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EXAMINING THE RELATIONSHIP BETWEEN PATIENT SAFETY CULTURE AND PATIENT EXPERIENCE IN AMBULATORY SURGERY CENTER SETTINGS

By

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A DISSERTATION IN PRACTICE

Submitted to the faculty of the Graduate School of Creighton University in Partial Fulfillment of the Requirements for the degree of Doctor of Education in Interdisciplinary Leadership

Omaha, NE

October 25, 2019
Abstract

This dissertation in practice examined the relationship between patient safety culture and patient experience using a collective, instrumental case study conducted within 40 ambulatory surgery centers that are part of a large healthcare organization in the United States. The study included analysis of two existing data sets, namely the Agency for Healthcare Research and Quality Ambulatory Surgery Center Survey on Patient Safety Culture and the Outpatient and Ambulatory Surgery Consumer Assessment of Providers and Healthcare Systems surveys. Additionally, an anonymous online survey was administered to formal leaders to gain a deeper understanding of the organizational cultural elements and leadership strategies that promoted, or detracted from, patient safety culture and patient experience. Three evidence-based leadership strategies were put forth as a result of this research. Leaders should frequently employ both active and passive communication strategies to promote an open, transparent environment where necessary information is readily shared. Leaders should ensure structural elements are in place, including appropriate education and training for staff, reasonable staffing levels, and adequate supplies and equipment, to demonstrate that the delivery of high quality, safe, patient-centered care is of utmost importance. Leaders should promote a blame-free environment when errors or near misses occur to enable staff to feel empowered to speak up. Implementation and assessment recommendations are provided, along with opportunities for future research involving patient safety culture and patient experience.

Keywords: Leadership, patient safety culture, patient experience, communication
Dedication

To my husband, Dennis, and my daughters, Madelyn and Gabriella. There are no words, only love.
Acknowledgements

I am beyond grateful to Juli Montgomery, Erin Mee, and Doug Lewis for convincing me to embark on one of the most challenging and rewarding experiences of my life. I could not have asked for a more supportive team to push me through the difficult times, and celebrate the wins. To my mentors, Gayle Rhinehart, Lisa Foster, Dave Roy, and Erica Rossitto, your leadership has made a lasting imprint.

I am truly appreciative of the opportunity to conduct this research within an incredible healthcare organization, and am thankful for the support of Greg Beasley and Dr. Michael Hicks throughout this journey. To those that participated in this research, from the bottom of my heart, thank you. My hope is that it will contribute to a meaningful difference in the care we provide every day.

To my dissertation chair, Dr. Debra Ford, and my committee members, Dr. Leah Georges and Dr. Kenneth Sands, thank you for your support, encouragement, and words of wisdom, without which this dissertation would not have been possible. To my fellow cohort members, thank you for cheering me on and allowing me to do the same for each of you.

To my family, thank you for allowing me to pursue my dreams. I treasure your love and support, I appreciate the sacrifices you made along the way, and I value your reminders to always do my best. I hope I have made you proud.
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CHAPTER ONE: INTRODUCTION

Introduction and Background

Quint Studer (2013) noted, “Culture outperforms strategy every time, and culture with strategy is unbeatable” (Chapter 3, para 10). Owens, Eggers, Keller, and McDonald (2017) defined culture as patterns of behavior that result in shared philosophies and values that bond employees together. A culture index was created from self-reported employee engagement survey data taken from healthcare organizations that have achieved the Malcolm Baldrige Award (Owens et al., 2017). The culture index involved several key areas including the extent to which patients are treated as valued customers, values of employees being similar to those of the organization, feeling that being a member of the organization is rewarding, and employees developing a sense of pride in the company (Owens et al., 2017). Organizations performing in the top quartile of the culture index “outperformed every domain for employee engagement, physician engagement, patient experience, and overall value-based purchasing performance with statistical significance” (Owens et al., 2017, p. 25). Leveraging culture, therefore, is an important component in achieving success in healthcare organizations, as high-performing cultures can somewhat intuitively be linked to a significant focus on patient-centered care (Aboumatar et al., 2015; Owens et al., 2017).

The Centers for Medicare and Medicaid Services (CMS) released the Outpatient and Ambulatory Surgery Consumer Assessment of Healthcare Providers and Systems (OAS CAHPS) survey in January 2016, which is designed to assess the patient’s perception of care delivered in an Ambulatory Surgery Center (ASC) setting (Centers for Medicare & Medicaid Services, 2016). CMS has required acute care hospitals to
administer the standardized Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey since 2006 (Abrahamson, Hass, Morgan, Fulton, & Ramanujam, 2016). HCAHPS provides the foundation for 30 percent of the Value-Based Purchasing (VBP) program established by the Affordable Care Act (Elliott et al., 2016). VBP is essentially a pay-for-performance model that is designed to enhance the quality and cost of care (Elliott et al., 2016). In 2015, the hospital VBP program impacted 1.5 percent of hospitals’ base operating payments which equated to roughly $1.4 billion (Elliott et al., 2016). It is likely that OAS CAHPS will impact reimbursement to ASCs in the near future in much the same fashion that HCAHPS impacts hospital reimbursement. Owens et al. (2017) clearly articulated that the patient’s perception of care is significantly impacted by organizational cultural characteristics, therefore concerted effort must be placed on enhancing culture within ASCs.

An emphasis on high-quality outcomes in ASCs necessitates a culture that places the safety of patients above operational objectives, such as productivity metrics and profit margins. For the purposes of this research, patient safety culture was defined as group values and patterns of behavior that demonstrate commitment to the safety and wellbeing of patients (Owens et al., 2017). While substantial research exists related to patient safety culture in acute care (inpatient hospital) settings (Abrahamson et al., 2016; Merrill, 2015; Ramya, 2017; Nie, Mao, Cui, He, Li, & Zhang, 2013; Zingiryan, Paruch, Osler, & Hyman, 2017), research is limited specific to outpatient ASC environments. Contributing to existing research associated with outpatient settings is particularly important because ASCs tend to promote a fast, efficient work pace, and as such there is increased risk that there may be diminished focus on patient safety (Geier & Gelardi-Slosburg, 2009).
There is also no existing research associated with the measurable impact of patient safety culture on the patient’s perception of care delivered in an ASC. The collective perceptions associated with one’s care was termed patient experience for the purposes of this study. Considering that ASCs perform the vast majority of surgical procedures in the United States (Dunning, Liedtke, Toedter, & Rohatgi, 2008) and 27 percent of adverse patient safety events are related to surgical procedures (Tingle, 2017), particular focus on the ASC environment will make a meaningful contribution to existing literature and to the healthcare industry as a whole.

The intent of this collective, instrumental case study was to understand the relationship between patient safety culture and patient experience in ASCs that are part of ABC Healthcare, with particular focus on organizational cultural elements and leadership strategies that promote patient safety culture, and in turn patient experience. Located in several states, ABC Healthcare is a large healthcare system with multiple hospitals, surgery centers, physician groups, and imaging centers. ABC Healthcare employs over 200,000 individuals, more than 80,000 of which are nursing professionals, whom provide care for millions of patients annually. Obtaining a better understanding of the cultural elements that enhance patient safety culture within a sampling of ABC Healthcare’s ASCs enabled the development of evidence-based leadership strategies that might improve patient safety culture throughout ASCs, in turn hopefully positively affecting patient experience.

In summary, this Dissertation in Practice examined the relationship between patient safety culture and patient experience in outpatient ASC settings. This study has proven valuable in identifying that promoting patient safety culture within ASCs is
beneficial in the delivery of safe, high-quality care that positively influences the patient experience. As payment becomes increasingly tied to quality outcomes and the overall patient experience (Owens et al., 2017), risk will be minimized in ASCs that develop strong patient safety culture. The following sections provide greater insight about the essential features of the research, including the statement of the problem, the purpose of the study, the overarching research question, the aim of the study, the proposed methodology, the role of leadership, and the significance of the research.

**Statement of the Problem**

The Agency for Healthcare Research and Quality (AHRQ) asserts four patient safety culture tenets (Abrahamson et al., 2016; AHRQ, 2017):

- acknowledgement of the high-risk nature of healthcare operations
- a blame-free environment when errors or near misses occur, where team members feel comfortable reporting issues without fear of reprisal
- multidisciplinary collaboration to seek solutions to patient safety issues
- commitment of adequate resources for the elimination of safety concerns.

While substantial research exists related to patient safety culture in acute care settings, research is limited specific to outpatient ASC environments. Abrahamson et al. (2016) established that patient safety culture not only enhances the delivery of safe care, but also influences patient experience in acute care settings.

With the 2016 release of the OAS CAHPS survey, greater emphasis must be placed on patient experience in ASCs because the results will become publicly available and may affect CMS reimbursement to ASCs in the future (Elliott et al., 2016). Considering that roughly 10,000 Americans turn 65 daily and as such become eligible for
Medicare, a reduction in CMS reimbursement to ASCs could be significant (Lofgren & Clancy, 2015). Research associated with the measurable impact of patient safety culture on patient experience in an ASC environment is lacking in the current literature. Understanding the relationship between patient safety culture and patient experience in an ASC environment enabled the development of evidence-based leadership strategies that may improve patient safety culture throughout ASCs, in turn hopefully positively impacting patient experience and minimizing risk to CMS reimbursement (Owens et al., 2017).

**Purpose of the Study**

The purpose of this collective, instrumental case study was to understand the relationship between patient safety culture and patient experience within ABC Healthcare’s ASCs, with particular focus on the organizational cultural elements and leadership strategies that promoted patient safety culture, and in turn patient experience. Patient safety culture was evaluated through the AHRQ ASC Survey on Patient Safety Culture. Patient experience was evaluated through OAS CAHPS surveys. An anonymous online survey administered to formal leaders within ABC Healthcare’s ASCs selected for site inclusion enhanced understanding of the organizational cultural characteristics and leadership strategies that supported or detracted from patient safety culture.

**Research Questions**

The goal of this collective, instrumental case study was to understand the relationship between patient safety culture and patient experience in ASCs that are part of ABC Healthcare, with particular emphasis on the organizational cultural elements and
leadership strategies that promoted patient safety culture, and in turn patient experience. 

Thus, this qualitative study sought to answer the following research questions:

Research question #1: What is the relationship between patient safety culture and patient experience within a sampling of ambulatory surgery centers?

Research question #2: How do healthcare leaders describe organizational cultural elements that enhance patient safety culture and patient experience within a sampling of ambulatory surgery centers?

Research question #3: How do healthcare leaders describe leadership strategies that may influence patient safety culture, and in turn patient experience, throughout ambulatory surgery centers?

To assess patient safety culture within ABC Healthcare’s ASCs, the AHRQ ASC Survey on Patient Safety Culture administered in February 2018 was utilized. The survey included 35 questions, with 27 items grouped into eight composites, including communication about patient information, communication openness, staffing/work pressure/pace, teamwork, staff training, organizational learning/continuous improvement, response to mistakes, and management support of patient safety (Westat, Sorra, Franklin, & Behm, 2015). An anonymous online survey administered to formal leaders within ABC Healthcare’s ASCs selected for site inclusion enhanced understanding of the organizational cultural characteristics and leadership strategies that supported or detracted from patient safety culture.

Patient experience was evaluated using OAS CAHPS surveys completed by patients cared for in ABC Healthcare’s ASCs between January and March 2018. The OAS CAHPS survey was designed by AHRQ and CMS and consisted of 37 questions
grouped into three domains, Communication, Discharge, and Facility/Personal Treatment, and two global items, Overall Rating of the Facility and Likelihood to Recommend the Facility (Centers for Medicare and Medicaid Services, 2016). Using existing survey instruments to examine patient safety culture and patient experience within ABC Healthcare’s ASCs, coupled with the anonymous online survey designed to deepen understanding of the organizational cultural characteristics that supported or detracted from patient safety culture, was beneficial in answering the overarching research question.

**Aim of the Study**

The aim of this study was to create evidence-based leadership strategies to improve patient safety culture, and in turn patient experience, throughout ASCs. Improving patient safety culture and patient experience in the ASC setting will help ensure the delivery of safe, high-quality care, and minimize risk to CMS reimbursement (Owens et al., 2017).

**Methodology Overview**

A collective, instrumental case study was employed, using surgery centers within ABC Healthcare to allow for purposes of comparison (Creswell & Poth, 2018). The ASCs appropriate for inclusion in this qualitative study were determined by reviewing an existing ABC Healthcare data source. The results of the AHRQ ASC Survey on Patient Safety Culture administered to ABC Healthcare’s roughly 130 ASCs in February 2018 were reviewed with specific attention to the question, “Please give your facility an overall rating on patient safety.” The percentage of ABC Healthcare employees and clinicians that rated this question Very Good or Excellent included a low of 51 percent and a high
of 100 percent. As such, facilities in which 95 to 100 percent of employees and clinicians rated patient safety as Very Good or Excellent composed ASC Group A (20 ASCs total). Facilities in which 51 to 71 percent of employees and clinicians rated patient safety as Very Good or Excellent constituted ASC Group B (20 ASCs total). Forty ASCs was determined to be a sufficient sample size from which to draw conclusions, and there was a natural break in scores when evaluating the 20 highest scoring facilities and the 20 lowest scoring facilities within ABC Healthcare on the overall safety culture rating.

