actors’ decision to speak up during a critical safety moment. My research was conducted in a large tertiary care hospital Level One trauma center in the Midwest. It has been my experience in working with this hospital doing after action case reviews that healthcare professionals often suspect or know that an unsafe condition exists. What drives them to raise voice, or not? Through a phenomenological case study, I gathered data through the lens of the healthcare team as they shared their personal stories of times when they chose to
speak up and times when they did not. Years later, some of them were brought to tears as they recalled their experiences. Sometimes it may have been a time they chose to speak up, but it was too late, or no one listened. Other times, it involved the decision not to speak up and an adverse outcome resulted. Especially when patients die because of preventable errors, the secondary trauma for the providers and support team is tremendous. The trauma is deeply personal and may last a lifetime. This trauma may create a tension that compels them to speak up moving forward, or it may lead to a decision to leave the clinical space and move to a more administrative role. Other times, healthcare actors shared stories about lessons learned resulting from positive outcomes; for example, safety disasters averted.

In the final chapter, I addressed the contributions from this research, ways other healthcare organizations may utilize the findings from my research, connections to literature, limitations, and implications for future research.

**Discussion of Findings**

My research question was answered. *What are the personal, emotional, and relational elements that influence a member of the healthcare team to speak up in a critical moment?* I found based on frequency of mention that the relational element of trust in their team had the greatest single impact on the decision to speak up or not. When the actor felt he or she had the support of the team, there was a greater likelihood of speaking up. When it was perceived that the team either did not support speaking up or did not necessarily agree there was a significant safety concern, the person was less inclined to raise voice. I defined a team as the group of healthcare professionals with whom the actor was working at the time of the critical safety
moment. The practice of medicine is indeed a team sport. Interdisciplinary collaboration is mission critical to provide patient care.

Especially in a hospital setting, care delivery cannot be managed by one or even a few people. Healthcare is fast-paced, high stakes, and complex. The risk of something going wrong is omnipresent and the result of an error can be catastrophic. The reliance on others creates a unique dynamic. Triaging is a word frequently used in hospital settings. It refers to the constant assessment and reassessment of priorities. Priorities are established according to the clinical urgency of a specific situation. As it turns out, I found that healthcare professionals triage the urgency of speaking up as well. The internal dialogue of the person who is faced with the choice to speak up or not often contains a series of thoughts and calculations that result in a decision by the actor to speak up or not. As described to me through the participants’ stories, there were many phenomena that influenced their decision.

- Is it critical I speak up now?
- What will happen if I don’t?
- Can speaking up wait if there are other urgent matters I must attend to?
- Is there benefit in waiting—will others be more receptive later? (This often came up in the context of describing a situation where there was high emotional charge).
- Will speaking up result in damaged credibility and/or collaboration with this team?
- Do I have enough relational capital in the bank to speak up since I’m not sure if others will support it?

Interestingly, interpersonal trust—the belief that another person will not harm you or create consequences for you, did not appear to be a significant factor in terms of frequency of mention.
The relational element in my logic model of team trust can be applied to the role of leader modeling as well, as leaders are an extension of the healthcare team. Participants shared one of the most influential factors that encouraged them to speak up was when leaders modeled the behavior and made speaking up an expectation, not just something that was accepted. This modeling provided assurance, trust, and confidence that their own individual decision to speak up would be supported. Conversely, participants also shared when leaders espoused that speaking up was desired but did not model the behavior, it discouraged the actor from speaking up. In other words, what leaders did have much greater influence on the participants than what they said. This was especially true at the executive level as there were more frequent mentions of this phenomenon when talking about the chief officer suite. The risk was often perceived as too high without the assurance of leader support.

The second element of emotional influences per my logic model had the next greatest impact on a person’s decision to speak up evidenced by frequency of mention. Based on coding frequencies, fear was the greatest inhibitor while anger was the most significant driver. Happiness due to positive outcomes, safety disasters being averted, and safety wins being celebrated and reinforced was the most compelling positive emotional driver of the decision to speak up. There was a broad range of emotions described by the participants. Providing healthcare is a highly intimate and personal profession. There was not a single participant who did not share their feelings about their past decisions to speak up or not. In fact, on a day-to-day basis, the actors’ stories revealed they had a lot of feelings in general. It turns out emotional investment is part of the equation. While patients and families undoubtedly benefit from this
investment, the participants can burn out. Particularly in the wake of Covid, which I discuss as an anecdotal note to my research, depleted personal reserves are a real concern facing our healthcare system. Building resilience will be an important consideration moving forward.

Personal influences included psychological safety and self-efficacy or competence. While these elements were important considerations to the actors’ decision to speak up or not, they were mentioned with less frequency than relational (team trust) or emotional factors. I categorized moral obligation as a personal influence and added it to my findings. Psychological safety was important across all disciplines. Perceived self-efficacy, also known as competence, is of particular importance to physicians and nurses, especially early on in their careers.

**Tools and Tactics - How can we increase speaking up behaviors to improve patient safety outcomes?**

Although this was not directly related to my research question, the captive audience I enjoyed with key stakeholders and influencers in the safety processes at my case study site provided an irresistible opportunity to ask some deeper questions. When I asked participants the question “how can we increase speaking up behavior to improve patient safety outcomes?” There were 47 codes that appeared. The codes with the greatest frequency of mention across all participants stories (n=88) were as follows. Any code with less than 10 mentions was deleted because it did not appear to constitute a prevailing theme to consider when looking at ways to improve safety culture.

- A culture of safety is built with intention.
- A culture of safety is built in a HRO where everyone is thinking about what could go wrong at any moment.
• Hold others accountable to share information including speaking up.
• Acknowledge your own mistakes publicly- humility builds trust and risk- taking.
• A leader’s presence promotes trust and engagement.
• Bestowing peace and compassion when errors are made promotes speaking up.
• Building trust with the patient encourages patient participation in safety processes.
• Celebrate the safety wins.
• Challenge the status quo – exercise courage and prudence.
• Engage the team in interdisciplinary education.
• An escalation policy provides a third party to intervene.
• Explaining the why behind the what garner’s greater engagement
• Expect don’t just accept.
• Root cause analysis case reviews are important drivers of improvement.
• Modeling speaking up behavior for learners (medical and nursing students as well as residents), creates opportunity to hardwire best practices.

