

2018

Management of Inappropriate Behaviors by Healthcare Risk Managers

Sahar Ebrahim Zadeh
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Business Administration, Management, and Operations Commons](#), [Health and Medical Administration Commons](#), and the [Management Sciences and Quantitative Methods Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Management and Technology

This is to certify that the doctoral dissertation by

Sahar Ebrahim Zadeh

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Robert Haussmann, Committee Chairperson, Management Faculty
Dr. Craig Barton, Committee Member, Management Faculty
Dr. Lisa Barrow, University Reviewer, Management Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2018

Abstract

Management of Inappropriate Behaviors by Healthcare Risk Managers

by

Sahar Ebrahim Zadeh

MS, University of London, 2009

BS, University of London, 2000

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

May 2018

Abstract

Medical errors are the 3rd leading cause of death in the U.S.. The problem is timely recognition and management of inappropriate healthcare worker behaviors that lead to intimidation and loss of staff focus, eventually leading to errors. The purpose of this qualitative modified Delphi study was to seek consensus among a panel of experts in hospital risk management practices on the practical methods for early detection of inappropriate behaviors among hospital staff, which may be used by hospital managers to considerably mitigate the risk of medical mishaps. High reliability theory guided the research process, utilizing the conceptual framework of fair and just culture patient safety model. A single research question asked what level of consensus exists among hospital risk management experts as to the practical methods for early detection of inappropriate behavior among hospital staff, which managers may use to ultimately mitigate the risk of preventable medical mishaps. This study included nonprobability purposive sampling (n=34) and 3 rounds of questionnaires. Consensus was reached on 8 factors: setting expectations, developing a culture of respect, holding staff accountable, enforcing a zero-tolerance policy, confidentiality of reporting, communicating expected behavior, open communication, and investigating inappropriate behaviors. The implications for positive social change include a better understanding of inappropriate behaviors among healthcare workers as well as the potential to minimize its negative impacts and improve patient safety in healthcare organizations.

Management of Inappropriate Behaviors by Healthcare Risk Managers

by

Sahar Ebrahim Zadeh

MS, University of London, 2009

BS, University of London, 2000

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

May 2018

Dedication

I dedicate this dissertation to my parents who ignited the love of learning and growing in me. To my Dad who is my hero and role model, and of course my third unofficial dissertation committee member. To my Mom whose selflessness and support is beyond this world. I dedicate this dissertation to my sisters who kept my spirit up and helped me to stay on track and laugh off my stress. I also dedicate this dissertation to my husband who always provides unconditional love and support. Finally, to my dog and best friend who forced me to take breaks to pet him, go for a walk, and clear my head.

Acknowledgments

I wish to thank my committee members who were more than generous with their expertise and time. Special thanks to Dr. Robert Haussmann for his time, patience, knowledge, and support throughout the dissertation process. I would like to thank Dr. Craig Barton for his time, valuable feedback, reflections, and wisdom. I thank Dr. Lisa Barrow for her time and support.

I would like to acknowledge and thank American Society for Healthcare Risk Management for helping me recruit my study participants. I would also like to thank the risk management experts who agreed to participate in my study.

Finally, I would like to acknowledge the important role of coffee and sugar as my companions through many nights of writing.

Table of Contents

List of Tables	vi
List of Figure.....	vii
Chapter 1: Introduction to the Study.....	1
Background of the Study	1
Patient Safety and Inappropriate Behaviors.....	3
Problem Statement.....	6
Purpose of the Study.....	7
Research Question	7
Conceptual Framework.....	8
Nature of the Study	10
Method and Design.....	10
Instrument	10
Analysis.....	11
Population and Sampling	11
Definition of Terms.....	12
Assumptions.....	17
Scope and Delimitations	18
Limitations	19
Significance of the Study	20
Significance to Practice.....	20
Significance to Theory.....	21

Significance to Social Change	22
Summary and Transition.....	22
Chapter 2: Literature Review	23
Literature Search Strategy.....	26
Conceptual Framework.....	26
High Reliability Organization.....	27
Fair and Just Culture Patient Safety Model	31
Safety Measurement and Monitoring Framework	31
Literature Review.....	33
The Role of Risk Management and Quality Improvement.....	37
Role of Incident Reporting Systems	41
Inappropriate Behaviors and Their Consequences	46
The Scope of Current Solutions to the Problem	50
Professional Applications	55
Contribution to Positive Social Change.....	56
Summary and Conclusion.....	56
Chapter 3: Research Method.....	58
Research Design and Rationale	59
Role of the Researcher	63
Methodology.....	63
Participant Selection Logic	63
Instrumentation	66

Procedures for Recruitment, Participation, and Data Collection	70
Data Analysis Plan	75
Issues of Trustworthiness.....	77
Credibility	77
Transferability.....	78
Dependability	78
Confirmability.....	79
Ethical Procedures	79
Risk and Benefits	80
Summary	81
Chapter 4: Results	83
Research Setting.....	83
Demographics	84
Data Collection	84
Round One	86
Round Two.....	86
Round Three.....	87
Data Analysis	91
Round One	91
Round Two.....	93
Round Three.....	93
Evidence of Trustworthiness.....	94

Credibility	94
Transferability.....	94
Dependability	95
Confirmability.....	95
Ethical Procedures	96
Study Results	96
Round One Result.....	96
Round Two Results.....	101
Round Three Results.....	102
Summary.....	103
Chapter 5: Discussion, Conclusions, and Recommendations.....	105
Interpretation of Findings	106
Risk Management Perspective.....	107
Contributing Factors to Inappropriate Behaviors	108
Role of Incident Reporting Systems	109
Communication for Conflict Resolution.....	110
Reporting of Inappropriate Behaviors	110
Limitations of the Study.....	111
Recommendations.....	112
Implications.....	115
Professional Applications	115
Contribution to Positive Social Change.....	117

Conclusions.....	119
References.....	121
Appendix A: Reprinting Permissions	143
Appendix B: Round One Questionnaire	145
Appendix C: E-mail Invitation to Prospective Participants.....	147
Appendix D: E-mail Reminder to Participants: Round One.....	149
Appendix E: E-mail Reminder Sent to Participants for Delphi Rounds Two and Three	151
Appendix F: Summary of all Round Two Data Statistics.....	152
Table F1 Summary of Statistics.....	152
Appendix G: Round One Code Book	157
Appendix H: Reflexive Journal	160
Appendix I: Delphi Round Two Questionnaire	169
Appendix J: Delphi Round Three Questionnaire.....	178
Appendix K: E-mail Sent to Participants after Completing Round Three.....	181

List of Tables

Table 1. Safety Culture and High Reliability: Stages of Organizational Maturity.....	29
Table 2. Risk and Opportunity Identification methods.....	40
Table 3. Factors Identified as Very Important or Extremely Important in the Second Questionnaire with a Weighted Average of Four or More	88
Table 4. Factors Selected by Panelists as Top 10 Important Factors.....	90
Table F1. Summary of Statistics.....	152
Table G1. Questionnaire Codebook.....	157

List of Figure

Figure 1. A framework for safety measure and monitoring.....	32
Figure 2. Flow chart of the three Delphi rounds data collection process	85
Figure 3. Question 1 word cloud.....	98
Figure 4. Question 2 word cloud.....	98
Figure 5. Question 3 word cloud.....	99
Figure 6. Question 4 word cloud.....	99
Figure 7. Question 5 word cloud.....	100
Figure 8. Question 6 word cloud.....	100
Figure 9. Word cloud of top most frequent 50 words for overall questionnaire results .	101
Figure 10. Distribution of percentage agreement on top important factors for recognizing and managing inappropriate behavior in the workplace	103

Chapter 1: Introduction to the Study

Medical errors in the U.S. are the third leading cause of death, and there is an immediate need to address the medical error issue (James, 2013). Medical errors occur as a result of process issues, technology problems, and teamwork issues (Herndon, 2015; Satiani, Sena, Ruberg, & Ellison, 2014). Limited information is available regarding the degree to which inappropriate behaviors in healthcare organizations are detected and managed by managers as part of a patient safety model (Satiani et al., 2014). Some researchers have reviewed the issue of inappropriate behaviors in healthcare organizations from nursing or physician perspectives and suggested some solutions (Hartung & Miller, 2013; Kimes, Davis, Medlock, & Bishop, 2015; Longo & Hain, 2014). The problem of inappropriate behavior and the negative impact on patient safety still exists, hence, studying the problem from a different perspective (that of hospital risk managers) may lead to solutions that had not been identified before. Knowledge gained from this research may contribute to a framework for successful management of inappropriate behaviors and reduce medical errors. Experiences shared by managers may provide a context for professionals in similar situations.

Background of the Study

The U.S. healthcare system is complex at the individual, organizational and national levels. A large amount of new clinical knowledge is generated every year that applies directly to patient care and healthcare workers need to learn and apply them (James, 2013). At the system level, healthcare managers try to provide the latest technologies to patients, effectively manage the transfer of patient information during

staff shift changes, and arrange for the efficient transfer of patients to other care facilities (James, 2013). Increasing production demands is another challenge for hospital managers to provide care with decreased staffing and physician shortage, which can lead to burnout, fatigue, and eventually medical errors (Zilberberg, 2011). At the national level, patients need to navigate through complex provider systems to gain access to affordable care. All these factors of a highly technical, rapidly changing and poorly integrated industry can lead to increased medical errors and preventable patient harm (Gittell, 2009). The scenario is further complicated by limited accountability when such errors occur (Levinson, 2012).

Thirteen years after the Institute of Medicine (IOM) report *To Err is Human* that estimated 100,000 patients die every year in the United States as a result of medical errors, a new report includes estimates that the medical error death toll to be closer to 400,000 death per year (Donaldson, Corrigan, & Kohn, 2000; James 2013). The scope of response to these reports suggests that the findings are considered a national crisis (Centers for Medicare and Medicaid Services, 2008; McCannon, Hackbarth, & Griffin, 2007). The IOM's report *To Err is Human* (Donaldson et al., 2000) has been cited in over 16,000 articles. Since then there have been many studies on process improvement and streamlining clinical processes to eliminate system errors (Radley et al., 2013; Starmer et al., 2014; Agency for Healthcare Research and Quality, 2016). In 2008, The Joint Commission recognized the inappropriate behavior of healthcare workers as a cause for diminished safety culture and issued a sentinel event alert concerning the issue of inappropriate behaviors (The Joint Commission, 2008). The Joint Commission's

recognition of inappropriate behaviors as a safety concern brought attention to a previously ignored or simply accepted part of a culture that had existed in healthcare organizations due to fear and confidentiality issues around reporting (Overton & Lowry, 2013). Debates over healthcare reform in the United States have escalated improvement efforts through legislation and federal program development to integrate high quality patient care with delivery efficiency. Costs associated with medical errors and hospital-acquired conditions are financially burdensome and threaten the solubility of federal healthcare insurance coverage. In 2011, the annual cost of measurable medical harm was estimated at \$17.1 billion per year (Van Den Bos et al., 2011); presumably, today's costs are higher. To encourage patient safety improvement and hold organizations accountable, on October 1, 2008, the Centers for Medicare and Medicaid Services stopped paying the excess cost for inpatient stays complicated by preventable errors (CMS, 2008).

Patient harm has negative personal, organizational, social, and financial impact and supports the need for further study to identify root causes and improvement opportunities that may lead to sustained patient safety. In this study, I aimed to further the knowledge of how inappropriate behaviors could be addressed by managers to mitigate medical errors and improve patient safety.

Patient Safety and Inappropriate Behaviors

Patient safety is a priority in healthcare and the responsibility of all healthcare workers (IOM, 2004). *To Err is Human* was IOM's report that revealed the high rate of medical errors and focused on the role of ineffective collaboration and communication between healthcare professionals (Donaldson et al., 2000). The IOM report caught the

attention of regulatory and professional organizations because there are validated relationships between communication of healthcare professionals and patient safety outcomes (American Association of Critical Care Nurses, 2005; The Joint Commission, 2008). Among the many factors attributable to medical errors are human behavioral issues, often referred to as inappropriate behaviors (Logo & Hain, 2014). Inappropriate behavior encompasses behavior that adversely affects morale, focus, concentration, collaboration, and communication. Inappropriate behavior of healthcare workers is an issue that has long existed that was simply accepted as part of the organizational culture and ignored as a problem; however, The Joint Commission's 2008 sentinel event alert concerning inappropriate behavior issue recognized the urgency of the problem by linking the behaviors to safety.

There are several terms used in the literature to identify inappropriate behaviors including bullying, horizontal violence, incivility, and mobbing. Bullying is when an employee is constantly picked on or humiliated by other staff or supervisors (Einarsen, Raknes, & Matthiesen, 1994, p. 382). Incivility occurs when people do not respect or pay attention to the expected norms in the workplace (Altmiller, 2012; Clark, Olender, Kenski, & Cardoni, 2013). Mobbing happens when one person is harassed by a group of workers (Leymann, 1990). Horizontal violence occurs when workers among the same rank rather than across power gradients display certain behaviors (Vessey, DeMarco, Gaffney, & Budin, 2009). Such behaviors can include unjustified blame, being treated differently than others, intimidation, exclusion, social isolation, humiliation, or

unreasonable demands (Vessey et al., 2009). For the purpose of this study, I used the overarching term of inappropriate behavior to refer to any of the above behaviors.

Poor working relationships between physicians and nurses that include intimidation, frustration, hostility, and poor communication can lead to a reduced transfer of necessary information that can adversely affect patient outcomes (Kimes et al., 2015; Sanchez, 2014; Stanley, Lohani, & Isaacowitz, 2014). Though physician behaviors have been scrutinized, bullying behaviors occur in other groups of healthcare worker such as managers, nurses, and other medical staff members in the United States (Rosenstein & O'Daniel, 2008). Inappropriate behaviors have been witnessed in physicians (77%) and in nurses (65%) (Rosenstein & O'Daniel, 2008). Inappropriate behavior of healthcare workers such as aggression is contributing factors that increase the risk of making errors, causing delays in delivery of care or causing conflict and stress for healthcare workers (Longo & Hain, 2014; Sanchez, 2014; Stanley et al., 2014). For example, to study the perception of a link between inappropriate behavior and negative patient outcomes, researchers have identified intimidation as a contributing factor to unsafe patient care by affecting the way medication orders are double checked (Institute for Safe Medication Practices, 2004). In Rosenstein and O'Daniel's (2005) study of 1,487 healthcare workers, 75% of respondents believed that medical errors caused by disruptive behavior could have been prevented, and 60% reported that they personally knew of at least one error that occurred because of disruptive behavior. Another study that included 4,530 healthcare workers showed that 27% felt there was a linkage between disruptive behavior and patient mortality, 67% believed that disruptive behaviors and adverse events are

linked together, and 71% felt disruptive behaviors can be linked to medical errors (Rosenstein & O'Daniel, 2008). Apart from the quality of care, inappropriate behavior can have negative physical and psychological impacts on healthcare workers as well as negatively affecting staff job satisfaction and productivity (Berry, Gillespie, Gates, & Schafer, 2012). A strong safety culture along within a high quality work environment can improve patient and staff outcomes (Stanley et al., 2014), a culture away from blame and more focused on examining system issues that could contribute to error (Overton & Lowry, 2013). Healthcare managers could consider human interactions as a source of errors because medical errors still occur even though there have been various efforts to provide clinical training and streamline clinical processes to prevent errors from occurring (Herndon, 2015; Satiani et al., 2014).

This background discussion demonstrated that there is a need for healthcare managers to pay attention to the significance of inappropriate behaviors and have a better understanding of what provokes these behaviors, develop standards, policies, and procedures along with active reinforcement to effectively deal with the issue and educational programs on effective communication among the healthcare teams to reduce the likelihood of incidences. In this study I aimed to close the gap of how to achieve the above goals.

Problem Statement

Apart from the estimated 400,000 patients that die every year in U.S. hospitals due to preventable harm, nonfatal but serious injuries attributable to the negligence of preventable harm may inflate the death rate figure by 10 to 20 times (Classen et al., 2011;

James, 2013; Makary & Daniel, 2016). Medical errors are the third leading cause of death in the United States and improvements in increasing patient safety scores are slow to occur according to new hospital safety scores (Landrigan et al., 2010; Makary & Daniel, 2016). The general problem addressed as part of this study was the mismanagement of medical errors and patient safety issues in healthcare organizations that result in unacceptably high patient mortality (James, 2013; Shojania & Thomas, 2013). The specific problem was timely recognition and management of inappropriate healthcare worker behaviors that lead to intimidation and loss of staff focus. As a consequence, loss of focus results in the poor transmittal of key instructions eventually leading to errors (Dellasega, Volpe, Edmonson, & Hopkins, 2014; Grogan & Knechtges, 2013; Longo & Hain, 2014).

Purpose of the Study

The purpose of this qualitative modified Delphi design study was to seek consensus among a panel of experts in hospital risk management practices on the practical methods for early detection of inappropriate behaviors among hospital staff, which may be used by hospital managers to considerably mitigate the risk of medical mishaps.

Research Question

Given the likelihood of inappropriate behaviors to cause medical errors, managers in hospitals have likely faced the need to make decisions to recognize and manage inappropriate behaviors to mitigate these errors and their implications (Longo & Hain, 2014). As part of this study, I asked a single research question with no stated or implied

hypothesis to emphasize the value of open-ended naturalistic observation in a qualitative approach as an opportunity to observe without the influence of hypotheses and other preconceptions. To best gather the consensus of expert managers, I used open-ended questions in a questionnaire to allow explanations and descriptions. I gathered information and insight from the following research question: What level of consensus exists among hospital risk management experts as to the practical methods for early detection of inappropriate behavior among hospital staff, which managers may use to ultimately mitigate the risk of preventable medical mishaps?

Conceptual Framework

I used the conceptual framework of fair and just culture patient safety model (Frankel, Leonard, & Denham, 2006) and the safety measurement and monitoring framework (Vincent, Burnett, & Carthey, 2014) as a roadmap to conduct my study. The fair and just culture patient safety model ensures balanced accountability for both staff and the organization by considering human factors and developing an algorithm for error. A combination of engineering principals and human factors would help in building systems that are safe and reliable. In just culture, a learning culture is cultivated to constantly improve patient safety (Boysen, 2013). In an organization with just culture, there is an atmosphere of trust where the staff are well aware of the boundaries between acceptable and unacceptable behaviors and are encouraged and rewarded for providing patient safety-related information. The just culture concept was initially popularized by Grout (2007, pp. 23–37). He developed a model that distinguished between human errors, at-risk behavior, and reckless behavior where human error is defined as a slip or

mistake, at-risk behavior is when someone takes shortcuts but they do not perceive it as risky, and reckless behavior is when someone repeatedly ignores processes or is working while under influence of drugs.

The safety measurement and monitoring framework (Vincent et al., 2014) was developed by a comprehensive study of safety measurement and monitoring systems and frameworks in various high-risk industries through interviews, case studies, publications, technical reports, and guidance documents reviews. The framework approaches safety as an active inquiry rather than compliance and assurance. The five dimensions of the framework are past harm, reliability, sensitivity to operation, anticipation, and preparedness and integration and learning.

Current theoretical and conceptual models exist on patient safety and inappropriate behavior in healthcare literature. I used the high reliability theory (Tamuz & Harrison, 2006) to guide my research process. High reliability theory has been studied and applied in the healthcare settings (Goldenhar, Brady, Sutcliffe, & Muething, 2013; Tolk, Cantu, & Beruvides, 2015). High reliability theory was first introduced at the Berkeley College of the University of California when La Porte, Roberts, and Rochlin (1987) studied how some organizations with highly unpredictable and demanding production goals that work with hazardous technologies and complex operations succeed at remaining accident-free for long periods of time. High reliability theory includes the assertion that organizations can successfully prevent accidents and sustain and achieve error-free operations. I discuss the theory in more detail in Chapter 2. Considering the high reliability theory, hospital risk managers are involved in some capacity in safety

measurement and monitoring and the fair and just culture. Therefore, I conceptually considered these frameworks throughout my study as part of the literature review, design, data analysis, and the final discussion of the study results.

Nature of the Study

Method and Design

I used a qualitative approach to an in-depth exploration of the role of management in recognizing and preventing inappropriate behavior in healthcare organizations. Application of modified Delphi design inquiry assisted to build consensus among a panel of experts in hospital risk management practices as to the practical methods for early detection of inappropriate behaviors among hospital staff, which may be used with confidence by hospital managers to mitigate the risk of medical mishaps. The modified Delphi design is a suitable approach when there is no consensus or there is incomplete knowledge and the method can apply expert knowledge to generate new understanding about a problem (Skulmoski, Hartman, & Krahn, 2007). The modified Delphi design is a forecasting technique that applies expert knowledge to identify solutions or predict the outcome of future events through multiple rounds of data collection (Flostrand, 2016).

Instrument

Instrumentation in the study included three questionnaires that were administered sequentially through SurveyMonkey™. Expert panelists were solicited from identified stakeholder groups using purposive sampling to participate in the study based on a range of criteria for inclusion as a risk management expert. The first questionnaire was open-ended, followed by two questionnaires consisting of statements to be rated on a Likert

scale. Characteristics of high reliability theory, fair and just culture model, and literature-based recommendations served as the base for question themes. The questions focused on strategies, barriers, risks, and benefits of managing inappropriate behavior to improve patient safety and mitigate errors.

Analysis

I used the NVivo (Version 11) software, which is a Computer Assisted Qualitative Data Analysis Software (CAQDAS) to analyze my data from the round one questionnaire. In the second round, experts were asked to rank the degree of their agreement with a series of identified statements pertaining to defining the risk management practices as to the practical methods for early detection and management of inappropriate behaviors among hospital staff. After data analysis of round two, the most highly ranked items (extremely important and very important) were then submitted in a third questionnaire. For the final questionnaire, the panelists selected the top 10 factors that they considered important. The consensus was reached by identifying the statements selected by over 50% of the experts in the panel.

Population and Sampling

The general population for my study was healthcare risk managers with a specific set of skills and experiences as listed for the inclusion criteria. The lists of participants were randomly drawn from the online member directory of the American Society for Healthcare Risk Managers (ASHRM) available to members throughout the United States. The details of inclusion and exclusion criteria are discussed in Chapter 3.

An e-mail invitation was used to solicit experts to serve in the study across all three rounds. Purposive sampling was appropriate in this study to obtain a sample that has the necessary expertise and experience in diversity issues to comprise the expert panel for the modified Delphi design. Each participant was asked to sign an informed consent form prior to participation in the study. The informed consent form complied with all policies and standards of Walden University Institutional Review Board (IRB). The consent form also included a brief description of the goal of the research project; it indicated that responses are anonymous and responses will be shared with other participants and potentially published or discussed at academic conferences. The consent form stated participation is purely voluntary and that participants have the right to withdraw from the study at any time and finally a statement that participants will have early access to study results.

Definition of Terms

Adverse events: An accidental harm to the patient caused by an act of commission or omission rather than by the underlying disease or condition of the patient (National Quality Forum, 2009).

Enterprise risk management (ERM): Approach where risks are identified proactively (rather than reactively after an event has happened) with a multidisciplinary team attitude to look for risks to the organization as a whole (Carroll, 2016).

Fair and just culture patient safety model: A patient safety model to ensure balanced accountability for both staff and the organization by considering human factors and developing an algorithm for error (Frankel et al., 2006).

Harm: Any temporary or permanent injury to the physical or psychological health of patients (National Quality Forum, 2009).

Healthcare managers: Responsible for effective use of organizational resources such as financial, material, information, and human resources to deliver services and achieve organizational goals (McGinnis, 2007). Additionally, healthcare managers need to have both technical and interpersonal skills such as communication, motivation, and teamwork to coordinate various medical teams (Buchbinder & Shanks, 2012).

Healthcare managers are in the position of authority to make important decisions such as recruitment and development of staff, adding or reducing service lines, and acquisition of technologies within a certain budget (Buchbinder & Shanks, 2012).

Healthcare organization: The definition of healthcare organization in this study was adopted from the World Health Organization (2000, p. xi) and is defined as comprising all the organizations, institutions and resources that are devoted to producing health actions in terms of any effort, whether in personal healthcare, public health services, or through intersectional initiatives, whose primary purpose is to improve health. Healthcare facilities are licensed to provide diagnosis, treatment, or rehabilitation to care for patients. Examples of healthcare facilities are rehabilitation centers, nursing homes, hospitals, outpatient centers, clinical laboratories, or ambulatory surgical centers (National Quality Forum, 2009).

Healthcare quality: According to Press (2006), patients' perception of quality is influenced by the interactions between patients and staff and the surrounding sounds and sights. Cunningham (1991) provides a more detailed definition of quality from the

patient's perspective that contains nine elements: good doctors, good patient care, responsiveness, advanced equipment, reputation, good food, quietness, cleanliness, and accurate billing. Physicians and other providers focus on clinical quality which involves measurement and comparison of various clinical indicators. Healthcare managers' focus on quality is to ensure their staffs have the competency and adequate tools to provide excellent care and gain patients satisfaction to the point that patients are willing to come back for more services and recommend it to others (Chilgren, 2008).

High reliability organization (HRO): Have a nearly error-free performance by implementing a set of behavioral and cognitive processes that all employees adapt (Weick & Sutcliffe, 2007). HROs provide an environment of collective mindfulness in which all staffs are always looking for unsafe conditions and report every small problem before it poses a risk to safety. Humans working in complex systems may not have the ability to sense all possible problems generated in the system; therefore, an appropriate organization of people, processes, and technologies can manage the complexity and hazardous conditions of a complex system with the goal of improving reliability (Ruchlin, Dubbs, Callahan, & Fosina, 2004).

Hospital-acquired conditions: An undesirable and preventable condition or complication that a patient develops during hospital stay, which was not present at time of admission (Centers for Medicaid and Medicare services, 2017).

Inappropriate behavior: For the purposes of this paper, refers to the inappropriate work behaviors including bullying, disruptive behavior, horizontal violence, incivility, and mobbing. Bullying is the term chosen mostly by English-speaking countries,

harassment by the French-speaking, and mobbing by Europeans (Einarsen, Hoel, Zapf, & Cooper, 2011, pp. 3–40). Bullying is when an employee is constantly picked on or humiliated by other staff or supervisors (Einarsen et al., 1994, p. 382). Incivility happens when people do not respect or pay attention to the expected norms in the workplace (Altmiller, 2012; Clark et al., 2013). Mobbing happens when one person is harassed by a group of workers (Leymann, 1990). Horizontal violence occurs when workers among the same rank rather than across power gradients display certain behaviors (Vessey et al., 2009). Such behaviors can include unjustified blame, being treated differently than others, intimidation, exclusion, social isolation, humiliation, or unreasonable demands (Berman-Kishony & Shvarts, 2015; Washington State Department of Labor & Industries, 2013; Vessey et al., 2009). The Joint Commission defines disruptive behavior as passive or uncooperative actions such as refusing to talk or perform a task, as well as physical or verbal outbursts or threats (The Joint Commission, 2008). Rosenstein (2015) conveniently summarizes all the above definitions of inappropriate behaviors into a short and inclusive definition of any behavior that can adversely undermine patient safety and patient care.

Incident: A patient safety event to the patient, regardless of whether the patient was harmed (National Quality Forum, 2009).

Medical errors: Deviation or unintended act in the process of care that may or may not cause harm to patients (Makary & Daniel, 2016).

Organizational culture: Characterized by the shared values, assumptions, attitudes, and norms of behavior that may promote some behaviors and block others (Gale, Shapiro, McLeod, Redwood, & Hewison, 2014).

Patient safety: A prevention and mitigation strategy used by healthcare organizations to minimize the likelihood of medical errors (National Quality Forum, 2009).

Quality improvement professional: Professionals who are trained to conduct in-depth root cause analysis, gather data on all incidents, look for trends and offer multidisciplinary team approach for introducing long-term systematic solutions (Antonelli, Seaver, & Urman, 2013; Harvey et al., 2016).

Quality: A high standard for healthcare delivery services to increase the likelihood of reaching optimum health outcomes consistent with current professional practice (National Quality Forum, 2009).

Risk managers: Involved in identification and avoidance of risks in a systematic way (Streimelweger, Wac, Seiringer, & Geneva, 2016). Risk management systems do not guarantee total absence of failures, but they ensure accuracy, dependability and prompt handling of failures with the aim to reduce risks and damages. Additionally, risk managers improve safety within the organization (Streimelweger et al., 2016).

Risk: Likelihood of loss, damage or injury (National Quality Forum, 2009).

Safety culture: In a comprehensive literature review of 139 peer-reviewed articles published from 1980 to 2009 pertaining to safety culture in healthcare organizations,

Halligan and Zecevic (2011) found the most commonly used definition of safety culture was:

The product of individual and group values, attitudes, competencies and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and safety programs. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measure (National Quality Forum, 2009, p. 339).