A qualitative approach proved valuable to this study in that the goal of the research was to understand the themes and patterns that enhanced patient safety culture and patient experience (Creswell & Creswell, 2018; Creswell & Poth, 2018). Understanding the relationships between patient safety culture and patient experience inherently required an in-depth review of multiple sources of information (Creswell & Poth, 2018). OAS CAHPS survey results received from patients who were cared for between January and March 2018 within the 40 ASCs that were part of site inclusion were evaluated, with particular attention to the two global measures and three composites (Centers for Medicare and Medicaid Services, 2016). The two global measures included the questions, “Using any number from 0 to 10, where 0 is the worst facility possible and 10 is the best facility possible, what number would you use to rate this facility” and “Would you recommend this facility to your friends and family” (Centers for Medicare and Medicaid Services, 2016). The three composites included Communication, Discharge, and Facility/Personal Treatment (Centers for Medicare and Medicaid Services, 2016).
An anonymous online survey was administered to formal leaders within the 40
ASCs selected for site inclusion. The survey included a question about the duration of
employment to ensure that responses were only captured for formal leaders that were
employed by the ASCs selected for site inclusion at the time the AHRQ ASC Survey on
Patient Safety Culture and OAS CAHPS surveys were administered. This assured clear
connections as case studies are required to be bounded by specific parameters (Creswell
& Poth, 2018), while also ensuring anonymity for the participants.

In summary, a collective, instrumental case study was the appropriate
methodology for this research as understanding the relationship between patient safety
culture and patient experience inherently required a review of multiple sources of
information. The two components under study, patient safety culture and patient
experience, were evaluated through the lens of the AHRQ ASC Survey on Patient Safety
Culture and OAS CAHPS surveys. Verbatim comments received from employees and
clinicians on the AHRQ ASC Survey on Patient Safety Culture, along with an
anonymous online survey administered to formal leaders within ABC Healthcare further
enhanced understanding of the similarities and differences between the concepts under
study. Comprehensive site selection allowed for substantial descriptive analysis of
patient safety culture and patient experience, and as such, the proposed research design
supported answering the research questions.

**Definition of Relevant Terms**

Many healthcare industry terms and abbreviations were used throughout this
research study, and as such this section serves to define the terms that do not have a
commonly known meaning outside of the industry (Creighton University, 2017). The following terms were used operationally within this study.

Agency for Healthcare Research and Quality (AHRQ): As a division of the U.S. Department of Health and Human Services, AHRQ maintains focus on producing evidence to keep patients safe in healthcare settings, promoting the delivery of high-quality care, and developing data sources to track changes and improvements within the healthcare industry (AHRQ, 2014).

Ambulatory Surgery Center: A healthcare setting that specializes in elective, outpatient surgical procedures. Patients undergoing surgery in an ASC setting are expected to be discharged within 23 hours and complete one’s recovery in the comfort of one’s home.

Ambulatory Surgery Center, Multi-Specialty: An ASC that provides elective, outpatient surgical procedures associated with multiple medical specialties. For example, a multi-specialty ASC may provide general surgery, orthopedic care, and urology services.

Ambulatory Surgery Center, Single-Specialty: An ASC that provides elective, outpatient surgical procedures associated with a single medical specialty. For example, a single-specialty urology ASC only provides urologic care.

Iatrogenic Harm: A source of harm occurring during the course of care directly attributable to the actions of a healthcare provider.

Normalized Deviance: The concept that healthcare workers become accustomed to a deviant behavior, and in turn no longer consider said behavior to be a departure from acceptable standards.
Outpatient and Ambulatory Surgery Consumer Assessment of Healthcare

Providers and Systems (OAS CAHPS): Designed by AHRQ and CMS and released in 2016, OAS CAHPS is a survey administered to patients that had surgery in an outpatient ambulatory surgery center setting to assess patient experience. For the purposes of this study, OAS CAHPS results obtained from a third-party vendor, Press Ganey, were utilized.

Patient Experience: The collective perceptions associated with one’s care delivered in an ASC setting.

Patient Safety Culture: Group values and patterns of behavior that demonstrate commitment to the safety and wellbeing of patients (Owens et al., 2017). Patient safety culture is one aspect of the overall culture of an organization, the concept itself emerging from growing research about safety in “high-reliability, error-critical industries” (Sorra & Dyer, 2010, p. 199).

Sentinel Event: An adverse event occurring in the delivery of patient care, such as mortality, wrong-site surgery, or wrong-side surgery. Sentinel events are frequently referred to in the healthcare community as “never events”.

While this section was not meant to be all inclusive of the terminology used throughout this Dissertation in Practice, the major concepts under study were defined to provide greater understanding of areas that may not be commonly understood.

Delimitations and Limitations

This collective, instrumental case study was conducted by using data sources from 40 ASCs that are part of ABC Healthcare. Site inclusion for this research was based upon the results of the AHRQ ASC Survey on Patient Safety Culture, which identified
the 20 highest performing and 20 lowest performing facilities within ABC Healthcare on the overall safety culture rating for the facility. As such, generalizations cannot be made across all ASCs or throughout the industry as a whole as a result of this research (Creswell & Poth, 2018).

The review of patient experience data was restricted to OAS CAHPS surveys returned from patients who received care within the 40 ASCs identified for site inclusion between January and March 2018. Creswell and Poth (2018) discussed that analysis can be limited when examining multiple cases due to the time constraints associated with the volume of the data collected. This is of particular importance, as verbatim comments from the OAS CAHPS surveys were excluded from the study due to the volume of comments received from patients cared for between January and March 2018 within the 40 ASCs that encompassed site inclusion.

Participants surveyed online consisted of administrators, directors, managers, and charge nurses that have been employed in a formal leadership position within the 40 ASCs selected for site inclusion for at least 18 months. While open-ended verbatim comments received from employees and clinicians from the 40 ASCs selected for site inclusion on the AHRQ ASC Survey on Patient Safety Culture were evaluated as part of this research, the study did not provide an opportunity to ask direct questions of employees and clinicians.

**Leader’s Role and Responsibility in Relation to the Problem**

A significant focus of this research was on the organizational cultural elements and leadership strategies that promoted patient safety culture, and in turn patient experience. Leaders play an important role in developing the culture of the organization.
Lowney (2003) noted that the Jesuits became leaders by understanding their values, adapting to changing conditions, engaging others, and energizing those around them through shared ambitions. Teams perform best when they appreciate that their purpose is not all about them (Lowney, 2011). Patient safety culture at its core is a commitment to the safety and wellbeing of patients (Owens et al., 2017). Leaders have the opportunity to guide their teams and offer support and inspiration (Lowney, 2003) to ensure the safety and wellbeing of patients remains a consistent priority.

Safety culture has been found to positively moderate the effectiveness of other technically oriented safety interventions, such as checklists, training/education, or procedural algorithms (Daugherty et al., 2016). An environment free from blame is a major tenant of providing safe, high-quality healthcare (Merrill, 2015). Laissez-faire leadership is associated with blame when errors occur, and managers are likely to find quick fixes, be indecisive, or become hostile rather than investigate root causes (Merrill, 2015). Transformational leadership characteristics, however, are largely associated with promoting patient safety (Merrill, 2015). Transformational leadership practices often lead to high quality outcomes and improved retention (Lavoie-Tremblay et al., 2015). As such, the researcher anticipated laissez-faire leadership emerging in bottom-performing ASCs, whereas the researcher predicted transformational leadership presenting in top-performing ASCs. The online web-based survey completed by leaders of ABC Healthcare’s ASCs provided greater insight into the leadership style and strategies that promoted or detracted from patient safety culture in these particular ASCs. There was great value in gaining a deeper understanding of the leadership style present within the ASCs under study, as the information guided the development of evidence-based
leadership strategies designed to promote patient safety culture throughout all ASCs within ABC Healthcare.

Servant leaders consistently put the needs and concerns of followers first (Johnson, 2015). Followers are viewed as partners rather than subordinates by servant leaders because the overall goal is to ensure the group serves the common good (Johnson, 2015). Servant leaders articulate principles that shape individual and organizational behavior, are responsible for fostering quality and openness to change, and serve worthy missions (Johnson, 2015). Accordingly, the researcher expected that servant leadership would surface when examining patient safety culture and patient experience within ABC Healthcare’s ASCs, particularly through the online web-based survey conducted with formal leaders employed by the ASCs under study. As noted previously, there was great value in gaining a deeper understanding of the leadership style present within the ASCs under study as the information guided the development of evidence-based leadership strategies designed to promote patient safety culture throughout all ASCs within ABC Healthcare.

In summary, leadership styles that emerged during the course of the research included laissez-faire, transformational, and servant leadership. Individuals perform optimally when they are part of an organizational culture that makes them feel valued, trusted, and respected by a caring leader (Lowney, 2003). As such, examining various leadership styles were key in developing evidence-based leadership strategies that promote patient safety culture and in turn patient experience through ABC Healthcare’s ASCs.
Significance of the Study

The significance of patient safety culture extends beyond high-quality outcomes to influence the patient’s overall care experience (Abrahamson et al., 2016). Quality outcomes is one of four domains for reimbursement tied to VBP (Owens et al., 2017). Achievement of high-quality outcomes accounted for 96 percent of the difference among hospitals in total HCAHPS points and subsequent VBP reimbursement (Elliott et al., 2016). VBP appears to be working as intended to reduce undesired effects and to increase engagement by lower-performing hospitals in quality improvement, therefore it stands to reason CMS make take a similar approach to reimbursement in ASC settings to enhance the delivery of high-quality care (Elliott et al., 2016). This Dissertation in Practice has improved practice for ABC Healthcare’s ASCs by supporting the development of evidence-based leadership strategies that will improve patient safety culture, thereby enhancing patient experience, and in turn minimizing risk to CMS reimbursement. Additionally, clinicians, such as physicians, advanced practice providers, and nurses, typically require an evidence-based approach in order to support policy change. This Dissertation in Practice stands to promote policy change within a section of the industry with an evidence-based approach to improving patient safety culture, which will likely yield greater adoption of policy changes by clinicians.

Owens et al. (2017) noted that healthcare organizations performing in the top quartile for culture outperformed the bottom quartile for patient experience in every HCAHPS domain. Improving the responsiveness to patient needs, the discharge experience, and patient-clinician interactions were key focus areas for top-performing hospitals (Lavoie-Tremblay, Fernet, Lavigne, & Austin, 2015). Aboumatar et al. (2015)
noted the importance of “instilling an understanding that an exceptional patient experience is more about quality and safety than it is about satisfaction” (p. 763). This point is emphasized by the fact that patient-centered care is one of six quality improvement aims by the Institute of Medicine (IOM) (Aboumatar et al., 2015). Organizational culture has emerged as a common theme with commitment to the patient and family experience (Aboumatar et al., 2015). This Dissertation in Practice adds to existing scholarly research and literature by exploring a care setting, namely ASCs, that has received little attention to date. Further, it specifically evaluates patient experience through the lens of OAS CAHPS of which minimal research currently exists. Lastly, it specifically addresses organizational cultural elements that improve patient safety culture from a multidisciplinary perspective, which is lacking in current literature.

While this Dissertation in Practice used a collective, instrumental case study to explore the relationship between patient safety culture and patient experience within ABC Healthcare’s ASCs, certain concepts hold applicable on an interdisciplinary scale. The concepts of safety, quality, and stakeholder experience are applicable across industries, and the results gleaned from this case study research may prove beneficial to organizations outside of healthcare.

In summary, the overall significance of patient safety culture extends beyond high-quality outcomes to influence the patient’s overall care experience. This Dissertation in Practice supported the development of evidence-based leadership strategies that will improve patient safety culture, thereby hopefully improving patient experience. This study adds to existing scholarly research through the exploration of the ASC care setting, which has received minimal attention to date. Finally, there are
interdisciplinary implications associated with this study, as the concepts of safety, quality, and stakeholder experience are applicable across industries.