The Impact of COVID on Patient Safety Outcomes

My research was conducted early in the post Covid Pandemic era. While Covid was not a focus of my research, given the timing of my interviews it seemed appropriate to include some anecdotal musings from my participants about the effects of COVID on patient safety outcomes. The question I asked all participants during the semi- structured interviews was: “Did Covid have an impact on safety outcomes? If so, how?”
95% of participants responded that Covid did impact safety outcomes (21 of 22 respondents). One participant stated they did not feel Covid had any impact. The following table summarizes the responses. These were the themes that emerged across all 22 interviews:

**Table 6**

**Emergent Themes**

<table>
<thead>
<tr>
<th>Positive Impact on Safety</th>
<th>Negative Impact on Safety</th>
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</thead>
<tbody>
<tr>
<td><em>The team rallied together</em> and watched out for each other and each other’s patients.*</td>
<td><em>Pressure ulcers</em> from putting respiratory-compromised patients in the prone (face down) position. *left untreated, pressure ulcers can result in catastrophic infection*</td>
</tr>
<tr>
<td>Everyone felt a <em>moral obligation to care for COVID patients and families</em></td>
<td><em>Staffing shortages</em> during and since the pandemic began– healthcare has continued to endure “the great resignation”</td>
</tr>
<tr>
<td></td>
<td><em>Fear of interfacing with Covid patients– the need for self-preservation in the face of the unknown.</em></td>
</tr>
<tr>
<td><strong>Heroes and Villains</strong> – at the start of the pandemic, healthcare workers were revered and praised. As time passed, patients and families became less tolerant of staffing challenges, delays, and the lack of a cure for those who were extremely ill. The villainizing became a demotivator and an agent promotive of disengagement.</td>
<td><strong>Visitor policy restrictions</strong> were necessary to protect the health and well-being of patients, families, visitors, and staff. However, the isolation and fear these patients were experiencing resulted in added stress on the staff and extra work to ensure families were continuously informed. One more thing to do in an already untenable scenario resulted in high-risk situations left unchecked.</td>
</tr>
<tr>
<td><strong>How money was spent–financial challenges</strong> – there were a lot of federal dollars given to healthcare organizations</td>
<td></td>
</tr>
</tbody>
</table>
including this case study site. Many felt the money was not spent on measures that would promote safety. Further, the ongoing financial challenges resulting from the pandemic are in part a result of not funding proper safety measures. There is also a trickle-down effect of staff feeling angry they have to fight for every dollar which has resulted in greater turnover. To feel unsupported after a battle of such epic proportion has had significant negative impact retention.

Interestingly, there were mixed feelings about how COVID impacted the team. 14 of 22 participants indicated the overall effect of living through the Covid pandemic as a team was positive. They came together, rallied on behalf of the patients, families, and their teammates, and did the best they could to take excellent care of these patients. Resilience was built as the team survived together. For some, the sense of team was what sustained them. “Team” was frequently expanded to include leaders (including the executive team), who showed up on the units, rounded, offered support, and brought snacks and other amenities. Further, they gave of their time to call families with updates, restock supplies, sat with patients so nurses, doctors, and other staff could take a break or a nap, and do a variety of other support tasks to ease the burden of the clinical team. Five of the participants indicated they felt Covid had an overall negative impact on the team because of the damage it did to individuals on the team. This is an important distinction to raise because the team elements of collaboration and trust were high, but because certain individuals were more negatively impacted, those teammates needed to ensure their own survival. Often this meant they resigned or disengaged as they ran out of resilience. It was the teammates’ departure, either literally or figuratively, that left the remaining teammates feeling
damaged. In essence, what the participants described was grief, a prominent theme in most of the discussions about COVID. The grief was far reaching. Grief for the patients they lost, and the lives left broken as a result of those deaths. Grief for their co-workers who either resigned, a few who died, or who will simply never be the same, the irreparable damage done to people they cared about during an unprecedented healthcare crisis.

Central Contributions and Significance of Implications

Transformational leadership

In the context of this healthcare setting, we now have a lot of information about conditions under which healthcare professionals are likely to speak up as well as those which disincline them from doing so. While I did not set out to specifically examine leadership dynamics, there were many that came to light. Perhaps the most important question I can ask now that my research is completed is how can we take what I learned and apply it to improve patient safety outcomes? Looking at frequency analysis of codes, there was a very clear overarching theme that emerged in this healthcare setting. When actors in a healthcare setting see leaders modeling speaking up behavior and make it an expectation for staff to raise voice, that is one of the most significant drivers to speak up. The absence of this phenomenon over time will almost certainly shut down speaking up, even among those who were previously inclined to do so.

The theoretical framing of transformational leadership defined by Burns (1978), occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality. This definition is depicted in the scene
where a decision to speak up in the moment is enacted in the healthcare setting. The actor who chooses to speak up aligns him or herself with the morally worthy goal of stopping a medical error, thus protecting the patient. Because the delivery of medical care to a patient during a procedure requires a team, the exercise of an individual’s willingness to speak up at a specific instance in time is an act of leadership. This act of transformation occurs at the moment one chooses to speak up. The speaker assumes risk and does what (s)he feels compelled to do, thus exhibiting leadership in the moment. Others may then be motivated to also speak up. This was an important finding as it relates to team trust. We have seen in my research that the behavior of leaders throughout the organization significantly influences the individual’s decision to speak up. The participants said when their team has a high degree of trust, individual members are more likely to speak up. Over time, however, it appears that in the absence of leader modeling, a culture of silence will prevail. Based on Bass’s transformational leadership theory (Avolio & Bass 1995), it was asserted that an individuals’ behavior will impact organizational change and transformation and therefore should be examined at the individual, team, and organizational levels of analysis to understand leadership and influence. The authors explained that behavior reinforced becomes more normative and subsequently seen at multiple levels of the organization’s performance (Bass, 2007; Burns, 1978). Bass (2007) described four elements of transformational leadership.

**Individual consideration.** The leader, broadly defined, gives empathy and support, and encourages individual contributions to the team and organization. As more individuals—also known within the context of this research as actors who speak up—become willing and committed to exercise voice to confront poor safety practices, this behavior will flourish. The
greater good, which is what is in the best interest of the patient, becomes a priority. Collective transcendence, which can be described as a group of individuals moving toward what is in the interest of the greater good, emerges, which likely serves to reinforce the speaking up behavior.

**Intellectual stimulation.** Intellectual stimulation is the degree to which the leader challenges assumptions, takes risks, and solicits ideas. Leaders with this style often encourage creativity and alternative approaches. Followers are then more prone to ask questions, think deeply about challenges, and try to find better ways to accomplish objectives. In the context of speaking up and its impact on safety outcomes, challenging the status quo where unacceptable behaviors that have subsequent negative influence on safety outcomes, is an important consideration.