Assumptions

I assumed my literature review was extensive enough to support my research question. I assumed the inclusion criteria for study participants were appropriate and the panel experts had the expertise and depth of knowledge to answer the research question. I ensured clear communication on anonymity and confidentiality of all responses along with the option to withdraw from the study at any time without any ramification. Therefore, I assumed the study participants were honest and forthcoming with their answers and had no explicit biases. I assumed the participants had a sincere interest in participating in this study and did not have any other motives. Finally, given the assertion and justifications I provide in Chapter 3 for credibility, transferability, dependability, and confirmability of my study, I assumed my choice of methodology was the most suited for answering the research question.

Scope and Delimitations

The general scope of the problem addressed as part of this study was the mismanagement of medical errors and patient safety issues in healthcare organizations that result in unacceptably high patient mortality (James, 2013; Shojania & Thomas, 2013). Although there have been many attempts to improve patient safety by streamlining various clinical processes, medical errors still exist (Radley et al., 2013; Starmer et al, 2014; Agency for Healthcare Research and Quality, 2016). Not much attention has been given to management of the behavior of healthcare workers as the root cause of some of these errors. Limited information is available regarding the degree to which inappropriate behaviors in healthcare organizations are detected and managed by managers (Satiani et al., 2014). I narrowed down my focus from the general problem of patient safety and high rate of medical errors and mortality in healthcare settings to a more specific emphasis on management controls over inappropriate behavior of healthcare worker that leads to poor transmittal of key instructions, eventually leading to errors (Dellasega et al., 2014; Longo & Hain, 2014; Ulrich, Lavandero, Woods, & Early, 2014). I focused on the specific population of risk managers to gain their insight and answering my research question. Previously, researchers have studied inappropriate behaviors in healthcare organizations from nursing or physician perspectives (Hartung & Miller, 2013; Kimes et al., 2015; Longo & Hain, 2014). In my study, however, I looked at the problem from a different perspective (that of hospital risk managers) and proposed solutions that had not been identified before (Cooke, 2016). I used the conceptual frameworks of fair and just culture patient safety model (Frankel et al., 2006) and the

safety measurement and monitoring framework (Vincent et al., 2014) as a guiding lens to conduct my study. Knowledge gained from my research may contribute to a framework for successful management of inappropriate behaviors in healthcare organizations. Experiences shared by healthcare risk managers may provide a context for professionals in similar situations.

Limitations

The modified Delphi design is often criticized for not showing research-based evidence concerning diverse feedback methods and their effect on the validity and reproducibility of the decisions reached by the panel experts (McMillan, King, & Tully, 2016). Another possible influence on group dynamic of Delphi design is psychosocial biases (Pagliari, Grimshaw, & Eccles, 2001). The modified Delphi design has been critiqued as being affected by researchers' biases concerning the selection and coordination of expert opinions, also by a potential absence of mutual idea clarification among the various experts (McMillan et al., 2016). To address these concerns, I followed strategies such as rich description, clarification of researcher bias, presentation of negative information, documentation of research procedures, and the cross-check of codes to confirm trustworthiness and rigor in my study. Additionally, ongoing checks by my dissertation committee ensured the quality of the study's data management procedures and pointed out any potential bias or distortion. Multiple rounds of modified Delphi design may have introduced participant fatigue and some drop-outs. To reduce participation fatigue, I kept in touch with my participants throughout the modified Delphi rounds and thanked them for their continued participation at each round.

This study came from the perspective of risk managers in healthcare organizations within United States and may not be applicable to other settings. The results of the modified Delphi design are based on subjective expert opinions; therefore, it should be generalized with caution. A limitation of the modified Delphi design is the restricted number of participants and a larger group, which may provide more extensive representation but was beyond the scope and resources for this study. Patient safety cultures may vary across hospitals depending on local culture, geography, patient demographics, financial climates, or other variables, therefore limiting the transferability of the study. The included hospitals may not be representative of all hospitals within the United States, which may also affect transferability. Similarly, this study was limited to the risk managers in healthcare organizations and does not include other healthcare workers. Future research is warranted to explore their view.

Significance of the Study

Significance to Practice

Given the intensely service-oriented nature of healthcare organizations, understanding individuals and group are critical for healthcare managers (Borkowski, 2015). Failure is bound to happen when healthcare managers fail to work effectively in teams, have weak relationships, and do not handle change effectively (Borkowski, 2015). There is evidence of a strong link between the working relationship of healthcare employees and productivity, patient safety, and patient outcomes (Almost et al., 2016). Today's healthcare organization settings are stressful and demanding and the risk of interpersonal conflicts is high. Consequently, effective management of conflicts and

inappropriate behaviors is important to healthcare managers. Knowledge gained from this research may contribute to a framework for successful management of inappropriate behaviors. Experiences shared by managers may provide a context for professionals in similar situations.

Significance to Theory

Limited information is available regarding the degree to which inappropriate behaviors in healthcare organizations are detected and managed by managers as part of a patient safety model (Satiani et al., 2014). Hospital risk management should evolve its role from traditional crisis oriented focused to become more responsive to the increasing demands of safety and accountability of U.S. healthcare system (Card & Klein, 2016; Card, Ward, & Clarkson, 2012; Kuhn & Youngberg, 2002). Recent risk management literature highlights the expanding role of risk management professionals in recognizing opportunities for patient safety improvement (Bunting & Groszkruger, 2016) and recommending appropriate risk control tools and techniques (Card et al., 2015). The problem of inappropriate behavior and its negative impact on patient safety was an opportunity for improvement that risk management professionals addressed as part of this study. Some researchers have reviewed the issue of inappropriate behaviors in healthcare organizations from nursing or physician perspectives and suggest some solutions (Hartung & Miller, 2013; Kimes et al., 2015; Leape et al., 2012). The problem of inappropriate behavior and its negative impact on patient safety still exist; hence, studying the problem from a different perspective (that of hospital risk managers) may propose solutions that had not been identified before.

Significance to Social Change

Arguably most of the research related to the healthcare industry is aimed to improve patient outcomes in some way or another. Improving the health of communities in itself is a positive social change and therefore most of the healthcare-related literature is aimed to bring positive social change. Positive social change as defined by Walden (2014) as a deliberate process of creating ideas and actions with the aim to improve the lives of individuals or communities locally and around the world. The transformation of social change leads to positive outcomes at many levels and at different rates. I had an interdisciplinary and multicultural approach to social change as part of my dissertation research topic. In my research I focused on real-world application of ideas and strategies to create positive social change. The implications for positive social change in my dissertation research include a better understanding of inappropriate behaviors among healthcare workers, how it influences the workplace and patients, and the potential to minimize its negative impacts.

Summary and Transition

In Chapter 1 I provided an overview of the study. I reviewed some backgrounds for the study problem, stated the research question, and described the significance of the proposed study on professional practice, theory and on social change. I also briefly introduced the theoretical foundation and conceptual framework that I applied to the study. Furthermore, I reviewed the nature of the study in terms of methodology, population and sampling, instruments, and data analysis. Finally, I explained the scope and limitation of the study with reference to more details in Chapters 2 and 3.

Chapter 2: Literature Review

Modern healthcare organizations involve a complex system to provide services delivered by multidisciplinary teams who rely on clear communication and effective teamwork to ensure patient safety and effective patient care (Weller, Boyd, & Cumin, 2014). As estimated in several studies, up to 400,000 patients die every year in U.S. hospitals due to preventable harm (Makary & Daniel, 2016; James, 2013). James (2013) estimated that nonfatal but serious injuries due to errors may inflate the above figure by 10 to 20 times. Similarly, the IOM estimated that 1.5 million patients are injured by medications errors alone every year. More recently Makary and Daniel (2016) looked at the issue of medical error deaths from a different perspective and concluded that medical errors are the third leading cause of death after heart disease and cancer in the United States. The latest report from Center for Disease Control and Prevention estimated 722,000 cases of preventable infections in acute care hospitals in 2011 (2017). Additionally, in 2011, about 75,000 patients died during their hospital stay because of preventable infections (Center for Disease Control and Prevention, 2017).

The general problem was the mismanagement of patient safety issues in healthcare organizations resulting in unacceptable high patient mortality and harm (James, 2013; Shojania & Thomas, 2013). The specific problem was poor management controls over inappropriate healthcare worker behaviors that lead to intimidation and loss of staff focus. As a consequence, the loss of staff focus results in the poor transmittal of key instructions eventually leading to errors (Dellasega et al., 2014; Grissinger, 2017; Longo & Newman, 2014). Among the many factors attributable to medical errors are

human behavioral issues, often referred to as inappropriate behaviors (Logo & Hain, 2014). Inappropriate behavior encompasses behavior that adversely affects morale, focus, concentration, collaboration, and communication. There were several terms used in the literature to identify inappropriate work behaviors, including bullying, horizontal violence, incivility, and mobbing. These behaviors were positively correlated to the likelihood of making an error and can lead to conflict or delays in providing care, becoming the root cause of patient harm (Grissinger, 2017; Logo & Hain, 2014; McLaughlin, Pearce, & Trenoweth, 2013).

Healthcare managers must consider human interactions as a source of errors because medical errors are still happening even though there have been various efforts to provide clinical training and streamline clinical processes with the goal of reducing errors (Herndon, 2015; Satiani et al., 2014). The current literature on inappropriate behavior in healthcare organizations places an exclusive focus on individual actors and acts, which directly shapes prevention and intervention practices limiting the potential for long-term systemic change (Hartung & Miller, 2013; Kimes et al., 2015; Longo & Hain, 2014). Risk managers along with quality improvement professionals, however, are trained to conduct in-depth root cause analysis, gather data on all incidents, look for trends, and offer a multidisciplinary team approach for introducing long-term systematic solutions (Antonelli et al., 2013; Harvey et al., 2016; Meara, 2013). They can then systematically monitor the implementation and sustainability of changes long-term.

As part of this study I closed the gap in ways managers identify and manage inappropriate behaviors in healthcare organizations. I focused on finding desirable

attributes and practical methods for the early detection of inappropriate behaviors, which may be used with confidence by managers to mitigate the risk of medical mishaps.

Finally, I gained insight into risk management's understanding of what constitutes inappropriate behavior in healthcare organizations and what contributes to and supports these behaviors.

The remainder of Chapter 2 covers the following topics:

- Definitions of various terms used in this study.
- A description of search strategies to identify relevant articles for the literature review.
- Identification and description of the conceptual frameworks employed in the study to state the logical connections among key elements of the framework; how the framework relates to the study approach and key research questions; a literature and research-based analysis of how the theory has been applied previously in similar ways to the current study.
- A historical overview of ways researchers in the discipline have approached the problem; a review and synthesis of studies related to the key concepts under investigation to produce a description of what is known about them, what is controversial, and what remains to be studied; a summary of major themes in the literature; and a description of how the present study fills at least one of the gaps in the literature and will extend knowledge in the discipline.
- A summary of the role of risk management and quality improvement in healthcare organizations and their role in patient safety.

- An overview of inappropriate behavior in healthcare organizations and its consequences.
- A review of current solutions to the problem in the literature.
- A synopsis of the professional and positive social change contribution of this study.

Literature Search Strategy

The search for the pertinent literature began using the following keywords: *patient harm, patient safety, medical error, peer incivility, inappropriate behavior, disruptive behavior, and risk management*. I used PubMed/MEDLINE, CINAHL, ProQuest Health and Medical Collection, and Cochrane Database of Systematic Reviews to identify relevant articles. Additionally, I used Google Scholar to supplement the search using the above keywords. Although I mostly focused on most current literature in my review, I did not limit the publication dates in my search to find other important articles on my topic. Articles were chosen based on the abstract review that identified articles related to inappropriate behavior in healthcare organizations.

Conceptual Framework

In this section I identify and define the concept that grounded the study and provide an overview of the frameworks I used to provide conceptual clarity to my research process and findings. I review how these frameworks encompass the principal facets of safety and provided guidance to my research. Moreover, I state the logical connections among key elements of the frameworks. I also state how the framework relates to the study approach, key research question, instrument development, and data

analysis. To close, I provide a literature and research-based analysis of how the theory has been applied previously in ways similar to this study.

High Reliability Organization

To solve the long-standing problems with quality and safety in healthcare organizations, many regulators, academics, and leaders have pushed healthcare organizations to adapt principles of HROs that have been successful in other high-risk industries such as nuclear power stations and aircraft carrier flight decks (Chassin & Loeb, 2013; Sutcliffe, Paine, & Pronovost, 2016; Vogus & Hilligoss, 2016). HROs have a nearly error-free performance by implementing a set of behavioral and cognitive processes that all employees adapt (Weick & Sutcliffe, 2007). HROs provide an environment of collective mindfulness in which all staff are always looking for unsafe conditions and report every small problem before it poses a risk to safety. Weick and Sutcliffe (2007) identified five high reliability principles that healthcare organizations can adapt to improve safety and ingrain safety culture:

1. HROs are always on high alert to look for safety concerns and never satisfied that they are safe because they have not had an accident for a long time.
2. HRO employees never simplify safety observations and feel free and obligated to speak up on any safety concerns.
3. HRO employees are sensitive to smallest deviations in operations that could affect safety.
4. HROs have a commitment to resilience in the sense that if an error happens, it will not disable staff and they can contain them.

5. Deference to expertise is the final principle of HROs that when confronted with a safety threat, staffs know exactly who to contact to best manage the situation.

According to Chassin and Loeb (2013), the current healthcare system is far from the state of high reliability as described above. Fires in operating rooms or procedures on wrong body parts should never happen. These events rarely happen; however, the rarity of these events tends to reinforce organizations' belief that they will never experience them and therefore have a false sense of confidence that their safety systems are adequate. The false sense of safety reduces the alertness of surgical teams to the small signs of a risk of fire or wrong-side surgery (Chassin & Loeb, 2013). Healthcare workers routinely observe unsafe behaviors, conditions, and practices, but they often fail to report them (Agency for Healthcare Research and Quality, 2016). Poor communication within and between teams is one of the reasons for lack of reporting; when healthcare workers are used to poor communication they become desensitized to its hazards (Chassin & Loeb, 2013). The 2016 report of the federal Agency for Healthcare Research and Quality showed that among the 680 participating hospitals, 55% of respondents believe that their mistakes and event reports are held against them and that mistakes are kept in their personnel file (Agency for Healthcare Research and Quality, 2016). Only 48% of respondents believed important patient care information is transferred across hospital units and during shift changes (Agency for Healthcare Research and Quality, 2016). These numbers are alarming because it means intimidated staffs are not recognizing or reporting safety issues that could harm patients. Chassin and Loeb (2013) identified five

components of safety culture in each of the four stages of maturity toward high reliability (see Table 1). In this table Chassin and Loeb illustrated how staff trust in their peers and organizations is a key component to timely reporting of safety issues. Additionally, elimination of intimidating behavior that suppresses reporting can establish trust and communicating improvements further strengthen the trust (Chassin & Loeb, 2013)

Table 1

Safety Culture and High Reliability: Stages of Organizational Maturity

Safety Culture	Beginning	Developing	Advancing	Approaching
Trust	Trust or intimidating behavior is not assessed.	First codes of behavior are adopted in some clinical departments.	CEO and clinical leaders establish a trusting environment for all staff by modeling appropriate behaviors and championing efforts to eradicate intimidating behaviors.	High levels of (measured) trust exist in all clinical areas; self-policing of codes of behavior is in place.
Identifying unsafe conditions	Root cause analysis is limited to adverse events; close calls (“early warnings”) are not recognized or evaluated.	Pilot “close call” reporting programs begin in few areas; some examples of early intervention to prevent harm can be found.	Staffs in many areas begin to recognize and report unsafe conditions and practices before they harm patients.	Close calls and unsafe conditions are routinely reported, leading to early problem resolution before patients are harmed; results are routinely communicated.

(table continues)

Safety Culture	Beginning	Developing	Advancing	Approaching
Strengthening systems	Limited or no efforts exist to assess system defenses against quality failures and to remedy weaknesses.	RCAs begin to identify the same weaknesses in system defenses in many clinical areas, but systematic efforts to strengthen them are lacking.	System weaknesses are cataloged and prioritized for improvement.	System defenses are proactively assessed, and weaknesses are proactively repaired.
Assessment	No measures of safety culture exist.	Some measures of safety culture are undertaken but are not widespread; little if any attempt is made to strengthen safety culture.	Measures of safety culture are adopted and deployed across the organization; efforts to improve safety culture are beginning.	Safety culture measures are part of the strategic metrics reported to the board; systematic improvement initiatives are under way to achieve a fully functioning safety culture.

Note. From “High-reliability Health Care: Getting There from Here,” by M. R., Chassin, & J. M., Loeb (2013), *Milbank Quarterly*, 91(3), p. 478–479. Reprinted with permission. (see Appendix A)

To make significant progress toward high reliability, Chassin and Loeb (2013) offered three key changes that healthcare organizations would need to make. The first change is the leadership’s commitment to the goal of zero patient harm, second is to systematically adapt and implement all the principles of safety culture, and finally, effective process improvement tools must be deployed throughout the organization. All these requirements have been considered in the following chosen conceptual frameworks.

Fair and Just Culture Patient Safety Model

The fair and just culture patient safety model uses HRO principles to ensure balanced accountability for both staff and the organization by considering human factors and developing an algorithm for error (Frankel et al., 2006). A combination of engineering principals and human factors would help in building systems that are safe and reliable. As part of just culture, a learning culture is nurtured to continuously improve patient safety (Boysen, 2013). In an organization with just culture, staffs know the boundaries of acceptable and unacceptable behaviors and have the trust and encouragement to share patient safety related information. The just culture concept was initially promoted by Grout (2007, pp. 23–37). He developed a model that differentiated between human errors, at-risk behavior and reckless behavior. He defined human error as a slip or mistake, at-risk behavior is when someone takes shortcuts but they do not perceive it as risky, and reckless behavior is when someone ignores processes or is working while under influence of drugs.

Safety Measurement and Monitoring Framework

The safety measurement and monitoring framework (Vincent et al., 2014) was developed by a comprehensive study of safety measurement and monitoring systems and frameworks in various high-risk industries through interviews, case studies, publications, technical reports, and guidance documents reviews. The framework approaches safety as an active inquiry rather than compliance and assurance as advocated by HRO principles. The five dimensions of the framework are past harm, reliability, sensitivity to operation, anticipation and preparedness, and integration and learning. Continuous application of

each dimension is required as part of the safety measurement and monitoring and is represented in Figure 1 in the form of a connected circles.



Figure 1. A framework for safety measure and monitoring. From “Safety measurement and monitoring in healthcare: A framework to guide clinical teams and healthcare organizations in maintaining safety,” by C. Vincent, S. Burnett, & J. Carthey, 2014, *British Medical Journal Quality and Safety*, 23, p. 672. Reprinted with permission/ (see Appendix A)

Within an HRO framework, hospital risk managers are involved in some capacity in safety measurement and monitoring and the fair and just culture. Therefore, I conceptually considered these frameworks throughout my study as part of the literature review, design, data analysis, and the final discussion of the study results.

Literature Review

The literature review section includes a description of ways researchers in the discipline have approached the problem along with their strengths or weaknesses. It contains synthesise of related studies and a summary of major themes in the literature with the aim of producing a description of what is known and what remains to be studied. Finally, the literature review section includes a description of how the present study will extend knowledge in the discipline.

In 2000, IOM published the eye-opening report that estimated 100,000 patients die every year as a result of medical errors in healthcare organizations (Donaldson et al., 2000). In 2001, the Joint Commission adopted patient safety standards and a survey process was introduced using a patient tracer methodology in 2002 to improve patient safety. In 2005 The Join Commission introduced National Patient Safety Goals that healthcare quality managers have traditionally been responsible for to design and implement processes that would assure compliance with these requirements. At the same time, these new accreditation requirements were being introduced by the Joint Commission, healthcare organizations were encouraged to join safety and quality initiatives promoted by other agencies, such as National Quality Forum and the Institute for Healthcare Improvement (IHI). Then came the pressure for public reporting of quality data as state governments were confronted with the consumers' desire for transparency and comparison of quality measures from various healthcare organizations. Additionally, the consumers and various regulatory bodies demanded to report on healthcare organizations' efforts in improving patient safety. It was at this point that

quality and risk management gained recognition and support by executive leaders as the success of their patient safety and quality improvement efforts would affect the financial strength of the organization and their ability to get accredited and attract patients.

Almost two decades after the IOM report *To Err is Human*, new reports now estimate this number to as high as 400,000 deaths per year (Donaldson et al., 2000; James 2013; Makary & Daniel, 2016). The IOM report's conclusion was based on the 1984 Harvard Medical Practice Study and the 1992 Utah and Colorado Study (Brennan et al., 1991; Thomas et al., 1999). One of the chief investigators in the 1984 Harvard study, published an article in 1993 arguing that the 100,000 deaths estimate was too low and the actual number of preventable iatrogenic deaths were 180,000 (Leape, Lawthers, Brennan, & Johnson, 1993). Since then others have also suggested that the IOM's report was an underestimation of the problem. In 2004 the patient safety indicators of the Agency for Healthcare Quality and Research (AHQR) in the Medicare population reported an estimated 575,000 deaths due to medical errors between 2000 and 2002 (Health Grades, 2004). Subsequently, in 2008, the Office of Inspector General of the U.S. Department of Health and Human Services reported 180,000 per year deaths caused by medical error after reviewing patient records of Medicare beneficiaries (Levinson, 2010). Finally, the most recent estimates are up to 400,000 deaths each year, more than four times the estimate by IOM (Classen et al., 2011; James 2013; Makary & Daniel, 2016). Makary and Daniel (2016) considered the 400,000 death per year an underestimation of the true incidence of death due to medical error because the studies cited in IOM's study rely only on errors that were documented in patients' medical records and include only inpatient

deaths. All the above studies excluded deaths from medical errors that may happen in other settings such as nursing homes, outpatient ambulatory centers or home care. There is also a possibility of errors that do not get reported or documented.

The scope of response to these reports suggested that the findings are considered a national crisis (CMS, 2008; McCannon et al., 2007). In 2008, The Joint Commission recognized the inappropriate behavior of healthcare workers as a cause for diminished safety culture and issued a sentinel event alert concerning the inappropriate behavior issue (The Joint Commission, 2008). Issuing the sentinel event brought attention to an often ignored or accepted part of culture that had existed in healthcare organizations due to fear and confidentiality concerns around reporting (Overton & Lowry, 2013). Current debates over healthcare reform in the United States have escalated improvement efforts through legislation and federal program development to integrate high-quality patient care with delivery efficiency. Costs associated with medical errors and hospital-acquired conditions are financially burdensome and threaten the solubility of federal healthcare insurance coverage. The annual cost of measurable medical harm is estimated at \$17.1 billion (Van Den Bos et al., 2011); presumably, today's costs are higher. On October 1, 2008, the Centers for Medicare and Medicaid Services stopped paying the excess cost for inpatient stays complicated by preventable errors (CMS, 2008).

Although there have been many studies on streamlining clinical processes with the aim to eliminate system errors, the patient safety problem of medical errors still exist (Radley et al., 2013; Starmer et al., 2014; Agency for Healthcare Research and Quality, 2016); Not much attention has been given to management of the behavior of healthcare

workers as the root cause of some of these errors (Grissinger, 2017). Limited information is available regarding the degree to which inappropriate behaviors in healthcare organizations are detected and managed by managers and leaders as part of a patient safety model (Satiani et al., 2014). Some scholars recommended that hospital risk management should evolve its role from traditional crisis-oriented and loss management focused to become more responsive to the increasing demands of safety and accountability of U.S. healthcare system (Card & Klein, 2016; Card et al., 2012; Kuhn & Youngberg, 2002). Recent risk management literature highlighted the expanding role of risk management professionals in recognizing opportunities for patient safety improvement (Bunting & Groszkruger, 2016) and recommending appropriate safety risk control tools and techniques (Card et al., 2015). Therefore the problem of inappropriate behavior and its negative impact on patient safety was an opportunity for improvement that risk management professionals could address as part of this study. Some researchers have reviewed the issue of inappropriate behaviors in healthcare organizations from nursing or physician perspectives and suggest some solutions (Hartung & Miller, 2013; Kimes et al., 2015; Longo & Hain, 2014). However the problem of inappropriate behavior and its negative impact on patient safety still existed, hence studying the problem from a different perspective (that of hospital risk managers) may propose solutions that had not been identified before (Cooke, 2016). Knowledge gained from my research may contribute to a systematic framework for successful management of inappropriate behaviors. Experiences shared by managers and leaders may provide a context for professionals in similar situations.

I used a qualitative modified Delphi design for an in-depth exploration of hospital risk managers' perspective on the problem and to inform the literature by building consensus among hospital risk management experts as to what constitutes inappropriate behavior in the workplace and what contributes to and supports the behaviors to help their organizations provide appropriate educational and training programs that can reduce the possibility of errors (Butcher 2015; Chervenak, McCullough & Brent, 2013; Rawson, Thompson, Sostre, & Deitte, 2013). The modified Delphi design is a suitable approach when there is no consensus or there is incomplete knowledge and the method can utilize expert knowledge to generate new understanding about a problem (Flostrand, 2016). In Chapter 3 I provide more in-depth discussions on the choice of methodology for the study.

The Role of Risk Management and Quality Improvement

Initially risk management was a strategy used mainly in the business and economic sector; However with the increasing number of medical malpractice lawsuits, similar risk management strategies were adopted in the healthcare sector (Messano, De Bono, Di Folco, & Marsella, 2013). In 2016, over \$3.8 billion was paid in medical malpractice claims in the U.S. (Diederich Healthcare, 2017). Hospitals are also facing financial loss risks if they do not provide high-quality care according to Centers for Medicare & Medicaid Services (Medicare, 2017). The value-based purchasing program is part of the affordable care act that rewards hospitals with incentive payments for the quality of care they provide rather than the quantity of services they provide to patients (Medicare, 2017). The Center for Medicare and Medicaid Services' 2017 fiscal year

hospital value-based purchasing program adjusts hospitals' payments based on their performance on four domains that reflect hospital quality. First is the clinical care domain that is comprised of process and outcomes subdomains; Second is the patient and caregiver centered experience of care/ care coordination domain; Third is the safety domain; and the fourth domain is the efficiency and cost reduction. The Total Performance Score (TPS) is comprised of the clinical care - process subdomain score (weighted as 5% of the TPS), the clinical care – outcomes subdomain score (weighted at 25% of the TPS), the patient- and caregiver centered experience of care/care coordination domain (weighted as 25% of the TPS), the safety domain score (weighted as 20% of the TPS), and the efficiency and cost reduction domain score (weighted as 25% of the TPS). The most recent study from AON/ASHRM (AON/ASHRM, 2016) indicated that healthcare organizations with better TPS, as measured by the CMS, have a tendency to have a lower frequency of professional liability claims. The findings supported the importance of measuring quality and safety scores because they are a predictor of healthcare organizations' professional liability claim environment and they have a direct impact on the CMS Value-Based Purchasing program. According to the AON/ASHRM's recent study (AON/ASHRM, 2016), projected loss rate for hospital professional liability is \$2,620 per occupied bed equivalent (OBE) for events occurring in 2017. In other words, the frequency of claims is projected to be 1.55 per 100 occupied bed equivalent and the severity of claims is expected to be \$169,000 per claim.

Risk managers are involved in identification and avoidance of risks in a systematic way (Streimelweger et al., 2016). In practice, a strong risk management

system does not guarantee total absence of failures, but it ensures accuracy, dependability and prompt handling of failures to reduce risks and damages (Streimelweger et al., 2016). Consequently, risk managers can improve safety within the organization (Streimelweger et al., 2016). Quality management often serves as a methodical platform for risk management (Streimelweger, Wac, & Seiringer, 2015). The International Organization for Standardization's ISO 9001 advocates mitigating and avoiding risk to ensure that products and services consistently meet customer's requirements and that quality is consistently improved ("International Organization for Standardization" 2015). The new ISO 9001:2015 standard explicitly requires organizations to establish quality management systems to address opportunities for improvement based on the risk analysis (ISO 9000 - Quality Management, 2015). These requirements align with the HRO framework (Chassin & Loeb, 2013). To truly thrive in an environment of continuing changes and an era of increased data transparency and media scrutiny, healthcare organizations require taking a sustainable risk management approach to avoid repercussions, fines for noncompliance or damaged reputation.

Modern healthcare organizations are now taking the Enterprise Risk Management (ERM) approach where risks are identified proactively (rather than reactively after an event has happened) with a multidisciplinary team attitude to look for risks to the organization as a whole (Carroll, 2016). The ERM approach is in alignment with Chassin and Loeb's (2013) HRO structure. ERM approach can enable risk managers to look for aggregated and prioritized risk data where broad-based comprehensive risks are ranked by significance, and risks are seen as a portfolio of related risks with the ability to

identify correlation and interconnectivity (Carroll, 2016). The focus of ERM is to create value and manage uncertainty with the goal of identifying risks that impact the organization's ability to meet strategic objectives.