**Summary**

As a whole, the introduction and background of this Dissertation in Practice articulated the value of examining the relationship between patient safety culture and patient experience in outpatient ASC settings, as there is a lack of research in this specific care environment. Using existing survey instruments to examine patient safety culture and patient experience within ABC Healthcare’s ASCs, coupled with the qualitative online web-based survey to deepen understanding of the organizational cultural characteristics that supported or detracted from patient safety culture, was beneficial in answering the research questions. Leadership styles that emerged during the course of the research included laissez-faire, transformational, and servant leadership, and understanding how leadership style influences organizational culture was essential to making positive changes within ASCs. This Dissertation in Practice will hopefully make a meaningful impact within the healthcare industry as a whole, namely through the development of evidence-based leadership strategies that could improve patient safety culture throughout ASCs. The delivery of safe, high-quality care inherently requires the presence of patient safety culture within the ASC, and in turn, the risk to CMS reimbursement rates decreasing is minimized as payment becomes increasingly tied to quality outcomes and patient experience (Owens et al., 2017).
CHAPTER TWO: LITERATURE REVIEW

Introduction

The IOM estimated that there are 44,000 to 100,000 patient deaths in the United States annually due to preventable medical error (as cited in Watson, 2015). Sentinel events such as mortality, wrong-site surgery, and wrong-side surgery can have devastating consequences for patients, families, and healthcare providers. Martin Bromiley recounted the story surrounding the death of his wife, Elaine, following routine sinus surgery (Laerdal Medical, 2011). The care providers encountered difficulties during the induction of anesthesia, which resulted in Elaine experiencing a lack of oxygen for upwards of 30 minutes (Laerdal Medical, 2011). Sinus surgery was ultimately not performed because of the issue with anesthesia, and Elaine subsequently died several days later (Laerdal Medical, 2011). The investigation into Elaine’s death revealed a breakdown in communication, namely nurses who knew exactly what needed to happen to appropriately care for Elaine but were afraid to speak up (Laerdal Medical, 2011).

Halligan (2014) asserted that the culture in many hospitals normalizes not speaking up because of loyalty, friendship, or even fear. A top down leadership approach with little patience for error only perpetuates such a culture (Halligan, 2014). Normalized deviance is the concept that staff feel anxious, stressed, and fearful about working under an angry, critical, intolerant manager (Halligan, 2014). In turn, nurses focus on survival and self-preservation as opposed to patient safety (Halligan, 2014).

Abrahamson et al. (2016) asserted that nurses have a direct view of patient safety culture because they provide the majority of direct patient care. In a particularly
surprising study, Ramya (2017) found that only 1.2 percent of nurse participants “perceived a favorable climate for patient safety culture” in intensive care units (p. 509).

As such, there is tremendous opportunity to promote patient safety culture within healthcare organizations to encourage the delivery of safe, high-quality care. Additionally, Abrahamson et al. (2016) established that patient safety culture not only enhances the delivery of safe care, but also influences patient experience in acute care settings. The following literature review will present findings about patient safety culture and patient experience in a variety of healthcare settings, followed by a review of the literature about the ASC professional practice setting, and finally an analysis of the role of leadership in promoting patient safety culture and patient experience.

**Literature about the Professional Practice Topic**

The following section will provide an overview of the literature associated with the Dissertation in Practice topic, namely an examination of the relationship between patient safety culture and patient experience in outpatient ASC settings, with particular focus on organizational cultural elements and leadership strategies that promote patient safety culture, and in turn patient experience.

**Patient Safety Culture**

Patient safety culture is fundamentally part of organizational culture and involves group values and patterns of behavior that demonstrate commitment to the safety and wellbeing of patients (Owens et al., 2017; Vogus et al., 2010). At its core, patient safety culture promotes actions that reduce harm (Ramya, 2017; Vogus, Sutcliffe, & Weick, 2010). AHRQ asserts four patient safety culture tenets including acknowledgement of the high-risk nature of healthcare operations, a blame-free environment when near misses
occur, multidisciplinary collaboration to seek solutions to patient safety issues, and a commitment of adequate resources for the elimination of safety concerns (Abrahamson et al., 2016; AHRQ, 2017).

The delivery of healthcare is inherently high-risk. Healthcare is increasingly viewed in a similar fashion as other high-reliability industries, such as airlines, due to the critical nature of services provided (Sorra & Dyer, 2010). Unlike airplanes, which are essentially identical, “human disease is inherently complex and may manifest itself differently across patients” (Vogus et al., 2010). More than 230 million surgical procedures are performed annually throughout the world (Panesar et al., 2013), and patients undergoing surgery are subject to numerous risks that can result in harm or death even under perfect circumstances in the operating room. Preventable harm is a source of risk for patients that gained increasing attention when the IOM (1999) released the report, To Err is Human. In the report, preventable medical errors, such as healthcare acquired infections, bloodstream infections, and patient falls, were noted as the eighth leading cause of death in the United States (Institute of Medicine, 1999). It is estimated that nearly half of the complications experienced by surgical patients are avoidable (Zingiryan et al., 2017). Orthopedic and trauma surgery carry the greatest risk of harm according to Panesar et al. (2013), where an analysis of more than 48,000 reported safety incidents revealed iatrogenic harm in 30 percent of cases, and death in 0.15 percent of cases.

Inattentional blindness, the failure to observe events occurring in real-time, is often the result of competing priorities that contribute to the high-risk nature of healthcare (Vogus et al., 2010; Watson, 2010). While patient safety is likely a shared value between healthcare organizations and clinicians providing direct patient care,
priorities may vary across disciplines (Vogus et al., 2010). Nurses are often faced with caring for multiple patients in fast paced environments, and additional operational challenges such as missing equipment or excessive documentation requirements create a scenario in which it is challenging to commit one’s full attention to each task (Vogus et al., 2010). Technically oriented safety interventions, such as checklists and procedural algorithms help in this regard, and patient safety culture has been found to moderate the effectiveness of these tools (Daugherty et al., 2016).

**Blame-free environment.** An environment free from blame is a major tenant of providing safe, high-quality healthcare (Merrill, 2015). Assigning blame when an error occurs as opposed to utilizing the experience as a learning opportunity can quickly damage organizational culture and diminish safety voice (Merrill, 2015; Schwappach & Gehring, 2014). Safety voice, defined as speaking up behaviors to improve unsafe conditions associated with patient care, may be weakened because of fear of negative consequences (Schwappach & Gehring, 2014). Fear is often the result of physicians or managers becoming hostile when an error or near miss occurs rather than investigating root causes in an effort to learn from the event (Merrill, 2015). Clinicians must be empowered to speak up to minimize harm reaching the patient (Merrill, 2015).

**Multidisciplinary Collaboration.** Multidisciplinary collaboration to seek solutions to patient safety issues begins by empowering employees (Vogus et al., 2010). Because communication failures are ultimately responsible for upwards of 70 percent of preventable medical errors, the entire care team must be engaged in the process of developing solutions to diminish the risk of recurrence (Vogus et al., 2010). Vogus et al. (2010) discussed mindful organizing as a mechanism to promote collaboration across the
multidisciplinary team. Preoccupation with failure, reluctance to simplify interpretations, sensitivity to operations, commitment to resilience, and deference to expertise allow for a mindful approach to patient safety (Vogus et al., 2010; Weick, Sutcliffe, & Obstfeld, 1999). Mindfulness toward patient safety occurs by assessing potential vulnerabilities, actively allowing loyal dissent where differing opinions are welcomed and encouraged, and utilization of expertise from individuals regardless of title or rank within the organization (Vogus et al., 2010; Weick et al., 1999).

Power inequalities exist between surgeons and nurses largely due to the distribution of labor, which can impede collaboration if not managed effectively (Keshet, Ben-Arye, & Schiff, 2013). Nurse-physician collaboration is an integral piece of providing safe patient care (Klemenc-Ketis, Deilkas, Hofoss, & Bondevik, 2017). Benson (2010) discussed that members of different disciplines as well as those in varying positions within the organizational hierarchy must spend time working together to diminish such power inequalities. Leaders should require multidisciplinary collaboration on real issues (Benson, 2010). Adequate time and resources to support team members in implementing change is imperative, thus allowing multidisciplinary teams to achieve similar levels of collaboration that are typically reserved for members of the same profession (Benson, 2010; Klemenc-Ketis et al., 2017). The attainment of a safe environment in which to provide care necessitates members of the multidisciplinary team asking questions, working together, offering one another feedback, and exhibiting a high level of comfort with self-reporting (Benson, 2010).

**Commitment of Adequate Resources.** Organizational commitment of adequate resources for the elimination of safety concerns goes beyond providing supplies and
equipment that reduce the potential for harm such as safety needles and personal protective equipment like gowns, gloves, and masks. Implementation of a surgical checklist, typically referred to as a time out process, is an example of a resource that can mitigate harm (Zingiryan et al., 2017). However, the tool is of little value if staff are not allowed adequate time to appropriately perform the safe surgical checklist prior to the induction of anesthesia, prior to incision, and immediately post procedure. Other necessary resources aimed at the elimination of safety concerns include adequate training and mentoring to perform the essential functions of one’s job, communication and reflective listening skill building, and adherence to safe nurse-to-patient ratios (Abdelhadi & Drach-Zahavy, 2011; Abrahamson et al., 2016).

Patient Experience

Aboumatar et al. (2015) noted the importance of “instilling an understanding that an exceptional patient experience is more about quality and safety than it is about satisfaction” (p. 763). A strong safety culture may produce positive spillover effects throughout the nurse caregiving experience resulting in the patient’s perception of a high-quality experience (Abrahamson et al., 2016), meaning the concepts of nurse engagement and patient experience are not mutually exclusive.

Employee Engagement. Employee engagement encompasses items such as discretionary effort, enthusiasm for work, and a positive relationship between team members and the mission of the organization (Owens et al., 2017). Employee engagement has been shown to have a mediating effect on patient safety and nursing turnover (Collini, Guidroz, & Perez, 2015; Laschinger & Leiter, 2006; Snavely, 2016). Nursing turnover in 2014 was 17.2 percent overall, placing a notable burden on the
healthcare industry (Snavely, 2016). Understanding the causes of nurse turnover is important from a patient safety perspective as nurse-to-patient ratios tend to increase as turnover grows, resulting in potentially unsafe conditions and reduced quality of care (Collini et al., 2015).

Organizations performing in the top quartile for culture outperformed the bottom quartile in terms of overall employee engagement, which resulted in a 3.2 percent favorable difference related to turnover (Owens et al., 2017). Engaged employees have advanced levels of organizational commitment, which is an important consideration for healthcare organizations, particularly taking into account that the average cost of replacing one registered nurse can be upwards of $22,000 (Owens et al., 2017). Collini et al. (2015) demonstrated that one of the primary predictors of turnover and turnover intent is the extent to which employees are engaged with one’s work. Highly engaged employees are 87 percent less likely to leave the organization than non-engaged counterparts (Patrnchak, 2013). Adequate staffing is one of three safety culture domains asserted by AHRQ, and minimizing turnover is essential to ensuring appropriate nurse-to-patient ratios (Abrahamson et al., 2016).

**Patient-Centered Care.** Patient-centered care, identified by the IOM as one of six quality improvement aims, enhances outcomes, positively impacts patient experience, and has the potential to reduce the overall cost of care (Aboumatar et al., 2015). Patient-centered care requires improved communication among nurses as well as the involvement of patients in making decisions about one’s care, as well as the use of empathy and compassion in the delivery of care (Abdelhadi & Drach-Zahavy, 2011). Patients deserve to be heard and treated as a whole person. When care is patient-centered, individuals
have a better understanding of one’s medical issue, which promotes improved compliance with treatment plans and subsequently better outcomes (Abdelhadi & Drach-Zahavy, 2011).

Service climate, defined as shared perceptions between clinicians and leaders about the level of service required and supported, facilitates patient-centered care in nursing homes (Abdelhadi & Drach-Zahavy, 2011). Investing in service excellence training will promote self-awareness and reflective listening skills, which will greatly enhance patient-centered care (Abdelhadi & Drach-Zahavy, 2011). Not surprisingly, patient-centered care positively influences patient experience as patients feel valued and as if they have a voice in the decisions that affect one’s care (Abdelhadi & Drach-Zahavy, 2011).

**OAS CAHPS.** The OAS CAHPS survey was designed by AHRQ and CMS to measure patient experience in an ASC setting. The survey consists of 37 questions grouped into three domains including Communication, Discharge, and Facility/Personal Treatment. Two global measures are also included, namely Overall Rating of the Facility and Willingness to Recommend the Facility to Family or Friends (Centers for Medicare and Medicaid Services, 2016). CMS has approved two modes of completion, namely by sending paper surveys via mail or conducting telephone calls (“Patient Surveys,” 2017). Although electronic surveys may be administered, CMS does not currently recognize them as meeting mandatory reporting requirements that will likely be put into place in the near future (“Patient Surveys,” 2017). Healthcare reimbursement is increasingly going to be tied to high-quality outcomes and patient experience, therefore a strategic focus on OAS CAHPS is required for ASCs to ensure success well into the future (Elliott et al.,
At ABC Healthcare, the standardized OAS CAHPS survey is administered to patients by a third-party vendor, Press Ganey, and the returned survey data is then compiled in a database capable of aggregating the results for in depth analysis.

In summary, there is considerable existing literature associated with patient safety culture in various healthcare settings in light of the four safety culture tenets established by AHRQ. Additionally, existing literature about patient experience is available specific to care environments such as hospitals and nursing homes, much of which is presented along with the associated concepts of employee engagement and patient-centered care. OAS CAHPS is a reliable and valid measurement of patient experience. Research associated with OAS CAHPS is currently lacking in existing literature. This research study was specifically designed to fill that gap.

**Literature about the Professional Practice Setting**

The following section will present literature associated with ASCs as a professional practice setting. A brief history of ASCs will be provided along with a discussion about key players.