**Inspirational motivation.** Leaders articulate a vision that inspires their followers. This can in turn create a sense of purpose that motivates action. According to Weick (1995), purpose, meaning and sense making provide a catalyst to drive behavior. Speaking up to inspire others to challenge the process and ask questions about a critical safety moment can result in employing prudence or practical wisdom when following safety practices. This phenomenon is often in play as root cause analysis case reviews are conducted when making sense of a critical safety incident is the focus of the team.

**Idealized influence.** When exercised, transformational leadership provides a model for ethical behavior and builds trust and respect with others. In the context of a healthcare setting, the team of actors may then be empowered to speak up when seeing others doing so.

Looking at the relationship between leaders and actors in the healthcare setting as a predictor of safety climate, two contextual factors emerged as influential. First, the
organization’s prioritization of safety correlates with individual behavior. Second, transactional and avoidant leadership styles were predictive of divergent culture in which safety was not as high a priority. This occurred because employees used relationship-based reference with leadership perception and commitment-based reference for climate-based perceptions about the importance of safety culture (Kerfoot, 1999a). The participants conveyed that relational element of trust and leader perception of modeling was a significant influence of their decision to speak up in the moment. The commitment base was related to the duty to ensure safe patient care, which happens in the context of a critical safety moment. These previous findings in the literature mirrored what I found in my study as it relates to transformational leadership.

Whether or not the act of using voice in the moment to speak up changes the safety outcome, is not what defines the transformation. Transformational leadership exercised in the moment inspires others to raise their standards in pursuit of morally worthy goals.

Kouzes and Posner (2008) provide a model that supports the theory of transformational leadership when applied to the field of patient safety. The exercise of courage is frequently associated with the decision to speak up and take a stand to advocate for improved safety practices. The elements of this theory that support challenging the process and leading are:

1. **Model the way:** Leaders need to behave in a way that is consistent with the behavior they want to see. First, values and guiding principles must be clarified. Leaders define their own values and give them a voice. Espousing values is not enough. Applied to the hospital safety setting, the participants have said leaders must speak up in public forums and make speaking up an expectation, not just something that is acceptable. This leader modeling is a powerful driver of speaking up behavior.
2. **Inspire a shared vision:** As a leader exercising voice begins to see a vision of how safety practices can be improved by empowering others to speak up, that vision is then shared with others. Having a clear understanding of what has not worked in the past as well as the possibilities for a brighter future serves to empower other individuals and teams to envision the impact of improving safety outcomes by raising voice. Celebrating safety wins is an important component to inspiring a shared vision and commitment to improving patient safety.

3. **Challenge the process:** Challenging the status quo is required for growth and improvement both on a personal and organizational level. Leaders (formal and informal) who are willing to take risks, be uncomfortable, and test boundaries can change outcomes. The leaders who are willing to experience discomfort by taking a stance, speaking up, and pushing through fear that might otherwise prevent them from speaking up, inspire others. In a hospital setting, healthcare team members become more willing to take a risk and speak up to confront unsafe behavior when leaders make it an expectation and model the same behavior. These actors are all challenging the behavior in the moment and the status quo when unsafe behaviors go unchecked because of fear of retaliation or other consequences. Participants shared they are most willing to challenge the process when they perceive they have the support of their team.

4. **Enable others to act:** While this research examined speaking up on an individual level, we learned that teams influence safety practices which affect outcomes on an organizational level as well. Individual accountability and group collaboration can be influenced by a single person’s action serving to empower those around them. Improving
safety outcomes happens by the collective decisions and behaviors of many. When individuals speak up, the example set for others can be contagious and will serve to facilitate prudence. Leader modeling, as previously stated, is also critical.

5. *Encourage the heart:* Inspiring others to act in a way that is aligned with the mission—in this case, safe patient care—requires recognizing and rewarding positive contributions. The participants shared this with their framing of the importance of celebrating the wins. The exercise of speaking up must be recognized and reinforced to foster sustainability and facilitate change in safety practices. This reinforcement may occur as a direct result of an error that was averted, an outcome that was improved, or perhaps praise and support for the person who spoke up.

Leader presence was also a finding that seemed to be transformational as 16 of the 22 participants mentioned the leader’s presence in their areas/on their units was a driver of speaking up. Their very presence (sustained and over time) as an extension of the healthcare team, built trust and supported risk taking. Single or very sporadic visits, while appreciated, did not impact speaking up behavior per the participants’ response.

**Application of Implications to Other Settings**

While the results of my study were not intended to be generalizable to other settings, there are likely phenomena that would apply to other similar healthcare organizations. The concept of speaking up and raising voice is well explored (Cavanagh & Moberg, 1999, 1999; Cole, 2017; Comer & Sekerka, 2015, 2015, 2015; Detert & Edmondson, 2005; Edmondson, 2004, 2012; Edmondson et al., 2008; Eppich, 2015; Kish-Gephart, Detert, Treviño, et al., 2009, 2009; Lachman, 2010, 2010; Morrow et al., 2016; Rashid & Edmondson, 2012; Shelp, 1984;
Spruce, 2014; Srivastava, 2013; Taitz et al., 2012; Weiss et al., 2014). However, to my knowledge no one had previously explored the specific personal, emotional, and relational elements that influence an actor’s decision to speak up during a critical safety moment. The dynamics of a particular team in a specific setting will be somewhat unique to the bounded reality of the case study site. However, there are many, if not most, healthcare organizations that struggle with the same challenges.

Using transformational leadership principles as previously described to encourage and promote speaking up behavior can only help. Modeling speaking up behavior and challenging the status quo at all levels of leadership while clarifying that raising voice is an expectation, not just an acceptable action, will serve as an example for others to follow regardless of setting. Understanding the powerful dynamic that exists within the healthcare team where team support and trust are so highly regarded helps leaders appreciate how to leverage relationships and resources (relational elements). Embracing the influence of emotions in each situation can help better direct productive responses and can deepen empathy for others in high stress, high risk situations (emotional elements). Having a high degree of awareness and an understanding of how perceived self-efficacy and competence influence one’s personal decision to speak up is very important, especially early in the actor’s individual career (personal elements). Celebrating safety wins can positively drive future decisions to speak up. Applying the concept of sensemaking to after-action reviews (RCAs, for example), can motivate individuals to act with prudence to implement better practices. Further, sensemaking and after-action case reviews foster a deeper understanding of the alternative decisions that could be made during a critical safety incident which may result in better outcomes. Using all these phenomena to encourage
Speaking up can result in collective transcendence, which happens when the team is moving towards acting together to achieve what is in the greater good of the patient.