Table 2 includes a list of the current tools and processes available to hospital risk managers by which they can capture risks of adverse events. Table 2 list is not a complete list because some organizations may have developed their own tools to capture risks unique to them.

Table 2

Risk and Opportunity Identification methods

Retrospective	Concurrent	Preinterventional	Prospective
Root cause analysis	Root cause analysis	Universal time out	Predictive analysis
Adverse event reporting	Record review	Quiet room for high-risk tasks	What if? Thinking
IHI Global Trigger Tool (Griffin, Resar, 2009)	Team rounding	Double-checks	Socratic questioning
Claims and litigation data	Focus groups	History and physicals	FMECA (Institute for Healthcare Improvement, n.d.)
Satisfaction scores	Brain storming	Identification verification	Bow-tie risk assessment
Peer review and quality data	Interviews	Informed consent	SWOT analysis
Committee and departmental reports	The Joint Commission sentinel event alerts (The Joint Commission, 2008)		External alerts
Inspections and consultant reports	Product recall		Surveys
Key performance indicators	Strategic plan review		Questionnaires
	NQF-Serious Reportable Events (National Quality Forum (NQF), 2011)		
	Daily huddles		
	Internal audit reports		
	Current financial reports		Staff meetings
	AHRQ patient safety indicators (Agency for Healthcare Research and Quality (AHRQ), 2015.)		Key risk indicators
			Financial pro forma

Note. From “Identifying risks in the realm of enterprise risk management,” by Carroll, R. (2016), *Journal of Healthcare Risk Management*, 35(3), p 26. Reprinted with permission. (see Appendix A).

Risk managers and quality improvement professionals work in partnership with the common goal of improving patient safety (Bokar & Perry, 2007). As risk managers identify safety risks, quality improvement teams start appropriate process improvement (PI) initiatives to address safety gaps. Risk managers’ investigations of safety risks may reveal new information that quality improvement professionals can use to revise any ongoing PI initiatives. The collaboration between risk managers and quality improvement professionals improves the efficiency of quality improvement efforts, minimized redundancies and silo thinking, and maximizes patient safety efforts (Bokar & Perry, 2007).

Role of Incident Reporting Systems

Incident reporting systems are used in hospitals and other healthcare settings where employees can report any patient safety issues, errors, or near misses, where the incident did not cause harm but had the potential to do so (Hudson, 2003; Kim et al., 2017). These systems were introduced to healthcare because of their success in the aviation industry, and the reason behind their success was twofold (Macrae, 2016). First, incident reporting systems are used to identify where the risk areas are, and prioritize which risks need to be examined closely; second, the incident reporting systems are used to organize investigations and improvement activities to understand and address identified risks. Healthcare organizations can actively use the processes of exploration,

investigation, and enhancement to support organizational learning and improve patient safety (Macrae, 2016). Inappropriate behaviors that could or have led to patient harm can either be reported through incident reporting systems, or be identified as the root cause of some other errors. Risk managers are in charge of managing the incident data, investigating reported errors, and documenting the steps taken to ensure such errors do not happen again (Simmons, 2008). Employees are trained to report patient safety-related incidents through the system and they do not have to provide their names (Hudson, 2003). Some argued that reported incidents data can lead to improving processes and considering the human factors to reduce harm, and ultimately a good source for organizational learning (Hudson, 2003; Kim et al., 2017). There was also some evidence that providing good feedback to reporters of incidents is essential to the success of incident reporting systems by encouraging reporting and supporting learning from errors (Anderson, Kodate, Walters, & Dodds, 2013; Waring, 2005).

On the other hand, there were also concerns about the effectiveness of incident reporting systems in improving patient safety (Chassin & Loeb, 2013). Because incident reporting systems are one of the main avenues for reporting inappropriate behaviors, I reviewed the literature to gain an understanding of their effectiveness as it relates to identification and management of inappropriate behaviors. To start, one of the concerns was the cost associated with running the incident reporting systems, including human resources and technology costs (Travaglia, Westbrook, & Braithwaite, 2009). Some argued that the incident reporting systems do not provide true information about the frequency of errors because some errors go unreported by staff and also most systems do

not allow patients to report errors (Doherty & Stavropoulou, 2012). There may also be ambiguity about what constitutes an error or near miss, who is responsible for reporting it, and some clinicians may fear retaliations if they report an incident (Dixon-Woods, 2010; Mahajan, 2010). Centralized risk management departments in charge of incident reporting systems can induce a perception that managing errors is somebody else's job; hence frontline staff may not take actions within their clinical teams to improve safety (Sujan, 2015). To add to the list of concerns, there were social challenges involved in organizational learning from the incident reporting systems' data. For example, incident reporting systems can be viewed as a control mechanism of managers or linked to organizational and inter professional politics and power struggles (Stavropoulou, Doherty, & Tosey, 2015). Stavropoulou et al. (2015) suggested knowledge in healthcare is the source for power and jurisdictional control; therefore, it could become a source of conflict between various clinical disciplines and managers. There was evidence that suggested doctors are more reluctant to report incidents because they view managerial control over incident reporting systems as an intrusion on their professional status and individual autonomy. In support of Stavropoulou et al. argument, Waring (2005) identified a distrust and hostility between doctors and managers; therefore, doctors may prioritize professional learning to organizational learning. Additionally, Waring (2005) suggested, doctors hesitate to report errors because they see errors as a natural part of the uncertainty of medical practice, or because of fear of litigation. Stavropoulou et al. conducted a systematic review to determine whether incident reporting systems are effective in improving patient safety through organizational learning. They found 43

studies that compared the effectiveness of incident reporting systems either to other methods such as direct observation or medical chart review or in terms of changes made to practice in the form of setting, process or outcomes. Stravopoulou et al. applied Argyris and Schön's theory of single and double loop learning to their analysis (Argyris & Schön, 1978). Single loop learning results in technical and operational improvement, but does not provide substantial changes to the overall safety culture; double loop learning, on the other hand, involves changes in organizational policies and objectives that lead to improving organizational safety culture. Stravopoulou et al. systematic review did not show strong evidence that incident reporting systems are more effective than other reporting methods. The review showed some evidence of single loop learning from incident reporting data, such as improvements on techniques and correcting procedural errors. There was, however, little evidence of sustainability of single loop learning results or improvement in patient safety outcomes, and similarly little evidence of cultural change as part of double loop learning. Overall, Stravopoulou et al. revealed that combining incident reporting systems with other quality improvement initiatives and wider safety programs, along with decentralizing hospital department to clinical teams can be effective.

Stravopoulou et al. (2015) review identified several factors that could facilitate double loop learning including psychological safety in terms of making incident reporting non punitive, confidential, anonymous, and removing fear of reprisals; having the focus on learning; breaking down silos by improving intra-organizational, multi-disciplinary, and cross-functional relationships; offering multiple interventions such as systematic and

holistic approach; and focusing on the local and participative aspects by introducing locally designed versus centrally or externally designed solutions, and involving participants in problem solving rather than hierarchical interference.

Similar to Stavropoulou et al. (2015), another review of incident reporting systems showed there are challenges that exist to make incident reporting systems effective in improving patient safety (Mitchell, Schuster, Smith, Pronovost, & Wu, 2015). The challenges included insufficient physician engagement, similar to Stavropoulou et al. and Waring (2005) observations; inadequate processing of incident reports; absence of visible action to reported safety concerns; inadequate use of information technology to link safety reports to patients' medical charts; and shortage of organizational support and funding.

In summary, incident reporting systems as a standalone method do not result in improving patient safety. First, a deeply embedded organizational patient safety culture in the form of a social infrastructure of inquiry, investigation, and improvement (Macrae, 2016) can help to successfully utilize incident reporting systems. Additionally, working collaboratively to investigate safety reports can help to understand and improve system issues. Finally, clear definition of safety errors, strong understanding of the relationship between safety measurement and performance improvement, and anonymous reporting can enhance the effectiveness of incident reporting systems as one of many organizational processes needed to improve patient safety. In most healthcare organizations, risk managers are in charge of the overall operation of incident reporting systems (Simmons, 2008); therefore, they may provide valuable insight into their role in

managing safety incident reports of inappropriate behaviors. As part of this study, risk managers shared their experience in implementing methods of managing inappropriate behaviors by using data from incident reporting systems.

Inappropriate Behaviors and Their Consequences

As mentioned earlier in more details (see Definitions of terms) there are several terms used in the literature to identify inappropriate work behaviors including bullying, disruptive behavior, horizontal violence, incivility, and mobbing. Other inappropriate behaviors include unjustified blame, being treated differently than others, intimidation, exclusion, social isolation, humiliation or unreasonable demands (Berman-Kishony & Shvarts, 2015; Washington State Department of Labor & Industries, 2013; Vessey et al., 2009). The Joint Commission defines disruptive behavior as passive or uncooperative actions such as refusing to talk or perform a task, as well as physical or verbal outbursts or threats (The Joint Commission, 2008). In this paper, I focused on all these behaviors under one comprehensive term of inappropriate behavior.

Berman-Kishony and Shvarts (2015) suggested that personal factors such as aggressive personality, interpersonal factors such as stressful and high workloads, and organizational factors such as poor communication, disrespect, and distrust contribute to the majority of inappropriate behaviors. Still, other factors that could cause conflict are disagreements over medical management, absence of effective supervision, not enough opportunities for informal interactions, and interdependence (Berman-Kishony & Shvarts, 2015). Poor working relationships between physicians and nurses along with intimidation, frustration, hostility and poor communication can lead to a reduced transfer

of necessary information that can adversely affect patient outcomes (Grissinger, 2017; Kimes et al., 2015; Stanley et al., Lohani, & Isaacowitz, 2014). Inappropriate behavior of healthcare workers such as aggression is a contributing factor that increases the risk of making errors, causing delays in delivery of care or causing conflict and stress for healthcare workers (Grissinger, 2017; Longo & Hain, 2014; Stanley et al., 2014). Healthcare managers need to pay attention to the significance of inappropriate behaviors and have a better understanding of what provokes these behaviors. Such managers need to develop standards, policies, and procedures along with reinforcement to effectively deal with the issue. They also need to provide appropriate educational programs to improve the effectiveness of communication among the healthcare team and reduce the likelihood of incidences. In this study I aimed to close the gap of how to achieve the above goals.

A strong safety culture along with a high-quality work environment can improve patient and staff outcomes (Stanley et al., 2014). Halligan and Zecevic (2011) identified the most commonly cited dimensions of safety culture as leadership commitment to safety, organizational learning, open communication founded on trust, non punitive approach to adverse event reporting and analysis, shared belief in the importance of safety, and teamwork. Inappropriate behavior of healthcare workers is an issue that has long existed that was implicitly accepted as part of the culture and ignored as a problem; however The Joint Commission 2008's sentinel event alert concerning the issue of inappropriate behaviors and the link to safety recognized the urgency of the problem by linking the behaviors to safety (The Joint Commission, 2008). Though physician

behaviors have been scrutinized, bullying behaviors occur in other groups of healthcare worker such as managers, nurses, and other medical staff members in the U.S. (Grissinger, 2017; Webb et al., 2016). Inappropriate behaviors have been witnessed in physicians (77%) and in nurses (65%) (Rosenstein & O'Daniel, 2008). In another study, Berman-Kishony and Shvarts (2015) showed similar results with 89% nurses and physicians have witnessed inappropriate behaviors (Berman-Kishony & Shvarts, 2015).

In an older study of 1,487 healthcare workers, 75% of respondents believed that medical errors caused by disruptive behavior could have been prevented and 60% reported that they personally know of at least one error that occurred because of disruptive behavior (Rosenstein & O'Daniel, 2005). Another study that included 4,530 healthcare workers showed that 27% felt that there was a linkage between disruptive behavior and patient mortality; 67% believed that disruptive behaviors and adverse events are linked together; and 71% felt that disruptive behaviors can be linked to medical errors (Rosenstein & O'Daniel, 2008). Grissinger (2017) in his survey of 4884 healthcare workers found that between 63% and 69% of the respondents reported witnessing resistance to following safety practices or working collaboratively with others. The same study showed that only 25% of the respondents felt that their organization dealt effectively with disrespectful behavior. Apart from the quality of care, inappropriate behavior can have negative physical and psychological impacts on healthcare workers as well as negatively affecting staff job satisfaction and productivity (Berry et al., 2012).

In 2008, The Joint Commission recognized the inappropriate behavior of healthcare workers as a cause for diminished safety culture and issued a sentinel event

alert concerning the issue. Issuing a sentinel event by the Joint Commission brought attention to a previously ignored or implicitly accepted part of a culture that had existed in healthcare organizations due to fear and confidentiality concerns around reporting (Agency for Healthcare Research and Quality, 2016; Overton & Lowry, 2013). Current debates over healthcare reform in the United States have escalated improvement efforts through legislation and federal program development to integrate high quality patient care with delivery efficiency (CMS, 2008). Costs associated with medical errors and hospital-acquired conditions are financially burdensome and threaten the solubility of federal healthcare insurance coverage (Van Den Bos et al., 2011). To encourage patient safety improvement and hold organizations accountable, on October 1, 2008, the Centers for Medicare and Medicaid Services stopped paying the excess cost for inpatient stays complicated by preventable errors (CMS, 2008).

Patient harms have negative personal, organizational, social and financial impact and support the need for further study to identify root causes and improvement opportunities that will lead to sustained patient safety. Inappropriate behaviors have negative effects beyond patient safety. Employees affected by inappropriate behavior may have decreased productivity, low morale, and job satisfaction; the organizational effects are, lost productivity, high staff turnover and low patient satisfaction results (Blando, O' Hagan, Casteel, Nocera, & Peek-Asa, 2013). These results implied the need for early detection and effective management of inappropriate behavior. In this study I aimed to further our knowledge of how inappropriate behaviors should be addressed by managers to mitigate medical errors and improve patient safety.

The Scope of Current Solutions to the Problem

To identify effective ways of managing inappropriate behavior, we first need to understand the underlying contributing factors to individual values, attitudes, and perceptions that trigger inappropriate behaviors (Longo & Hain, 2014; Rosenstein, 2015). Rosenstein (2015) recognized factors that contribute to inappropriate behaviors could be internal such as age, gender, ethnicity, culture or personality profile, and/or external such as training, environmental factors, social and expectations. Berman-Kishony and Shvarts (2015) identified intense work, miscommunication, and problematic personalities as the most significant causes of inappropriate behavior. The researchers recommended various retrospective resolution approaches such as reviewing the number and nature of complaints. However, a prospective approach is more effective in the long run (American Society for Healthcare Risk Management, 2010; Rosenstein, 2015). Some of the solutions offered in the literature were raising organizational awareness, building organizational commitment, address barriers, leadership commitment, zero tolerance policies, provide education and training, facilitating physician engagement, and offer interventions to enhance relationships and communication (Grissinger, 2017; Kimes et al., 2015; Rosenstein, 2015). Similarly, Berman-Kishony and Shvarts (2015) identified teamwork and conflict training, complaints evaluation processes, and introducing a behavioral mission statement as most effective across many antecedents of inappropriate behavior. These recommendations were in alignment with the conceptual framework of safety measurement and monitoring framework (Vincent et al., 2014) and the safety and just culture (Frankel et al., 2006) in this study.

Rosenstein (2015) identified some of the obstacles that organizations face when dealing with the problem of inappropriate behavior including organizational hierarchies where physicians and executive leaders are viewed as autonomous entities. Another obstacle was the organization's fear of a physician taking his/her business somewhere else (Simpson 2017; Springer, 2008). Next was the culture of silence where staffs are reluctant to report inappropriate behaviors. Other obstacles were poor reporting processes, shortage of structure and absence of skill sets needed for investigation and improvement strategies. Majority of the literature on inappropriate behavior in healthcare organizations were studied from the perspective of nurses, physicians or general management (Kimes et al., 2015; Leape et al., 2012; Longo & Hain, 2014). The only material that I could identify that studied the problem from a risk management viewpoint is the ASHRM leadership summit report where a group of thought leaders including human resource, risk management, and healthcare quality and patient safety experts participated in a two-hour session forum titled, workplace intimidation: the underestimated threat to patient safety (ASHRM, 2010). Similar to Rosenstein (2015) findings, the workplace intimidation report identified not having safety culture, undefined expectations, absence of behavioral change tools, not enough educational training, organizational hierarchy and absence of effective tools for timely recognition of inappropriate behavior. The thought leaders provided improvement suggestions similar to those of Rosenstein (2015) including building teamwork and culture of respect, reporting systems, leadership engagement, and provide training and tools to enable culture change. One recommendation that stood out in the workplace intimidation report

is the emphasis on collaboration between risk managers and human resources. They point out that risk managers and human resource professionals have the combined expertise needed to influence culture through talent management and equipping healthcare employees with knowledge, tools, and resources needed to recognize, respond and eliminate inappropriate behavior.

Another angle that some researchers had taken to study the issue of inappropriate behavior in healthcare organizations was from the conflict resolution approach and they provided various retroactive or proactive conflict management solutions (Almost et al., 2016; Leon-Perez, Notelaers, & Leon-Rubio, 2016). In their study, Leon-Perez et al. (2016) translated Pruitt and Rubin's (1986) dual-concern conflict resolution model into practice and suggest three conflict management skills that healthcare workers need to learn to manage conflict in an integrative way. These skills included (1) interpersonal communication skills that can facilitate understanding others' point of views and interests; (2) emotional regulation skills to manage negative emotions at work and decrease the chance of escalation; and (3) problem solving skills to enable healthcare staff identify other party's interests and assist in accomplishing mutually beneficial solutions.

To examine the effectiveness of the abovementioned solutions, Webb et al. (2016) in their study titled *Using Coworker Observations to Promote Accountability for Disrespectful and Unsafe Behaviors by Physicians and Advanced Practice Professionals*, implemented all of the above recommendations by Rosenstein (2015) as part of building a co-worker observation reporting system (CORS). Webb et al. (2016) developed the

CORS system based on their positive experience of decreasing patient complaints and malpractice risk by sharing patient complaints with physicians. Initially, Webb et al. (2016) identified and developed key people, organizational support, and systems as a project bundle to recruit and train key individuals, gain leadership buy-in, alignment of the project with organizational values and policies, encourage reporting, effective monitoring of reports, and applying tiered intervention to deal with the reported coworker concerns. Webb et al. (2016) used a multidisciplinary approach in designing and implementing the CORS program. Webb et al. (2016) involved top leaderships, department chairs, project champions and peer messengers, quality and risk management, center for patient and professional advocacy, and senior associate faculty dean. Webb et al. (2016) break downs the characteristics associated with the success of CORS system for improving safety and quality in three categories of people, organization, and system. Webb et al. (2016) ensured that at the people level, the project has sufficient level of leadership commitment, trusted project champions and an engaged implementation team. At the organizational level, they made certain the project has clearly defined organizational goals and values, enforceable policies, tiered intervention method for sharing coworker concerns and addressing patterns, and sufficient resources. Finally, at the system level, they utilized reliable measurement and reliable tools, reliable processes for reviewing and delivering data, and multi-level training for both project staff and those reported for unprofessional or unsafe behavior. Three years after the launch of CORS system, the number of coworkers reporting on disrespectful and unsafe behaviors increased each year and the follow up surveillance indicates that after receiving CORS

data, a majority of reported professionals self-regulate. The Webb et al. (2016) study did have its limitations such as short follow up period, absence of data to estimate how many incidents still go unreported for the fear of retaliation or not having trust in the CORS system to effectively resolve the issues. Also, Webb et al. (2016) only focused on the inappropriate behavior of physicians, nurse practitioners, midwives and physician assistants. The authors reported that 37 physicians had 3 or more reports; however, only two physicians received disciplinary interventions. The authors did not report on exactly what disciplinary actions were taken on the two physicians. Additionally, one would wonder what about disciplinary actions for the other 35 physicians who had more than 3 reports. The authors stated that the decision to escalate to level 2 guided intervention by authority or level 3 disciplinary action lied within the authority of department chairs and the associate dean for faculty affairs. Issues like these may be the reason behind some staff not trusting in the system's ability for fair and just disciplinary actions for everyone (Agency for Healthcare Research and Quality, 2016). In summary, Webb et al. (2016) study showed that no advanced practice professional (Nurse practitioners, midwives and physician assistants) had three or more incidents and they were only physicians that were associated with 42% of all CORS reports who had more than three reports and almost 95% of them did not get the disciplinary action required as part of the CORS model.

After reviewing the literature it seemed evident that the problem of inappropriate behavior and its negative impact on patient safety was an opportunity for improvement that risk management professionals could address as part of this study (Almost et al., 2016; Grissinger, 2017; Webb et al., 2016). Some researchers have only used the

perspectives of physicians and nurses to review the issue of inappropriate behaviors in healthcare perspectives to suggest some solutions (Hartung & Miller, 2013; Kimes et al., 2015; Longo & Hain, 2014). However, the problem of inappropriate behavior and its negative impact on patient safety still exists, hence studying the problem from a different perspective (that of hospital risk managers) proposed solutions that had not been identified before (Almost et al., 2016).

Professional Applications

Given the intensely service-oriented nature of healthcare, it is critical for healthcare managers to understand individuals and groups (Borkowski, 2015). Failure is bound to happen when managers fail to work effectively in teams, have weak relationships, and do not handle change effectively (Borkowski, 2015). There is evidence of a strong link between the working relationship of healthcare employees and productivity, patient safety, and patient outcomes (Almost et al., 2016; Grissinger, 2017). Today's healthcare organizations are stressful and demanding and the risk of interpersonal conflicts is high. Consequently, effective management of conflict and inappropriate behaviors are an important part of healthcare managers' responsibility.

This study's results may improve the systematic framework on the effective management of inappropriate behaviors. Sharing managers' experiences might offer a context for other managers in comparable circumstances. This study originated from the perspective of U.S. healthcare managers and therefore, most applicable within the same demographics.

Contribution to Positive Social Change

Arguably most of the research related to the healthcare industry is aimed to improve patient outcomes in some way or another. Improving the health of communities in itself is a positive social change and therefore most of the healthcare related literature is aimed to bring positive social change. Positive social change as defined by Walden (2014) is a deliberate process of creating ideas and actions with the aim to improve the lives of individuals or communities locally and around the world. The transformation of social change leads to positive outcomes at many levels and at different rates. I had an interdisciplinary and multicultural approach to social change as part of my dissertation research topic. I focused on real-world application of ideas and strategies to create positive social change. The implications for positive social change in my dissertation research include a better understanding of inappropriate behaviors among healthcare workers, how it influences the workplace and patients, and the potential to minimize its negative impacts.

Summary and Conclusion

This chapter included a historical overview of the research problem and the extent to which the current literature recognizes the problem and provides solutions. After identifying a research gap worthy of study, I explained the conceptual frameworks of high reliability organization, fair and just culture and safety measurement and monitoring framework that I used for this study (Chassin & Loeb, 2013; Sutcliffe et al., 2016; Vincent et al., 2014). I provided a summary of the search strategies I used to find relevant articles for this literature review. Further, I reviewed the role of risk

management and quality improvement within the healthcare industry and how they could provide insight in finding answers to the research question at hand (Streimelweger et al., 2016). I then described what inappropriate behaviors are and how they negatively affect staff, patients, and the healthcare industry demands (Berman-Kishony & Shvarts, 2015; Grissinger, 2017; Washington State Department of Labor & Industries, 2013). Finally, I suggested the professional applications of the study and how it can positively contribute to social change.

Chapter 3: Research Method

Chapter 2 included a historical overview of the research problem and the extent to which the current literature recognizes the problem and provides solutions. After reviewing the literature, it seems evident that the problem of inappropriate behavior and its negative impact on patient safety is an opportunity for improvement that risk management professionals can address as part of this study. The purpose of this qualitative modified Delphi design was to seek consensus among a panel of experts in hospital risk management practices on the practical methods for early detection of inappropriate behaviors among hospital staff, which may be used by hospital managers to considerably mitigate the risk of medical mishaps. Researchers in prior studies have reviewed the issue of inappropriate behaviors in healthcare organizations from a clinical management perspective (Hartung & Miller, 2013; Kimes et al., 2015; Longo & Hain, 2014); however, studying the problem from a different perspective (that of hospital risk managers) through a modified Delphi design may lead to new solutions and build consensus on current methods of recognition and management of inappropriate behavior to improve patient safety (Bunting & Groszkruger, 2016; Cooke, 2016).

In Chapter 3, I build on the literature review to suggest an appropriate research method to answer the research question. I explain the research design and rationale for using the modified Delphi design methodology. I also provide details of the research instrument for data collection, data analysis, population, and sampling. Finally, I explain the role of researcher and justify the credibility of the study design.

Research Design and Rationale

In this study, I asked a single research question with no stated or implied hypothesis to emphasize the value of open-ended naturalistic observation in a qualitative approach, which allowed me to observe without the influence of hypotheses and other preconceptions. The research question was what level of consensus exists among hospital risk management experts as to the practical methods for early detection of inappropriate behavior among hospital staff, which may be used to ultimately mitigate the risk of preventable medical mishaps.

The expanding role of risk management professionals in recognizing opportunities for patient safety (Bunting & Groszkruger, 2016) and recommending appropriate risk control tools and techniques improvement is highlighted within the risk management literature (Card et al., 2015). The problem of inappropriate behavior and its negative impact on patient safety was an opportunity for improvement that risk management professionals addressed as part of this study. The purpose of this qualitative modified Delphi design was to seek consensus among a panel of experts in hospital risk management practices on the practical methods for early detection of inappropriate behaviors among hospital staff, which may be used by hospital managers to considerably mitigate the risk of medical mishaps. The purpose aligned with the traditional intent of the modified Delphi design to forecast and plan ahead (Du Plessis & Human, 2007).

The U.S. healthcare system is complex. At the individual level, there is a large amount of new clinical knowledge constantly being generated that healthcare workers have to continually learn and apply to patient care (James, 2013). At the system level,

the complexity lies within the desire of hospital systems to provide latest technologies to patients, effectively manage multidisciplinary teams, and provide excellent care with limited financial and human resources (Grissinger, 2017). Finally, there are complexities at the national level where patients need to navigate through complex provider systems and insurance plans to gain access to affordable care. Gittell (2009) believes the healthcare complexity factors of highly technical, rapidly changing, and poorly integrated industry can lead to higher risk of medical error and patient safety issues.

Addressing the complexity factors of the healthcare system through the modified Delphi design aligned with Linstone and Turoff's (1975) characterization of the modified Delphi design as a technique for structuring group communication process to deal with complex problems. Applying the modified Delphi design with multiple rounds of narrative feedback from a group of risk management experts can help to understand the nature of the problem and establish a consensus of group experience (Pulford, Adams, & Sheridan, 2009). The data collection and analysis technique of modified Delphi design can produce data that might otherwise be very difficult if not impossible in some cases to obtain (Beech, 1999). The modified Delphi design has the following five characteristics that helped answer my research question: it is focused on researching things about which little is known, as is the case about the role of risk management in managing inappropriate behavior; second, it relied on expert opinion of risk managers who have sufficient experience and knowledge of the problem at hand; third, it used remote group processes, enabling me to consult experts across the country without the need for them to meet in person; fourth, it used an iterative research process; and finally, it established

consensus of opinion (Amos & Pearse, 2008). Although the modified Delphi design has its origins in the business community, the method has gained acceptance in other industries including healthcare (Skulmoski et al., 2007).

To summarize, modified Delphi design is a suitable approach when there is no consensus or there is incomplete knowledge; therefore, the modified Delphi design helped to answer my research question by applying expert knowledge to generate new understanding about my research problem (McMillan et al., 2016). Consensus methods such as the modified Delphi design can overcome group or committee decision making that can be dominated by individuals or alliances who may have a vested interest in a specific outcome. The application of the modified Delphi design in the study applied expert knowledge of risk managers to identify solutions through multiple rounds of data collection. The process of this modified Delphi design was as follows:

1. Defining the questions
2. Panel creation
3. First round of questionnaires
4. First round of data analysis
5. Second round of questionnaire based on first round analysis
6. Second round of data analysis
7. Third round of questionnaire to build consensus
8. Third round of data analysis and drawing conclusions
9. Final report preparation

Other research method choices were considered less effective and were not selected to answer my research question. A mixed method study was beyond the resources available to me to conduct this study in a timely manner. A case study is an in-depth exploration of a single process; however, such approach may limit the scope of information needed for this study. Given the existing data in the field of patient safety and adverse events, a grounded theory did not fit this research study. Focusing on an in-depth interaction with one individual as part of a narrative study may have introduced bias to this study. Direct observation as part of an ethnographic study was not feasible for this study because of confidentiality issues and possible researcher bias for objective observation. Nominal group technique as a group process required all participants to be physically available to attend problem identification, solution generation, or decision-making session (Delbecq, Van de Ven, & Gustafson, 1975; McMillan et al., 2016). The nominal group technique would have limited my study to a small participant pool available in a small geographical area. Using the modified Delphi design allowed me to use remote group processes, enabling me to consult experts across the country without the need for them to meet in person. Finally, because of the sensitive and confidential nature of inappropriate behaviors and medical errors, participants may have been reluctant to share their experience in a face-to-face setting; therefore, the remote group process of modified Delphi design may have helped in obtaining richer data from participants.