**History**

ASCs are freestanding medical facilities that provide the majority of surgical procedures in the United States (Carey & Mitchell, 2017). Both single-specialty and multi-specialty ASCs exist to serve specific populations within a given community. ABC Healthcare, for example, currently manages more than 130 ASCs across the country, three of which are single-specialty urology facilities, several are single-specialty gastroenterology (GI) facilities, and the majority are multi-specialty facilities that provide service lines such as orthopedics, ear, nose and throat (ENT), gynecology, and general...
surgery among many others. As a general rule, ASCs are able to provide the same expert-level care administered in acute care settings at a much lower cost (Carey & Mitchell, 2017).

ASCs have experienced exponential growth throughout the past several years. There were 3,028 CMS certified ASCs in 2000, and that number grew to 5,446 in 2014 (Carey & Mitchell, 2017). ASCs tend to be patient friendly facilities, largely because surgeries are not at risk of being delayed because of emergent patients, which is a common occurrence in a hospital setting. Additionally, ASCs are physically smaller and thus easier to maneuver for patients and visitors. Physicians are able to maintain ownership interest in ASCs, which inherently causes ASCs to take a physician-centric approach to decision-making (Carey & Mitchell, 2017). ASCs must be licensed by the Department of Health in the state in which they reside, and should they wish to provide reimbursable care for Medicare beneficiaries, they are required to be certified by CMS. Many ASCs also choose to seek accreditation, such as through the Accreditation Association for Ambulatory Health Care (AAAHC) or The Joint Commission (TJC), to demonstrate a strong commitment to quality and safety.

Key Players

Physicians must go through a rigorous credentialing process prior to providing care in an ASC to ensure the appropriate education, training, and experience is in place for the delivery of safe, high-quality care. In an ASC setting, physicians providing direct patient care include anesthesiologists and surgeons. Nurses are essential to ASCs, and typically have an extensive background in nursing within the pre-operative, operating room, or post anesthesia care unit setting. Radiology technicians are available to provide
imaging services, instrument technicians ensure surgical equipment is appropriately cleaned and sterilized prior to surgical procedures, and surgical technicians assist surgeons during procedures by handing supplies and equipment to the surgeon in a sterile manner. These key players play an essential role in providing safe, high quality, patient-centered care.

Literature specific to ASCs is quite limited, thus the Dissertation in Practice designed to examine the relationship between patient safety culture and patient experience in ASC settings is timely and valuable.

**Leadership Literature**

The role of leadership will surface when examining organizational characteristics that promoted or detracted from patient safety culture. The following section will present leadership styles that emerged during the course of the research, specifically laissez-faire, transformational and servant leadership.

**Laissez-faire Leadership**

Robbins and Judge (2016) pointed out that laissez-faire leadership is the most passive and least effective form of management. Laissez-faire leadership is associated with blame when errors occur, and managers are likely to find quick fixes, be indecisive, or become hostile rather than investigate root causes (Merrill, 2015). It is unlikely that Laissez-faire leadership promotes patient safety culture or enhances patient experience within ASC settings.

**Transformational Leadership**

As the most widely studied of all leadership theories, transformational leadership promotes diverse behaviors through four key tenets (Bass, 1998). Idealized influence
Involves a leader doing what is right simply because it is indeed the right thing to do; it is a moral commitment to the collective good (Bass, 1998). Inspirational motivation stimulates passion and optimism among employees, allowing obstacles to be overcome (Bass, 1988). Intellectual stimulation encourages employees to find innovative solutions to complex problems, in turn creating a competitive advantage (Bass, 1998; Eisenbeiss, van Knippenberg, & Boerner, 2008). Individualized consideration evokes compassion and empathy and emphasizes establishing quality relationships with employees (Bass, 1998). Transformational leadership characteristics are largely associated with promoting patient safety (Merrill, 2015). Transformational leadership practices often lead to high quality outcomes and improved retention (Lavoie-Tremblay et al., 2015).

Transformational leadership involves inspirational, visionary, and values-driven components with focused attention on long term goals that instill a higher sense of purpose (Graves, Sarkis, & Zhu, 2013; Johnson, 2015).

**Servant Leadership**

Servant leadership is a pro-social form of management known to promote positive associations between follower attitudes and behaviors, and organizational outcomes (Neubert, Hunter & Tolentino, 2016). As noted by Neubert et al. (2016), servant leadership is valuable largely due to its defining feature, benevolent service to others. Servant leadership promotes an organizational culture that puts employees first, promotes well-being and growth, and considers the interests of customers and the community (Neubert et al., 2016).

Researchers explored the correlation between job satisfaction and the satisfaction of patients when management employed servant leadership (Neubert et al., 2016). An
online survey was utilized to obtain feedback from 1,485 staff nurses and 105 nurse managers that worked for nine different hospitals to assess the level of servant leadership present within the organization (Neubert et al., 2016). Employee engagement was measured by a third-party vendor as was patient satisfaction, the results of which were then compared to the online survey related to the degree of servant leadership present within a given hospital unit (Neubert et al., 2016). The results of the survey indicated that unit-level servant leadership was positively associated with job satisfaction, which was in turn positively correlated with patient satisfaction (Neubert et al., 2016). The study also noted that high levels of organizational structure coupled with strong servant leadership yielded the greatest amount of job satisfaction, and in turn considerable patient loyalty (Neubert et al., 2016).

This section presented literature associated with leadership styles that emerged during the course of the research. Laissez-faire management presented in ASCs where patient safety culture is lacking. Transformational leadership practices often lead to high quality outcomes and improved retention (Lavoie-Tremblay et al., 2015), and as such are found in top-performing ASCs for patient safety culture and patient experience. Finally, servant leadership was discussed as a mechanism to shape individual and organizational behavior (Johnson, 2015), and, much like transformational leadership, was found in ASCs where patient safety culture and patient experience are clear priorities.

**Summary**

In summary, the literature review presented findings about patient safety culture and patient experience in a variety of healthcare settings, followed by a review of the literature associated with the ASC professional practice setting, and finally provided an
analysis of the role of leadership in promoting patient safety culture and patient experience. Patient safety culture has been a concept under study since the IOM (1999) published its groundbreaking report, *To Err is Human*. Patient experience is not a new notion either, with considerable existing research involving the associated concepts of employee engagement and patient-centered care. Literature associated with patient safety culture and patient experience is lacking specific to the ASC environment, which further adds value to the Dissertation in Practice.

Laissez-faire management, transformational leadership, and servant leadership all appeared within the ASCs under study. While laissez-fair management detracted from patient safety culture and patient experience, transformational and servant leadership promoted patient safety culture and patient experience as both are leadership styles that are motivating and empowering for followers (Bass, 1998; Neubert et al., 2016; Vogus et al., 2010). As a whole, the literature review provided insight into existing scholarly research about patient safety culture and patient experience, and demonstrated that the Dissertation in Practice designed to examine the relationship between patient safety culture and patient experience in ASC settings fills a void in existing research.
CHAPTER THREE: METHODOLOGY

Introduction

The purpose of this collective, instrumental case study was to understand the relationship between patient safety culture and patient experience within ASCs that are part of ABC Healthcare, with particular focus on organizational cultural elements and leadership strategies that promote patient safety culture, and in turn patient experience. Patient safety culture was evaluated through the AHRQ ASC Survey on Patient Safety Culture completed by existing employees and clinicians of ABC Healthcare. Patient experience was evaluated through OAS CAHPS surveys completed by patients whom have had surgery in one of ABC Healthcare’s ASCs. An anonymous online survey designed to increase understanding of the organizational cultural characteristics and leadership strategies that support or detract from patient safety culture, and in turn patient experience, was administered to formal leaders within ABC Healthcare’s ASCs.

While significant research exists related to patient safety culture in acute care (inpatient hospital) settings (Abrahamson et al., 2016; Merrill, 2015; Ramya, 2017; Nie, Mao, Cui, He, Li, & Zhang, 2013; Zingiryan, Paruch, Osler, & Hyman, 2017), research is limited specific to outpatient ASC environments. There is also no existing research associated with the true impact of patient safety culture on the patient experience in an ASC setting. Obtaining a better understanding of the cultural elements that enhance patient safety culture within a sampling of ABC Healthcare’s ASCs will enable the development of evidence-based leadership strategies. These strategies may improve patient safety culture throughout ASCs, and in turn hopefully positively affect patient experience. Improving patient safety culture within ASCs is beneficial in the delivery of
safe, high-quality care, and will minimize risk to CMS reimbursement rates as payment becomes increasingly tied to quality outcomes and the patient experience (Owens et al., 2017).

The following section of the Dissertation in Practice provides detail about the collective, instrumental case study designed to examine the relationship between patient safety culture and patient experience in an outpatient ASC environment. The purpose of the study is discussed along with the procedures for site inclusion. An in-depth description of the three primary data collection tools, the AHRQ ASC Survey on Patient Safety Culture, OAS CAHPS surveys, and the anonymous online survey, along with an overview of the data collection and analysis procedures is provided. Ethical considerations address how anonymity and confidentiality for participants was assured. Finally, the researcher engages in brief reflective practice to acknowledge how the study may contribute to the industry as a whole.

**Research Questions**

The goal of this collective, instrumental case study was to understand the relationship between patient safety culture and patient experience in ASCs that are part of ABC Healthcare, with particular focus on organizational cultural elements and leadership strategies that promote patient safety culture, and in turn patient experience. Thus, this qualitative study sought to answer the following research questions:

**Research question #1:** What is the relationship between patient safety culture and patient experience within a sampling of ambulatory surgery centers?
Research question #2: How do healthcare leaders describe organizational cultural elements that enhance patient safety culture and patient experience within a sampling of ambulatory surgery centers?

Research question #3: How do healthcare leaders describe leadership strategies that may influence patient safety culture, and in turn patient experience, throughout ambulatory surgery centers?

**Research Design**

A collective, instrumental case study was employed, using surgery centers within ABC Healthcare to allow for purposes of comparison (Creswell & Poth, 2018). The ASCs appropriate for inclusion in this qualitative study were determined by reviewing existing ABC Healthcare data sources. The results of the AHRQ ASC Survey on Patient Safety Culture administered to ABC Healthcare’s roughly 130 ASCs in February 2018 was reviewed, with specific attention to the question, “Please give your facility an overall rating on patient safety.” The percentage of ABC Healthcare employees and clinicians that rated this question Very Good or Excellent included a low of 51 percent and a high of 100 percent. As such, facilities in which 95 to 100 percent of employees and clinicians rated patient safety as Very Good or Excellent composed ASC Group A (20 ASCs total). Facilities in which 51 to 71 percent of employees and clinicians rated patient safety as Very Good or Excellent composed ASC Group B (20 ASCs total). Site selection included 40 facilities to allow for substantial descriptive analysis of the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS survey results. Additionally, 40 facilities was determined to be a sufficient sample size from which to draw conclusions, and there was a natural break in scores when evaluating the 20 highest scoring facilities.
and the 20 lowest scoring facilities within ABC Healthcare on the overall safety culture rating.

OAS CAHPS survey results received from patients who were cared between January and March 2018 within one of the 40 ASCs part of site inclusion were evaluated, with particular attention to the two global measures and three composites (Centers for Medicare and Medicaid Services, 2016). An anonymous online survey was administered to formal leaders within the 40 ASCs selected for site inclusion. The survey included a question about the duration of employment to ensure that responses were only captured for formal leaders that were employed by the ASCs selected for site inclusion at the time the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS surveys were administered. This assured clear connections, as case studies must be bounded by specific parameters (Creswell & Poth, 2018).

**Appropriateness of Design**

A qualitative approach proved valuable to this study in that the goal of the research was to understand the themes and patterns that enhance patient safety culture and patient experience (Creswell & Creswell, 2018; Creswell & Poth, 2018). Understanding the relationships between patient safety culture and patient experience inherently required an in-depth review of multiple sources of information (Creswell & Poth, 2018).

**Study Components**

The two components under study were patient safety culture, which was measured by the AHRQ ASC Survey on Patient Safety Culture administered to employees and clinicians within ABC Healthcare’s ASCs, and the overall patient experience, which was evaluated by the OAS CAHPS survey administered to patients whom had surgery in one
of ABC Healthcare’s ASCs. The relationships and defining characteristics of patient safety culture and patient experience were analyzed further through verbatim comments received from employees and clinicians as part of the AHRQ ASC Survey on Patient Safety Culture, as well as through an anonymous online survey administered to formal leaders within ABC Healthcare’s ASCs selected for site inclusion.

In summary, a collective, instrumental case study was an appropriate methodology for this research as understanding the relationships between patient safety culture and patient experience inherently required a review of multiple sources of information. The two components under study, patient safety culture and patient experience, were evaluated through the lens of the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS surveys. Verbatim comments received from employees and clinicians, along with an anonymous online survey administered to formal leaders within ABC Healthcare further enhanced understanding of the similarities and differences between the concepts under study. Selecting 40 ASCs for site inclusion allowed for substantial descriptive analysis of patient safety culture and patient experience, and as such, the proposed research design supported answering the research questions.