As I examined data, there were clear relationships that emerged between my findings and the previous literature. From a historical perspective, the literature shows while patient safety has been an important focal area of the US healthcare system for many years, not much has changed

<table>
<thead>
<tr>
<th>Subject</th>
<th>Object</th>
<th>Predominant Authors</th>
<th>Level of Analysis</th>
<th>Field-Research Focus</th>
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<td>Speaking up and Voice literature</td>
<td>Actors and offender</td>
<td>Edmondson, 2004 Okuyama et. al., 2014 Martinez et.al., 2017 Worline 2009, 2012</td>
<td>Macro to micro</td>
<td>Physicians, nurses, administrators and other providers who choose to speak up (or not).</td>
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<td>Speaking up as manifestation of transformational leadership</td>
<td>Actors offenders and hospital administrators</td>
<td>Avolio &amp; Bass 1995 Bass &amp; Burns 1976 Kouzes &amp; Posner 2008</td>
<td>Micro to Macro</td>
<td>Speaking up and raising awareness may result in transformational leadership as new ways to improve patient safety emerge.</td>
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in the past 20 years, and, in fact, the number of preventable medical errors resulting in death has increased (Makary & Daniel 2016). Although speaking up has been widely studied, (Cavanagh & Moberg, 1999; Cole, 2017; Comer & Sekerka, 2015; Detert & Edmondson, 2005; Edmondson, 2004, 2012; Edmondson et al., 2008; Eppich, 2015; Kish-Gephart, Detert, Treviño, et al., 2009, 2009; Lachman, 2010, 2010; Morrow et al., 2016; Rashid & Edmondson, 2012; Shelp, 1984; Spruce, 2014; Srivastava, 2013; Taitz et al., 2012; Weiss et al., 2014) there seems to be a lot yet to be discovered about what drives a person to speak up in particular setting in the context of a critical safety moment. Speaking up as a manifestation of courage did come up in my findings, although the label of Courage was much less prominent than I had anticipated. (Detert & Bruno 2017; Detert & Edmondson, 2005, 2007; Lachman, 2007, 2008, 2009, 2010, 2014, Kobuck 2015).

Personal elements of self-efficacy or competence, relational elements of interpersonal and team trust and emotions including anger and fear were important data points in my findings. Anticipatory regret as an emotion was never mentioned. However, as previously discussed, the fear of adverse outcomes based on past experience can be construed as anticipatory regret. While there is literature that speaks to these elements broadly (Edmondson, 1999, 2003, Boyatzis & Goleman, 1999; Shelp, 1983, 1984; Worline, 2004), there was no source that I could find that combined them.

Looking at speaking up as an act of courage laden with emotional responses such as feeling disengaged and devalued at work offers an additional framework for consideration. Feeling disengaged and devalued at work are forms of suffering. Suffering may incline one to speak up in some circumstances yet disincline the behavior in others. Using courage to speak up
is an individual response to address threats to collective group welfare. Compassion as a response to these experiences is the extension of empathy and presence, which can promote communication and healing, seems especially important to nurses. Organizations that promote speaking up and compassion will flourish and understanding antecedents and consequences of speaking up can help achieve better results (Worline, 2010, 2012).

Speaking up was loosely referenced in the literature on transformational leadership (Avolio & Bass 1995; Bass & Burns 1976; Kouzes & Posner 2008). However, patient safety was not. My research applying transformational leadership principles to the field of patient safety is a new contribution to literature.

**Researcher Comments**

Speaking up is risky. There are personal, professional, and political consequences for doing so. In the case study site where I conducted my research, participants acknowledged a great deal of progress over the years related to encouraging and supporting speaking up. For those participants with greater than 20 years of experience, the stories of how things used to be are compelling. Healthcare is a highly specialized field that requires a great deal of education and training for many positions. It is also a field, as I noted in Chapter 4, which typically attracts smart young people with a passion for science and a drive to contribute to society by helping others. Because of these factors, most people in the healthcare profession are highly dedicated and compassionate people who want to do the right thing. All of that said, medicine is also very hierarchical and political. While less true today than ever before, it is still very much a physician driven culture where doctors know best and often have the final say. Making enemies with them is ill-advised. If it doesn’t limit one’s career, it will likely impede one’s resilience. Medicine is a
team sport by necessity; it’s simply become too complex to deliver without a strong interdisciplinary team. This complexity gives rise to increased risk for error. Physicians understand that. However, they are still members of an elite tribe. The sage and the wise have come to accept and embrace that the interdisciplinary team can make their lives a lot easier. Those still hanging onto ego and a paternalistic view of medicine aren’t as quick to walk toward the circle of light. This resistance is often the impetus of challenge and internal struggle when making the decision to exercise courage and prudence in a critical safety moment and speak up, or not. The espoused values of the organization are often see something, say something. In reality, that is not necessarily the perception of the participants about how the organizational culture is hard wired.

There are some other noteworthy observations made throughout this research based on the interview transcripts.

- Executives and some mid-level leaders as a leader group may have an inflated sense of others’ willingness to speak up. This may provide a false sense of security regarding the extent to which safety concerns are being raised and brought to the forefront to be addressed.

- There appears to be a lack of awareness in this leader group about the impact of their own behavior on the speaking up choices of others. While this leader group articulated their understanding that leader expectations have a significant impact on safety behavior, there was not much insight shared about the influence of their own modeled behavior. The awareness of this phenomena was strongest at the midlevel and less tenured management levels of the organization.
There is a perception across many (15 of 22 participants) that millennial and Gen X healthcare actors are more inclined to speak up about issues that impact their pay and quality of life at work, much more so than raising voice about safety concerns. This may be an interesting area for future research.

Deciding when “enough is enough,” a code that was generated, seems to correlate with choosing the hill one is willing to die on. 50% of participants shared a personal experience where their anger and frustration with certain conditions resulted in the decision to speak up, no matter the personal cost.

It will take a strong commitment from leaders to change the culture. It won’t be easy or fast. However, the participants shared their personal stories, their anger, their fear, their frustration, and their tears. They have told us what they need to speak up. In a brave culture where actors raise voice and silence cannot prevail, safety issues that come to light must be addressed. Leaders must model speaking up, not just about critical safety issues but also about lack of professionalism among all providers including physicians. Speaking up must be expected, not just accepted. Accountability for decisions in the moment and action plans to remedy adverse outcomes in the future must be in place. These behaviors are how leaders demonstrate they are listening and present. Perhaps most important is embracing awareness and acceptance; when people stop listening, people stop talking. A culture of silence is dangerous.