Role of the Researcher

In this study, I adopted a role of the constructivist inquirer and performed an ongoing iterative process of discovery and interpretation (Amos & Pearse, 2008). The degree of my personal familiarity with the experience of participants and the topic under the study had the potential to impact all phases of the research process, including recruitment of participants, data collection and analysis, and drawing conclusions (see Berger, 2013). I remained alert throughout the study process to avoid projecting my own experience and using it as the lens to view and understand participants' experience. Keeping a reflective research journal as well as expert checking helped to reduce any researcher bias. I did not have any personal and/or professional relationships, as the researcher, with participants. There was not any supervisory or instructor relationships involving positions of power with the participants. I participated in all aspects of the study including planning, organizing, design, recruitment of participants, data collection, analysis, and reporting of final results. A bias that I may have brought to the study was my experience and knowledge of risk management and healthcare organizations; however, the member-checking nature of the modified Delphi design helped to mitigate any influence of subjectivity that I could have introduced to the study analysis.

Methodology

Participant Selection Logic

The population under this study was risk managers in healthcare settings with a specific set of skills, knowledge, and experience as defined below in the inclusion criteria for risk manager experts. I selected a representative sample from the population using

the members list of the ASHRM. I searched for every letter of the alphabet as the first letter of last names and I selected the first 25 names that were displayed under each letter. I excluded anyone who was not located in the United States. ASHRM is a personal membership group of the American Hospital Association (AHA) with nearly 6,000 members representing risk management, patient safety, insurance, law, finance, and other related professions. ASHRM is a well-known and respected organization within the risk management professionals and a good population source for my sample selection. ASHRM members may take advantage of the learning opportunities ASHRM offers on the most innovative and effective risk management strategies. Members can also participate in ASHRM's initiatives to develop and implement safe and effective patient care practices, maintaining safe work environments, and preserving financial resources (ASHRM, n.d.).

The modified Delphi design does not have strict parameters for selecting a sample size (Du Plessis & Human, 2009; Skulmoski et al., 2007). While the qualification of the participants holds a greater importance than an extensive sample size, the sample size can also be based on the type of inquiry, the research goal, the availability of participants, and the time and resources available to the researcher (Du Plessis & Human, 2009; Skulmoski et al., 2007). Generally, a participant pool could range between 20 and 100 and should not be less than 10 (Du Plessis & Human, 2009). For the purpose of this study, I targeted to recruit between 30 to 50 participants depending on the response rate I get from my invitation. Predicting a dropout rate of about 30%, the minimum number of 30 was selected to have at least 20 experts on the study by the end of round three.

I used a nonprobability purposive sample selection of participants with pertinent expertise with the phenomenon. For this study, I used Clayton's (1997) definition of *expert* as someone who has the knowledge and experience on the topic under study to participate in a Delphi. The lists of participants were drawn from the online member directory of the ASHRM available to members throughout the United States.

Inclusion criteria included the following:

- Risk managers and quality improvement professionals with a minimum of 5-year experience within healthcare organizations in the United States.
- Current ASHRM membership

The participants must also have had direct responsibility in their organizations for all the following activities:

- patient safety programs
- root cause analysis
- incident reporting
- policy development
- quality improvement initiatives and
- regulatory compliance

Exclusion criteria

- Fewer than 5 years' experience as a risk manager or quality improvement professional
- No experience with any of the above responsibilities

- No experience in handling any medical error cases that were caused by staffs' inappropriate behavior.

Instrumentation

According to Linstone and Turoff (1975), three rounds of data collection are sufficient to reach stability in participant responses. Instrumentation in this study included three questionnaires that were administered sequentially electronically with a choice to be completed on SurveyMonkey™ or with a Microsoft Word document. Expert panelists were solicited by e-mail from identified stakeholder groups using purposive sampling to participate in the study based on the inclusion criteria as a risk management expert. The first round of this modified Delphi design study was an exploration of open-ended questions in a broad sense using qualitative analyses to provide a list of items to be used in the next round (Ziglio, 1996). Characteristics of high reliability theory, safety measurement and monitoring framework, and the fair and just culture model and literature-based recommendations, as discussed in Chapter 2, served as the base for question themes in round one questionnaire. The questionnaire focused on strategies, barriers, risks, and benefits of managing inappropriate behavior to improve patient safety and mitigate errors. The initial questionnaire included some background information on the issue and objectives of the study. In addition to this study's single research question on the first questionnaire, I added more questions based on the literature review of the scope of current solutions to the problem in Chapter 2 and the input from my dissertation committee. Additionally, the participants had the opportunity to suggest additional items of importance. The questions provided an opportunity to build upon what is already

known (ASHRM, 2010; Rosenstein, 2015). The following open-ended questions were used for inclusion in the first questionnaire (Appendix B).

The first question asked what are the reasons and drivers of inappropriate behaviors in the workplace. This question helped in setting the stage by presenting some ideas as the root causes of the problem that needs to be addressed. Rosenstein (2015) pointed to the importance of identifying the underlying factors to inappropriate behaviors. The first question was also discussed during the thought leader forum of ASHRM (ASHRM, 2010). Raising the question here provided an opportunity to gain more insight from risk managers' perspective. Additionally, the question in the formal setting of a modified Delphi design provided unbiased answers that reached to a degree of consensus. Ruchlin et al. (2004) suggested that individual humans working in complex systems may not have the capacity to detect all possible problems in the system. For that reason, the collective insight of the experts' answers to the first question provided new perspectives to the problem at hand. The answers to the first question also helped in taking steps towards building a high reliability organization with an environment of collective mindfulness in which all staff are always looking for unsafe conditions and report every small problem before it poses a risk to safety (Weick & Sutcliffe, 2007). The question also aligned with the conceptual framework of fair and just culture patient safety model where human factors are considered to develop an algorithm for errors, and ensure balanced accountability for both staff and the organization (Frankel et al., 2006).

The second question asked what the managers' roles are in identifying and managing inappropriate behavior in the workplace. Absence of reporting process,

structure, and skill sets needed to investigate inappropriate behaviors are some of the reasons behind a weak organizational safety culture (Rosenstein, 2015). Therefore, managers could have a role in addressing these issues and the second question helped in introducing new ideas that was confirmed by the consensus of this study. The second question also aligned with the high reliability theory and the fair and just culture patient safety model. Managers in a high reliability organization have a role in implementing a set of behavioral and cognitive processes to have an error-free performance (Weick & Sutcliffe, 2007). Managers are accountable to consider human factors and develop an algorithm for error as defined by the fair and just culture patient safety model (Frankel et al., 2006). The second question also fitted into the safety measurement and monitoring framework, where managers as members of healthcare teams are active inquirers in ongoing cycles of safety measurement and monitoring (Vincent et al., 2014).

The third question asked what role does organizational culture play in the prevention of inappropriate behavior in the workplace. Rosenstein (2015) points to the importance of organizational culture to hold everyone accountable to a professional code of conduct and a zero-tolerance policy. Similar to previous questions, the third question aligned with the fair and just culture patient safety model, where a balanced accountability culture between staff and the organization is in place. Moreover, the third question fitted into the overarching definition of safety culture in healthcare by Halligan and Zecevic (2011)

The product of individual and group values, attitudes, competencies and patterns of behavior that determine the commitment to, and the style and proficiency of, an

organization's health and safety programs. Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measure. (p. 339)

The fourth and fifth questions on the questionnaire were what training and tools are needed to manage inappropriate behavior in the workplace. These questions touched the core of the problem by soliciting ideas for actions through training and tools. Once again, the high reliability theory supported these questions in the sense that organizations need training and tools to implement a set of behavioral and cognitive processes to have an error-free performance (Weick & Sutcliffe, 2007). Assuming most healthcare organizations have a safety monitoring and/or error reporting systems similar to the safety measurement and monitoring framework (Vincent et al., 2014), there would be a need for some training on the reporting and monitoring systems as a tool.

The final question asked the participants to share any other comment or information that was not covered on the above questions to answer the research question of what are the practical methods for early detection of inappropriate behavior among hospital staff, which may be used to ultimately mitigate the risk of preventable medical mishaps. To ensure the questionnaire captured a broad range of ideas, the final question helped to generate more ideas than those framed within the previous questions. The final question offered an open solicitation for any other information or comments the participants wished to share. The final question reduced the vulnerability of the

questionnaire to potential biases or shortcomings of the investigator (Linstone & Turoff, 1975).

Hsu and Sandford (2007) note the use of central tendency measurements such as the mean or median and standard deviations for displaying the level of dispersion in modified Delphi designs. The second round of this modified Delphi allowed participants to rate the identified items from round one to provide an understanding of priorities and clarification of agreements and disagreements (Ziglio, 1996). The participants rated the statements on the second questionnaire on a 5-point Likert scale as suggested by Clayton (1997). I used the mean and standard deviation to communicate the results of round two questionnaires to participants in round three. The third and final questionnaire included the shortened list of items from second round analysis. The third questionnaire asked the study participants to select the top 10 most important factors they believe are the practical methods for early detection of inappropriate behavior among hospital staff, which may be used to ultimately mitigate the risk of preventable medical mishaps. One way to determine consensus was to use a percentage of participants' votes that fall within a predetermined range (Miller, 2006). Consensus for this modified Delphi design was defined to be reached by the factors selected by more than 50% of participants. I explained the process of data collection in more details in the Procedures for Recruitment, Participation, and Data Collection section.

Procedures for Recruitment, Participation, and Data Collection

The general population for my study was risk managers with a specific set of skills and experiences as listed for the inclusion criteria. A list of members who have

agreed to have their names and contact information published online is available to members of the ASHRM. As an ASHRM member myself, I initially invited 400 randomly selected risk managers from the ASHRM members list to participate in the study (Appendix C). The large sample pool got smaller depending on the eligibility and acceptance of risk managers to participate in the study. As a plan B for the case I did not reach the minimum participant goal of 30 risk managers, I selected another random sample of 200 risk managers from the ASHRM members list. An e-mail invitation was used to solicit experts to serve in the study across all three data collection rounds. I sent the initial blind copied e-mail invitation to the 400 randomly selected study candidates. The invitation included a copy of the study consent form, an overview of the study, the estimated time to answer each questionnaire, and the overall expected time to complete the study. The candidates who wished to participate were asked to e-mail me directly to indicate their consent to participate in the study. The e-mail replies helped me to make a list of my expert panelists. The participants were asked to complete the first questionnaire within seven days of receiving the invitation. Candidates could start their participation from the first day they consented to the study by completing the first questionnaire. I provided my contact information along with Walden University's IRB contact information, in case the participants had any questions regarding the study or the consent form. The first questionnaire on SurveyMonkey™ had an initial statement for consent and the participants could not complete the questionnaire unless they agreed to the initial consent statement. At three days and five days after sending the initial invitation e-mail, I sent reminder e-mails as recommended by Hsu and Sandford (2007;

Appendix D). These e-mails had all the information provided on the first invitation e-mail, in case they have deleted the initial e-mail. I kept an activity log in a spreadsheet format to ensure I follow up with the participants according to the above timelines and track the study progress. I estimated the above process could take a minimum of one week to complete unless some candidates request for more time. At the end of the first week, I had an idea of how many participants I have for my study. Because the number had not reached my goal of 30 participants, I rolled out my plan B and invited 200 more randomly selected members from ASHRM. I then repeated the same process for the invitation as for the first 400 candidate cohort. As an exit strategy, I sent a thank you e-mail to all participants and promised to share the final results with them.

Similar to the study consent form, the invitation letter included a brief description of the problem under study and the goal of the research project. The invitation emphasized the importance of participants continuous participation through the end of the third round to ensure the credibility of the research results, participation was voluntary and participants could withdraw from the study at any time, and responses would be anonymous throughout the study and in any publication of the study. I informed the invitees that they needed access to the internet to fill out the questionnaires either on Survey Monkey or on a Word document that can be e-mailed back to me. Finally, I provided an estimated time of 20 to 30 minutes to fill out the first questionnaire because it contained open-ended questions that required them to type in their answers. The estimated times to complete the second and third questionnaires were 15 to 20 minutes.

These were estimated times however, the participants could take as long as they needed to complete the questionnaires.

Purposive sampling was appropriate in this study because purposive sampling is used to obtain a sample that has the necessary expertise and experience in the role of risk manager to comprise the expert panel for the modified Delphi design. I was willing to take recommendations from participants if they know someone who could contribute to the research if I did not reach the minimum participant goal of 30. Each participant was asked to read the informed consent form prior to participation in the study. The informed consent form complied with all policies and standards of Walden University's Institutional Review Board (IRB). The consent form included a brief description of the goal of the research project and emphasizes on the significance of the participants' continuous participation through the end of third round. It indicated that responses are anonymous and responses will be shared anonymously with other participants and potentially published or discussed at academic conferences. The consent form stated that participation is purely voluntary and that participants have the right to withdraw from the study at any time and finally, and a statement that participants will have early access to study results. The equipment needed to participate in the study was a computer, an e-mail address and access to the Internet. There were no monetary compensations to risk managers for participating in this study. The three rounds of data collection and analysis process of this study were as follows.

Round One. The first questionnaire was e-mailed to the participants both as a Word document and a link to SurveyMonkey™. The initial questionnaire was very

simple and it consisted of an open-ended solicitation of ideas to answer the research question (Appendix B). I provided the participants one week to complete the questionnaire and I sent two reminder e-mails on day three and day five after the initial e-mail as recommended by Hsu and Sandford (2007). After day seven, I sent a thank you letter to all participants. For those who had not completed the questionnaire, I asked them to contact me directly and let me know if they need more time. In such cases, I was flexible to extend the time for another week. Delbecq et al. (1975) recommend a period of two weeks in between each round and a minimum of 45 days to complete a modified Delphi design study. I started coding the data, using the NVivo (Version 11) software at the end of week one and prepare a list of all the identified items for inclusion in round two questionnaire. A detailed explanation of data analysis process is given in the Data Analysis section below. The coding of data, double checking the content with my dissertation chair, and drafting the second questionnaire took two weeks to complete.

Round Two. The second questionnaire listed the items identified from round one for the panel to rate them according to a 5-point Likert scale where 5 = extremely important, 4 = very important, 3 = important, 2 = less important, and 1 = not important. I e-mailed the second questionnaire to the panel with a brief discussion of findings on round one and thank them for their contribution. I provided seven days to complete the questionnaire, with reminder e-mails on days three and five (Appendix E). On day eight, after sending the second questionnaire, I started analyzing the data through SurveyMonkey™ to determine the mean and standard deviation for each item. I shared the findings with the participants in the third round. I selected the most highly rated

items as extremely important and very important to include in the third round questionnaire.

Round Three. I sent the third questionnaire via e-mail to the panel with the same response deadline structure as rounds one and two. The final questionnaire asked the panelists to select (not rank) the top 10 factors that they consider important. The consensus was reached by identifying the factors selected by over 50% of the experts in the panel.

Data Analysis Plan

I started coding of the responses to the first questionnaire as soon as I receive all the responses. I used the NVivo (Version 11) software, which is a CAQDAS to analyze my data from round one. Using NVivo (Version 11) to code qualitative data ensures effective, efficient, and accurate results (Bazeley & Jackson, 2013). Any responses from SurveyMonkey™ can be imported to NVivo (Version 11). If some participants sent their responses as a word document, I typed them into SurveyMonkey™. I developed an NVivo (Version 11) project with three phases of structuring, creative/analytic, and optional analytic iteration (Edhlund & McDougall, 2016). In the structuring phase, I utilized NVivo's (Version 11) descriptive coding to create folders, templates or case nodes. I then ran a thematic coding to identify themes. I extend the thematic coding into the creative/analytic phase and run analytic coding to create node hierarchies or use queries and matrices. I repeated these steps to analyze the data further. I also used word frequency queries to identify key phrases and text search queries to explore themes, phrases, and concepts. The final result of the qualitative analysis provided a list of items

that participants suggested as risk management practices for early detection of inappropriate behavior among hospital staff. I provided a separate list of items under categories of the questions on the questionnaire. I kept a detailed process journal in all three rounds of the data analysis.

In the second round, experts were asked to rate the degree of their agreement with the series of identified statements in round one, pertaining to defining the risk management practices as to the practical methods for early detection of inappropriate behaviors among hospital staff. I listed the items identified from round one analysis for the panelists to rate them according to a 5-point Likert scale. For the analysis of the round two answers, I selected only the statements that were highly rated as *extremely important* and *very important*. I recorded the mean and standard deviation of each item produced by SurveyMonkey™. I then had a narrowed down list of items that I used on the third and final questionnaire.

In the third round, I provided a table with the descriptive statistics of means and standard deviations of each item in round two questionnaires. The third and final questionnaire listed the items ranked the highest in round two in terms of the top two responses calculated by combined frequency percentage of extremely important and very important. I sent the list to the expert panelists to select 10 statements that they believe were the most important in addressing the problem. The consensus was reached by identifying the statements selected by over 50% of the experts in the panel. I reported the response rate of the participants at each round. The final list of items were the answers to my research question as descriptions of practical methods for early detection of

inappropriate behaviors among hospital staff, which may be used to ultimately mitigate the risk of preventable medical mishaps. As an exit strategy, I sent a thank you e-mail to all participants and promised to share the final results with them. I documented any changes in data analysis plan and their justifications that were needed during the research process. I used the final results to compare with current literature and discuss its implications and suggestions for additional studies.

Issues of Trustworthiness

Credibility

I used Anney (2014) definition of credibility as the confidence that can be placed on the truthfulness of the research results. The credibility can be established by assessing the degree of coherence between the supporting data and the interpretations and results presented by the researcher (Munn, Porritt, Lockwood, Aromataris, & Pearson, 2014). To ensure the credibility of my instrument, I utilized peer debriefing and used external expert review of my dissertation chair and methodology expert. Additionally, the process and rigor of modified Delphi design in itself, in the sense that data collection and analysis goes through three cycles for refinement by member checking and prolonged contact with the participants, added to the credibility and trustworthiness of the results. A detailed description of every step of my data collection and analysis process serves as a fulfillment for transparency and systematicity of the study. Using the NVivo (Version 11) software for qualitative analysis of round one data provided a transparent picture of the data and an audit of data analysis process. Common method bias was anticipated as risk managers may be reluctant to discuss confidential issues related to medical errors

and patient safety. Assurance of anonymity and open-ended questions may have helped to minimize the common method bias.

Transferability

I described the research context and any assumptions in detail to enhance transferability of my results (Anney, 2014). Thick descriptions allow for transferability of the findings from this research context to another. The use of nonprobability purposeful sampling in my study also helped to answer the specific research question and it provided greater in-depth answers than other probability sampling methods (Anney, 2014). The results of modified Delphi design were based on subjective expert opinions; therefore it should be generalized with caution. Patient safety cultures may vary across hospitals depending on local culture, geography, patient demographics, financial climates or other variables. The included hospitals may not be representative of all hospitals within U.S. which may affect transferability. Also, this study was limited to the risk managers in healthcare organizations and did not include other healthcare workers. Future research is warranted to explore their view.

Dependability

Dependability involves evaluation of participants on the findings, interpretations, and recommendations of the study (Anney, 2014). The detailed methodology descriptions in this chapter served to fulfill the dependability of my research by explaining congruity between the research question and the methodology, data collection, and analysis (Munn et al., 2014). The rigor and process of modified Delphi design allowed for participants involvement in the evaluation process. To ensure dependability

of my result, I also kept detailed audit trails of all the steps throughout the study process. I followed strategies such as rich thick description, researcher's bias clarification, present negative information, documenting research procedures, steps and transcripts and cross-checking codes and transcripts to confirm trustworthiness and rigor in my qualitative research (Munn et al., 2014). I described and justified any changes that occurred during the research process.

Confirmability

To ensure confirmability of my results, I provided detailed documentation of my data processing (Appendices F, G, and H) so that other researchers can confirm the findings (Anney, 2014). Appendix F consists of detailed summary of round two statistics for each question including the agreement percentage for each Likert scale, total number of respondents for each question, and the weighted average (mean) for each question. Appendix G is the code book for round one data coding. Appendix H is the reflexive journal that I kept in order to reflect on, tentatively interpret, and plan data collection. I documented data checking and rechecking by both my committee members and the study participants' feedback through the multiple rounds of data collection. Finally, I described any negative instances that contradict prior observations in the results chapter.

Ethical Procedures

I obtained all the permissions and approvals required by Walden University to conduct this study. The permissions included the IRB application and a statement from the ASHRM regarding the permission to use their member directory contact list. Walden University's IRB approval number for this study was 08-08-17-0397637. I included a

copy of the IRB approved study consent form that explains risks, benefits, confidentiality, and protection of human subjects. Additionally, I provided copies of documents submitted for IRB approval including study recruitment invitation letter, recruitment process, data collection and analysis process, protection of confidential data (Appendices B, C, D, E, I, J, K).

I kept the list of participants and all the study data secure in a password protected computer that only I have access to. All the study results remained anonymous throughout the study and no participant identifiers will be used in the final study publications. The participants did not experience any adverse events as part of the study. Nonetheless, if any unpredictable adverse events had happened as part of the study, I had planned to consult the university IRB for guidance. Study participants were informed that their participation was voluntary and they could withdraw from the study at any time, but the answers they had already provided cannot be removed from the study because all the questionnaires have no identifiers. I did not have any conflict of interest to declare for the conduction of the study. I did not have any position of supervisory power, personal and/or professional relationships with participants.

Risk and Benefits

The only identified possible risk associated with participating in this study was a breach in confidentiality that I documented and planned for in the Institutional Review Board (IRB) application. The only identifiable information that I collected was participants' e-mail addresses. I followed the IRB approved process for protecting identifiable information and I kept all e-mail addresses in a file within a password

protected computer that only I can access. I will keep the study data in a password protected file within a password protected computer that only I have access to for five years as approved by the Walden University IRB. I sent all e-mails as blind copies.

There was no direct benefit to participate in the study other than a potential benefit of gaining knowledge about what other experts contributed to the study and the final study results.

Summary

In Chapter 3 I built on the knowledge gained from the literature review of previous chapter to suggest an appropriate research method to answer the research question of what level of consensus exists among hospital risk management experts as to the practical methods for early detection of inappropriate behavior among hospital staff, which managers may utilize to ultimately mitigate the risk of preventable medical mishaps.

Chapter 3 included the research design and rationale for using the modified Delphi design (Pulford et al., 2009). The purpose of the study aligned with the traditional intent of the modified Delphi design to forecast and plan ahead (Du Plessis & Human, 2007).

Modified Delphi design was a suitable approach for my study as there was no consensus and incomplete knowledge, hence the modified Delphi design helped to answer my research question by utilizing expert knowledge to generate new understanding about my research problem (McMillan et al., 2016). I also provided details of the research instrument for data collection, data analysis, population, and sampling. Within Chapter 3, I explained the role of the researcher as a constructivist inquirer to perform an iterative process of discovery and interpretation (Amos & Pearse, 2008). I declared that as the

researcher, I did not have any personal and/or professional relationships, such as supervisory or any position of power with participants. The issues of trustworthiness section covered the credibility attempts such as peer debriefing and expert review. Providing detailed description of every step of my data collection and analysis process, along with copies of NVivo (Version 11) analysis results served as a fulfillment for transparency of the study. Detailed descriptions of the research context and assumptions, along with the use of nonprobability sampling method enhanced the transferability of my results (Anney, 2014). To ensure dependability of my result, I kept detailed audit trails of all the steps throughout the study process. I followed strategies such as rich thick description, researcher's bias clarification, present negative information, and cross-checking codes and transcripts (Anney, 2014).

Chapter 4: Results

In Chapter 4, I present the results of the modified Delphi design to answer the research question of what level of consensus exists among hospital risk management experts as to the practical methods for early detection of inappropriate behavior among hospital staff, which managers may use to mitigate the risk of preventable medical mishaps. To answer the research question, I used a modified Delphi design to collect the opinions of healthcare risk managers. The purpose of this qualitative study was to seek consensus among a panel of experts in hospital risk management practices on methods for early detection of inappropriate behaviors among hospital staff, which hospital managers can use to mitigate the risk of medical errors. I developed the questions for the initial questionnaire based on my review of the literature presented in Chapter 2.

The results presented in Chapter 4 derive from qualitative analyses of the responses from the first questionnaire and from the statistical analyses of responses from the second and third questionnaires submitted by the healthcare risk manager experts. This chapter includes the results of the study and is organized into seven main sections of setting, demographics, data collection, data analysis, evidence of trustworthiness, results, and chapter summary.

Research Setting

The general population for my study was healthcare risk managers with a specific set of skills and experiences as listed for the inclusion criteria in Chapter 3. I selected a sample from the population of healthcare risk managers using the members list of the ASHRM, inviting 600 randomly selected risk managers to participate in the study. The

large sample pool became smaller because of the eligibility requirements and willingness to participate in the study. Thirty-four healthcare risk managers consented to participate in the study. The candidates who wished to participate e-mailed me directly to indicate their consent to participate in the study by writing “I consent” on the e-mail subject line. The e-mail replies helped me to make a list of my expert panelists. A few invitees e-mailed me to say that they were not interested in participation or they were not eligible according to the inclusion criteria. I took their e-mails off my reminder e-mail lists.

Demographics

Participants were risk managers with the minimum of 5 years’ experience within healthcare organizations in the United States. The participants also had direct responsibility in their organizations for all the following activities: patient safety programs, root cause analysis, incident reporting, policy development, quality, improvement initiatives, and regulatory compliance

Data Collection

There were three rounds of data collection and analysis process for the study. At the end of the first week after the first invitation, I had 23 participants who consented to the study. I then sent out a second invitation to my 200-name back up list of risk managers to reach the desired minimum of 30 participants. The above process took 2 weeks to complete, and I recruited 34 participants. Thirty-two participants completed the first round questionnaire, 19 participants completed the second round questionnaire, and 26 participants completed the third round questionnaire. Figure 2 shows a flow chart of the three Delphi rounds data collection process.

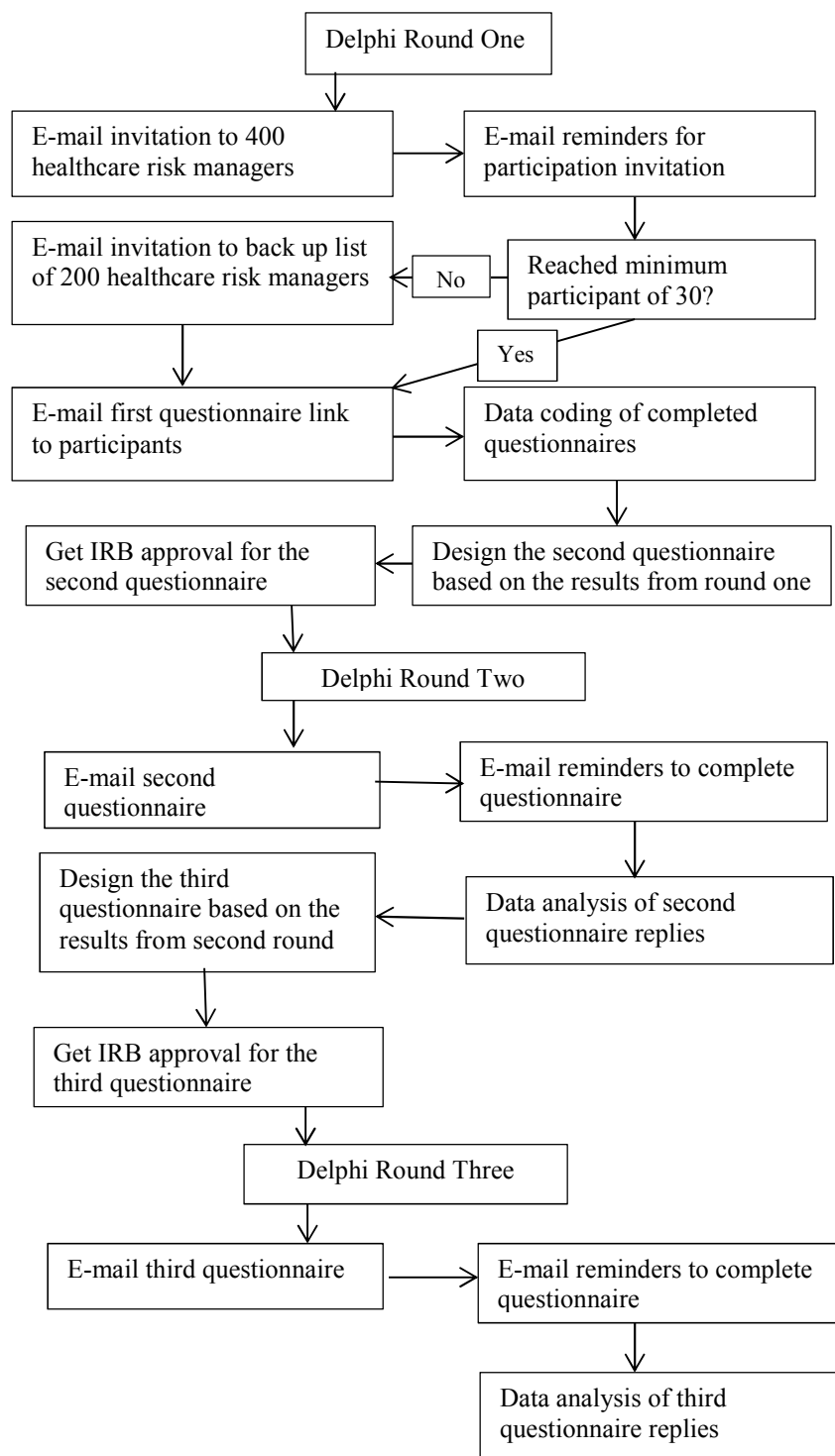


Figure 2. Flow chart of the three Delphi rounds data collection process

Round One

From the 34 participants who consented to participate in the study, 32 of them completed the first questionnaire. Because the questionnaires were answered anonymously, I could not track who had not answered the questionnaire to follow up with them. One participant, however, e-mailed me and indicated that she found the questionnaire too time consuming for her to answer. I received a few out of office auto replies every time I sent out e-mails. The average completion time for the first questionnaire was 11 minutes. The completion rate of those providing consent was at 100%. I started coding the responses to the first questionnaire as soon as I received all the responses (Appendix G). During the first and second round, some participants e-mailed me after getting reminder e-mails to complete the questionnaire, saying that they have completed the survey and why are they receiving reminder e-mails. I explained to them that the process is anonymous and I did not know who had or had not completed the surveys, meaning I had to send the reminders to everyone. But I did not send more reminders to those who contacted me to say they have completed the surveys.