**Participants/Data Sources**

The population under study included various individuals from the healthcare community, namely healthcare workers at ASCs that completed the AHRQ ASC Survey on Patient Safety Culture, patients who received care in an ASC environment and subsequently completed the OAS CAHPS survey, and formal leaders that have worked in an ASC setting for a minimum of 18 months.
Sampling Strategy

The sampling strategy for site inclusion in this qualitative study was determined by reviewing existing ABC Healthcare data sources, specifically the results of the AHRQ ASC Survey on Patient Safety Culture administered to ABC Healthcare’s roughly 130 ASCs in February 2018, and OAS CAHPS surveys administered at the same facilities between January and March 2018. The results of the AHRQ ASC Survey on Patient Safety Culture allowed for identification of the top (ASC Group A) and bottom (ASC Group B) performers within the organization, which determined site inclusion. OAS CAHPS survey results received from patients who had surgery at the 40 ASCs selected for site inclusion were utilized for descriptive analysis to evaluate potential differences in patient experience between ASC Group A and ASC Group B. Formal leaders employed by the ASCs selected for site inclusion at the time the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS surveys were administered were recruited for the anonymous online survey component of the study.

Necessary Permissions

The AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS survey results are the property of ABC Healthcare and as such, permission was sought to utilize these data sets for the purposes of this study. It is important to note that there were no patient identifiers associated with the AHRQ ASC Survey on Patient Safety Culture, which eliminated concern associated with maintaining patient confidentiality. OAS CAHPS surveys were received by a third party vendor, Press Ganey, and entered into a database. If the patient consented to the release of one’s demographic information, identifiable information was in turn available within the database. However, OAS
CAHPS survey results were de-identified prior to being disseminated to the researcher, minimizing HIPAA considerations and risk of identification of individual participants.

The individuals recruited for the anonymous online survey component of this collective, instrumental case study were existing employees of ABC Healthcare. Because proprietary information could be gleaned from the online survey results during the course of the study, approval from ABC Healthcare was required for this portion of the collective case study as well. ABC Healthcare had a formal process in place for requesting access to utilize company information for the purposes of research that included gaining approval from the associated division president. This process was appropriately completed by the researcher.

IRB approval was obtained from Creighton University prior to commencing research activities to ensure the protection of human subjects. This collective, instrumental case study met the requirements for expedited review because risk to participants was minimal. Additionally, the research involved group characteristics and behavior that encompassed organizational cultural practices, minimizing risk to individual participants.

In summary, the population under study included healthcare workers employed by and patients receiving care from ABC Healthcare’s ASCs. Purposeful sampling was utilized to recruit top and bottom performers on the patient safety culture survey and careful attention was paid to recruiting formal ASC leaders employed during the timeframe the surveys were administered which assured clear connections between the data points existed. Finally, the process for gaining written permission to utilize ABC Healthcare’s data for the purposes of this research was followed appropriately, and IRB
approval was obtained prior to commencing study activities to ensure the protection of human subjects.

**Data Collection Tools**

Using existing survey instruments that have been determined to be both reliable and valid allowed the researcher to establish meaningful inferences (Creswell & Creswell, 2018). These instruments are described below.

**AHRQ ASC Survey on Patient Safety Culture**

The AHRQ ASC Survey on Patient Safety Culture includes 35 questions, with 27 items grouped into eight composite scores, including communication about patient information, communication openness, staffing/work pressure/pace, teamwork, staff training, organizational learning/continuous improvement, response to mistakes, and management support of patient safety (Westat et al., 2015). Reliability statistics for the AHRQ ASC Survey on Patient Safety Culture were calculated from the pilot study results involving 1,800 staff members at 59 ASCs across 20 states (Westat et al., 2015). The internal consistency of the eight composites was quantified by Cronbach’s alpha, with a low of .69 associated with communication about patient information and a high of .84 for management support of patient safety (Westat et al., 2015). Seven of the eight composites fell within the ideal range of .70 to .90. This is indicative of good internal consistency of the instrument (Creswell & Creswell, 2018). Please note that for the purposes of this Dissertation in Practice, the AHRQ ASC Survey on Patient Safety Culture results were provided to the researcher already aggregated at the facility level to ensure anonymity of the participants, therefore reliability statistics cannot be calculated for this specific sample.
OAS CAHPS

The OAS CAHPS survey was designed by AHRQ and CMS and consists of 37 questions grouped into three domains, Communication, Discharge, and Facility/Personal Treatment, and two global items, Overall Rating of the Facility and Likelihood to Recommend the Facility. A field test involving 4,179 patients from 36 facilities was conducted in 2014 to test the reliability and validity of the survey (Centers for Medicare and Medicaid Services, 2016). Psychometric analysis was performed which included cognitive interviews involving patients to test the ability to answer survey questions, followed by a mode experiment which was conducted in 2015 “to test data collection modes, detect potential nonresponse bias, determine patient characteristics that influence OAS Survey results, and develop models to adjust or control for these characteristics prior to public reporting” (AHRQ, 2016, p. 2; Centers for Medicare and Medicaid Services, 2016). In turn, the 49-item survey instrument was reduced to 37 questions (AHRQ, 2016; Centers for Medicare and Medicaid Services, 2016). The OAS CAHPS survey was deemed reliable and received CAHPS accreditation in 2015 (Centers for Medicare and Medicaid Services, 2016). AHRQ and CMS did not report reliability and validity statistics for OAS CAHPS, however healthcare organizations across the United States utilize this survey to measure patient experience in outpatient and ambulatory surgery environments.

Anonymous Online Survey for Formal Leaders

An anonymous online survey was administered to formal leaders that were employed at the facilities included in ASC Group A and ASC Group B during the timeframe that the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS
surveys were administered. The anonymous nature of the online survey resulted in greater candor from participants, which yielded greater understanding of the organizational cultural elements and leadership strategies that promote patient safety culture and in turn patient experience. The online survey was administered using Survey Monkey. One link to the survey was generated and emailed to formal leaders within ASC Group A, and a separate link was generated and emailed to formal leaders within ASC group B to ensure responses could be appropriately attributed to each respective group without asking participants to identify the surgery center in which they work (see Appendix D).

Research participants were asked to provide electronic consent prior to beginning the survey. Participants were then asked if they were in a formal leadership position within their respective ASC identified for site inclusion when the AHRQ ASC Survey on Patient Safety Culture was administered to employees and clinicians (February 2018), as well as when patients were surveyed about their experience by way of OAS CAHPS (first quarter 2018). Employee rounding, as noted in question four, is a strategy articulated by Studer (2013) that is designed to promote employee engagement and in turn positively influence patient experience. Open-ended responses were associated with most questions to allow the participant to share their perspective without being prompted to answer in a specific manner.

In summary, utilizing two existing surveys, namely the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS, both having been deemed reliable and valid, allowed for the establishment of meaningful inferences. The online survey provided the opportunity for greater depth of understanding about the relationship between patient
safety culture and patient experience, and the anonymous nature of the survey likely promoted greater candor.

**Data Collection Procedures**

The AHRQ ASC Survey on Patient Safety Culture was administered throughout the Ambulatory Surgery Division (ASD) of ABC Healthcare in February 2018 by a third party vendor. Reports providing the data from the AHRQ ASC Survey on Patient Safety Culture were obtained from the third party vendor already aggregated at the facility level, and were evaluated for each of ABC Healthcare’s ASCs. Specific attention was given to the question, “Please give your facility an overall rating on patient safety.” The percentage of ABC Healthcare employees and clinicians that rated this question Very Good or Excellent included a low of 51 percent and a high of 100 percent. As such, facilities in which 95 to 100 percent of employees and clinicians rated patient safety as Very Good or Excellent composed ASC Group A (20 ASCs total). Facilities in which 51 to 71 percent of employees and clinicians rated patient safety as Very Good or Excellent composed ASC Group B (20 ASCs total).

Press Ganey administers OAS CAHPS surveys for ABC Healthcare. Patients have the option of allowing one’s demographic information to be released as part of the survey process, however for the purposes of this study, OAS CAHPS data was de-identified and no patient identifiers were included in the research. OAS CAHPS survey results from patients whom had surgery between January and March 2018 at the 40 ASCs identified for site inclusion were evaluated, with particular focus on the two global measures and the three domains (Centers for Medicare and Medicaid Services, 2016).
Formal leaders, including administrators, directors of nursing, nurse managers, operating room managers, preoperative managers, and post anesthesia care unit managers, currently employed within the ASCs identified for site inclusion were recruited for the anonymous online survey component of the study. The researcher utilized employee rosters provided by ABC Healthcare to identify the aforementioned formal leaders currently employed at the 40 ASCs identified for site inclusion for recruitment purposes. Survey Monkey was utilized to administer the survey. Two separate links were generated from Survey Monkey, one that was sent to formal leaders within ASC Group A and the second that was sent to formal leaders within ASC Group B. This ensured responses could be grouped appropriately without the participant having to identify their respective surgery center. A recruitment email that included the link generated from Survey Monkey was emailed to participants associated with ASC Group A and ASC Group B (see Appendix D and Appendix E). Participants were given two weeks to complete the anonymous online survey. At the end of the first week, a second email was sent to participants associated with ASC Group A and ASC Group B, reminding them of the timeframe to complete the survey (see Appendix F). The researcher anticipated that a response rate of 30 percent would be attained (Braithwaite, Emery, de Lusignan, & Sutton, 2003). The anonymous online survey was closed at the conclusion of the two-week timeframe, and only the responses received during the applicable timeframe were utilized.

A report was generated from Survey Monkey that contained the results of each survey returned during the applicable timeframe. The open-ended responses went through the coding process to identify similarities and differences in the perceptions of
participants. Saldana (2009) noted the importance of organization to facilitate the coding process as it is challenging, time consuming, and often full of ambiguity. The electronic reports from Survey Monkey were hand coded using an open coding system, moving from one meaning unit to the next during the first cycle (Babbie, 2017; Saldana, 2009). During the second cycle, a more deliberate approach was taken to look for similarities and differences to more carefully select each code (Creswell & Creswell, 2018; Saldana, 2009). Themes emerged during this process, and notes were made accordingly (Creswell & Creswell, 2018). Additional cycles of open coding continued to ensure accuracy and completeness until it was clear that additional themes were no longer emerging (Saldana, 2009).

Descriptive analysis was performed to evaluate the relationship between patient safety culture and patient experience. The mean score for each of the two global measures and three domains from OAS CAHPS surveys returned from patients who had surgery within the ASCs identified for site inclusion between January and March 2018 were evaluated for ASC Group A and ASC Group B to determine if the differences were statistically significant. SPSS software was used to run t-tests for this component of the study. An independent t-test was the appropriate statistical test to evaluate the first research question because the investigator was attempting to measure and analyze differences between two groups that did not involve the same participants (Creighton University; Creswell & Creswell, 2018).

A final important source of data for this Dissertation in Practice was the verbatim comments associated with the AHRQ ASC Survey on Patient Safety Culture. Employees and clinicians were provided an opportunity to write any comments about how things are
done or could be done in their respective facility that might affect patient safety while completing the AHRQ ASC Survey on Patient Safety Culture. The verbatim comments were de-identified to ensure anonymity of the source. The open-ended responses went through the coding process to identify similarities and differences in the perceptions of participants. The electronic reports containing the verbatim comments were hand coded using an open coding system, moving from one meaning unit to the next during the first cycle (Babbie, 2017; Saldana, 2009). During the second cycle, a more deliberate approach was taken to look for similarities and differences to more carefully select each code (Creswell & Creswell, 2018; Saldana, 2009). Themes emerged during this process, and notes were made accordingly (Creswell & Creswell, 2018). Additional cycles of open coding continued to ensure accuracy and completeness until it was clear that additional themes were no longer emerging (Saldana, 2009).

As a leader within ABC Healthcare’s ASD, I needed to be mindful of the bias I brought to the study. My own perceptions of successful leadership characteristics, how to promote patient safety culture, and how to improve the patient experience may have affected my overall judgment in the thematic analysis. To minimize the bias I brought to the study, I engaged in the process of reflexivity by considering how my experiences within the healthcare industry were shaping the interpretation of the research findings (Creswell & Creswell, 2018). Maintaining a personal research diary ensured my reflections were captured throughout the research process (Vaismoradi, Turunen, & Bondas, 2013). Sharing this self-reflection built a candid narrative “that will resonate well with readers” (Creswell & Creswell 2018, p. 200). Additionally, I worked closely
with my dissertation committee to review themes to help control for bias (Creswell & Creswell 2018).