**Implications for Future Practice**

There are clear and actionable data in my research that help to create a roadmap for leaders to foster and encourage speaking up. Understanding that a long-standing culture of hierarchical proclivity along with the need for leader awareness of the importance of modeling
will go a long way to drive speaking up. Speaking up must be acknowledged and rewarded. Those who raise voice and speak up are heroes and should be named as such. Safety wins, inclusive of those instances where outcomes were changed because someone spoke up as well as times when the outcome may not have been favorable, but the actions of the healthcare team were commendable, must be celebrated. Disruptive physicians must be dealt with. Protecting members of the sacred tribe will backfire every time. The organization may retain the doctor, but they will lose their support staff. Just culture, is a condition that exists when errors and mistakes are analyzed with a non-punitive approach, and where improving safety is the goal within the context of the belief that most people are well-intended and working hard to do the right thing. This framing, in which people are more likely to be honest, transparent, forthcoming, and willing to be part of the discussion and the solution (Boysen, 2013), applies to everyone. Physicians, leaders, executives, nurses, etc. all must be held accountable and helped to grow as a result of error. Consequences should only happen if the error was egregious. Finally, cultivating teams where trust is high and modeling speaking up behavior will be critical to foster a culture of speaking up.

**Implications for Future Research**

The two areas that should be examined in future research are specific attributes of leader modeling as they apply to speaking up and a deeper dive analysis of what factors of influence are most important when looking at a healthcare team with high trust and confidence in each other. Studying leaders who have high speaking up modeling as perceived by their direct and indirect reports could provide significant insight into what specific behaviors are being exhibited that incline the rest of the healthcare team to speak up. Doing a similar deep dive into team dynamics,
communication, and other factors that result in an individual team member feeling supported and trusted during a critical safety moment could change the landscape. As more is understood about these phenomena, leaders will have greater ability to influence these factors, thus creating a culture of transformational leadership and improved patient safety outcomes.

There may also be value in exploring the generational differences mentioned by my participants. As discussed earlier in this chapter, the perception is that millennial and Gen X healthcare professionals are more likely to speak up about personal phenomena that impact their compensation and quality of work environment. Unlike the findings in this research, that perception would suggest that personal factors may be of greater influence on their decision to speak up than relational or emotional elements.
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https://doi.org/0894/3257/99/020093-14
APPENDIX A:

QUESTIONS FOR SEMISTRUCTURED INTERVIEWS AND IRB INFORMED CONSENT PROCESS

Introduction

Thank you for talking with me today.

As you know, (if they know me) my name is Kelly Rabah and I am the director of patient safety quality improvement for graduate medical education at Wright State University. I am here today as a doctoral student – not in my professional role.

This study focuses on the elements that influence a person’s decision to speak up in a critical safety moment. I am interested in your lived experience as a healthcare professional. Your stories and insight will provide me with a deeper understanding of the phenomena that effect your decision to speak up at a given point in time.

This hospital’s name will not be published. Your name will not be shared. Your reflections will be summarized in aggregate along with others who have agreed to respond.

Information about how responses will be protected, and data will be stored on a secured cloud application.

Do you have any questions?
Review Consent Form including permission to record the interview and to clarify/answer questions. Oral consent will be required.

WRIGHT STATE UNIVERSITY  Department of Education and Leadership Studies

INFORMED CONSENT FORM FOR RESEARCH

Examining the Personal, Relational and Emotional Elements that influence the Actor’s Decision to Speak up During a Critical Safety Moment: A Phenomenological Case Study.

This template encompasses all of the required and some additional elements of informed consent, as required by federal regulations.

Key Information

Your consent is being sought for research and your participation is voluntary. The purpose of my research is to explore the lived experience of healthcare professionals who make routine decisions about how to respond to patient safety concerns. These decisions often include the decision to speak up or not in a critical safety moment. I expect the research phase of data collection to last approximately 2-3 months. I anticipate our interview to last approximately one hour. I will be reaching back out to you for a 15-30 minute follow up appointment to ask for your feedback about the interpretation of your narrative. There are no physical risks to your participation. There may be some emotional and psychological risk to your involvement as you share your experience. The benefits to you and others that may reasonably be expected from my research include gaining insight in to what inclines a person to speak up during a critical safety
moment. Understanding that information may have impact on the hospital’s approach to encourage staff to speak up. Speaking up may positively impact patient safety.

**About This Research Study**

You are asked to participate in a research study. Scientists do research to answer important questions which might help change or improve the way we do things in the future. This consent form will give you information about the study to help you decide if you want to participate. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

**This study is being conducted by:** Kelly Rabah, a doctoral candidate in the department of education and organizational leadership studies.

*My research is being conducted* under the direction of Dr. Dan Noel in the department of education and Dr. David Bright in the department of management- Raj Soin School of business.

**There is no funding required for this study.**

**Why is This Study Being Done?**

The purpose of this study is to explore the personal, emotional and relational elements that influence a member of the healthcare team to speak up during a critical safety moment. You were selected as a possible participant because of your role in the hospital as **ROLE** and your routine involvement in patient safety cases. If you agree to participate, you will be one of 32 participants taking part in this study.
**Taking Part in this Study is Voluntary**

You may choose not to take part in this study or choose to leave the study at any time. Deciding not to participate, or deciding to leave the study later, will not result in any penalty. You can skip any questions that make you uncomfortable and can stop the interview at any time. Your decision whether or not to participate in this study will not affect your role in any way and will not preclude you from learning about the outcome of my study.

**What Will Happen During the Study?**

If you agree to be in this study, we will ask you to do the following things:

I ask that you meet with me virtually to answer a series of questions about your lived experience as a healthcare professional in dealing with patient safety concerns. I ask that you reflect about your experiences and share your stories with me.

**Participation in the study involves the following time commitment:**

One ½ hours for the initial virtual interview and a follow up appointment of approximately 15 - 30 minutes.
What are the Risks of Taking Part in the Study?

The study involves the following foreseeable risks or discomforts: There are possible psychological risks to you as you share your story. This researcher will protect your confidentiality and create a safe space for you to share your experience.

What are the Potential Benefits of Taking Part in the Study

There are no direct benefits to you. More broadly, this study may help the researchers learn more about speaking up about patient safety events and may help to inform the hospital about ways to encourage staff to raise voice.

Will I Receive my research results?

We may learn things about you from the study activities which could be relevant to your job. I will reach out to all participants after the study concludes and offer an aggregate summary of the results.

Will I be Paid to Participate in the Research? You will receive no payment for participating in this study.
How Will my Information Be Protected?