Round Two

I e-mailed the second questionnaire to the panel with a brief discussion of findings on round one and thanking them for their contribution (Appendix I). I provided 7 days to complete the questionnaire, with reminder e-mails on days three and five. One participant e-mailed me after the second questionnaire to let me know that she did not have time to complete the questionnaire. I took the e-mail address of the participant off my mailing list for the remainder of the study. On day eight, after sending the second

questionnaire, I received 19 responses and I started analyzing the data through SurveyMonkey™ to determine the mean and standard deviation for each item.

Round Three

In the third round, I provided a table (Table 3) with the descriptive statistics of means and standard deviations of each item in round two questionnaires. The third and final questionnaire listed the items ranked the highest in round two in terms of the top two responses calculated by combined frequency percentage of extremely important and very important (Appendix J). Twenty-six participants completed the third round of data collection. The definition of consensus I used for my study was to select the factors the over 50% of the experts on the panel agreed on (Table 4). After sending out the third questionnaire, I received one auto-reply e-mail from one participant stating she did not work for that organization anymore and did not provide her new e-mail. Therefore, she counted as a drop out on the final round. The final list of items are the answers to my research question as descriptions of practical methods for early detection of inappropriate behaviors among hospital staff, which may be used to mitigate the risk of preventable medical mishaps. As an exit strategy, I sent a thank you e-mail to all participants and promised to share the final results with them (Appendix K).

Table 3

Factors Identified as Very Important or Extremely Important in the Second Questionnaire with a Weighted Average of Four or More

Factors selected for each question	Weighted average	Standard Deviation
Q1. What are the drivers of inappropriate behaviors in the workplace?		
Lack of communication skills	4.19	0.73
Reluctance to report inappropriate behaviors	4.50	0.71
Role modeling	4.00	0.69
Tolerance for inappropriate behavior	4.69	0.58
Q2. What are the managers' roles in managing inappropriate behavior in the workplace?		
Acknowledging there is a problem	4.56	0.60
Being proactive in identification and remediation	4.50	0.69
Communicating expected behavior	4.59	0.60
Develop culture of respect	4.35	0.84
Encourage reporting of inappropriate behaviors	4.29	0.82
Enforce zero tolerance policy	4.35	1.03
Holding staff accountable	4.53	0.61
Investigate inappropriate behaviors	4.53	0.61
Provide timely feedback on incidents	4.47	0.70
Taking consistent corrective and disciplinary action	4.59	0.60
Q3. What is the role of organizational culture in the prevention of inappropriate behavior in the workplace?		
Creating a positive and supportive environment	4.24	1.00
Leadership involvement	4.59	0.60
Setting expectations	4.65	0.48

(table continues)

Factors selected for each question	Weighted average	Standard Deviation
Q4. What trainings are needed to manage inappropriate behavior in the workplace?		
Change management training	4.06	0.87
Communication training	4.41	0.69
Customer service training	4.00	1.03
Engagement of leadership in training sessions	4.35	0.97
Incident reporting training	4.06	0.94
Initial orientation training	4.18	0.92
Just culture training	4.12	0.90
Leadership training	4.29	0.75
Ongoing training and monitoring for needs	4.00	1.08
Q5. What tools are needed to manage inappropriate behavior in the workplace?		
Open communication	4.06	0.87
Q6. Other comments		
Confidentiality of reporting	4.38	0.86
Focusing on staff engagement results	4.18	0.78
Management rounding	4.06	1.00

Table 4

Factors Selected by Panelists as Top Important Factors

Answer Choices	Percentage of agreement	Number of participants selecting the factor
Setting expectations	65.38%	17
Develop culture of respect	65.38%	17
Holding staff accountable	61.54%	16
Enforce zero tolerance policy	61.54%	16
Confidentiality of reporting	61.54%	16
Communicating expected behavior	57.69%	15
Open communication	57.69%	15
Investigate inappropriate behaviors	53.85%	14
Taking consistent corrective and disciplinary action	50.00%	13
Just culture training	46.15%	12
Being proactive in identification and remediation	42.31%	11
Acknowledging there is a problem	38.46%	10
Encourage reporting of inappropriate behaviors	38.46%	10
Leadership involvement	34.62%	9
Leadership training	30.77%	8
Creating a positive and supportive environment	30.77%	8
Communication training	26.92%	7
Role modeling	26.92%	7
Management rounding	26.92%	7
Tolerance for inappropriate behavior	26.92%	7
Provide timely feedback on incidents	23.08%	6
Incident reporting training	19.23%	5
Engagement of leadership in training sessions	19.23%	5
Initial orientation training	15.33%	4
Customer service training	11.54%	3
Lack of communication skills	11.54%	3
Reluctance to report inappropriate behaviors	11.54%	3
Ongoing training and monitoring for needs	7.69%	2
Change management training	3.85%	1
Focusing on staff engagement results	0.00%	0

Data Analysis

Round One

I used the NVivo (Version 11) software, which is a CAQDAS, to analyze my data from round one. All the responses from SurveyMonkey™ were imported to a spreadsheet and then exported to NVivo (Version 11). I developed an NVivo (Version 11) project with three phases of structuring, creative/analytic, and optional analytic iteration (see Edhlund & McDougall, 2016). In the structuring phase, I used NVivo's (Version 11) descriptive coding to create case nodes. Each question was marked as a main node. As themes were identified, they were added as child notes under subsequent questions. I then ran a thematic coding to identify themes for each question. I also used word frequency queries to identify key phrases and text search queries to explore themes, phrases, and concepts. I used the auto coding option in NVivo (Version 11) to confirm saturation and that I had not missed any important topic because of my selection bias. To reduce researcher bias, I coded each recommendation regardless of their meaning or validity to me. For example, below is one of the respondent's answers and I have underlined every word that I coded under each question.

Q1. What are the drivers of inappropriate behaviors in the workplace?

How do you define a "driver" I define it as a "contributing factor". Some of the factors I have identified are:

1. lack of clear expectations by management on what is appropriate and not appropriate.
2. Lack of follow up by management on inappropriate behaviors.

3. Management tolerance of incivility, basic manners, and bullying.

Q2. What are the managers' roles in managing inappropriate behavior in the workplace?

Please see the above response (I coded the above factors again for the second question). If the manager can't define "inappropriate behavior" and address it, the behavior will continue.

Q3. What is the role of organizational culture in the prevention of inappropriate behavior in the workplace?

Transparency and honesty between directors and managers re: what is accepted behavior and what isn't.

Q4. What trainings are needed to manage inappropriate behavior in the workplace?

Clear concise policies, and education for management about the policies

Q5. What tools are needed to manage inappropriate behavior in the workplace?

Policies, procedures, record keeping re: grievances and patient complaints so that individuals who are repeatedly pointed out by patients are counseled or are terminated.

Q6. Please provide any elaboration that may help to answer the research question "what are the practical methods for early detection of inappropriate behavior among hospital staff, which may be utilized to ultimately mitigate the risk of preventable medical mishaps?"

Incident reports, complaints, grievances.

The final result of the qualitative analysis provided a list of items that participants suggested as risk management practices for early detection of inappropriate behavior among hospital staff. I have also provided word cloud images from NVivo (Version 11) for the top most frequent 20 words (including stemmed words) within the answers for each question. The word cloud images were another level of checking for coding. The average completion time for the first questionnaire was 11 minutes. The completion rate of those providing consent was at 100%. For the six research questions on the first questionnaire, 67 factors were identified by the respondents (Appendix G). The results of the data analysis appear in the results section below.

Round Two

On day eight, after sending the second questionnaire, I received 19 responses and I started analyzing the data through SurveyMonkey™ to determine the mean and standard deviation for each item. I selected the most highly rated items as extremely important and very important to include in the third round questionnaire (Table 3).

Round Three

The consensus was reached by identifying eight factors selected by over 50% of the experts in the panel as listed on (Table 4). The final list of items are the answers to my research question as descriptions of practical methods for early detection of inappropriate behaviors among hospital staff, which may be used to ultimately mitigate the risk of preventable medical mishaps. As an exit strategy, I sent a thank you e-mail to all participants and promised to share the final results with them (Appendix K). I used

the final results to compare with current literature and discuss its implications and suggestions for additional studies in Chapter 5.

Evidence of Trustworthiness

Credibility

To ensure the credibility of my instrument, I used peer debriefing and external expert review as planned in Chapter 3. The reviews of my dissertation chair and methodology expert helped me to ensure the credibility of my instrument (Noble & Smith, 2015). Additionally, the process and rigor of modified Delphi design in itself, in the sense that data collection and analysis went through three cycles for refinement by member checking and prolonged contact with the participants, added to the credibility and trustworthiness of the results. A detailed description of every step of my data collection and analysis process served as a fulfillment for transparency of the study. Using the NVivo (Version 11) software for qualitative analysis of round one data provided a transparent picture of the data and an audit of data analysis process (Elo et al., 2014). Common method bias was anticipated as risk managers may be reluctant to discuss confidential issues related to medical errors and patient safety. Assurance of anonymity and open-ended questions helped to minimize the common method bias.

Transferability

Consistent with my plans in Chapter 3, I described the research context and any assumptions in detail to enhance transferability and replicability of my results (Noble & Smith, 2015). The results of modified Delphi design are based on subjective expert opinions; therefore it should be generalized with caution. Patient safety cultures may

vary across hospitals depending on local culture, geography, patient demographics, financial climates or other variables. The included hospitals may not be representative of all hospitals within U.S. which may affect transferability. Also, my study was limited to the risk managers in healthcare organizations and did not include other healthcare workers. Future research is warranted to explore their view.

Dependability

To ensure dependability of my result, I kept detailed audit trails of all the steps throughout the study process (Noble & Smith, 2015). Moreover, I followed strategies such as rich thick description, researcher's bias clarification, present negative information, documenting research procedures, steps and transcripts and cross-checking codes and transcripts to confirm trustworthiness and rigor in my qualitative research (Noble & Smith, 2015). I described and justified any changes that occurred during the research process.

Confirmability

To ensure confirmability of my results, I provided detailed documentation of my data processing (Elo et al., 2014). I have documented data checking and rechecking by both my committee members and the study participants' feedback through multiple rounds of data collection (Noble & Smith, 2015). My dissertation committee also checked and made judgments on the study's data management procedures, and pointed out any potential bias or distortion. Finally, I described any negative instances that contradict prior observations in the results chapter.

Ethical Procedures

I obtained all the permissions and approvals required by Walden University to conduct the study. The permissions included the IRB application and a statement from the ASHRM regarding the permission to use their member directory contact list. I included a copy of the IRB approved study consent form that explains risks, benefits, confidentiality, and protection of human subjects. Additionally, I provided copies of documents submitted for IRB approval including study recruitment invitation letter, recruitment process, data collection and analysis process, protection of confidential data.

I kept the list of participants and all the study data secure in a password protected computer that only I have access to. All the study results remained anonymous throughout the study and no participant identifiers will be used in the final study publications. The participants did not experience any adverse events as part of the study. Study participants were informed that their participation is voluntary and they could withdraw from the study at any time, but the answers they had already provided could not be removed from the study because all the questionnaires have no identifiers. I did not have any conflict of interest to declare for the conduction of the study. I did not have any position of supervisory power, personal and/or professional relationships with participants.

Study Results

Round One Result

For the six research questions on the first questionnaire, 67 factors were identified by the respondents (Appendix G). Although the frequency of references to these factors

varied, I listed them in alphabetical orders to present the results in a neutral way for the second questionnaire. The first question resulted in 22 items, the second question has 17 items, the third question has 11 items, the fourth question has 14 items, the fifth question has 10 items, and the last question has 17 items. There were some repetitions, for example, the following factors were identified in multiple questions: (a) zero tolerance attitudes, (b) monitoring and trend setting, (c) trainings, (d) consistent treatment of staff at any level, (e) encourage reporting of events, (f) address fatigue, (g) clearly set expectations of accepted behavior, (h) and communication of events to staff for learning. Therefore, the second questionnaire had a total of 67 items for the participants to rate on a Likert scale (Appendix I).

Figures 3 to 9 are the word cloud images from NVivo (Version 11) for the top most frequent 20 words (including stemmed words) within the answers of each question. Word clouds are a form of word frequency query presented in a pictorial way where a larger font size indicates a higher frequency of occurrence. The word frequency query helped me to see what words, phrases, or concepts were used most frequently by the participants. The word frequency queries allowed me to double check the coding and select what sources to query further.



Figure 3. Question 1 word cloud



Figure 4. Question 2 word cloud



Figure 5. Question 3 word cloud



Figure 6. Question 4 word cloud



Figure 7. Question 5 word cloud



Figure 8. Question 6 word cloud,



Figure 9. Word Cloud of top most frequent 50 words for overall questionnaire results

Round Two Results

Nineteen participants rated the statements on the second questionnaire on a 5-point Likert scale as suggested by Clayton (1997). The participation rate picked up again to 81% for the third round questionnaire which only had one question. Participants on average spent 11 minutes to complete the survey with a 95% completion rate. I selected the most highly rated items as extremely important and very important (Weighted average ≥ 4) to include in the third round questionnaire. I used the mean and standard deviations to communicate the results of round two questionnaires to participants in round three. A detailed summary of all round two data statistics is attached in Appendix F. Appendix F consists of detailed summary of round two statistics for each question including the agreement percentage for each Likert scale, total number of respondents for each question, and the weighted average (mean) for each question. The basic statistics include the mean, the median and the standard deviation of participants' agreement. The

participants who replied to the second round questionnaire identified at least one factor for each of the six research question categories. Thirty factors were identified as very important or extremely important in the second questionnaire with a weighted average of four or more (Appendix F). The third and final questionnaire included the shortened list of 30 items from second round analysis (Appendix J).

Round Three Results

The final questionnaire asked the panelists to select (not rank) the top 10 factors that they consider important from the 30 factors selected in round two. Twenty-six participants completed the third round of data collection. The average time to complete the final questionnaire was two minutes with the completion rate of 100%. The consensus was reached by identifying eight factors selected by over 50% of the experts in the panel as listed on (Table 4). Figure 3 shows the distribution graph of top 10 important factors selected by panelists for recognizing and managing inappropriate behavior in the workplace. The final list of eight items to answer my research question as to the practical methods for early detection of inappropriate behaviors among hospital staff were setting expectations, develop a culture of respect, holding staff accountable, enforce zero tolerance policy, confidentiality of reporting, communication expected behavior, open communication, and investigate inappropriate behaviors.

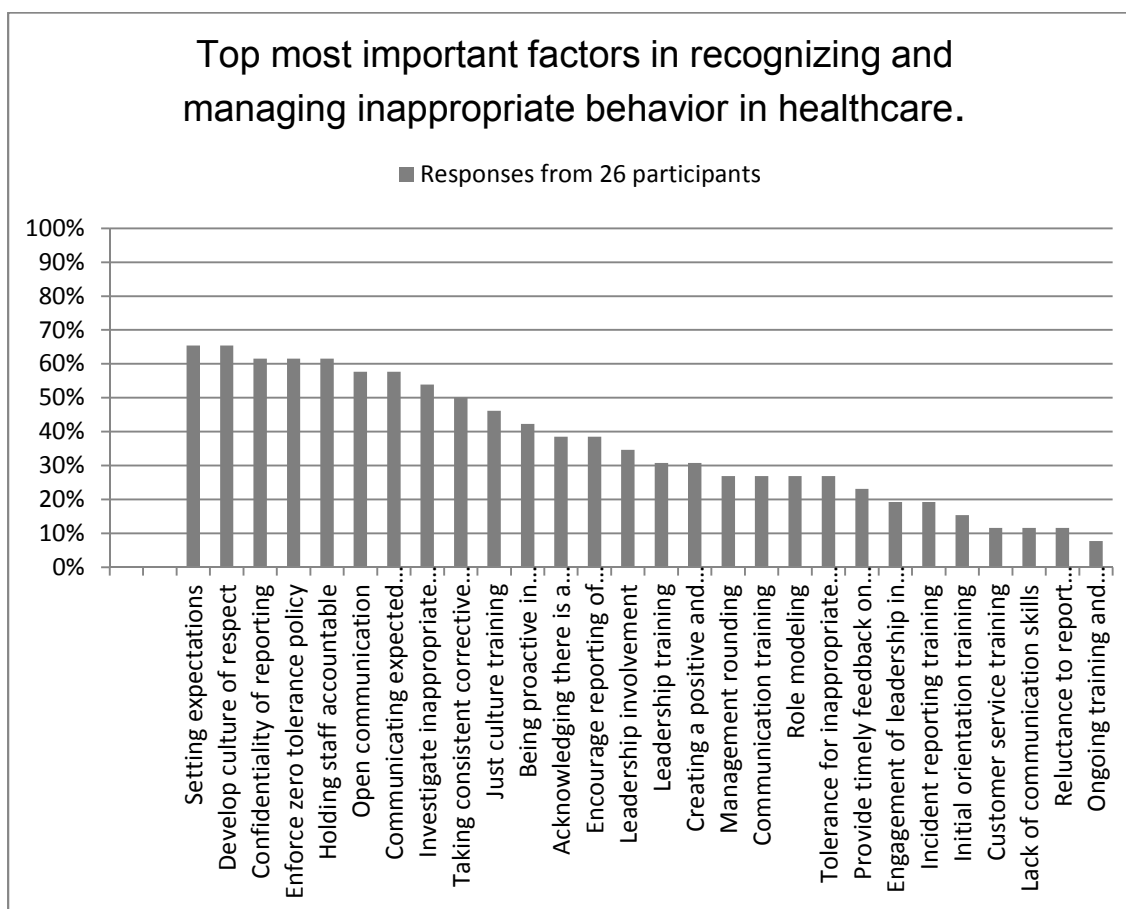


Figure 10. Distribution of percentage agreement on top important factors for recognizing and managing inappropriate behavior in the workplace

Summary

In this chapter I presented the result of my modified Delphi design to develop consensus among a panel of healthcare risk management experts as to the practical methods for early detection of inappropriate behaviors among hospital staff, which may be used to ultimately mitigate the risk of preventable medical mishaps. A panel of 32 healthcare risk management experts answered six initial questions to identify best practical methods for early detection of inappropriate behaviors. They continued their participation in the Delphi process to further narrow down the list and reach consensus on

the eight factors of setting expectations, confidentiality of reporting, develop a culture of respect, enforce zero tolerance policy, open communication, communication expected behavior, holding staff accountable, and investigate inappropriate behaviors to answer my research question.

In the next chapter, I examine the results in more detail and compare it to the current literature. The data gathered from the three Delphi rounds was analyzed to identify patterns and possible inferences that may be drawn regarding the practical methods for recognizing and managing inappropriate behavior in the workplace. I also used the participants' feedback and comments to support my recommendations and suggestions for additional research.

Chapter 5: Discussion, Conclusions, and Recommendations

In Chapter 5, I discuss the results of the study to answer the research question of what level of consensus exists among hospital risk management experts as to the practical methods for early detection of inappropriate behavior among hospital staff, which managers may use to mitigate the risk of preventable medical mishaps. The purpose of this qualitative modified Delphi design was to seek consensus among a panel of experts in hospital risk management practices on the practical methods for early detection of inappropriate behaviors among hospital staff, which may be used by hospital managers to considerably mitigate the risk of medical mishaps.

The first round of data collection resulted in 67 factors (Appendix G) identified by the panel members to the answers to six initial questions:

1. What are the drivers of inappropriate behaviors in the workplace?
2. What are the managers' roles in managing inappropriate behavior in the workplace?
3. What is the role of organizational culture in the prevention of inappropriate behavior in the workplace?
4. What trainings are needed to manage inappropriate behavior in the workplace?
5. What tools are needed to manage inappropriate behavior in the workplace?
6. Please provide any elaboration that may help to answer the research question what are the practical methods for early detection of inappropriate behavior among hospital staff, which may be used to ultimately mitigate the risk of preventable medical mishaps.

Through this study I identified the following eight factors (in no specific order) to answer my research question:

1. Setting expectations
2. Develop a culture of respect
3. Holding staff accountable
4. Enforcing a zero-tolerance policy
5. Confidentiality of reporting
6. Communicating expected behavior
7. Maintaining open communication
8. Investigating inappropriate behaviors

Chapter 5 includes a discussion on the findings of the study and is organized into five main sections: interpretation of findings, limitations of the study, recommendations, implications, and conclusions.

Interpretation of Findings

In this section I describe in what ways findings from this study confirm, disconfirm, or extend knowledge in the discipline of healthcare management by comparing them with what has been found in the peer-reviewed literature described in Chapter 2. The result of this study helps to close the gap in ways managers identify and manage inappropriate behaviors in healthcare organizations. In the interpretation of findings of this study I used the conceptual framework of HRO, fair and just culture patient safety model, and safety measurement and monitoring framework to provide

conceptual clarity to my research findings. I use the same order and thought pattern as my literature review to interpret the findings in chapter five.

Risk Management Perspective

Unlike the majority of the literature on inappropriate behavior in healthcare organizations that are studied from the perspective of nurses, physicians, or general management, I studied the issue from a new perspective of healthcare risk management (see Kimes et al., 2015; see Longo & Hain, 2014; see Parikh, Harolds, & Bluth, 2017). The only material that I could identify that studied the problem from a risk management viewpoint was the ASHRM leadership summit report where a group of thought leaders including human resource, risk management, and healthcare quality and patient safety experts participated in a 2-hour session forum titled “Workplace Intimidation: The Underestimated Threat to Patient Safety” (ASHRM, 2010). Similar to Rosenstein’s (2015) and Grissinger’s (2017) findings, the thought leaders identified lack of safety culture, undefined expectations, lack of behavioral change tools, lack of effective educational training, organizational hierarchy, and absence of effective tools for timely recognition of inappropriate behavior. The thought leaders provided improvement suggestions similar to those of Rosenstein and Grissinger such as building teamwork and culture of respect, reporting systems, leadership engagement, and providing training and tools to enable culture change. All the recommendations in Grissinger, Rosenstein, and the ASHRM leadership summit report were recognized in the first round of this study; however, only two factors of setting expectations and develop a culture of respect made it to the final consensus of the expert panel (ASHRM, 2010). All the identified factors in

the study align with the safety culture elements in a HRO (see Table 1). For example, the accountability element of safety culture aligns with holding staff accountable and enforces a zero-tolerance policy, or the assessment element of safety culture aligns with the investigation of inappropriate behaviors.

Contributing Factors to Inappropriate Behaviors

To identify effective ways of managing inappropriate behavior, I aimed to understand the underlying contributing factors to individual values, attitudes, and perceptions that trigger inappropriate behaviors (see Grissinger, 2017; see Rosenstein, 2015). Factors that contribute to inappropriate behaviors could be internal such as age, gender, ethnicity, culture, or personality profile, and/or external such as training, environmental factors, social interactions, and expectations (Rosenstein, 2015). Other contributing factors could be intense work, miscommunication, and problematic personalities (Berman-Kishony and Shvarts, 2015). The first question on the first questionnaire of the study answered the underlying contributing factors that trigger inappropriate behaviors. The expert panel initially identified 22 factors as the drivers of inappropriate behaviors in the workplace on the first questionnaire (Appendix G). Through the second round questionnaire I narrowed these factors down to four factors of lack of communication skills, reluctance to report inappropriate behaviors, role modeling, and tolerance for inappropriate behavior. However, the participants did not identify any factors under the category of drivers of inappropriate behaviors in the workplace on the final consensus on top most important factors in recognizing and managing inappropriate behavior. Given the result of this study, I conclude that although identifying the

contributing factors to inappropriate behavior is important, it may not be a top priority item to tackle when managing inappropriate behaviors in healthcare organizations.

Role of Incident Reporting Systems

In this section, I assess the role of incident reporting systems in healthcare settings where employees can report any patient safety issues or medical errors. In most healthcare organizations, risk managers are in charge of the overall operation of incident reporting systems (Simmons, 2008); therefore, I expected this study to provide valuable insight into their role in managing safety incident reports of inappropriate behaviors. As part of this study, risk managers shared their experience in implementing effective methods of managing inappropriate behaviors. Although the use of incident reporting systems was initially suggested, it did not reach the consensus of the expert panel as a top important factor in recognizing and managing inappropriate behaviors in healthcare organizations. Reported incidents data can lead to improving processes by considering the human factors to reduce harm, and it is ultimately a good source for organizational learning (Kim et al., 2017). There is also evidence that providing good feedback to reporters of incidents is essential to the success of incident reporting systems by encouraging reporting and supporting learning from errors (Health Quality Ontario, 2017). On the other hand, there are also concerns about the effectiveness of incident reporting systems in improving patient safety (Archer et al., 2017). There are debates that the incident reporting systems do not provide true information about the frequency of errors because some errors go unreported by staff and most systems do not allow patients to report errors (Archer et al., 2017). Comparing the results of this study to the literature

brings me to the conclusion that using incident reporting systems is not a top priority action item when it comes to management of inappropriate behaviors.

Communication for Conflict Resolution

Another angle to review the result of this study is from the conflict resolution approach of providing various retroactive or proactive conflict management solutions (Almost et al., 2016; Leon-Perez et al., 2016). My study results endorse the importance of communication in the final consensus on the two factors of communication of expected behaviors and open communication. This is similar to Leon-Perez et al. study that suggested three conflict management skills of (a) interpersonal communication skills that can facilitate understanding others' point of views and interests, (b) emotional regulation skills to manage negative emotions at work and decrease the chance of escalation, and (c) problem solving skills to enable healthcare staff identify other party's interests and assist in accomplishing mutually beneficial solutions.

Reporting of Inappropriate Behaviors

One of the top factors identified in managing inappropriate behaviors in my study is to encourage reporting of inappropriate behaviors. This finding is in alignment with the Webb et al. (2016) CORS. The characteristics associated with the success of CORS for improving safety and quality was broken down to three categories of people, organization, and system. Comparable to Webb et al. (2016)'s recommendations, at the people level, the expert panel of my study identified holding staff accountable, communication of expected behavior, and open communication; at the organizational level, the expert panel identified investigating inappropriate behavior and confidentiality

of reporting; and finally, at the system level, the expert panel identified developing culture of respect, setting expectations, and enforcing a zero-tolerance policy.

Limitations of the Study

One of the limitations of this modified Delphi design that could apply to my study is not having enough research-based evidence concerning diverse feedback methods and their effect on the validity and reproducibility of the decisions reached by the panel experts (McMillan et al., 2016). Multiple rounds of modified Delphi design may have introduced participant fatigue and resulted in an average of 29% drop-out rate during the study's three rounds of data collection. To reduce participation fatigue, I kept in touch with my participants throughout the modified Delphi rounds and thanked them for their continued participation at each round. Additionally, the restricted number of participants due to limited time and resources was a limitation and a larger group could have provided more extensive representation. The results of this modified Delphi design were based on subjective expert opinions; therefore, it should be generalized with caution. Common method bias was anticipated as risk managers may have been reluctant to discuss confidential issues related to medical errors and patient safety. Assurance of anonymity and open-ended questions may have helped to minimize the common method bias. Patient safety cultures may vary across hospitals depending on local culture, geography, patient demographics, financial climates, or other variables. Therefore, the included hospitals may not be representative of all hospitals within United States, which may affect transferability. Also, my study was limited to the risk managers in healthcare

organizations and does not include other healthcare workers. Future research is warranted to explore their view.