Excluding direct patient identifiers from the research minimized legal risk associated with the Health Insurance Portability and Accountability Act (HIPAA) and the Health Information Technology for Economic and Clinical Health Act (HITECH). Procedures for maintaining anonymity and confidentiality for survey participants are described later in this section. ABC Healthcare assumed the burden of cost associated with the completion of the AHRQ ASC Survey on Patient Safety Culture. Additionally, ABC Healthcare is contracted with Press Ganey to administer OAS CAHPS surveys to patients whom have had surgery within the ASD, and as such, there were no financial or budgetary issues associated with the data collection procedures. Formal leaders recruited for the online survey portion of the study were not compensated for their time; rather the perceived benefit of participation was the potential for improved safety culture and patient experience within one’s facility because of the knowledge gained from the research.

Data associated with the AHRQ ASC Survey on Patient Safety Culture, OAS CAHPS survey results, and Survey Monkey results were stored on ABC Healthcare’s secure network to minimize risk associated with inadvertent disclosure. Additionally, hand coding was performed electronically using tables in Excel. These documents were also stored on ABC Healthcare’s secure network to minimize risk associated with inadvertent disclosure. No documents were printed to eliminate the need to store hard copies of study data.
In summary, data collection procedures began with reviewing the results of the AHRQ ASC Survey on Patient Safety Culture administered in February 2018 throughout ABC Healthcare’s ASD, which provided the foundation for site inclusion. Descriptive analysis of the OAS CAHPS survey results from patients who had surgery between January and March 2018 was conducted using independent t-tests to determine if the differences between ASC Group A and ASC Group B were statistically significant. A deeper understanding of the relationship between patient safety culture and patient experience was gleansed from an anonymous online survey administered to formal leaders within the ASCs included in site selection. Recruitment for the online survey focused on formal leaders employed by the specific facility during the timeframe the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS surveys were conducted to allow for meaningful inferences. Financial considerations were limited to the cost of the access to Survey Monkey, which was minimal, as ABC Healthcare had already absorbed the cost of the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS surveys being utilized for this Dissertation in Practice.

**Data Analysis**

Data analysis occurred in phases due to the nature of the collective, instrumental case study. The results of the AHRQ ASC Survey on Patient Safety Culture was evaluated for the purposes of site inclusion. Specific attention was given to the question, “Please give your facility an overall rating on patient safety.” The percentage of ABC Healthcare employees and clinicians that rated this question Very Good or Excellent included a low of 51 percent and a high of 100 percent. As such, facilities in which 95 to 100 percent of employees and clinicians rated patient safety as Very Good or Excellent
composed ASC Group A (20 ASCs total). Facilities in which 51 to 71 percent of employees and clinicians rated patient safety as Very Good or Excellent composed ASC Group B (20 ASCs total).

**Descriptive Analysis**

Descriptive analysis of the results of the OAS CAHPS surveys administered to patients who had surgery between January and March 2018 within the 40 ASCs identified for site inclusion was performed. The mean score for each of the two global measures and three domains from the OAS CAHPS surveys returned from patients cared for between January and March 2018 in the 20 ASCs that comprise ASC Group A was calculated, as were the mean scores for the same measures and domains for ASC Group B. The mean score for each of the two global measures and three domains from the OAS CAHPS surveys returned from patients cared for between January and March 2018 in the 20 ASCs that encompass ASC Group B was calculated. The mean scores for the two global measures and the three domains from the OAS CAHPS surveys was evaluated for ASC Group A and ASC Group B to determine if the differences between the two groups were statistically significant. SPSS software was used to run t-tests for this component of the study. An independent t-test was the appropriate statistical test to evaluate the first research question because the investigator was attempting to measure and analyze differences between two groups that did not involve the same participants (Creighton University; Creswell & Creswell, 2018).

**Thematic Analysis**

Thematic analysis allowed for a thorough description of the data by identifying commonalities and differences that extended throughout the responses to the anonymous
online survey administered to formal leaders within ABC Healthcare, as well as throughout the verbatim comments from employees and clinicians associated with the AHRQ ASC Survey on Patient Safety Culture. Once the responses were hand coded using an open coding system, thematic analysis was conducted to "identify common themes and dominant arguments" (Schwappach & Gehring, 2014, p. 3). Thematic analysis involved analyzing narrative experiences from the constructivist worldview, which allowed for an emphasis on the views of the participants, namely leaders, employees, and clinicians working within ABC Healthcare’s ASCs (Creswell & Creswell, 2018; Vaismoradi et al., 2013). Using the constructivist worldview, I was able to acknowledge that my personal and professional experiences of healthcare shaped my interpretations of how research participants viewed their world (Creswell & Creswell, 2018). By seeking to understand the perceptions of participants, I was able to develop an explanation related to the organizational cultural elements and leadership strategies that promoted patient safety culture and influenced the overall patient experience (Creswell & Creswell, 2018).

In summary, a deeper understanding of the relationship between patient safety culture and patient experience was gleaned from this collective, instrumental case study. Descriptive analysis of the OAS CAHPS surveys completed by patients whom received care within the same 40 ASCs between January and March 2018 was conducted using independent t-tests, with particular emphasis on the mean scores for the two global measures and the three domains. An anonymous online survey administered to formal leaders was utilized to improve understanding of the organizational cultural elements and leadership strategies that enhanced patient safety culture and patient experience. Basic
thematic analysis of the verbatim comments from employees, clinicians, and leaders of ABC Healthcare enhanced understanding of similarities and differences in the perceptions of staff and leaders that affected patient safety culture and patient experience.

**Ethical Considerations**

Institutional Review Board approval was obtained from Creighton University’s IRB prior to beginning the study to ensure risks to participants were minimal (Babbie, 2017). The AHRQ ASC Survey on Patient Safety Culture data and OAS CAHPS survey information did not contain any identifiable information, therefore keeping individual responses anonymous, which greatly minimized risk to participants (Creswell & Creswell, 2018). Electronic consent was obtained from participants for the online survey administered to formal leaders within ABC Healthcare by asking participants to review the consent language and select “Agree” prior to beginning the Survey Monkey. Responses remained anonymous to lessen the risk to participants with a unique survey link free of identifiable information (Creswell & Creswell, 2018).

**Participant Anonymity and Confidentiality**

Three groups of participants were involved in the course of this research. The first participant group included healthcare workers that completed the AHRQ ASC Survey on Patient Safety Culture in February 2018. The second participant group encompassed patients who received care in an ASC environment between January and March 2018 and subsequently completed the OAS CAHPS survey. The results of both of these surveys were de-identified, thus keeping individual participant responses anonymous (Creswell & Creswell, 2018).
The third participant group included formal leaders that are existing employees of each of the selected ASCs that were recruited for the anonymous online survey. Informed consent was obtained electronically from each participant to assure subjects understood the risks and benefits of the research and the procedures employed to maintain anonymity (Babbie, 2017; Creswell & Creswell, 2018).

**Protection of Data**

The AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS survey data was obtained, analyzed, and stored within ABC Healthcare’s secure network. These datasets were provided to the researcher already de-identified, yielding minimal risk to individual survey participants. The online survey administered to formal leaders within ABC Healthcare was conducted using unique links from Survey Monkey to ensure anonymity. The results of the online survey were obtained, analyzed, and stored within ABC Healthcare’s secure network to ensure appropriate protection of the information.

The results of the research were shared with the Dissertation Committee and ABC Healthcare’s senior leadership team. Because the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS survey data was de-identified, and because formal leaders that completed the online survey will remain anonymous when reporting results, there is minimal risk to individual participants of the study. Additionally, it is unlikely that the investigator will seek to publish the research, as ABC Healthcare may not grant permission for the study to be published.

In summary, obtaining IRB approval and obtaining electronic consent from formal leaders participating in the anonymous online survey will serve to address many of the ethical considerations for this research. Anonymity was provided for respondents
of the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS surveys, as well as for formal leaders participating in the online survey. All data associated with this study was housed on ABC Healthcare’s secure network, and no documents were printed during the course of this research to eliminate the need to store such documents. Finally, a thoughtful approach was maintained in disseminating the results of the research to adhere to sound ethical research practices.

**Reflections of the Researcher**

Patient safety culture is a concept that I am passionate about because of the role it plays in the delivery of safe, high quality, patient-centered care. Patient experience is becoming an increasingly important theme in healthcare, in part because delivering an exceptional experience to every patient is the right thing to do, but also because reimbursement is increasingly going to be tied to the patient’s perception of care in an ASC setting. I embarked on this research study with a desire to gain a deeper understanding of the organizational cultural elements that improve patient safety culture. Being able to demonstrate the relationship between patient safety culture and patient experience helps highlight the importance of providing resources throughout ABC Healthcare’s ASCs, such as leadership development and service excellence training, to improve safety culture and patient experience. This research could ultimately provide the understanding required to develop evidence-based leadership strategies that will promote patient safety culture in ASCs across the country, which would be a meaningful contribution to the industry as a whole.
Summary

In summary, a collective, instrumental case study was utilized to examine patient safety culture and patient experience and the associated relationship between the two concepts, with particular focus on organizational cultural elements and leadership strategies that promote patient safety culture, and in turn patient experience. The population under study included healthcare workers employed by and patients receiving care from ABC Healthcare’s ASCs during a similar timeframe to ensure clear connections existed between the data points. Existing surveys, namely the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS, were utilized to avoid potential delays associated with creating a new survey instrument that has yet to be deemed reliable and valid. Descriptive analysis of the OAS CAHPS survey results using independent t-tests along with basic thematic analysis of the verbatim comments and survey responses from employees, clinicians, and leaders associated with ABC Healthcare provided the opportunity for greater depth of understanding about the relationship between patient safety culture and patient experience in the ASC setting.

Data collection procedures included evaluating the results of the AHRQ ASC Survey on Patient Safety Culture administered in February 2018, OAS CAHPS surveys received from patients whom had surgery between January and March 2018, as well as results of an anonymous online survey administered in May 2019 to formal leaders within ABC Healthcare that were employed at the time the patient safety culture and patient experience surveys were administered. Financial considerations were limited to the cost of Survey Monkey access, which was minimal, as ABC Healthcare already absorbed the cost of the patient safety culture and patient experience surveys being
utilized for this Dissertation in Practice. Obtaining IRB approval served to address many of the ethical considerations for this research. Anonymity was provided for respondents of the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS surveys because the data sets were de-identified. No identifiable information was sought when administering the online survey, keeping individual responses anonymous. All data associated with this study was housed on ABC Healthcare’s secure network. Finally, a thoughtful approach was maintained in disseminating the results of the research to adhere to sound ethical research practices.
CHAPTER FOUR: FINDINGS

Introduction

The purpose of this collective, instrumental case study was to understand the relationship between patient safety culture and patient experience within ABC Healthcare’s ASCs. Particular focus was placed on the organizational cultural elements and leadership strategies that promoted patient safety culture, and in turn patient experience. Patient safety culture was evaluated through the AHRQ ASC Survey on Patient Safety Culture. Patient experience was evaluated through OAS CAHPS surveys. An anonymous online survey administered to formal leaders within ABC Healthcare’s ASCs selected for site inclusion enhanced understanding of the organizational cultural characteristics and leadership strategies that supported or detracted from patient safety culture. This case study sought to answer the following research questions:

Research question #1: What is the relationship between patient safety culture and patient experience within a sampling of ambulatory surgery centers?

Research question #2: How do healthcare leaders describe organizational cultural elements that enhance patient safety culture and patient experience within a sampling of ambulatory surgery centers?

Research question #3: How do healthcare leaders describe leadership strategies that may influence patient safety culture, and in turn patient experience, throughout ambulatory surgery centers?

The following section of the Dissertation in Practice offers a detailed presentation of the research findings. It begins by describing in detail the site selection strategy for this case study, followed by a comprehensive discussion of the descriptive analysis.
completed, and finally a presentation of the thematic analysis conducted. A more in-depth discussion of the research findings is presented in Chapter 5.

**Presentation of the Findings**

**Site Selection Process**

Data collection occurred in phases due to the nature of the collective, instrumental case study. The results of the AHRQ ASC Survey on Patient Safety Culture were evaluated for the purposes of site inclusion. I was granted access to the online password-protected database that contained the results of the AHRQ ASC Survey on Patient Safety Culture for 134 ASCs within ABC Healthcare. A report was generated with specific attention to the question, “Please give your facility an overall rating on patient safety.” The percentage of ABC Healthcare employees and clinicians that rated this question Very Good or Excellent included a low of 51 percent and a high of 100 percent. Four ASCs were immediately excluded from site selection because OAS CAHPS survey information was not available and thus the relationship between patient safety culture and patient experience could not be evaluated.

There was a natural, mathematical break in scores for the top 20 scoring ASCs and the bottom 20 scoring ASCs. As such, facilities in which 95 to 100 percent of employees and clinicians rated patient safety as Very Good or Excellent composed ASC Group A, and facilities in which 51 to 71 percent of employees and clinicians rated patient safety as Very Good or Excellent composed ASC Group B. It is important to acknowledge that for ASC Group A, there is a difference of only five percent between the top and bottom score, whereas for ASC Group B, there is a difference of 20 percent between the top and bottom scores. If ASC Group A were to encompass facilities scoring
between 80 and 100 percent, 69 percent of ABC Healthcare’s ASCs that completed the AHRQ ASC Survey on Patient Safety Culture, or 90 ASCs total, would have been included. To keep site selection to a reasonable sample size for ASC Group A and ASC Group B, facilities scoring between 73 and 94 percent were excluded from site selection (90 ASCs). Table 1 illustrates site selection for ASC Group A, and Table 2 reflects site selection for ASC Group B.