Coded Data/Pseudonym linked with identifying information:

The information that you give in the study will be handled confidentially. Your information will be assigned a code number/pseudonym. The list connecting your name to this code will be kept in a locked file separate from the research data. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report.

Your data will be stored on a password protected computer and two secure cloud-based data analysis storage systems ATLAS.ti and Otter.ai. When the study is completed and the data have been analyzed, all code lists linking names to study numbers will be destroyed. This is expected to occur no later than February 2023. The audio recordings will also be destroyed within 2-3 weeks of your completed interviews. The audio recording will be transcribed. The recording will be deleted after the transcription is complete and verified. This process should be completed by February 2023. This informed consent form will be kept for the state Ohio minimum time frame of three years after the study is complete, and then it will be destroyed.

Disclosure

It is unlikely, but possible, that others responsible for research oversight may require us to share the information you give us from the study to ensure that the research was conducted safely and appropriately. Organizations, in addition to the Wright State Institutional Review Board (IRB) and research investigators, may inspect your research records. We will only share your
information if law or policy requires us to do so. For example, working in a hospital and as a licensed clinical social worker, means I am a mandated reporter. If you shared a story about abuse or neglect while working with children, the elderly, disabled persons, or other vulnerable populations that carries a reporting requirement, I would need to follow the rules of my institution, even though I am conducting this research in my role as a doctoral student. Further, if the researchers learn that you or other parties are in danger of self-harm or are contemplating a violent act, state law requires the researchers to have a duty to warn and are required to report it to the authorities. Finally, confidentiality could be broken if materials from this study were subpoenaed by a court of law.

**Will My Information Be Used for Research in the Future**

Recommendations for future research may be made at the conclusion of my study. However, Your specific responses and your identity will not be disclosed.

There is no financial interest, benefit or conflict of interest for this researcher.

**Who Should I Call with Questions?**

If you have questions about the research study itself, please contact the Principal Investigator Kelly Rabah at [Kelly.rabah@wright.edu](mailto:Kelly.rabah@wright.edu). Or, you may contact the two faculty members supervising my research. Dr. David Bright at [david.bright@wright.edu](mailto:david.bright@wright.edu), or Dr. Dan Noel at [dan.noel@wright.edu](mailto:dan.noel@wright.edu).

If you have questions about your rights as a research volunteer or would simply like to speak with someone other than the research team about concerns regarding this study, please contact
the IRB at (937) 775-4462 or irb-rsp@wright.edu. All reports or correspondence will be kept confidential.

You will be given a copy of this information to keep for your records. It will be sent to you via email.

**Statement of Consent**

I have read and discussed the above information provided in this form. I have had the opportunity to ask questions and have my questions answered. In consideration of all the information provided in this form, I give my consent to participate in this research study. You will be provided with a copy of this form to keep for your records. My verbal consent is being recorded now in advance of the interview.

Indicate Yes or No:
I give consent to be audio and/or video-taped during this study.
___Yes ___No

I give consent to be contacted for follow-up in this study or future similar studies:
___Yes ___No

“Let’s Begin”

**Warmup questions**

1. If you could, please share something about what brought you to your career in healthcare? What do you find compelling about your work when you are at your best?
   Ask demographics – how long have you been in your career? How long have you worked here?
Critical Incident Interview

For the purpose of my research, a critical safety incident is defined as a sudden unexpected event that puts the safety of the patient at risk. These risks maybe known to exist in advance but should be planned for thus minimizing the likelihood of their occurrence. Speaking up can take place before, at the time of or after the critical incident. Now, let’s talk about some of your experiences in the culture of safety here at the hospital. I’d like you to think about moments when you chose to speak up and moments when you did not speak up. If possible, I’d like to talk about two of each if we have time. If you are unable to come up with two of each situation, I will still use your information to inform my data pool, as long as you are able to articulate at least one time when you chose to speak up, and one time when you did not. My research involves creating a dichotomous list for comparison of the factors that inclined you to speak up or not. In the absence of an example of both, that list cannot accurately be derived.

Critical Incidents #1 and 2 (You chose to speak up)

Let’s start with a moment when you chose to speak up.

- Please describe in as much detail as possible, what happened in this experience. What were the roles of the individuals involved? What was the challenge of the moment? What is the story? What was outcome?
- Time – when did this incident occur (for example pre-covid vs. post-covid? How many years ago?)
- Number – how many people were directly involved with this incident? Or how many were present when the incident occurred?
• Proximity – where were you physically in relation to the incident (same room? next room? down the hall?)

• To be clear, what was the moment when you felt like you had to make a choice about speaking up or not?

• What was going through your mind and heart at that moment?

• What was the ultimate decision?

• What influences shaped your decision in that moment?

• Which of these influences was most significant for you?

• Where any of the following a significant influence?
  o Your relationships with the people involved.
  o Your feelings or emotions in that moment
  o Your personal situation in that moment

• Is there anything else that might be helpful for me to know about this moment as you experienced it?

**Critical Incidents #3 and 4 (You chose not to speak up):**

Let’s start with a moment, one when you chose *not* to speak up.

• Please describe in as much detail as possible what happened in this experience. What were the roles of the individuals involved? What was the challenge of the moment? What is the story? What was the outcome?

• To be clear, what was the moment when you felt like you had to make a choice about speaking up or not?

• What was going through your mind and heart at that moment?
• What was the ultimate decision?

• What was the goal (or anticipated outcome) when you decided to speak up?

• What factors made it easier to speak up?

• What factors made it harder to speak up?

• Under what conditions did your act of speaking up seemed welcomed / embraced by others?

• Which of these elements was most significant for you?

• Is there anything else that might be helpful for me to know about this moment as you experienced it?

Summary Questions

• Based on what you’ve shared with me, are there any patterns in your decision to or not to speak up at a critical moment?

Now I have some general questions.

1. Tell me about a time when there was a serious safety event that could have been prevented? What were you thinking about? What were you feeling? What were the relationship factors on your mind?

2. Share your reflections and experience as you think about a critical safety event that could have been prevented if policy had been followed. As you considered the fact that following policy and procedure is evidence based, best practice, what were you personally thinking? What were you feeling? Was your relationship with the actors involved a factor in your experience?

3. For you personally, what would make a difference in improving our safety outcomes? (Include in chapter 5)
4. Did you notice any change or effect on safety and quality work, including people’s willingness to speak up, during and because of, COVID-19?

5. As an organization, based on your experience, what may be some personal, relational and emotional factors to consider reducing safety incidents?