Recommendations

In this research I highlight the expanding role of risk management professionals in recognizing opportunities for patient safety improvement (Bunting & Groszkruger, 2016) and recommending appropriate safety risk control tools and techniques (Card et al., 2015). Utilizing the modified Delphi design with multiple rounds of narrative feedback from a panel of risk management experts, I structured group communication process to deal with the complex problems of inappropriate behaviors in healthcare organization. I relied on expert opinion of risk managers who had sufficient experience and knowledge of the problem at hand and utilized remote group processes, enabling me to consult experts across the country without the need for them to meet in person. Healthcare risk managers in this study provide a combination of retrospective and prospective solutions to the problem of inappropriate behaviors. This modified Delphi design's results offer the following recommendations in no specific order for managing inappropriate behaviors in healthcare organizations.

1. Setting expectations
2. Developing a culture of respect
3. Holding staff accountable
4. Enforcing zero-tolerance policy
5. Confidentiality of reporting
6. Communication of expected behavior

7. Open communication
8. Investigating inappropriate behaviors

Knowledge gained from my research may contribute to a framework for successful management of inappropriate behaviors. Experiences shared by healthcare risk managers may provide a context for professionals in similar situations. Here I provide a summary of my recommendations for future research based on the result of this study.

1. As the result of this study I narrowed down many solutions that existed in managing inappropriate behaviors to the above eight top important factors. Using this information may help healthcare organizations prioritize and manage their resources when developing policies, standards, or trainings to address inappropriate behaviors. Further research is recommended to measure the degree of effectiveness of these recommendations individually or combined in managing inappropriate behaviors and improving patient safety.
2. In this study, I looked at the problem of inappropriate behaviors from the perspective of hospital risk managers and proposed solutions that had not been identified before (Cooke, 2016). There are some literature that studied the issue of inappropriate behaviors in healthcare organizations from nurses and physicians perspectives (Kimes et al., 2015; Longo & Hain, 2014). Further research is needed to study the issue of inappropriate behaviors in healthcare organizations from the perspectives of other healthcare workers and/or patients.

3. There are many obstacles that organizations face when dealing with the problem of inappropriate behaviors (Grissinger, 2017). The expert panel of this study identified many obstacles on the first round of data collection that did not make it to the final consensus. Some of these obstacles had also been identified in previous literature. For example, organizational hierarchies where physicians are viewed as autonomous entities and the organization's fear of a physician taking his/her business somewhere else (Rosenstein, 2015; Simpsons, 2017; Springer, 2008). Further research is recommended to study some of the factors identified in the first round of this study in order to measure their impact on patient safety and find suitable solutions to address them.
4. Collaboration with human resources was identified as one of the manager's role in managing inappropriate behavior in the first round of data collection. Although this factor did not reach the final consensus of this study, other literature had also suggested collaboration between human resources department and risk management as a possible solution to the problem of inappropriate behaviors (American Society for Healthcare Risk management, 2010). Risk managers and human resource professionals have the combined expertise needed to influence culture through talent management and equipping healthcare employees with knowledge, tools, and resources needed to recognize, respond, and eliminate inappropriate behavior (American Society for Healthcare Risk management, 2010). Therefore, I recommend further

research to study the role of collaboration between risk management and human resources professionals in managing inappropriate behaviors in healthcare organization.

In summary, I recommend using the eight factors that reached consensus as the result of this study for planning and prioritizing practical methods for early detection of inappropriate behavior among hospital staff. Further research is needed to confirm if using the eight factors recommended as the result of this study ultimately mitigate the risk of preventable medical mishaps. The results of this modified Delphi design are based on subjective expert opinions; therefore, it should be generalized with caution. My study was limited to the risk managers in healthcare organizations and did not include other healthcare workers. Future research is warranted to explore their view.

Implications

Professional Applications

Healthcare has an intensely service-oriented nature; therefore, it is critical for healthcare managers to understand individuals and groups (Borkowski, 2015). There is evidence of a strong link between the working relationship of healthcare employees and productivity, patient safety, and patient outcomes (Almost et al., 2016). Errors will occur when staffs fail to work effectively in teams, have weak relationships, and do not handle change effectively (Borkowski, 2015). Inappropriate behavior of healthcare workers is an issue that has long existed and was subtly accepted as part of the culture and ignored as a problem; however, The Joint Commission 2008's sentinel event alert concerning the issue of inappropriate behavior recognized the urgency of the problem by linking the

behaviors to safety (The Joint Commission, 2008). Though physician behaviors have been scrutinized, inappropriate behaviors occur in other groups of healthcare worker such as managers, nurses, and other medical staff members in the U.S. (Rosenstein & O'Daniel, 2008; Webb et al., 2016). Inappropriate behaviors have been witnessed in physicians (77%) and in nurses (65%) (Rosenstein & O'Daniel, 2008). Other researchers show similar results with 89% nurses and physicians have witnessed inappropriate behaviors (Berman-Kishony & Shvarts, 2015). Apart from the quality of care, inappropriate behavior can have negative physical and psychological impacts on healthcare workers as well as negatively affecting staff job satisfaction and productivity (Berry et al., 2012). Costs associated with medical errors and hospital-acquired conditions are financially burdensome and threaten the solubility of federal healthcare insurance coverage (Van Den Bos et al., 2011). To encourage patient safety improvement and hold organizations accountable, on October 1, 2008, the Centers for Medicare and Medicaid Services stopped paying the excess cost for inpatient stays complicated by preventable errors (CMS, 2008). Today's healthcare organizations are stressful and demanding and the risk of interpersonal conflicts is high. Consequently, effective management of conflict and inappropriate behaviors are an important part of healthcare managers' responsibility.

The results of my study may improve the framework for the effective management of inappropriate behaviors. Also, sharing healthcare risk managers' experiences, as part of this study, might offer a context for other managers in comparable

circumstances. This study originated from the perspective of U.S. healthcare risk managers and therefore, most applicable within the same demographics.

Contribution to Positive Social Change

This research study like most of the research related to the healthcare industry is aimed to improve patient outcomes and the health of communities in some way or another. Improving the health of communities in itself is a positive social change. Researchers estimate up to 400,000 patients die every year in U.S. hospitals due to preventable harm (Makary & Daniel, 2016; James, 2013). James (2013) estimates that nonfatal, but serious injuries due to errors may inflate the above figure by 10 to 20 times. Costs associated with medical errors and hospital-acquired conditions are financially burdensome to patients, hospitals and insurance providers. The annual cost of measurable medical harm is estimated at \$17.1 billion (Van Den Bos et al., 2011); presumably, today's costs are higher. Patient harms have negative personal, organizational, social and financial impact and support the need for further study to identify root causes and improvement opportunities that will lead to sustained patient safety. A strong safety culture along with a high-quality work environment can improve patient and staff outcomes (Stanley et al., 2014). Inappropriate behaviors have negative effects beyond patient safety. Employees affected by inappropriate behavior may have decreased productivity, low morale, and job satisfaction; the organizational effects are, lost productivity, high staff turnover, and low patient satisfaction results (Blando et al., 2013). The implications for positive social change in my dissertation research include a better understanding of inappropriate behaviors among healthcare workers, how it

influences the workplace and patients, and the potential to impacts patient safety improvements. Some of my study participants stated their agreement with the importance and timeliness of this research when they consented to take part in the study. For example one participant wrote “It is crucial in understanding that piece and how things may flow within an organization to influence change” another participant wrote “I think this is a very interesting and worthwhile research topic you have chosen. Thank you for conducting this much needed research”. The transformation of social change as the result of my study leads to positive outcomes at many levels. At the people level, my study introduces new ways to improve safety of patients. At the organizational level, my study suggests eight top important factors to guide healthcare managers’ effort in managing inappropriate behaviors. Finally, at the system level, my study results suggest to healthcare organizations to develop culture of respect, set expectations, and enforce a zero-tolerance policy in order to better manage inappropriate behaviors and improve safety culture as a positive social change.

For my research I focused on the real-world application of ideas and strategies to create positive social change. I had an interdisciplinary approach to social change as part of my dissertation research topic. The current literature on inappropriate behavior in healthcare organizations places an exclusive focus on individual actors and acts which directly shapes prevention and intervention practices limiting the potential for systematic long-term change (Kimes et al., 2015; Longo & Hain, 2014). Risk managers in this study were trained to conduct in-depth root cause analysis on all incidents and offer

multidisciplinary team approach for introducing long-term systematic solutions that could reduce errors and improve patient safety (Harvey et al., 2016).

In summary, as the result of my study I introduced solutions and better understanding of inappropriate behaviors among healthcare workers when developing standards, policies, and procedures. The early detection and effective management of inappropriate behaviors in healthcare organizations could lead to positive social change in the form of reduced medical errors and improved patient safety.

Conclusions

Medical errors are the third leading cause of death in the United States (Makary & Daniel, 2016). The general problem of this study was the mismanagement of patient safety issues in healthcare organizations resulting in unacceptable high patient mortality and harm (James, 2013; Shojania & Thomas, 2013). The specific problem I addressed as part of this study was inappropriate healthcare worker behaviors that lead to intimidation and loss of staff focus, eventually leading to errors (Grissinger, 2017; Longo & Newman, 2014). I used a new approach in my study, by taking the perspective of healthcare risk managers, to recommend a list of top important factors in recognizing and managing inappropriate behaviors in healthcare organizations, which may be used by healthcare managers to ultimately, mitigate the risk of preventable medical mishaps. As the result of this study, the expert panel of risk managers identified the following eight factors (in no specific order) as the top important factors in managing inappropriate behaviors

1. Setting expectations
2. Developing a culture of respect

3. Holding staff accountable
4. Enforcing a zero-tolerance policy
5. Confidentiality of reporting
6. Communicating expected behavior
7. Open communication
8. Investigating inappropriate behaviors

In conclusion, my study adds to the literature by offering the new perspective of healthcare risk managers to study the problem of inappropriate behaviors in healthcare organizations. As part of this study I also conveyed a previously missing consensus on the top important factors that healthcare managers can utilize to recognize and manage inappropriate behaviors. Therefore, the result of my study can offer a focused agenda when developing standards, policies, and procedures in addressing inappropriate behaviors in healthcare organizations. My study's future value and contribution is to patient safety as a positive social change by early detection and effective management of inappropriate behaviors in healthcare organizations.

References

- Agency for Healthcare Research and Quality. (2015). *Patient safety indicators overview*. Retrieved from http://www.qualityindicators.ahrq.gov/modules/psi_resources.aspx
- Agency for Healthcare Research and Quality. (2016). *Hospital survey on patient safety culture: 2012 user comparative database report*. Retrieved from <https://www.ahrq.gov/professionals/quality-patient-safety/patientsafetyculture/hospital/hosp-reports.html>
- Agency for Healthcare Research and Quality. (November, 2016). Quality and patient safety. Retrieved from <http://www.ahrq.gov/professionals/quality-patient-safety/index.html>
- Almost, J., Wolff, A. C., Stewart-Pyne, A., McCormick, L. G., Strachan, D., & D'Souza, C. (2016). Managing and mitigating conflict in healthcare teams: An integrative review. *Journal of Advanced Nursing*, 72 (7) 1490–1505. doi:10.1111/jan.12903
- Altmiller, G. (2012). Student perceptions of incivility in nursing education: Implications for educators. *Nursing Education Perspectives*, 33(1), 15-20. doi:10.5480/1536-5026-33.1.15
- American Association of Critical Care Nurses (2005). AACN standards for establishing and sustaining healthy work environments: A journey to excellence. *American Journal of Critical Care*, 14(3), 187–197. Retrieved from <http://ajcc.aacnjournals.org/content/14/3/187.short>

- American Society for Healthcare Risk Management (2010). *Workplace intimidation: The underestimated threat to patient safety*. Retrieved from <http://www.ashrm.org/pubs/index.dhtml>
- Amos, T., & Pearse, N. (2008). Pragmatic research design: An illustration of the use of the Delphi technique. *Electronic Journal of Business Research Methods*, 6(2), 95–102. Retrieved from <http://www.ejbrm.com/issue>
- Anderson, J. E., Kodate, N., Walters, R., & Dodds, A. (2013). Can incident reporting improve safety? Healthcare practitioners' views of the effectiveness of incident reporting. *International Journal for Quality in Health Care*, 25(2), 141–150. doi:10.1093/intqhc/mzs081
- Anney, V. N. (2014). Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2): 272–281. Retrieved from <https://www.semanticscholar.org>
- Antonelli, M. T., Seaver, D., & Urman, R. D. (2013). Procedural sedation and - implications for quality and risk management. *Journal of Healthcare Risk Management*, 33(2), 3–10. doi:10.1002/jhrm.21121
- Aon/ASHRM (2016). *Aon/ASHRAM Hospital and Physician Professional Liability Benchmark Report*. Retrieved from: <http://aon.mediaroom.com/news-releases?item=137469>
- Archer, S., Hull, L., Soukup, T., Mayer, E., Athanasiou, T., Sevdalis, N., & Darzi, A. (2017). Development of a theoretical framework of factors affecting patient

safety incident reporting: a theoretical review of the literature. *British Medical Journal open*, 7(12), e017155. doi:10.1136/bmjopen-2017-017155

Argyris C, & Schön DA (1978). *Organizational learning: A theory of action perspective*. Boston, MA: Addison-Wesley Publishing Company.

Bazeley, P., & Jackson, K. (Eds.). (2013). *Qualitative data analysis with NVivo*. London, England: Sage Publications Limited.

Beech, B. (1999). Go the extra mile use the Delphi technique. *Journal of Nursing Management*, 7(5), 281–288. doi:10.1046/j.1365-2834.1999.00125.x

Berger, R. (2013). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative research*, 15(2), 219–234.

doi:10.1177/1468794112468475

Berman-Kishony, T., & Shvarts, S. (2015). Universal versus tailored solutions for alleviating disruptive behavior in hospitals. *Israel Journal of Health Policy Research*, 4(1), 26. doi:10.1186/s13584-015-0018-7

Berry, P. A., Gillespie, G. L., Gates, D., & Schafer, J. (2012). Novice nurse productivity following workplace bullying. *Journal of Nursing Scholarship*, 44(1), 80–87.

doi:10.1111/j.1547-5069.2011.01436.x.

Blando, J. D., O'Hagan, E., Casteel, C., Nocera, M. A., & Peek-Asa, C. (2013). Impact of hospital security programs and workplace aggression on nurse perceptions of safety. *Journal of Nursing Management*, 21(3), 491–498. doi:10.1111/j.1365-2834.2012.01416.x

- Bokar, V. & Perry, D. (2007). Different roles, same goal: Risk and quality management partnering for patient safety. *Journal of Healthcare Risk Management*, 27(2):17–23, 25. doi:10.1002/jhrm.5600270205
- Borkowski, N. (2015). *Organizational behavior in health care*. Burlington, MA: Jones and Bartlett Publishers.
- Boysen, P. G. (2013). Just culture: A foundation for balanced accountability and patient safety. *The Ochsner Journal*, 13(3), 400–406. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3776518/>
- Brennan, T. A., Leape, L. L., Laird, N. M., Hebert, L., Localio, A. R., Lawthers, A. G., . . . & Hiatt, H. H. (1991). Incidence of adverse events and negligence in hospitalized patients: Results of the Harvard medical practice study I. *New England Journal of Medicine*, 324(6), 370–376. doi:10.1056/NEJM199102073240604
- Buchbinder, S. B. & Shanks, N. H. (2012). *An introduction to health care management*. Burlington, MA: Jones & Bartlett Learning.
- Bunting, R. F., & Groszkruger, D. P. (2016). From to err is human to improving diagnosis in health care: The risk management perspective. *Journal of Healthcare Risk Management*, 35(3), 10–23. doi:10.1002/jhrm.21205
- Card, A. J., & Klein, V. R. (2016). A new frontier in healthcare risk management: Working to reduce avoidable patient suffering. *Journal of Healthcare Risk Management*, 35(3), 31-37. doi:10.1002/jhrm.21207

- Card, A. J., Ward, J. R., & Clarkson, P. J. (2012). Getting to Zero: Evidence-based healthcare risk management is key. *Journal of Healthcare Risk Management*, 32(2), 20-27. doi:10.1002/jhrm.21091
- Card, A. J., Ward, J. R., & Clarkson, P. J. (2015). Rebalancing risk management—part 2: The active risk control (ARC) toolkit. *Journal of Healthcare Risk Management*, 34(3), 4-17. doi:10.1002/jhrm.21160
- Carroll, R. (2016). Identifying risks in the realm of enterprise risk management. *Journal of Healthcare Risk Management*, 35(3), 24–30. doi:10.1002/jhrm.21206
- Centers for Medicare and Medicaid Services. (2008). *CMS improves patient safety for Medicare and Medicaid by addressing never events*. Retrieved from <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2008-Fact-sheets-items/2008-08-042.html>
- Centers for Medicaid and Medicare services. (2017). *ICD-10 HAC List*. Retrieved from https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/icd10_hacs.html
- Chassin, M. R., & Loeb, J. M. (2013). High-reliability health care: Getting there from here. *Milbank Quarterly*, 91(3), 459–490. doi:10.1111/1468-0009.12023
- Chervenak, F. A., McCullough, L. B., & Brent, R. L. (2013). The professional responsibility model of physician leadership. *American Journal of Obstetrics and Gynecology*, 208(2), 97–101. doi:10.1016/j.ajog.2012.03.005
- Chilgren, A. A. (2008). Managers and the new definition of quality. *Journal of Healthcare Management*, 53(4), 221. doi:10.1097/00115514-200807000-00004

- Clark, C. M., Olender, L., Kenski, D., & Cardoni, C. (2013). Exploring and addressing faculty-to-faculty incivility: A national perspective and literature review. *Journal of Nursing Education*. doi:10.3928/01484834-20130319-01
- Classen, D. C., Resar, R., Griffin, F., Federico, F., Frankel, T., Kimmel, N., . . . & James, B. C. (2011). 'Global trigger tool' shows that adverse events in hospitals may be ten times greater than previously measured. *Health Affairs*, 30(4), 581–589. doi:10.1377/hlthaff.2011.0190
- Clayton, M. J. (1997). Delphi: A technique to harness expert opinion for critical decision-making tasks in education. *Educational Psychology*, 17(4), 373–386. doi:10.1080/0144341970170401
- Cooke, M. (2016). Team STEPPS for health care risk managers: Improving teamwork and communication. *Journal of Healthcare Risk Management*, 36(1), 35–45. doi:10.1002/jhrm.21233
- Cunningham, L. (1991). The quality connection in health care. *Journal for Healthcare Quality*, 13(6), 45.
- Delbecq, A. L., Van de Ven, A. H., & Gustafson, D. H. (1975). *Group techniques for program planning: A guide to nominal group and Delphi processes* (pp. 83–107). Glenview, IL: Scott, Foresman.
- Dellasega, C., Volpe, R.L., Edmonson, C., & Hopkins, M. (2014). An exploration of relational aggression in the nursing workplace. *Journal of Nursing Administration*, 44(4), 212–218. doi:10.1097/NNA.0000000000000052.

- Diederich Healthcare. (2017). *2017 Medical Malpractice Payout Analysis*. Retrieved from <http://www.diederichhealthcare.com/the-standard/2017-medical-malpractice-payout-analysis/>
- Dixon-Woods, M. (2010). Why is patient safety so hard? A selective review of ethnographic studies. *Journal of Health Services Research & Policy*, *15*(suppl 1), 11–16. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/20075122>
- Doherty, C., & Stavropoulou, C. (2012). Patients' willingness and ability to participate actively in the reduction of clinical errors: A systematic literature review. *Social science & medicine*, *75*(2), 257–263. doi:10.1016/j.socscimed.2012.02.056
- Donaldson, M. S., Corrigan, J. M., & Kohn, L. T. (Eds.). (2000). *To err is human: Building a safer health system* (Vol. 6). Washington, DC: National Academies Press.
- Du Plessis, E., & Human, S. P. (2007). The art of the Delphi technique: Highlighting its scientific merit. *Health SA Gesondheid*, *12*(4), 13–24. ISSN: 1025-9848. Retrieved from <https://hsag.co.za/index.php/hsag>
- Edhlund, B., & McDougall, A. (2016). *NVivo 11 Essentials*. Stallarholmen, Sweden: Form & Kunskap AB.
- Einarsen, S., Hoel, H., Zapf, D., & Cooper, C. L. (2011). The concept of bullying and harassment at work: The European tradition. *Bullying and harassment in the workplace* (3–40). Boca Raton, FL: CRC Press.
- Einarsen, S., Raknes, B.I., & Matthiesen, S.B. (1994). Bullying and harassment at work and their relationships to work environment quality: An exploratory study.

European Work and Organizational Psychologist, 4(4), 381–401.

doi:10.1080/13594329408410497

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014).

Qualitative content analysis: A focus on trustworthiness. *Sage Open*, 4(1),

2158244014522633. doi:10.1177/2158244014522633

Flostrand, A. (2016). Finding the future: Crowdsourcing versus the Delphi technique.

Business Horizons, 60(2), 229–236. doi:10.1016/j.bushor.2016.11.007

Frankel, A. S., Leonard, M. W., & Denham, C. R. (2006). Fair and just culture, team

behavior, and leadership engagement: The tools to achieve high

reliability. *Health Services Research*, 41(4p2), 1690–1709. doi:10.1111/j.1475-

6773.2006.00572.x

Gale, N. K., Shapiro, J., McLeod, H. S., Redwood, S., & Hewison, A. (2014). Patients-

people-place: developing a framework for researching organizational culture

during health service redesign and change. *Implementation Science*, 9(1), 106.

doi:10.1186/s13012-014-0106-z

Gittel, J. H. (2009). *High performance healthcare: Using the power of relationships to*

achieve quality, efficiency and resilience. New York, NY: McGraw Hill

Professional.

Goldenhar, L. M., Brady, P. W., Sutcliffe, K. M., & Muething, S. E. (2013). Huddling for

high reliability and situation awareness. *British Medical Journal Quality &*

Safety, 22(11), 899–906. doi:10.1136/bmjqs-2012-001467

- Griffin, F. A., Resar, R. K. (2009). *IHI global trigger tool for measuring adverse events* (Second Edition). IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement. Retrieved from <http://www.ihl.org/resources/pages/IHIWhitePapers/IHIGlobalTriggerToolWhitePaper.aspx>
- Grissinger, M. (2017). Unresolved disrespectful behavior in health care: practitioners speak up (again)—part 1. *Pharmacy and Therapeutics*, 42(1), 4. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5215268/>
- Grogan, M. J., & Knechtges, P. (2013). The disruptive physician: A legal perspective. *Academic Radiology*, 20(9), 1069–1073. doi:10.1016/j.acra.2013.04.015.
- Grout, J. (2007). Relationships to existing patient safety efforts and tools. *Mistake proofing the design of healthcare process* (pp. 23–37). Rockville, MD: AHRQ Publication.
- Center for disease control and prevention. (2017). *HAI Data and Statistics*. Retrieved from <https://www.cdc.gov/hai/surveillance/>
- Halligan, M., & Zecevic, A. (2011). Safety culture in healthcare: A review of concepts, dimensions, measures and progress. *British Medical Journal Quality & Safety*, 20(4), 338–343. doi:10.1136/bmjqs.2010.040964
- Hartung, S. Q., & Miller, M. (2013). Communication and the healthy work environment: Nurse managers' perceptions. *Journal of Nursing Administration*, 43(5), 266–273. doi:10.1097/NNA.0b013e31828eeb3c

- Harvey, H. B., Tomov, E., Babayan, A., Dwyer, K., Boland, S., Pandharipande, P. V., . . . & Boland, G. W. (2016). Radiology malpractice claims in the United States from 2008 to 2012: Characteristics and implications. *Journal of the American College of Radiology, 13*(2), 124–130. doi:10.1016/j.jacr.2015.07.013
- Health Grades. (2004). *Patient safety in American hospitals*. Retrieved from http://www.providersedge.com/ehr_articles_reports.htm
- Health Quality Ontario. (2017). Patient Safety Learning Systems: A Systematic Review and Qualitative Synthesis. *Ontario health technology assessment series, 17*(3), 1–23. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/28326148>
- Herndon, J. H. (2015). Editorial comment symposium: Patient safety: Collaboration, communication, and physician leadership. *Clinical Orthopaedics and Related Research, 473*(5), 1566–1567. doi:10.1007/s11999-014-4122-8.
- Hsu, C. C., & Sandford, B. A. (2007). Minimizing non-response in the Delphi process: How to respond to non-response. *Practical Assessment, Research & Evaluation, 12*(17), 62–78. Retrieved from <http://pareonline.net/getvn.asp?v=12&n=17>
- Hudson, P. (2003). Applying the lessons of high risk industries to health care. *Quality and safety in health care, 12*(supplement 1), i7–i12. doi:10.1136/qhc.12.suppl_1.i7
- Institute for Healthcare Improvement. (n.d.). *Failure Modes and Effects Analysis (FMEA) Tool*. Retrieved from

<http://www.ihi.org/resources/pages/tools/failuremodesandeffectsanalysisistool.asp>

x

Institute for Safe Medication Practices. (2004). *Survey shows workplace intimidation adversely affects patient safety*. Retrieved from

https://www.ismp.org/newsletters/acutecare/articles/20040311_2.asp

International Organization for Standardization. (2015). *ISO 9000 - Quality Management*.

Retrieved from: http://www.iso.org/iso/iso_9000

James, J. T. (2013). A new, evidence-based estimate of patient harms associated with hospital care. *Journal of Patient Safety*, 9(3), 122–128.

doi:10.1097/PTS.0b013e3182948a69

The Joint Commission. (2008). Behaviors that undermine a culture of safety. (2008).

Retrieved from

https://www.jointcommission.org/sentinel_event_alert_issue_40_behaviors_that_undermine_a_culture_of_safety/

The Joint Commission. (2008). *Sentinel event alert daily update*. Retrieved from

https://www.jointcommission.org/daily_update/joint_commission_daily_update.aspx?k=721&b=&t=4

Kim, A., Ford, E., Spraker, M., Zeng, J., Ermoian, R., Jordan, L., . . . & Nyflot, M.

(2017). Are we making an impact with incident learning systems? Analysis of quality improvement interventions using total body irradiation as a model

system. *Practical Radiation Oncology* 7(6), 418–424.

doi:10.1016/j.prro.2017.05.010

- Kimes, A., Davis, L., Medlock, A., & Bishop, M. (2015). 'I'm not calling him!': Disruptive physician behavior in the acute care setting. *MedSurg Nursing*, 24(4), 223–228. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/26434034>
- Kuhn, A. M., & Youngberg, B. J. (2002). The need for risk management to evolve to assure a culture of safety. *Quality and Safety in Health Care*, 11(2), 158–162. doi:10.1136/qhc.11.2.158
- La Porte, T. R., Roberts, K., & Rochlin, G. (1987). High reliability organizations: The research challenge, revision of La Porte, T. R: High Reliability Organizations: The problem and its research dimensions', institute of governmental studies. *University of California at Berkeley, Working Paper*.
- Landrigan, C. P., Parry, G. J., Bones, C. B., Hackbarth, A. D., Goldmann, D. A., & Sharek, P. J. (2010). Temporal trends in rates of patient harm resulting from medical care. *New England Journal of Medicine*, 363(22), 2124–2134. doi:10.1056/NEJMsa1004404
- Leape, L. L., Shore, M. F., Dienstag, J. L., Mayer, R. J., Edgman-Levitan, S., Meyer, G. S., & Healy, G. B. (2012). Perspective: A culture of respect, part 1: The nature and causes of disrespectful behavior by physicians. *Academic Medicine*, 87(7), 845–852. doi:10.1097/ACM.0b013e318258338d
- Leape, L.L., Lawthers A.G., Brennan T.A., Johnson W.G. (1993). Preventing medical injury. *Quality Review Bulletin*, 19(5), 144–149. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/8332330>

- Leon-Perez, J. M., Notelaers, G., & Leon-Rubio, J. M. (2016). Assessing the effectiveness of conflict management training in a health sector organization: Evidence from subjective and objective indicators. *European Journal of Work and Organizational Psychology, 25*(1), 1–12.
doi:10.1080/1359432X.2015.1010520
- Levinson, D. R. (2010). *Adverse events in hospitals: National incidence among Medicare beneficiaries*. Retrieved from Department of Health and Human Services office of inspector general, <https://oig.hhs.gov/reports-and-publications/index.asp>
- Levinson, D. R. (2012). *Hospital incident reporting systems do not capture most patient harm*. Washington DC: Office of the Inspector General. Retrieved from <https://psnet.ahrq.gov/resources/resource/23842/hospital-incident-reporting-systems-do-not-capture-most-patient-harm>
- Leymann, H. (1990). Mobbing and psychological terror at workplaces. *Violence and Victims, 5*(2), 119–126. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/2278952>
- Linstone, H.A. & Turoff, M. (1975). *The Delphi method: Techniques and applications*. London, England: Addison-Wesley Publishing Company.
- Longo, J. & Newman, D. (2014). The development and psychometric testing of the horizontal violence scale. *Issues in Mental Health Nursing, 35*(12), pp. 924–933.
doi:10.3109/01612840.2014.932871.