Table 1

*Site Selection for ASC Group A*

<table>
<thead>
<tr>
<th>ASC</th>
<th>N</th>
<th>Percent of Participants that answered Very Good or Excellent on Overall Rating on Patient Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC 1</td>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td>ASC 2</td>
<td>26</td>
<td>100</td>
</tr>
<tr>
<td>ASC 3</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>ASC 4</td>
<td>11</td>
<td>100</td>
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<tr>
<td>ASC 5</td>
<td>22</td>
<td>100</td>
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<tr>
<td>ASC 6</td>
<td>39</td>
<td>100</td>
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<tr>
<td>ASC 7</td>
<td>37</td>
<td>100</td>
</tr>
<tr>
<td>ASC 8</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>ASC 9</td>
<td>36</td>
<td>100</td>
</tr>
<tr>
<td>ASC 10</td>
<td>28</td>
<td>100</td>
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<tr>
<td>ASC 11</td>
<td>19</td>
<td>100</td>
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<td>ASC 12</td>
<td>34</td>
<td>98</td>
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<td>ASC 13</td>
<td>25</td>
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<td>ASC 14</td>
<td>21</td>
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<td>ASC 15</td>
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<td>96</td>
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<td>ASC 16</td>
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<td>ASC 17</td>
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<td>ASC 18</td>
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<td>96</td>
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<td>ASC 19</td>
<td>24</td>
<td>96</td>
</tr>
<tr>
<td>ASC 20</td>
<td>36</td>
<td>95</td>
</tr>
</tbody>
</table>
Notes: The third column reflects the percentage of participants that answered Very Good or Excellent on the AHRQ ASC Survey on Patient Safety Culture question, Please give your facility an overall rating on patient safety; \( N \) equals the number of employees and clinicians in each ASC that completed the AHRQ ASC Survey on Patient Safety Culture.

Table 2

*Site Selection for ASC Group B*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Percent of Participants that answered Very Good or Excellent on Overall Rating on Patient Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC 21</td>
<td>31</td>
<td>71</td>
</tr>
<tr>
<td>ASC 22</td>
<td>41</td>
<td>71</td>
</tr>
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<td>ASC 23</td>
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<td>68</td>
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<td>ASC 24</td>
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<td>ASC 25</td>
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<tr>
<td>ASC 27</td>
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<td>65</td>
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<tr>
<td>ASC 28</td>
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<td>65</td>
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<tr>
<td>ASC 29</td>
<td>40</td>
<td>65</td>
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<tr>
<td>ASC 30</td>
<td>52</td>
<td>63</td>
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<tr>
<td>ASC 31</td>
<td>48</td>
<td>63</td>
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<td>ASC 32</td>
<td>36</td>
<td>63</td>
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<tr>
<td>ASC 33</td>
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<td>62</td>
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<td>ASC 34</td>
<td>22</td>
<td>59</td>
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<tr>
<td>ASC 35</td>
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<td>ASC 36</td>
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<tr>
<td>ASC 37</td>
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<td>ASC 38</td>
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<td>57</td>
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<td>ASC 39</td>
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<td>56</td>
</tr>
<tr>
<td>ASC 40</td>
<td>71</td>
<td>51</td>
</tr>
</tbody>
</table>
Descriptive Analysis

The first research question sought to define the relationship between patient safety culture and patient experience within a sampling of ambulatory surgery centers. Descriptive analysis of the results of the OAS CAHPS surveys administered to patients who had surgery between January and March 2018 within the 40 ASCs identified for site inclusion was performed. The researcher was granted access to the password-protected database that houses OAS CAHPS survey information for the ASCs identified for site inclusion. De-identified reports were exported from the database into Excel that included the ratings for each of the two global measures and three domains from the OAS CAHPS surveys returned from patients cared for between January and March 2018 within the ASCs identified for site inclusion.

The two global measures included the following questions:

- Using any number from 0 to 10, where 0 is the worst facility possible and 10 is the best facility possible, what number would you use to rate this facility?

- Would you recommend this facility to your friends and family?

The first global measure offered a numerical rating of scores ranging between zero and 10, with a score of nine or 10 considered a top box rating. The second global measure offered the participant the ability to select definitely no, probably no, probably yes, or definitely yes (see Appendix B). To allow for a mean rating to be calculated for the second global measure, definitely no was equated to a score of one, probably no was equated to a score of two, probably yes was equated to a score of 3, and definitely yes was equated to a score of 4.
The three domains included several questions associated with overarching themes:

- **Communication about one’s procedure**
  - Provided needed information regarding procedure
  - Instructions were good regarding preparation
  - Procedure information was easy to understand
  - Anesthesia side effects were easy to understand
  - Anesthesia information was easy to understand

- **Facilities and staff (termed facility/personal treatment)**
  - Check-in run smoothly
  - Facility clean
  - Clerks and receptionists helpful
  - Clerks and receptionists courteous
  - Staff treated you with courtesy, respect
  - Staff ensured you were comfortable

- **Preparation for discharge and recovery**
  - Written discharge instructions
  - Instructions regarding recovery
  - Information regarding subsequent pain
  - Information regarding subsequent nausea
  - Information regarding subsequent bleeding
  - Information on response to infection
Participants were able to select no, yes somewhat, and yes definitely in response to the questions within each of the three domains (see Appendix B). The third party vendor that aggregated the individual surveys, Press Ganey, provided the overall score for each of the three domains. To allow for a mean rating to be calculated for each of the domains, no was equated to a score of one, yes somewhat was equated to a score of two, and yes definitely was equated to a score of three.

**The relationship between patient safety culture and patient experience as evaluated by independent t-tests.** An independent t-test was the appropriate statistical test to evaluate the first research question, namely what is the relationship between patient safety culture and patient experience within a sampling of ambulatory surgery centers, because the investigator was attempting to analyze differences between two groups that did not involve the same participants (Creighton University; Creswell & Creswell, 2018). For the first global measure, namely using any number from zero to 10 what number would you rate this facility, Excel was used to first run an F-test to determine if the variances between ASC Group A and ASC Group B were equal. The calculated F-test resulted in rejection of the null hypothesis, thus the variances of the two populations under study were unequal ($F(5633, 4555) = 1.75, p < .0001$).

An independent samples $t$-test assuming unequal variances was conducted to compare the overall facility rating on a scale of zero to 10 on the OAS CAHPS survey for ASC Group A and ASC Group B (see Table 3). ASC Group A reported a mean overall rating of 8.82 ($SD = .67$), whereas ASC Group B reported a mean overall rating of 8.73 ($SD = .88$). There is a statistically significant difference in the overall facility rating between ASC Group A and ASC Group B, $t(10143) = 5.98, p < 0.001$. 

For the second global measure, which highlighted willingness to recommend the facility, and the three domains associated with the OAS CAHPS survey, namely communication, discharge, and facility/personal treatment, SPSS software was used to run independent samples $t$-tests. Table 3 provides an overview of the descriptive statistics for ASC Group A and ASC Group B.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>Sig. (2-tailed)</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommend Facility</td>
<td>A</td>
<td>4542</td>
<td>3.85</td>
<td>0.43</td>
<td>4.87</td>
<td>0.01</td>
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<tr>
<td></td>
<td>B</td>
<td>5623</td>
<td>3.81</td>
<td>0.51</td>
<td>4.95</td>
<td>0.01</td>
</tr>
<tr>
<td>Rating Scale: 1 - 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>A</td>
<td>4579</td>
<td>2.91</td>
<td>0.33</td>
<td>2.60</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>5660</td>
<td>2.89</td>
<td>0.36</td>
<td>2.63</td>
<td>0.009</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge</td>
<td>A</td>
<td>4575</td>
<td>2.95</td>
<td>0.25</td>
<td>2.50</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>5651</td>
<td>2.94</td>
<td>0.29</td>
<td>2.53</td>
<td>0.011</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility/Personal Treatment</td>
<td>A</td>
<td>4572</td>
<td>2.97</td>
<td>0.20</td>
<td>4.03</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>5657</td>
<td>2.95</td>
<td>0.25</td>
<td>4.13</td>
<td>0.000</td>
</tr>
</tbody>
</table>

An independent samples $t$-test assuming unequal variances was conducted to compare the willingness to recommend the facility on the OAS CAHPS survey for ASC Group A and ASC Group B. ASC Group A reported a mean overall rating of 3.85 ($SD = .43$), whereas ASC Group B reported a mean overall rating of 3.81 ($SD = .51$). There is a statistically significant difference in the willingness to recommend the facility between ASC Group A and ASC Group B, $t(10141) = 4.95, p < 0.001$. 
An independent samples $t$-test assuming unequal variances was conducted to compare the communication domain on the OAS CAHPS survey for ASC Group A and ASC Group B. ASC Group A reported a mean overall rating of 2.91 ($SD = .33$), whereas ASC Group B reported a mean overall rating of 2.89 ($SD = .36$). There is a statistically significant difference in the communication domain between ASC Group A and ASC Group B, $t(10062) = 2.63, p = .009$.

An independent samples $t$-test assuming unequal variances was conducted to compare the discharge domain on the OAS CAHPS survey for ASC Group A and ASC Group B. ASC Group A reported a mean overall rating of 2.95 ($SD = .25$), whereas ASC Group B reported a mean overall rating of 2.94 ($SD = .28$). There is a statistically significant difference in the discharge domain between ASC Group A and ASC Group B, $t(10168) = 2.53, p = .011$.

An independent samples $t$-test assuming unequal variances was conducted to compare the facility/personal treatment domain on the OAS CAHPS survey for ASC Group A and ASC Group B. ASC Group A reported a mean overall rating of 2.97 ($SD = .20$), whereas ASC Group B reported a mean overall rating of 2.95 ($SD = .25$). There is a statistically significant difference in the facility/personal treatment domain between ASC Group A and ASC Group B, $t(10223) = 4.13, p < .001$.

The relationship between patient safety culture and patient experience as evaluated by non-parametric scales. The manner in which willingness to recommend the facility along with the three domains, namely communication, discharge, and facility/personal treatment, were measured are non-parametric in nature in that they are ordinal measures (Babbie, 2017). While the options available for the willingness to
recommend the facility, namely definitely no, probably no, probably yes, and definitely yes, provide an opportunity to evaluate the patient’s perception with ordered categories, the distances between the categories are unknown (Babbie, 2017). The same is true for the options available for the three domains, namely no, yes somewhat, and yes definitely. Again, while one can evaluate the patient’s perception with these ordered categories, the distances between the categories are unknown (Babbie, 2017). For the purposes of this research, the scales were converted to a numeric scale to generate means so that $t$-tests could be utilized. One could certainly argue that a score of one is different from a score of two, and so on, and as such, meaningful inferences can be made by treating these measures as parametric for the purposes of creating means. In an effort to acknowledge that some may argue that non-parametric analysis of these measures may be more appropriate, the Mann-Whitney U test was also utilized to compare the differences between ASC Group A and ASC Group B. Table 4 provides an overview of the medians for ASC Group A and ASC Group B, as the Mann-Whitney U test compares medians as opposed to means.
Table 4

**OAS CAHPS Median Scores for ASC Group A and ASC Group B**

<table>
<thead>
<tr>
<th></th>
<th>Recommend Facility (1 - 4)</th>
<th>Communication (1 - 3)</th>
<th>Discharge (1 - 3)</th>
<th>Facility/Personal Treatment (1 - 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>4.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Group B</td>
<td>4.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>Std. Deviation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>0.43</td>
<td>0.33</td>
<td>0.25</td>
<td>0.20</td>
</tr>
<tr>
<td>Group B</td>
<td>0.51</td>
<td>0.36</td>
<td>0.29</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Table 5 offers an overview of the mean rank and sum of ranks for ASC Group A and ASC Group B. The mean ranks indicate that for each OAS CAHPS domain measured, ASC Group A has the highest scores.

Table 5

**OAS CAHPS Mean Ranks for ASC Group A and ASC Group B**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommend Facility (1 - 4)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>4542</td>
<td>5167.86</td>
<td>23472433.00</td>
</tr>
<tr>
<td>Group B</td>
<td>5623</td>
<td>5014.45</td>
<td>28196262.00</td>
</tr>
<tr>
<td>Total</td>
<td>10165</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication (1 - 3)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>4579</td>
<td>5164.00</td>
<td>23645936.50</td>
</tr>
<tr>
<td>Group B</td>
<td>5660</td>
<td>5084.41</td>
<td>28777743.50</td>
</tr>
<tr>
<td>Total</td>
<td>10239</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Discharge (1 - 3)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>4575</td>
<td>5140.84</td>
<td>23519346.00</td>
</tr>
<tr>
<td>Group B</td>
<td>5651</td>
<td>5091.37</td>
<td>28771305.00</td>
</tr>
<tr>
<td>Total</td>
<td>10226</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Facility (1 - 3)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>4572</td>
<td>5157.87</td>
<td>23581778.00</td>
</tr>
<tr>
<td>Group B</td>
<td>5657</td>
<td>5080.35</td>
<td>2873957.00</td>
</tr>
<tr>
<td>Total</td>
<td>10229</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of the Mann-Whitney U test are reflected in Table 6, and further indicate a statistically significant difference between ASC Group A and ASC Group B on the OAS CAHPS measures.