Thank you for taking the time to meet with me. At the conclusion of my dissertation defense, I will email you an executive summary of my findings.
APPENDIX B

From: irb-office@wright.edu
To: dm.roehl@wright.edu, billboardwright.edu, rae@premierhealth.com, kelly.roehl@wright.edu
Cc: nancy.ml@premierhealth.com
Subject: IRB-2022-69 - Initial Exempt Determination
Date: Tuesday, October 11, 2022 4:51:06 PM

CAUTION: This Message Is From an External Sender
Exercise caution when opening attachments or clicking links.

WRIGHT STATE UNIVERSITY

Institutional Review Board
FWA#00002427

Notification of Exemption Determination

Revised Common Rule

Investigator Name: Investigator Affiliation: Leadership in Education
Kelly Raksh (LDR55), Management (MGT55), Organizational Studies
Program

Study ID#: IRB-
2022-69

Sponsor: No Funding

Study Title: EXPLORING THE IMPACT OF PERSONAL, EMOTIONAL, AND
RELATIONAL ELEMENTS THAT INFLUENCE THE DECISION TO SPEAK UP
DURING CRITICAL SAFETY MOMENTS

Determination Date: October 10, 2022
Check-In Date: October 9, 2023

Approved Study Sites:
- Premier Health

Limited IRB Review
A limited IRB review was conducted of this study. During limited review, the IRB member
considered:
- The risk and anticipated benefits, if any, to the subjects;
- Procedures to ensure the protection of privacy of the subjects; and
- Procedures to maintain the confidentiality of data.

205
CURRICULUM VITA

Kelly Rabah
kelly.rabah@wrightstatephysicians.org
https://www.linkedin.com/in/kelly-rabah-fache-msw-cphq-chrm-ssgb-b58a0026/

EDUCATION

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<td>Ed.D. 2023</td>
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<td>Clinical Practice and Administration</td>
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<td>Ann Arbor, Michigan</td>
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POSTGRADUATE EDUCATION

Certificates in Healthcare Leadership and Executive Management 2017
Wright State University School of Policy and Public Health, Dayton, Ohio
Leadership Academy 2015-2016
Wright State University Boonshoft School of Medicine, Dayton, Ohio
Teach the Teacher (Stanford Faculty Development Program in Clinical Teaching) 2015
Wright State University Boonshoft School of Medicine, Dayton, Ohio
Certificate in Family Life 1991
Wayne State University, Detroit, Michigan
Certificate in Management and Industrial Relations 1990
University of Michigan, Ann Arbor, Michigan

ACADEMIC EXPERIENCE

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<td>Wright State University, Dayton, Ohio</td>
<td>Assistant Professor</td>
<td>2014-present</td>
</tr>
<tr>
<td>Department of Obstetrics/Gynecology</td>
<td>Assistant Professor</td>
<td>2014-present</td>
</tr>
<tr>
<td>Department of Geriatrics</td>
<td>Assistant Professor</td>
<td>2014-present</td>
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CERTIFICATION

CERTIFIED HEALTHCARE COMPLIANCE PROFESSIONAL (CHC) 2022
Fellow American College of Healthcare Executives (FACHE) 2017
Certified Health Professional in Risk Management (CHPROM) 2015
Certified Professional in Healthcare Quality Management (CPHQ) 2015
Six Sigma Green Belt in Healthcare (SSGB) 2014
End of Life Nursing Education Consortium Facilitator 2012
Respecting Choices Trainer and Facilitator 2012
Academy of Bereavement Trainer and Facilitator 2010
Crucial Conversations Trainer 2010
End of Life Physician Education Consortium Trainer and Facilitator 2010
Baptist Health Systems Leadership Forum 2009
Resolve Through Sharing Bereavement Trainer 2009
Licensed Independent Chemical Dependency Counselor (LICDC) 1997
Relay Explain Listen Acknowledge Thank Express Trainer (RELATE) 2011

LICENSE
LISW-S 1.0010244 Ohio

PROFESSIONAL EXPERIENCE

Institution | Position | Dates
--- | --- | ---
Wright State Physicians | Senior Director / Chief Compliance Officer | 2019-present
Wright State University | Director of Patient Safety Quality Improvement for the Graduate Medical Education Program | 2014-present
Dayton, Ohio | Founder and President | 2013-present
Gabrielle’s Bridge | Patient Experience Advisor | 2012-2013
UC Health, University Hospital | Social Worker PRN | 2004-2005
Cadence Health - Central DuPage Hospital Consultative Services Manager | Case Manager, Adult Behavioral Health | 1991-1992
Winfield, Illinois | Key Account Manager | 1988-1989
Nabisco Brands, Inc. | Procter and Gamble Distributing Company Sales Representative | 1985-1988
Cincinnati, Ohio | Detroit, Michigan | 1994-1997

ADDITIONAL EXPERIENCE

Cadence Health - Central DuPage Hospital Consultative Services Manager | Case Manager, Adult Behavioral Health | 1991-1992
Winfield, Illinois | Key Account Manager | 1988-1989
Nabisco Brands, Inc. | Procter and Gamble Distributing Company Sales Representative | 1985-1988
Cincinnati, Ohio | Detroit, Michigan | 1994-1997

PROFESSIONAL MEMBERSHIPS

Leadership
President- Elect of the Board of Ohio Society of Risk Managers | 2023
Board Member Ohio Society of Risk Managers | 2022
Chair-Elect Dayton Chapter of American College of Healthcare Executives | 2018

Honorary
PI LAMBDA THETA Doctoral Student Honorary | 2016

Journal Peer Reviewer
The Journal of Patient Experience | 2016

Association
American Society for Healthcare Risk Management (ASHRM) | 2015-present
National Association of Health Care Quality (NAHQ) | 2015-present

207
PRINTED SCHOLARSHIP

Books

Articles
PEER REVIEWED

Abstracts

Rabah, Kelly , (2017), Rehbein, Jen , Coyne, Katherine ,Maxwell, Rose and Lindheim,Steven R., Department of Obstetrics and Gynecology, Wright State University, Boonshoft School of Medicine, Dayton, Ohio, Madeira, Jody Lynee, Maurer School of Law, Indiana University, Bloomington, Indiana, Sylvestre, Georges, Department of Obstetrics and Gynecology, Flushing Medical Center, Flushing, New York.

*Preliminary Findings of Unforeseen Challenges and Issues Among Male Gay Couples Utilizing Assisted Reproductive Technology (ART).* ) Poster Presentation.