- Longo, J., & Hain, D. (2014). Bullying: A hidden threat to patient safety. *Nephrology Nursing Journal*, 41(2), 193. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/24818452>
- Macrae, C. (2016). The problem with incident reporting. *British Medical Journal Quality and Safety*. doi:10.1136/bmjqs-2015-004732
- Mahajan, R. P. (2010). Critical incident reporting and learning. *British Journal of Anaesthesia*, 105(1), 69–75. doi:10.1093/bja/aeq133
- Makary, M. A., & Daniel, M. (2016). Medical error the third leading cause of death in the US. *The British Medical Journal*, 353, i2139. doi:10.1136/bmj.i2139
- McCannon, C. J., Hackbarth, A. D., & Griffin, F. A. (2007). Miles to go: An introduction to the 5 million lives campaign. *The Joint Commission Journal on Quality and Patient Safety*, 33(8), 477–484. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/17724944>
- McGinnis, S. K. (2007). Organizational behavior and management thinking. *Introduction to Health Care Management* (pp. 37-57). Burlington, MA: Jones & Bartlett Learning.
- McLaughlin, S., Pearce, R., & Trenoweth, S. (2013). Reducing conflict on wards by improving team communication: Sue McLaughlin and colleagues evaluate a pilot study that used interactive teaching methods to enable staff to rehearse real-life scenarios. *Mental Health Practice*, 16(5), 29–31. doi:10.7748/mhp2013.02.16.5.29.s9541

- McMillan, S. S., King, M., & Tully, M. P. (2016). How to use the nominal group and Delphi techniques. *International journal of clinical pharmacy*, 38(3), 655–662. doi:10.1007/s11096-016-0257-x
- Meara, J. G. (2013). New approaches to liability reform: An introduction. *Bulletin of the American College of Surgeons*, 98, 10–12. Retrieved from <http://bulletin.facs.org/archives/2013-2/#.Wn9Z1q5KvIU>
- Medicare. (2017). Total performance score information. Retrieved from <https://www.medicare.gov/HospitalCompare/Data/total-performance-scores.html>
- Messano, G. A., De Bono, V., Di Folco, F., & Marsella, L. T. (2013). Past and present of risk management in healthcare. *Igiene e Sanita Pubblica*, 70(4), 423–430. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/?term=25353272>
- Miller, L. E. (2006). Determining what could/should be: The Delphi technique and its application. In meeting of the 2006 annual meeting of the Mid-Western Educational Research Association, Columbus, Ohio.
- Mitchell, I., Schuster, A., Smith, K., Pronovost, P., & Wu, A. (2015). Patient safety reporting: a qualitative study of thoughts and perceptions of experts 15 years after ‘To Err is Human’. *British Medical Journal Quality and Safety*, 25(2). doi:10.1136/bmjqs-2015-004405
- Munn, Z., Porritt, K., Lockwood, C., Aromataris, E., & Pearson, A. (2014). Establishing confidence in the output of qualitative research synthesis: The ConQual approach. *BMC medical research methodology*, 14(1), 108. doi:10.1186/1471-2288-14-108

- National Quality Forum. (2009). *Patient safety terms and definitions*. Retrieved from:
https://www.qualityforum.org/Topics/Safety_Definitions.aspx
- National Quality Forum. (2011). *Serious reportable events in healthcare*. Retrieved from:
http://www.qualityforum.org/projects/hacs_and_sres.aspx
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-Based Nursing Published Online*. doi:10.1136/eb-2015-102054
- NVivo (Version 11) [Computer Software]. Victoria, Australia: QSR International.
Retrieved from: <http://www.qsrinternational.com/nvivo/nvivo-products/nvivo11-for-windows>
- Overton, A. R., & Lowry, A. C. (2013). Conflict management: Difficult conversations with difficult people. *Clinics in Colon and Rectal Surgery*, 26(4), 259.
doi:10.1055/s-0033-1356728
- Pagliari, C., Grimshaw, J., & Eccles, M. (2001). The potential influence of small group processes on guideline development. *Journal of evaluation in clinical practice*, 7(2), 165–173. doi:10.1046/j.1365-2753.2001.00272.x
- Parikh, J. R., Harolds, J. A., & Bluth, E. I. (2017). Workplace Bullying in Radiology and Radiation Oncology. *Journal of the American College of Radiology*, 14(8), 1089–1093. doi:10.1016/j.jacr.2016.12.021
- Press, I. (2006). *Patient satisfaction: Understanding and managing the experience of care*. Ann Arbor, MI: Health Administration Press.

- Pruitt, D. G., & Rubin, J. Z. (1986). *Social conflict: Escalation, impasse, and resolution*. Reding, MA: Addison-Wesley.
- Pulford, J., Adams, P., & Sheridan, J. (2009). Developing a clinical assessment model suited to use in an agency providing short-term substance use treatment: Findings from a Delphi survey of expert opinion. *Administration and Policy in Mental Health and Mental Health Services Research, 36*(5), 322–330.
doi:10.1007/s10488-009-0223-1
- Radley, D. C., Wasserman, M. R., Olsho, L. E., Shoemaker, S. J., Spranca, M. D., & Bradshaw, B. (2013). Reduction in medication errors in hospitals due to adoption of computerized provider order entry systems. *Journal of the American Medical Informatics Association, 20*(3), 470–476. doi:10.1136/amiajnl-2012-001241
- Rawson, J. V., Thompson, N., Sostre, G., & Deitte, L. (2013). The cost of disruptive and unprofessional behaviors in health care. *Academic radiology, 20*(9), 1074–1076.
doi:10.1016/j.acra.2013.05.009
- Rosenstein, A. (2015). Addressing the causes and consequences of disruptive behaviors in the healthcare setting. *Journal of Psychology and Clinical Psychiatry, 3*(3), 1–3. doi:10.15406/jpcpy.2015.03.00136
- Rosenstein, A. H., & O'Daniel, M. (2005). Original research: Disruptive behavior and clinical outcomes: Perceptions of nurses and physicians. *The American Journal of Nursing, 105*(1), 54–64. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/15659998>

- Rosenstein, A. H., & O'Daniel, M. (2008). A survey of the impact of disruptive behaviors and communication defects on patient safety. *The Joint Commission Journal on Quality and Patient Safety*, 34(8), 464–471. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/18714748>
- Ruchlin, H. S., Dubbs, N. L., Callahan, M. A., & Fosina, M. J. (2004). The role of leadership in instilling a culture of safety: Lessons from the literature. *Journal of Healthcare Management*, 49(1), 47. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/14768428>
- Sanchez, L. T. (2014). Disruptive behaviors among physicians. *The Journal of American Medical Association*, 312(21), 2209–2210. doi:10.1001/jama.2014.10218
- Satiani, B., Sena, J., Ruberg, R., & Ellison, E. C. (2014). Talent management and physician leadership training is essential for preparing tomorrow's physician leaders. *Journal of Vascular Surgery*, 59(2), 542–546. doi:10.1016/j.jvs.2013.10.074
- Shojania, K. G., & Thomas, E. J. (2013). Trends in adverse events over time: Why are we not improving? *British Medical Journal quality & safety*, 22(4), 273–277. doi:10.1136/bmjqs-2013-001935
- Simmons, S. (2008). Tackling patient safety taxonomy: A must for risk managers. *Journal of Healthcare Risk Management*, 28(1), 7–17. doi:10.1002/jhrm.5600280103

- Simpson, K. R. (2017). Disruptive Behavior in the Clinical Setting: Implications for Patient Safety. *MCN: The American Journal of Maternal/Child Nursing*, 42(3), 188. doi:10.1097/NMC.0000000000000334
- Skulmoski, G. J., Hartman, F. T., & Krahn, J. (2007). The Delphi method for graduate research. *Journal of information technology education*, 6, 1. ISSN: ISSN-1547-9714. Retrieved from <https://eric.ed.gov/?id=EJ807652>
- Springer, R. (2008). Disruptive Behavior—Patient Safety at Risk. *Plastic Surgical Nursing*, 28(4), 213–215. doi:10.1097/PSN.0b013e31818ea7f7
- Stanley, J. T., Lohani, M., & Isaacowitz, D. M. (2014). Age-related differences in judgments of inappropriate behavior are related to humor style preferences. *Psychology and Aging*, 29(3), 528. doi:10.1037/a0036666
- Starmer, A. J., Spector, N. D., Srivastava, R., West, D. C., Rosenbluth, G., Allen, A. D., . . . & Lipsitz, S. R. (2014). Changes in medical errors after implementation of a handoff program. *New England Journal of Medicine*, 371(19), 1803–1812. doi:10.1056/NEJMsa1405556
- Stavropoulou, C., Doherty, C., & Tosey, P. (2015). How effective are incident-reporting systems for improving patient safety? a systematic literature review. *Milbank Quarterly*, 93(4), 826–866. doi:10.1111/1468-0009.12166
- Streimelweger, B., Wac, K., & Seiringer, W. (2015). Improving patient safety through human-factor-based risk management. *Procedia Computer Science*, 64, 79–86. doi:10.1016/j.procs.2015.08.466

- Streimelweger, B., Wac, K., Seiringer, W., & Geneva (2016). Human-factor-based risk management in the healthcare to improve patient safety. *International Journal of E-Health and Medical Communications (IJEHMC)*, 7(3), pp. 16–28. doi:1947-315X10.4018/IJEHMC.2016070102.
- Sujan, M. (2015). An organisation without a memory: A qualitative study of hospital staff perceptions on reporting and organisational learning for patient safety. *Reliability engineering & system safety*, 144, 45–52. doi:10.1016/j.res.2015.07.011
- Survey Monkey (Version 11) [Online survey tool]. San Mateo, CA. Retrieved from <https://www.surveymonkey.com/>
- Sutcliffe, K. M., Paine, L., & Pronovost, P. J. (2016). Re-examining high reliability: Actively organizing for safety. *British Medical Journal Quality & Safety*, bmjqs-2015. doi:10.1136/bmjqs-2015-004698
- Tamuz, M., & Harrison, M. I. (2006). Improving patient safety in hospitals: Contributions of high-reliability theory and normal accident theory. *Health Services Research*, 41(4p2), 1654–1676. doi:10.1111/j.1475-6773.2006.00570.x
- Tolk, J. N., Cantu, J., & Beruvides, M. (2015). High reliability organization research: A literature review for health care. *Engineering Management Journal*, 27(4), 218–237. doi:10.1080/10429247.2015.1105087
- Travaglia, J. F., Westbrook, M. T., & Braithwaite, J. (2009). Implementation of a patient safety incident management system as viewed by doctors, nurses and allied health professionals. *Health*, 13(3), 277–296. doi:10.1177/1363459308101804

- Ulrich, B.T., Lavandero, R., Woods, D. & Early, S. (2014). Critical care nurse work environments 2013: A status report. *Critical Care Nurse*, 34(4), pp. 64–79. doi:10.4037/ccn2014731.
- Van Den Bos, J., Rustagi, K., Gray, T., Halford, M., Ziemkiewicz, E. & Shreve, J. (2011). The \$17.1 Billion problem: The annual cost of measurable medical errors. *Health Affairs*, 30(4), 596–603. doi:10.1377/hlthaff.2011.0084.
- Vessey, J. A., DeMarco, R. F., Gaffney, D. A., & Budin, W. C. (2009). Bullying of staff registered nurses in the workplace: A preliminary study for developing personal and organizational strategies for the transformation of hostile to healthy workplace environments. *Journal of Professional Nursing*, 25(5), 299–306. doi: 10.1016/j.profnurs.2009.01.022
- Vincent, C., Burnett, S., & Carthey, J. (2014). Safety measurement and monitoring in healthcare: A framework to guide clinical teams and healthcare organisations in maintaining safety. *British Medical Journal Quality and Safety*, 23(8), 670–677. doi:10.1136/bmjqs-2013-002757
- Vogus, T. J., & Hilligoss, B. (2016). The underappreciated role of habit in highly reliable healthcare. *British Medical Journal Quality and Safety*, 25(3), 141–146. doi:10.1136/bmjqs-2015-004512
- Walden University. (2014). *Social change impact report*. Retrieved from <https://www.waldenu.edu/about/social-change/impact-report-2014>
- Waring, J. J. (2005). Beyond blame: cultural barriers to medical incident reporting. *Social Science & Medicine*, 60(9), 1927–1935. doi:10.1016/j.socscimed.2004.08.055

- Washington State Department of Labor & Industries, SHARP. (2013). *Workplace bullying and disruptive behavior: What everyone needs to know*. Retrieved from <http://www.lni.wa.gov/Safety/Research/Workplacebullying/Default.asp>
- Webb, L. E., Dmochowski, R. R., Moore, I. N., Pichert, J. W., Catron, T. F., Troyer, M., . . . & Hickson, G. B. (2016). Using co-worker observations to promote accountability for disrespectful and unsafe behaviors by physicians and advanced practice professionals. *The Joint Commission Journal on Quality and Patient Safety*, 42(4), 149–AP3. doi:10.1016/S1553-7250(16)42019-2
- Weick, K.E., and K.M. Sutcliffe. 2007. *Managing the Unexpected*. 2nd ed. San Francisco, CA: Jossey-Bass.
- Weller, J., Boyd, M., & Cumin, D. (2014). Teams, tribes and patient safety: Overcoming barriers to effective teamwork in healthcare. *Postgraduate Medical Journal*, 90(1061), 149–154. doi:10.1136/postgradmedj-2012-131168
- World Health Organization. (2000). *The world health report*. Retrieved from: <http://www.who.int/whr/2000/en/>
- Ziglio, E. (1996). The Delphi method and its contribution to decision-making. In M. Adler & E. Ziglio (Eds.), *Gazing into the oracle: The Delphi method and its application to social policy and public health* (pp. 3–33). London, England: Kingsley.
- Zilberberg, M. D. (2011). The clinical research enterprise: Time to change course?. *Journal of American Medical Association*, 305(6), 604–605. doi:10.1001/jama.2011.104

Appendix A: Reprinting permissions

Permissions for Figure 1

License Number	4063240769168
License date	Mar 06, 2017
Licensed Content Publisher	BMJ Publishing Group Ltd.
Licensed Content Publication	BMJ Quality and Safety
Licensed Content Title	Safety measurement and monitoring in healthcare: a framework to guide clinical teams and healthcare organisations in maintaining safety
Licensed Content Author	Charles Vincent,Susan Burnett,Jane Carthey
Licensed Content Date	Aug 1, 2014
Licensed Content Volume	23
Licensed Content Issue	8
Volume number	23
Issue number	8
Type of Use	Dissertation/Thesis
Requestor type	Individual
Format	Print and electronic
Portion	Figure/table/extract
Number of figure/table/extracts	1
Description of figure/table/extracts	Figure 1.
Will you be translating?	No
Circulation/distribution	1
Title of your thesis / dissertation	The role of managers in recognizing and managing inappropriate behavior in healthcare
Expected completion date	Mar 2018
Estimated size(pages)	150
Requestor Location	Sahar Ebrahim Zadeh [REDACTED] Attn: Sahar Ebrahim Zadeh
Publisher Tax ID	GB674738491
Billing Type	Invoice
Billing address	Sahar Ebrahim Zadeh [REDACTED] Attn: Sahar Ebrahim Zadeh
Total	0.00 USD

Permission for Table 1

Reply | Delete | Junk | ...

Dear Sahar Ebrahim Zadeh

Thank you for your email.

Permission is granted for you to use the material requested for your thesis/dissertation subject to the usual acknowledgements (author, title of material, title of book/journal, ourselves as publisher) and on the understanding that you will reply for permission if you wish to distribute or publish your thesis/dissertation commercially.

You should also duplicate the copyright notice that appears in the Wiley publication in your use of the Material. Permission is granted solely for use in conjunction with the thesis, and the material may not be posted online separately.

Any third party material is expressly excluded from this permission. If any material appears within the article with credit to another source, authorisation from that source must be obtained.

Best wishes,

Kelly Hoff
Permissions Coordinator
Copyright & Permissions

WILEY

From: Sahar Zadeh [REDACTED]
Sent: 10 March 2017 04:15
To: RightsLink
Subject: Request permission

Dear Sir/Madam,

I'd like to request permission to reprint table 2 (Stages of Organizational Maturity) from the article "High-reliability health care: getting there from here." by Chassin, M. R. & Loeb, J. M. (2013). *Milbank Quarterly*, 91(3), 459-490. DOI: 10.1111/1468-0009.12023

For some reason when I try to get the permission through the RightsLink I get this message:
"Content Excluded
Permission to reproduce this content cannot be granted via the RightsLink® service."

Permission for Table 2

Your confirmation email will contain your order number for future reference.

[Printable details.](#)

License Number	4065121492441
License date	Mar 09, 2017
Licensed Content Publisher	John Wiley and Sons
Licensed Content Publication	JOURNAL OF HEALTHCARE RISK MANAGEMENT
Licensed Content Title	Identifying risks in the realm of enterprise risk management
Licensed Content Author	Roberta Carroll
Licensed Content Date	Jan 20, 2016
Licensed Content Pages	7
Type of use	Dissertation/Thesis
Requestor type	University/Academic
Format	Print and electronic
Portion	Figure/table
Number of figures/tables	1
Original Wiley figure/table number(s)	Table 2, Risk and Opportunity Identification methods
Will you be translating?	No
Title of your thesis / dissertation	The role of managers in recognizing and managing inappropriate behavior in healthcare
Expected completion date	Mar 2018
Expected size (number of pages)	150
Requestor Location	Sahar Ebrahim Zadeh [REDACTED] Attn: Sahar Ebrahim Zadeh
Publisher Tax ID	EU826007151
Billing Type	Invoice
Billing address	Sahar Ebrahim Zadeh [REDACTED] Attn: Sahar Ebrahim Zadeh
Total	0.00 USD

Appendix B: Round One Questionnaire

Dear research participant,

Thank you for agreeing to participate in the study of “The role of risk managers in recognizing and managing inappropriate behavior in healthcare”. The purpose of this study is to seek consensus among a panel of experts in hospital risk management practices as to the practical methods for early detection of inappropriate behaviors among hospital staff, which may be utilized by hospital managers to considerably mitigate the risk of medical mishaps. Your participation will help to answer the research question of “What are the practical methods for early detection of inappropriate behavior among hospital staff, which may be utilized to ultimately mitigate the risk of preventable medical mishaps?”

Inappropriate behavior in any form poses a risk to patients in healthcare settings. Inappropriate behavior is most commonly thought of, discussed, and addressed as overt, dramatic events involving two or more staff. The Joint Commission (2008) identifies behaviors such as verbal outbursts and physical threats, reluctance or refusal to answer questions or return phone calls or pages, condescending language or voice intonation, and impatience with questions as damaging to team effectiveness and patient safety. Please answer the following questions to the best of your ability using your expertise as a risk manager.

1. What are the drivers of inappropriate behaviors in workplace?
2. What are the managers’ roles in managing inappropriate behavior in workplace?

3. What is the role of organizational culture in the prevention of inappropriate behavior in workplace?
4. What tools are needed to manage inappropriate behavior in workplace?
5. Please provide any elaboration that may help to answer the research question “what are the practical methods for early detection of inappropriate behavior among hospital staff, which may be utilized to ultimately mitigate the risk of preventable medical mishaps?”

Appendix C: E-mail Invitation to Prospective Participants

Dear risk manager:

I am seeking individuals with experience in risk management and patient safety to serve on a panel of experts for my research study. My research study is titled: “The role of risk managers in recognizing and managing inappropriate behavior in healthcare organizations” and will consist of three sequential questionnaires. The questionnaires will be online and would probably take between 15 to 30 minutes to complete.

Participants will first fill out an open-ended questionnaire containing five questions and will provide their expert opinions on best methods to recognize and manage inappropriate behaviors. Participants will answer these questions by considering their knowledge and experience of managing medical errors that caused patient harm and their root causes were identified as inappropriate behavior. The second questionnaire will be sent a few weeks after the first one and provide an itemized summary of all the suggestions by all the panelists anonymously. Participants will rate the items and indicate their degree of agreement with each item on a 5-point Likert scale. The third and final questionnaire will be sent a few weeks after the second questionnaire. The final questionnaire will provide a shortened list of items that were identified as the result of the second questionnaire and participants are asked to select the top 10 most important items from this list. The final result will provide a consensus and answer my research question.

To participate in the study on the panel of experts, participants must meet the following criteria:

1) Have been practicing risk management in a healthcare setting for 5 years or more; 2) Have been involved in patient safety programs, root cause analysis including cases of inappropriate behavior, incident reporting, policy development, quality improvement initiatives, and regulatory compliance.

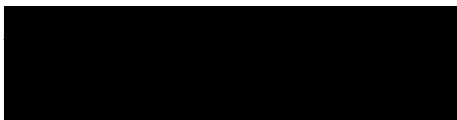
If you are willing to serve on the panel of expert please read the attached consent form and reply to this e-mail ██████████@██████████ to confirm your willingness by typing "I consent" in the e-mail.

If you have questions related to the study or consent form, please contact me at [██████████](tel:██████████) or via the e-mail address provided above.

Thank you in advance for your cooperation.

Sahar Ebrahim Zadeh

Doctoral Student at Walden University (PhD in management)



Appendix D: E-mail Reminder to Participants: Round One

Dear risk managers,

Three/five days ago, I sent you an e-mail inviting you to participate in a research study. Some of you have completed the questionnaire and I thank you. There is still time to participate and this is a reminder to encourage you to review the information below and complete the first questionnaire. I thank you so much in advance for your help.

I am seeking individuals with experience in risk management and patient safety to serve on a panel of experts for my research study and I need your help. My research study is titled “The role of risk managers in recognizing and managing inappropriate behavior in healthcare organizations” and will consist of three sequential questionnaires. The questionnaires will be online and would probably take between 15 to 30 minutes to complete.

Participants will first fill out an open-ended questionnaire containing five questions and will provide their expert opinions on best methods to recognize and manage inappropriate behaviors. Participants will answer these questions by considering their knowledge and experience of managing medical errors that caused patient harm and their root causes were identified as inappropriate behavior. The second questionnaire will be sent a few weeks after the first one and provide an itemized summary of all the suggestions by all the panelists anonymously. Participants will rate the items and indicate their degree of agreement with each item on a 5-point Likert scale. The third and final questionnaire will be sent a few weeks after the second questionnaire. The final questionnaire will provide a shortened list of items that were identified as the result of the

second questionnaire and participants are asked to select the top 10 most important items from this list. The final result will provide a consensus and answer my research question.

To participate in the study on the panel of experts, participants must meet the following criteria:

1) Have been practicing risk management in a healthcare setting for 5 years or more; 2) Have been involved in patient safety programs, root cause analysis including cases of inappropriate behavior, incident reporting, policy development, quality improvement initiatives, and regulatory compliance.

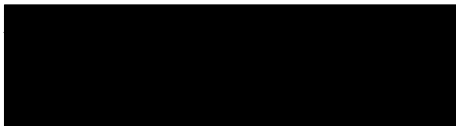
If you are willing to serve on the panel of expert please read the attached consent form and reply to this e-mail [REDACTED] to confirm your willingness by typing "I consent" in the e-mail.

If you have questions related to the study or consent form, please contact me at [REDACTED] or via the e-mail address provided above.

Thank you in advance for your cooperation.

Sahar Ebrahim Zadeh

Doctoral Student at Walden University (PhD in management)



Appendix E: E-mail Reminder Sent to Participants for Delphi Rounds Two and Three

Dear research participant,

Some of you have completed the questionnaire and I thank you. There is still time to complete the questionnaire. This questionnaire may take 15 to 20 minutes to complete.

Below is a web link to the questionnaire. You may click on the link to be directed to the questionnaire. If clicking the link doesn't work you can copy the link and paste it in your browser.

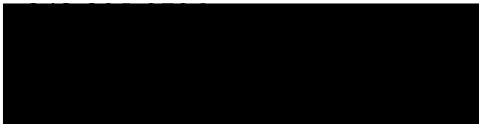
Link to questionnaire:

xxxxxxx

Thank you,

Sahar Ebrahim Zadeh

Doctoral Student at Walden University (PhD in management)



Appendix F: Summary of all Round Two Data Statistics

Table F1

Summary of Statistics

	Not at all important	Less important	Important	Very important	Extremely important	Total responds	Weighted Average
Q1. "Competition" as a driver of inappropriate behavior	22.22%	22.22%	38.89%	11.11%	5.56%	18	2.56
Q2. "Failure to recognize the behavior" as a driver of inappropriate behavior	6.25%	6.25%	18.75%	43.75%	25.00%	16	3.75
Q3. "Feeling unheard and devalued" as a driver of inappropriate behavior	0.00%	11.76%	17.65%	47.06%	23.53%	17	3.82
Q4. Hierarchical work culture allows those who drive income to misbehave and not be held accountable	6.25%	6.25%	31.25%	18.75%	37.50%	16	3.75
Q5. "Inefficient processes" as a driver of inappropriate behavior	0.00%	17.65%	29.41%	23.53%	29.41%	17	3.65
Q6. "Lack of communication skills" as a driver of inappropriate behavior in the workplace	0.00%	0.00%	18.75%	43.75%	37.50%	16	4.19
Q7. "Lack of resources" as a driver of inappropriate behavior	0.00%	31.25%	25.00%	31.25%	12.50%	16	3.25
Q8. "Lack of staff engagement" as a driver of inappropriate behavior	0.00%	5.88%	35.29%	17.65%	41.18%	17	3.94
Q9. "Learned behavior (Sticking to the status quo)" as a driver of inappropriate behavior	0.00%	6.25%	31.25%	43.75%	18.75%	16	3.75
Q10. "Not celebrating good behavior" as a driver of inappropriate behavior	0.00%	17.65%	29.41%	35.29%	17.65%	17	3.53
Q11. "Personality differences" as a driver of inappropriate behavior	0.00%	31.25%	37.50%	25.00%	6.25%	16	3.06
Q12. "Poor hiring processes" as a driver of inappropriate behavior	0.00%	5.88%	29.41%	41.18%	23.53%	17	3.82
Q13. "Reluctance to report inappropriate behaviors" as a driver of inappropriate behavior	0.00%	0.00%	12.50%	25.00%	62.50%	16	4.50
Q14. "Role modeling" as a driver of inappropriate behavior	0.00%	0.00%	23.53%	52.94%	23.53%	17	4.00

(table continues)

	Not at all important	Less important	Important	Very important	Extremely important	Total responds	Weighted Average
Q15. "Stress" as a driver of inappropriate behavior	0.00%	0.00%	58.82%	23.53%	17.65%	17	3.59
Q16. "Tolerance for inappropriate behavior" as a driver of inappropriate behavior	0.00%	0.00%	6.25%	18.75%	75.00%	16	4.69
Q17. "Unhappiness with the workplace" as a driver of inappropriate behavior	0.00%	12.50%	31.25%	31.25%	25.00%	16	3.69
Q18. "Workload fatigue" as a driver of inappropriate behavior	0.00%	11.76%	35.29%	35.29%	17.65%	17	3.59
Q19. "Acknowledging there is a problem" as managers' roles in managing inappropriate behavior in workplace	0.00%	0.00%	5.56%	33.33%	61.11%	18	4.56
Q20. "Being proactive in identification and remediation" as managers' roles in managing inappropriate behavior in workplace	0.00%	0.00%	11.11%	27.78%	61.11%	18	4.50
Q21. "Celebrate appropriate behavior" as managers' roles in managing inappropriate behavior in workplace	0.00%	22.22%	0.00%	44.44%	33.33%	18	3.89
Q22. "Communicating expected behavior" as managers' roles in managing inappropriate behavior in workplace	0.00%	0.00%	5.88%	29.41%	64.71%	17	4.59
Q23. "Develop culture of respect" as managers' roles in managing inappropriate behavior in workplace	0.00%	0.00%	23.53%	17.65%	58.82%	17	4.35
Q24. "Encourage reporting of inappropriate behaviors" as managers' roles in managing inappropriate behavior in workplace	0.00%	5.88%	5.88%	41.18%	47.06%	17	4.29
Q25. "Enforce zero tolerance policy" as managers' roles in managing inappropriate behavior in workplace	0.00%	11.76%	5.88%	17.65%	64.71%	17	4.35
Q26. "Having close relationship with staff" as managers' roles in managing inappropriate behavior in workplace	0.00%	29.41%	47.06%	17.65%	5.88%	17	3.00
Q27. "Holding staff accountable" as managers' roles in managing inappropriate behavior in workplace	0.00%	0.00%	5.88%	35.29%	58.82%	17	4.53
Q28. "Investigate inappropriate behaviors" as managers' roles in managing inappropriate behavior in workplace	0.00%	0.00%	5.88%	35.29%	58.82%	17	4.53
Q29. "Provide timely feedback on incidents" as managers' roles in managing inappropriate behavior in workplace	0.00%	0.00%	11.76%	29.41%	58.82%	17	4.47