Rabah, Kelly 1,(2017), Jen Rehbein , Kathryn Coyne , Jody Lynee Madeira , Miryoung Lee, J Preston Parry , and Steven R. Lindheim Department of Obstetrics and Gynecology, Wright State University, Boonshoft School of Medicine, Dayton, Ohio, Maurer School of Law, Indiana University, Bloomington, Indiana, Department of Epidemiology, Human Genetics and Environmental Sciences, University of Texas, Health Science Center at Houston Department of Obstetrics and Gynecology, University of Mississippi Medical Center, Jackson, Mississippi.

*Improving Informed Consent, (IC), to IVF through Engaged MD Multimedia Platform, (MP).* Poster presentation.

PRESENTATIONS
National
“Risk Management with Resident Physicians—A Mock Trial where the Doctors are the Judge and the Jury,” Association for Hospital Medical Education (AHME), May 2016. (Fort Lauderdale, Florida)

“Patient-Centered Care—A Bedside Rounding Tool.” Society of Family Medicine, April 2015. (Orlando, Florida)

“Connection and the Patient Experience.” Cleveland Clinic. March 2013. (Cleveland, Ohio),
“Communicating About Serious Illness.” National Leukemia Society, March 2007. (Orlando, Florida)

**International**

“Pearls and Pitfalls of communicating at the End of Life.” National Association of Social Workers (NASW), November 2006. (Alberta, Canada)

**Regional**

“Root Cause and Intensive Analysis—How to Make a Difference in Quality.” Wright State University School of Medicine. January 2015. (Dayton, Ohio)
“Quality Models.” Wright State University School of Medicine, Dayton, Ohio, October 2014.
“Going from Good to Awesome—How to Take It to the Next Level with Patient Experience.” Ohio Health Systems, November, 2013. (Columbus, Ohio)
“Palliative and Hospice Care.” University of Cincinnati Health, Cincinnati, Ohio, May, 2009.

**Grand Rounds and Other Local Presentations**

“Disclosure Training: An Ethical and Risk Management Perspective.” Wright State University Boonshoft School of Medicine, 22 Residency and Fellowship Programs, Dayton, Ohio, September –December 2018.
“CLER Pathways as a Model Framework for GME Curriculum Development.” CLER Physician Retreat, October 2016, (Dayton, Ohio)
“Transitions of Care.” Wright State University Boonshoft School of Medicine, 22 Residency and Fellowship Programs, Dayton, Ohio, April-July 2016.
“Patient Experience 2017.” Wright State University Boonshoft School of Medicine, 22 Residency and Fellowship Programs, Dayton, Ohio, September –December 2017
“Healthcare Disparities.” Wright State University Boonshoft School of Medicine, 22 Residency and Fellowship Programs, Dayton, Ohio, January-March 2016.
“Communicating with Patients and Families about Serious Illness.” Wright State University Boonshoft School of Medicine, 22 Residency and Fellowship Programs, Dayton, Ohio, October-December 2015.
“Code Status and the DNR Discussion.” Surgery residency program, Wright State University Boonshoft School of Medicine, Dayton, Ohio, August 2015.
“An Introduction to Basic Quality Models.” Wright State University Boonshoft School of Medicine, 22 Residency and Fellowship Programs, Dayton, Ohio, January-March 2015.
“A CLER Introduction and How to File an Incident Report.” Wright State University Boonshoft School of Medicine, 22 Residency and Fellowship Programs, Dayton, Ohio, April June 2014.

**SERVICE AND ACADEMIC OUTREACH**

**Committee Service**

<table>
<thead>
<tr>
<th>Committee Service</th>
<th>Position</th>
<th>Dates</th>
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<tbody>
<tr>
<td>WSU / BSOM School of Medicine Committee</td>
<td>Chair</td>
<td>2021-present</td>
</tr>
<tr>
<td>Graduate Quality /Safety Curriculum</td>
<td>Member</td>
<td>2018-present</td>
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<tr>
<td>CME Committee- Dean’s Appointment</td>
<td>Member</td>
<td>2017-present</td>
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<tr>
<td>LCME Quality Improvement Committee</td>
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<td>Appointment by the Dean of the School of Medicine</td>
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Underperforming Resident Program Committee  Member  2016-present  
Graduate Medical Education Committee  Member  2014-present  
Graduate Medical Education Executive Committee  Member  2014-present  

**Committee Service**

<table>
<thead>
<tr>
<th>Committee Service</th>
<th>Hospital</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Directors of Education Committee</td>
<td>Good Samaritan</td>
<td>2014-2018</td>
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<tr>
<td>Directors of Education Committee</td>
<td>Miami Valley</td>
<td>2014-present</td>
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<tr>
<td>Environment of Care Committee</td>
<td>Miami Valley</td>
<td>2014-present</td>
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<tr>
<td>Quality Council Committee</td>
<td>Miami Valley</td>
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<td>Sentinel Events Committee</td>
<td>Miami Valley</td>
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<td>Mortality and Morbidity Committee</td>
<td>Miami Valley</td>
<td>2015-present</td>
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<td>Leadership Forum</td>
<td>Premier Health</td>
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<tr>
<td>Safety and Quality Work Group</td>
<td>Premier Health</td>
<td>2014-present</td>
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**Community Service**

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<thead>
<tr>
<th>Association</th>
<th>Status</th>
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<tbody>
<tr>
<td>Guardian Ad Litem Child Advocate, CASA</td>
<td>Volunteer</td>
<td>2021-present</td>
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<tr>
<td>Hospice of Cincinnati</td>
<td>Volunteer</td>
<td>2021-present</td>
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<tr>
<td>Clermont County SPCA</td>
<td>Volunteer</td>
<td>2019-present</td>
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<tr>
<td>St. Susannah Church Bereavement Group</td>
<td>Leader and Facilitator</td>
<td>2014-2019</td>
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<tr>
<td>St. Susannah Communion distributor to area nursing homes</td>
<td>Leader</td>
<td>2014-2019</td>
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<tr>
<td>Moeller High School Mom’s Club</td>
<td>Member</td>
<td>2014-2016</td>
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<tr>
<td>CCHMC Kindervelt Chapter #23</td>
<td>President</td>
<td>1997-2000</td>
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<tr>
<td>Mason High School Moms Community Service Club Member</td>
<td>Member</td>
<td>2004-2015</td>
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<td>Cincinnati Women’s Club</td>
<td>Member</td>
<td>2001-2006</td>
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<td>Junior League of Cincinnati</td>
<td>Member</td>
<td>1997-2003</td>
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<tr>
<td>Make A Wish Foundation of Chicago</td>
<td>Wish Grantner</td>
<td>1993-1997</td>
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<tr>
<td>Junior League of Chicago</td>
<td>Member</td>
<td>1991-1994</td>
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