(table continues)

	Not at all important	Less important	Important	Very important	Extremely important	Total responds	Weighted Average
Q30. "Taking consistent corrective and disciplinary action" as managers' roles in managing inappropriate behavior in workplace	0.00%	0.00%	5.88%	29.41%	64.71%	17	4.59
Q31. "Working with HR" as managers' roles in managing inappropriate behavior in workplace	5.88%	5.88%	23.53%	41.18%	23.53%	17	3.71
Q32. "Creating a positive and supportive environment" as the role of organizational culture in the prevention of inappropriate behavior in the workplace	0.00%	5.88%	23.53%	11.76%	58.82%	17	4.24
Q33. "Flattening hierarchy" as the role of organizational culture in the prevention of inappropriate behavior in the workplace	5.88%	35.29%	5.88%	23.53%	29.41%	17	3.35
Q34. "Leadership involvement" as the role of organizational culture in the prevention of inappropriate behavior in the workplace	0.00%	0.00%	5.88%	29.41%	64.71%	17	4.59
Q35. "Non-punitive constructive correction" as the role of organizational culture in the prevention of inappropriate behavior in the workplace	5.88%	5.88%	17.65%	35.29%	35.29%	17	3.88
Q36. "Setting expectations" as the role of organizational culture in the prevention of inappropriate behavior in the workplace	0.00%	0.00%	0.00%	35.29%	64.71%	17	4.65
Q37. "Support for victims" as the role of organizational culture in the prevention of inappropriate behavior in the workplace	5.88%	0.00%	23.53%	35.29%	35.29%	17	3.94
Q38. "Allow adequate time for trainings" as trainings needed to manage inappropriate behavior in the workplace	5.88%	0.00%	29.41%	29.41%	35.29%	17	3.88
Q39. "Change management training" as trainings needed to manage inappropriate behavior in the workplace	0.00%	0.00%	35.29%	23.53%	41.18%	17	4.06
Q40. "Communication training" as trainings needed to manage inappropriate behavior in the workplace	0.00%	0.00%	11.76%	35.29%	52.94%	17	4.41
Q41. "Customer service training" as trainings needed to manage inappropriate behavior in the workplace	0.00%	11.76%	17.65%	29.41%	41.18%	17	4.00
Q42. "Diversity and inclusiveness training" as trainings needed to manage inappropriate behavior in the workplace	0.00%	5.88%	35.29%	23.53%	35.29%	17	3.88

(table continues)

	Not at all important	Less important	Important	Very important	Extremely important	Total responds	Weighted Average
Q43. "Engagement of leadership in training sessions" as trainings needed to manage inappropriate behavior in the workplace	0.00%	11.76%	0.00%	29.41%	58.82%	17	4.35
Q44. "Incident reporting training" as trainings needed to manage inappropriate behavior in the workplace	0.00%	11.76%	5.88%	47.06%	35.29%	17	4.06
Q45. "Initial orientation training" as trainings needed to manage inappropriate behavior in the workplace	0.00%	5.88%	17.65%	29.41%	47.06%	17	4.18
Q46. "Just culture training" as trainings needed to manage inappropriate behavior in the workplace	0.00%	5.88%	17.65%	35.29%	41.18%	17	4.12
Q47. "Leadership training" as trainings needed to manage inappropriate behavior in the workplace	0.00%	0.00%	17.65%	35.29%	47.06%	17	4.29
Q48. "Ongoing training and monitoring for needs" as trainings needed to manage inappropriate behavior in the workplace	5.88%	0.00%	23.53%	29.41%	41.18%	17	4.00
Q49. "Policy training" as trainings needed to manage inappropriate behavior in the workplace	5.88%	11.76%	47.06%	11.76%	23.53%	17	3.35
Q50. "Team building training" as trainings needed to manage inappropriate behavior in the workplace	0.00%	0.00%	41.18%	29.41%	29.41%	17	3.88
Q51. "Workplace violence training" as trainings needed to manage inappropriate behavior in the workplace	0.00%	11.76%	29.41%	11.76%	47.06%	17	3.94
Q52. "Employee Assistance Programs (EAP)" as tools needed to manage inappropriate behavior in the workplace	11.76%	5.88%	35.29%	23.53%	23.53%	17	3.41
Q53. "LEAN programs" as tools needed to manage inappropriate behavior in the workplace	11.76%	29.41%	35.29%	5.88%	17.65%	17	2.29
Q54. "Metrics and measurements" as tools needed to manage inappropriate behavior in the workplace	5.88%	23.53%	29.41%	17.65%	23.53%	17	3.29
Q55. "Open communication" as tools needed to manage inappropriate behavior in the workplace	0.00%	0.00%	35.29%	23.53%	41.18%	17	4.06
Q56. "Policies" as tools needed to manage inappropriate behavior in the workplace	0.00%	11.76%	47.06%	11.76%	29.41%	17	3.59
Q57. "Root cause analysis" as tools needed to manage inappropriate behavior in the workplace	11.76%	17.65%	29.41%	11.76%	29.41%	17	3.29

(table continues)

	Not at all important	Less important	Important	Very important	Extremely important	Total responds	Weighted Average
Q58. "Safety event reporting system" as tools needed to manage inappropriate behavior in the workplace	12.50%	6.25%	18.75%	18.75%	43.75%	16	3.75
Q59. "Service recovery tools" as tools needed to manage inappropriate behavior in the workplace	5.88%	29.41%	17.65%	29.41%	17.65%	17	3.24
Q60. TeamSTEPPS (TeamSTEPPS is an evidence-based set of teamwork tools, aimed at optimizing patient outcomes by improving communication and teamwork skills among healthcare professionals.)	5.88%	11.76%	35.29%	23.53%	23.53%	17	3.47
Q61. Confidentiality of reporting	0.00%	6.25%	6.25%	31.25%	56.25%	16	4.38
Q62. Focusing on staff engagement results	0.00%	0.00%	23.53%	35.29%	41.18%	17	4.18
Q63. Management rounding	0.00%	11.76%	11.76%	35.29%	41.18%	17	4.06
Q64. Mock sentinel events	18.75%	18.75%	37.50%	12.50%	12.50%	16	2.81
Q65. Personality assessment tests for all staff	17.65%	35.29%	29.41%	17.65%	0.00%	17	2.47
Q66. Secret shopping peers	5.88%	35.29%	41.18%	17.65%	0.00%	17	2.71
Q67. Use of multi-disciplinary teams	0.00%	0.00%	41.18%	35.29%	23.53%	17	3.82

Appendix G: Round One Code Book

Table G1

Questionnaire Codebook

Name	Sources	References
Q1 What are the drivers of inappropriate behaviors in the workplace?		
Competition	1	1
Failure to recognize the behavior (blind eye to the existence of problem)	1	3
Staff feeling unheard and devalued	1	1
Hierarchical work culture (Hierarchy allows those who drive income to misbehave and not be held accountable)	1	11
Inefficient processes (Or belief that a process is inefficient)	1	4
Lack of accountability	1	8
Lack of adequate training	1	6
Lack of communication skills	1	4
lack of resources	1	2
Lack of staff engagement	1	1
Learned behavior (Sticking to the old way of doing things)	1	1
Not celebrating good behavior	1	1
Not following policies	1	3
personality differences	1	5
Poor hiring processes (Poor team member fit)	1	2
Reluctance to report	1	1
Role modeling	1	2
Stress	1	8
Tolerance for bad behavior	1	4
Unhappiness	1	1
Workload fatigue	1	11
Workplace culture	1	6
Q2 What are the managers' roles in managing inappropriate behavior in the workplace?		
Acknowledging there is a problem	1	3
Being proactive in identification and remediation	1	1
Celebrate appropriate behavior	1	1
Communicating expected behavior	1	13
Develop culture of respect	1	1
Encourage reporting of inappropriate behaviors	1	3
Enforce zero tolerance policy	1	5
Follow policies	1	6
Getting leadership on board	1	2
Having close relationship with staff	1	4
Holding staff accountable	1	4
Investigate	1	8
Lead by example	1	4
Provide timely feedback on incidents	1	7
Provide training	1	11
Taking consistent corrective and disciplinary action	1	17
Working with HR	1	4

(table continues)

Name	Sources	References
Q3 What is the role of organizational culture in the prevention of inappropriate behavior in the workplace?		
Creating a positive and supportive environment	1	8
Flattening hierarchy	1	1
Holding staff accountable	1	1
Leadership involvement	1	6
Leading by example	1	11
Non-punitive constructive correction	1	2
Providing training	1	3
Setting expectations	1	8
Support for victims	1	1
Understanding of policies	1	2
Zero tolerance policy	1	9
Q4 What trainings are needed to manage inappropriate behavior in the workplace?		
Allow adequate time for trainings	1	1
Change management training	1	1
Communication training	1	13
Customer service training	1	2
Diversity and inclusiveness training	1	1
Engagement of leadership in training sessions	1	1
Incident reporting training	1	3
Initial orientation training	1	4
Just culture training	1	3
Leadership training	1	8
Ongoing training and monitoring for needs	1	5
Policy training	1	12
Team building	1	2
Workplace violence training	1	3
Q5 What tools are needed to manage inappropriate behavior in the workplace?		
EAP programs	1	1
LEAN programs	1	1
Metrics and measurements	1	1
Open communication	1	1
Policies	1	6
Root cause analysis	1	1
Safety event reporting system	1	3
Service recovery tools	1	1
TeamSTEPPS (TeamSTEPPS is an evidence-based set of teamwork tools, aimed at optimizing patient outcomes by improving communication and teamwork skills among health care professionals. Readiness Assessment. https://www.ahrq.gov/teamstepps/index.html)	1	2
Training	1	7

(table continues)

Name	Sources	References
Q6 Please provide any elaboration that may help to answer the research question “what are the practical methods for early detection of inappropriate behavior among hospital staff, which may be utilized to ultimately mitigate the risk of preventable medical mishaps?”		
Address fatigue	1	1
Clearly set expectations of accepted behavior	1	1
Communication of events to staff for learning	1	3
Confidentiality	1	1
Consistent treatment of staff at any level	1	1
Encourage reporting of events	1	10
Focusing on staff engagement results	1	1
Management rounding	1	2
Mock sentinel events	1	1
Monitoring for inappropriate behavior	1	4
Personality assessment tests for all staff	1	1
Secret shopping peers	1	1
Service recovery programs	1	1
Training to recognize inappropriate behaviors	1	7
Use of multi-disciplinary teams	1	2
Watch out for trends (To identify patterns of behavior or events forming)	1	3
Zero tolerance attitude	1	3

Appendix H: Reflexive Journal

Modified Delphi design has been critiqued as being affected by researchers' biases concerning the selection and coordination of expert opinions, also by a potential lack of mutual idea clarification among the various experts. To address these concerns, I will follow strategies such as rich thick description, researcher's bias clarification, present negative information, documenting research procedures, steps and transcripts and cross-checking codes and transcripts to confirm trustworthiness and rigor in my qualitative research. Additionally, ongoing checks at each stage of this modified Delphi rounds, by my dissertation committee and IRB can ensure quality of the study's data management procedures, and point out any potential bias or distortion.

Data collection and analysis process

- August:
 - Ongoing IRB application process. Addressed all change requests.
 - **My thoughts:** I was surprised when IRB asked me to submit a change request at every round of this modified Delphi design for approval. I appreciate this extra level of quality and ethics check by IRB. This should add credibility and trustworthiness to my study.
 - Prepared a list of possible participants from ASHRM. I searched for every letter of the alphabet as the first letter of last names and I selected the first 25 names that were displayed under each letter. I excluded anyone who was not located in the United States. I stopped when I reached 600

contacts. I only wrote down e-mail addresses in a list ready to be e-mailed when I get IRB approval.

- **My thoughts:** Before, I did not know how much time and leg work is required for the data collection phase. It took me more than 10 hours of work to collect the list of my invitees.
- I purchased an upgraded membership to SurveyMonkey™ in order to have greater capabilities to collect and analyze my data.
 - **My thoughts:** It took me a good whole day to read all the fine prints on SurveyMonkey™ agreements and few more days of reading instructions and practicing on how to design my questionnaires. I wanted to make sure that there are no surprises down the road. An example of little details that I found out from my SurveyMonkey™ study days was the option to select when we do not want to collect participants IP addresses. When I thought about it I first thought I would need the IP addresses as a proof that actual people completed my questionnaires. Then I realized, potentially I could identify the participants through their IP addresses and that would not fulfill the promise of anonymity of respondents. Therefore, I decided not to collect the IP addresses.
- I updated my NVivo version and license to NVivo Pro 11.
 - **My thoughts:** After further study of the software and mock practices of my data analysis, I realized that I need to get the

NVivo Pro 11 in order to have the auto code option to validate my manual coding.

- September 12: Received IRB approval to start data collection.
 - Sent out the initial invitation e-mail and consent form to 400 contacts
 - Created the first questionnaire on SurveyMonkey™. To serve the anonymity of respondents, I selected the option not to collect IP addresses of respondents in SurveyMonkey™. I also, selected the option that respondents cannot see each other's answers so that they can share their own ideas and expertise. I allowed as much time as the respondents need to complete the survey. I also gave the option to come back to the survey and change their answers if they want to.
- September 12-15: received 14 consents and forwarded the link to questionnaire to them
 - I kept a log of when I sent questionnaire links to each participant and I sent reminder e-mails on days 3 and 5 accordingly.
- September 15: Sent e-mail reminder to the 400 contacts
- September 17: Sent final e-mail reminder to the 400 contacts
- September 15-18: Received 9 more consents (23 total consents so far) and I e-mailed them the link to the questionnaire
- September 19: Sent invitation e-mail to 200 more contacts
- September 22: Send e-mail reminder to the 200 contacts
- September 24: Sent final e-mail reminder to the 200 contacts

- September 19-25: Received a total of 34 consents and 32 responses to the online questionnaire. Decided to close the questionnaire because I passed the minimum required participants.
- September 25-27:
 - I have been reading the responses as they were coming through to familiarize myself to the answers the respondents were providing. All the respondents answered all the questions with 100% completion rate. The typical time spent was 11 minutes.
 - I coded the data by selecting each survey question as a node. I read all the responses word by word and coded in NVivo. In order to reduce researcher's bias, I literally coded each recommendation regardless of their meaning or validity to me. For example, this is one of the respondent's answers and I've underlined every word that I coded.

Q2 What are the drivers of inappropriate behaviors in the workplace?

How do you define a "driver" I define it as a "contributing factor." Some of the factors I have identified are:

1. Lack of clear expectations by management on what is appropriate and not appropriate.
2. . Lack of follow up by management on inappropriate behaviors.
3. Management tolerance of incivility, basic manners, and bullying.

Q3 What are the managers' roles in managing inappropriate behavior in the workplace?

Please see the above response (I coded the above factors again for this question). If the manager can't define "inappropriate behavior" and address it, the behavior will continue.

Q4 What is the role of organizational culture in the prevention of inappropriate behavior in the workplace?

transparency and honesty between directors and managers re: what is accepted behavior and what isn't.

Q5 What trainings are needed to manage inappropriate behavior in the workplace?

Clear concise policies, and education for management about the policies

Q6 What tools are needed to manage inappropriate behavior in the workplace?

Policies, procedures, record keeping re: grievances and patient complaints so that individuals who are repeatedly pointed out by patients are counseled or are terminated.

Q7 Please provide any elaboration that may help to answer the research question "what are the practical methods for early detection of inappropriate behavior among hospital staff, which may be utilized to ultimately mitigate the risk of preventable medical mishaps?"

Incident reports, complaints, grievances.

- September 25-27 continued:
 - Received approval by committee.
 - Drafted second survey on SurveyMonkey™. Sent for IRB approval
- September 28: Received IRB approval for second round and e-mailed the second questionnaire link to the 34 consented participants
- October 1: Sent first e-mail reminder for second round questionnaire

- October 3: Sent second reminder for second round questionnaire
- October 5: 19 participants completed the second round questionnaire. I closed the questionnaire and analyzed the results using SurveyMonkey™ automatic analysis feature.
- October 7: Committee approved the analysis and third round questionnaire. I sent for IRB approval.
- October 9: IRB approved third round questionnaire
- October 10: Drafted the third questionnaire in SurveyMonkey™. Sent final questionnaire to the 34 participants.
- October 13: Sent first e-mail reminder for the third questionnaire
- October 15: Sent final e-mail reminder for the third questionnaire
- October 11-16: 26 participants completed the final round questionnaire.

Notes:

- Two participants thanked me in their consent e-mail for initiating this research and indicated that this is very timely and needed research in the field.
- A few invitees e-mailed me and asked specific questions about their eligibility to participate in the study. For example, one person did have all the needed experience, but she was retired and not currently working and she wanted to know if she is eligible to participate. I answered all the e-mails in a timely manner.
- I did not receive any specific questions on the consent form.

- A few invitees e-mailed me to say that they were not interested in participation or they were not eligible according the inclusion criteria. I took their e-mails off of my reminder e-mail lists.
- One participant e-mailed me after the second questionnaire to let me know that she does not have time to complete the questionnaire.
- Several participants contacted me for the result of the study. I told them I will send it to them as soon as it is finalized.
- During the first and second round, some participants e-mailed me after getting reminder e-mails to complete the questionnaire, saying that they have completed the survey and why are they receiving reminder e-mails. I explained to them that the process is anonymous and I do not know who has or has not completed the surveys, therefore, I have to send the reminders to everyone. But I did not send reminders to those who contacted me to say they have completed the surveys.
- I received a few out of office auto replies every time I sent out e-mails to groups
- All my e-mails were blind copied to protect the identity of participants
- For the third questionnaire, I received an auto reply from one participant that she does not work for that organization anymore and did not provide her new e-mail. Therefore, she counted as a drop out on the final round.
- A bias that I could have brought to this study is my experience and knowledge of risk management and healthcare organizations; however, the member-checking nature of the modified Delphi design helped to mitigate any influence of subjectivity that I could introduce to the study analysis.

- To ensure trustworthiness of my study, I reviewed all the aspects of credibility, transferability, dependability, and confirmability that I identified and discussed in the Chapter 2 of my proposal. The reviews of my dissertation chair and methodology expert helped me to ensure credibility of my instrument. Additionally the process and rigor of modified Delphi design in itself, in the sense that data collection and analysis goes through three cycles for refinement by member checking and prolonged contact with the participants, adds to the credibility and trustworthiness of the results. Detailed description of every step of my data collection and analysis process as written in Chapters 4 and 5 serves as a fulfillment for transparency and systematicity of the study. Using the NVivo software for qualitative analysis of round one data provides a transparent picture of the data and an audit of data analysis process (included as an appendix for Chapter 4).
- I described the research context and any assumptions in detail in Chapter 1 and 2 in order to enhance transferability and replicability of my results.
- To ensure dependability of my result, I kept detailed audit trails of all the steps throughout the study process (as reported above and in Chapters 4 and 5). Moreover, I followed strategies such as rich thick description, researcher's bias clarification, present negative information, documenting research procedures, steps and transcripts and cross-checking codes and transcripts to confirm trustworthiness and rigor in my qualitative research.

- There were no changes to the research plan that occur during the research process to describe or justify here.
- I have kept the list of participants and all the study data secure in a password protected computer that only I have access to. All the study results remained anonymous throughout the study and no participant identifiers will be used in the final study publications.
- There were no adverse events as part of this study to report.
- Finally, I did not have any conflict of interest to declare for the conduction of this study. I did not have any position of supervisory power, personal and/or professional relationships with participants.

Appendix I: Delphi Round Two Questionnaire

Dear research participants,

I am very grateful for your participation in this research and thank you very much for completing the first round of the study.

Below is a web link to the second questionnaire which lists all expert panelists' answers to the first questionnaire. This questionnaire may take 15 to 20 minutes to complete. You may click on the link below to be directed to the questionnaire. If clicking the link doesn't work you can copy the link and paste it in your browser.

Link to instrument:

xxxxxxx

Thank you,

Sahar Ebrahim Zadeh

Doctoral Student at Walden University (PhD in management)



Round Two Questionnaire

Question 1: Please indicate your level of agreement with the factors that expert panel members identified in the first questionnaire for the question of "What are the drivers of inappropriate behaviors in the workplace?"

Competition

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Failure to recognize the behavior

5 Extremely	4 Very important	3 Important	2 Less important	1 Not at all
----------------	---------------------	----------------	---------------------	-----------------

important				important
-----------	--	--	--	-----------

Feeling unheard and devalued

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Hierarchical work culture that allows those who drive income to misbehave and not be held accountable

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Inefficient processes

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Lack of communication skills

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Lack of resources

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Lack of staff engagement

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Learned behavior (Sticking to the status quo)

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Not celebrating good behavior

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Personality differences

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Poor hiring processes

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Reluctance to report inappropriate behaviors

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Role modeling

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Stress

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Tolerance for inappropriate behavior

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Unhappiness with the workplace

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Workload fatigue

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Question 2: Please indicate your level of agreement with the factors that expert panel members identified in the first questionnaire for the question of “What are the managers’ roles in managing inappropriate behavior in the workplace?”

Acknowledging there is a problem

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Being proactive in identification and remediation

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Celebrate appropriate behavior

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Communicating expected behavior

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Develop culture of respect

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Encourage reporting of inappropriate behaviors

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Enforce zero tolerance policy

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Having close relationship with staff

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Holding staff accountable

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Investigate inappropriate behaviors

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Provide timely feedback on incidents

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Taking consistent corrective and disciplinary action

5 Extremely	4 Very important	3 Important	2 Less important	1 Not at all
----------------	---------------------	----------------	---------------------	-----------------

important				important
-----------	--	--	--	-----------

Working with HR

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Question 3: Please indicate your level of agreement with the factors that expert panel members identified in the first questionnaire for the question of “What is the role of organizational culture in the prevention of inappropriate behavior in the workplace?”

Creating a positive and supportive environment

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Flattening hierarchy

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Leadership involvement

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Non-punitive constructive correction

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Setting expectations

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Support for victims

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Question 4: Please indicate your level of agreement with the factors that expert panel members identified in the first questionnaire for the question of “What trainings are needed to manage inappropriate behavior in the workplace?”

Allow adequate time for trainings

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Change management training

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Communication training

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Customer service training

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Diversity and inclusiveness training

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Engagement of leadership in training sessions

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Incident reporting training

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Initial orientation training

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Just culture training

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Leadership training

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Ongoing training and monitoring for needs

5	4	3	2	1
---	---	---	---	---

Extremely important	Very important	Important	Less important	Not at all important
---------------------	----------------	-----------	----------------	----------------------

Policy training

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Team building

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Workplace violence training

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Question 5: Please indicate your level of agreement with the factors that expert panel members identified in the first questionnaire for the question of “What tools are needed to manage inappropriate behavior in the workplace?”

EAP programs

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

LEAN programs

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Metrics and measurements

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Open communication

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Policies

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Root cause analysis

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Safety event reporting system

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Service recovery tools

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

TeamSTEPPS (TeamSTEPPS is an evidence-based set of teamwork tools, aimed at optimizing patient outcomes by improving communication and teamwork skills among health care professionals.)

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Question 6: Please indicate your level of agreement with the factors that expert panel members identified in the first questionnaire for the question of “Please provide any elaboration that may help to answer the research question “what are the practical methods for early detection of inappropriate behavior among hospital staff, which may be utilized to ultimately mitigate the risk of preventable medical mishaps?”

Confidentiality of reporting

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Focusing on staff engagement results

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Management rounding

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Mock sentinel events

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
--------------------------	---------------------	----------------	---------------------	---------------------------

Personality assessment tests for all staff

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Secret shopping peers

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Use of multi-disciplinary teams

5 Extremely important	4 Very important	3 Important	2 Less important	1 Not at all important
-----------------------------	---------------------	----------------	---------------------	------------------------------

Appendix J: Delphi Round Three Questionnaire

Dear research participant,

Thank you very much for completing the second round questionnaire. And thank you for hanging-in there. This is the last step, in terms of your participation. This questionnaire will probably take 15 to 20 minutes to complete.

Below is a web link to the questionnaire. You may click on the link to be directed to the questionnaire. If clicking the link doesn't work you can copy the link and paste it in your browser.

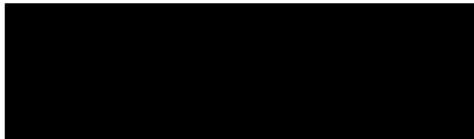
Link to questionnaire:

xxxxxxx

Thank you,

Sahar Ebrahim Zadeh

Doctoral Student at Walden University (PhD in management)



F.Y.I. The following 30 factors were identified as very important or extremely important in the second questionnaire with a weighted average of four or more.

Factors selected for each question	Weighted average	Standard Deviation
<u>Q1. What are the drivers of inappropriate behaviors in the workplace?</u>		
Lack of communication skills	4.19	0.73
Reluctance to report inappropriate behaviors	4.50	0.71
Role modeling	4.00	0.69
Tolerance for inappropriate behavior	4.69	0.58
<u>Q2. What are the managers' roles in managing inappropriate behavior in the workplace?</u>		
Acknowledging there is a problem	4.56	0.60
Being proactive in identification and remediation	4.50	0.69
Communicating expected behavior	4.59	0.60
Develop culture of respect	4.35	0.84
Encourage reporting of inappropriate behaviors	4.29	0.82
Enforce zero tolerance policy	4.35	1.03
Holding staff accountable	4.53	0.61
Investigate inappropriate behaviors	4.53	0.61
Provide timely feedback on incidents	4.47	0.70
Taking consistent corrective and disciplinary action	4.59	0.60
<u>Q3. What is the role of organizational culture in the prevention of inappropriate behavior in the workplace?</u>		
Creating a positive and supportive environment	4.24	1.00
Leadership involvement	4.59	0.60
Setting expectations	4.65	0.48
<u>Q4. What trainings are needed to manage inappropriate behavior in the workplace?</u>		
Change management training	4.06	0.87
Communication training	4.41	0.69
Customer service training	4.00	1.03
Engagement of leadership in training sessions	4.35	0.97
Incident reporting training	4.06	0.94
Initial orientation training	4.18	0.92
Just culture training	4.12	0.90
Leadership training	4.29	0.75
Ongoing training and monitoring for needs	4.00	1.08
<u>Q5. What tools are needed to manage inappropriate behavior in the workplace?</u>		
Open communication	4.06	0.87
<u>Q6. Other comments</u>		
Confidentiality of reporting	4.38	0.86
Focusing on staff engagement results	4.18	0.78
Management rounding	4.06	1.00

Round Three Questionnaire

Please select only 10 items that you believe are among the top most important factors in recognizing and managing inappropriate behavior in the workplace.

- | | |
|---|---|
| <input type="checkbox"/> Confidentiality of reporting | <input type="checkbox"/> Focusing on staff engagement results |
| <input type="checkbox"/> Management rounding | <input type="checkbox"/> Open communication |
| <input type="checkbox"/> Change management training | <input type="checkbox"/> Communication training |
| <input type="checkbox"/> Customer service training | <input type="checkbox"/> Engagement of leadership in training sessions |
| <input type="checkbox"/> Incident reporting training | <input type="checkbox"/> Initial orientation training |
| <input type="checkbox"/> Just culture training | <input type="checkbox"/> Leadership training |
| <input type="checkbox"/> Ongoing training and monitoring for needs | <input type="checkbox"/> Creating a positive and supportive environment |
| <input type="checkbox"/> Leadership involvement | <input type="checkbox"/> Setting expectations |
| <input type="checkbox"/> Acknowledging there is a problem | <input type="checkbox"/> Being proactive in identification and remediation |
| <input type="checkbox"/> Communicating expected behavior | <input type="checkbox"/> Develop culture of respect |
| <input type="checkbox"/> Encourage reporting of inappropriate behaviors | <input type="checkbox"/> Enforce zero tolerance policy |
| <input type="checkbox"/> Holding staff accountable | <input type="checkbox"/> Investigate inappropriate behaviors |
| <input type="checkbox"/> Provide timely feedback on incidents | <input type="checkbox"/> Taking consistent corrective and disciplinary action |
| <input type="checkbox"/> Lack of communication skills | <input type="checkbox"/> Reluctance to report inappropriate behaviors |
| <input type="checkbox"/> Role modeling | <input type="checkbox"/> Tolerance for inappropriate behavior |

Appendix K: E-mail Sent to Participants after Completing Round Three

Dear research participant,

Thank you very much for participating in this research study and sharing your expertise.

It will take a few weeks to analyze the results of this study. As a thank you for your participation I will e-mail you an early copy of the study report as soon as it is ready.

Warm regards,

Sahar Ebrahim Zadeh

Doctoral Student at Walden University (PhD in management)