Table 6

*Differences Between ASC Group A and ASC Group B on OAS CAHPS Measures Using a Non-Parametric Statistical Test*

<table>
<thead>
<tr>
<th></th>
<th>Recommend Facility (1 - 4)</th>
<th>Communication (1 - 3)</th>
<th>Discharge (1 - 3)</th>
<th>Facility/Personal Treatment (1 - 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>12384386.00</td>
<td>12757113.50</td>
<td>12801579.00</td>
<td>12735904.00</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>28196262.00</td>
<td>28777743.50</td>
<td>28771305.00</td>
<td>28739557.00</td>
</tr>
<tr>
<td>Z</td>
<td>-4.33</td>
<td>-2.83</td>
<td>-2.45</td>
<td>-3.97</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.005</td>
<td>0.014</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note: If \( p < .05 \), the difference between ASC Group A and ASC Group B on the given OAS CAHPS measure is statistically significant.

The Mann-Whitney U test indicated that the willingness to recommend the facility was statistically significantly greater for ASC Group A than for ASC Group B (\( U = 12384386.00, p = < .001 \)). Additionally, the communication domain was statistically significantly greater for ASC Group A than ASC Group B (\( U = 12757113.50, p = .005 \)). The discharge domain was also statistically significantly greater for ASC Group A than ASC Group B (\( U = 12801579.00, p = .014 \)), and the facility/personal treatment domain was statistically significantly greater for ASC Group A than ASC Group B (\( U = 12735904, p < .001 \)).

*Frequency distributions.* Frequency distributions were evaluated for the second global measure on OAS CAHPS, willingness to recommend the facility, as well as for the three domains to assess potential similarities and differences between ASC Group A and
ASC Group B. Table 7 illustrates the frequency distribution of each measure for ASC Group A and ASC Group B. When evaluating willingness to recommend the facility, the highest score possible (four) was given with greater frequency by patients cared for within a facility that is part of ASC Group A. That is, 86.7 percent of patients cared for within ASC Group A gave the highest rating possible when asked about their willingness to recommend the facility, whereas only 84.0 percent of patients cared for within ASC Group B gave the highest rating possible when asked about their willingness to recommend the facility. The same holds true for the communication, discharge, and facility personal/treatment domains. That is, 92.5 percent of patients cared for within ASC Group A gave the highest rating possible on overall communication, as compared to just 90.9 percent of patients within ASC Group B. 96.3 percent of patients cared for within ASC Group A gave the highest score possible on discharge, whereas 95.3 percent of patients cared for within ASC Group B gave the highest rating possible. Finally, 96.8 percent of patients cared for within ASC Group A gave the highest rating possible on facility/personal treatment, and only 95.4% of patients cared for within ASC Group B gave the highest rating possible.
Table 7

**OAS CAHPS Frequency Measures for ASC Group A and ASC Group B**

<table>
<thead>
<tr>
<th></th>
<th>Recommend Facility (1 - 4)</th>
<th>Communication (1 - 3)</th>
<th>Discharge (1 - 3)</th>
<th>Personal Treatment (1 - 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>34</td>
<td>0.7</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>66</td>
<td>1.2</td>
<td>95</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>28</td>
<td>0.6</td>
<td>276</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>81</td>
<td>1.4</td>
<td>416</td>
</tr>
<tr>
<td>3</td>
<td>A</td>
<td>508</td>
<td>11.1</td>
<td>4237</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>722</td>
<td>12.8</td>
<td>5149</td>
</tr>
</tbody>
</table>

Note: The first column (1, 2, 3, 4) indicates the rating a patient can give on the OAS CAHPS global measure, willingness to recommend the facility, as well as on the three domains, communication, discharge, and facility/personal treatment; for the communication, discharge, and facility/personal treatment domains, a rating of 4 is not available; the second column (A, B) is indicative of ASC Group A or ASC Group B; frequencies (Freq) indicate the number of times a particular rating was given by patients; % indicates the percent of patients that gave a particular rating.

**Thematic Analysis**

Thematic analysis allowed for a description of the data by identifying commonalities and differences in the responses to the anonymous online survey administered to formal leaders within ABC Healthcare. Thematic analysis was also used to identify the commonalities and differences in the verbatim comments from employees and clinicians that completed the AHRQ ASC Survey on Patient Safety Culture.

**Anonymous online survey.** Formal leaders, including administrators, directors of nursing, nurse managers, operating room managers, preoperative managers, and post anesthesia care unit managers, currently employed within the ASCs identified for site
inclusion were recruited for the anonymous online survey component of the study. In total, 41 formal leaders within ASC Group A were sent a recruitment email with a unique link (see Appendix D and Appendix E). During the two-week allotted timeframe, 16 existing formal leaders within ASC Group A completed the anonymous online survey yielding a response rate of 39.0 percent.

The second question on the online survey asks the participant if they have been in a formal leadership role within their respective ASC for at least 18 months (see Appendix C). This question was designed to exclude any formal leaders that responded to the survey that were not in their role at the time the AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS surveys were administered. Four leaders indicated they had not been in a formal leadership capacity for at least 18 months, therefore responses from these participants were excluded from the research.

For ASC Group B, a total of 49 formal leaders received a recruitment email with a unique link (see Appendix D and Appendix E). During the two-week allotted timeframe, 16 formal leaders within ASC Group B completed the anonymous online survey yielding a response rate of 32.7 percent. Four leaders indicated that they had not been in a formal leadership capacity for at least 18 months, and as such were excluded from the research.

Demographic information was not collected from participants during the course of the survey to ensure anonymity.

Individual responses, which contained no identifiable information, were exported from Survey Monkey into Excel for the coding process. The responses were hand coded using an open coding system, moving from one sentence to the next during the first cycle (Babbie, 2017; Saldana, 2009). During the second cycle, a more deliberate approach was
taken to look for similarities and differences to more carefully select each code (Creswell & Creswell, 2018; Saldana, 2009). Themes emerged during this process, and notes were made accordingly (Creswell & Creswell, 2018). Additional cycles of open coding continued to ensure accuracy and completeness until it was clear that additional themes were no longer emerging (Saldana, 2009).

**Communication mechanisms.** Participants were asked to identify the mechanisms used to communicate important information to team members. Upon initial review, 11 unique codes were identified that were ultimately distilled into two themes that emerged from both ASC Group A and ASC Group B, namely active communication and passive communication. Active communication included strategies such as staff meetings, huddles, and one-on-one rounding sessions, where the leader and followers were actively engaged in the communication process at the same time. Passive communication encompassed tools such as communication boards, email, and text messages, where the leader provided information to team members that could be absorbed when convenient.

In reviewing the verbatim responses from ASC Group A, there were 19 instances noted of active communication strategies and 14 instances of passive communication. Leader 1a, for example, indicated use of staff meetings, morning huddles, flyers, and impromptu face-to-face meetings, and Leader 4a noted meetings, rounding, and communication boards. For ASC Group B, there were 14 instances noted of active communication strategies and 6 instances of passive communication. Leader 1b, for example, indicated use of staff meetings and morning leadership huddles, Leader 9b noted staff meetings, team emails, mandatory in-services, management meetings, and
one-on-one meetings, and Leader 12b indicated they mostly use email, yet they also noted that it is inefficient and not effective.

**Employee rounding.** Employee rounding is a strategy articulated by Quint Studer (2013) designed to promote employee engagement and in turn positively influence patient experience. This particular strategy involves the leader having a brief one-on-one conversation with each team member to discuss what is working well, provide a forum for the employee to share ideas to improve quality and safety, as well as ensure the follower has the tools and resources necessary to do one’s job (Studer, 2013). Participants of the anonymous online survey were asked the frequency with which they conduct employee rounding. Upon initial review, seven unique codes were identified that were ultimately distilled into four themes, namely at least weekly, at least monthly, quarterly, and not enough. Seven formal leaders within ASC Group A noted that they round hourly, daily, or weekly. Leader 7a shared they conduct employee rounding “nearly every day. I don’t always catch everybody, but I try to touch base with as many employees as possible whenever I can. More formal rounding happens at least every two weeks with my managers.” Leader 7a’s descriptive answer highlights that some leaders may have interpreted employee rounding to be simple, quick conversations with team members while walking around the center as opposed to the intentional employee rounding described by Studer (2013).

One leader within ASC Group A indicated they conduct employee rounding bi-weekly, two noted monthly, and two noted quarterly. One leader that was part of ASC Group A noted they do not round frequently enough, but did not further define what was meant by that statement. Five participants within ASC Group B stated they conducted
employee rounding either daily or weekly, which is again likely an indication the
question was interpreted differently than intended, as it would be challenging to hold an
intentional one-on-one conversation with every team member with this frequency. Five
leaders within ASC Group B noted employee rounding is conducted monthly which is in
line with the recommendation from Studer (2013), and two participants indicated
rounding is conducted every other month.

**Productivity management.** ASCs strive to offer high value care, meaning the
goal is to deliver high quality, safe, patient-centered care in a cost-effective manner.
Leaders must effectively manage productivity, which is essentially a measure of the man
hours per patient, or more plainly, staffing ratios. Those participating in the anonymous
online survey were asked how they discuss productivity management with team
members. Upon initial review, nine unique codes were identified that were ultimately
distilled into two themes, namely active communication and reporting tools. Active
communication involved having conversations during team leader meetings, staff
meetings, or while conducting employee rounding sessions. Reporting tools included use
of productivity reports as well as scheduling reports.

In evaluating responses from participants within ASC Group A, there were 17
instances of using active communication and two instances of using reporting tools.
Leader 8a shared, “If there is a process that we are looking at changing we talk about it as
a group to get everyone’s input of who the change is involving. We want our employees
to feel valued and a lot of times they have good ideas on how to improve processes.”
Leader 7a noted, “I discuss productivity with managers in person, impromptu meetings,
and formal meetings. I discuss with all employees each quarter in staff meetings.”
Leader 5a discussed use of daily productivity reports, however did not notate how the reports were shared with staff.

Participants of ASC Group B shared 10 instances of employing active communication and zero occurrences of using reporting tools. Leader 3b noted productivity discussions occur through rounding and in departmental meetings. Leader 5b stated they discuss productivity “only when our Vice President is onsite conducting meetings, probably twice per year.” Leader 7b shared, “With my leaders, we discuss via in-person or via email depending on what the conversation needs to be.” Leader 6b answered monthly and Leader 10b answered yes, which likely indicates these leaders interpreted the survey question in a manner other than intended.

**Staffing levels.** Nurse-to-patient ratios are an important consideration for ASCs in that an appropriate balance must be maintained between operating in an efficient manner to reduce the overall cost of care and ensuring staffing ratios are not too lean as both quality and safety would be compromised. Participants were asked a two-part question, namely if they believed their ASC was staffed appropriately, and why or why not. Six formal leaders from ASC Group A believed their ASC was staffed appropriately, and seven leaders from ASC Group B noted their facility was staffed appropriately. Leader 10a noted their productivity metrics are met and staff input is utilized to ensure adequate staffing, and Leader 8a stated they “staff appropriately for our patient load. We look at staffing every day.” Leader 1b stated, “We have enough staff to adequately care for patients and provide a safe caregiving environment for both patients and our staff.” Leader 3b noted they are able to utilize regional float pools when staffing is short to ensure appropriate coverage.
Six formal leaders from ASC Group A stated their ASC was not staffed appropriately, and five formal leaders from ASC Group B indicated their ASC was not staffed appropriately. Upon initial review, five unique codes were identified that were ultimately distilled into two themes, namely retaining staff and recruitment challenges. Leader 1a noted they are not staffed appropriately because they recently lost an operating room nurse, and Leader 5a shared they have open positions for which they cannot find qualified applicants. Leader 10b stated they must utilize agency staff, and leader 9b noted that their ASC is over-staffed during the summer months and under-staffed later in the year.

**Teamwork.** Participants were asked how they promote teamwork within their facility. Upon initial review, 15 unique codes were identified from which four themes readily emerged, including communication, rewards and recognition, structure, and culture. It was noted that communication contributed to a sense of teamwork through strategies such as employee rounding and seeking feedback from team members. Rewards and recognition included birthday celebrations, holiday parties, and staff appreciation week. Structure encompassed strategies such as holding regular staff meetings and ensuring adequate staffing. Culture involved such things as a sense of comradery and leaders lending a hand.

**Communication.** Leaders for ASC Group A mentioned communication strategies five times. Leader 9a shared they talk to employees about the importance of a team mindset, and Leader 10a discussed obtaining frequent input from staff, taking it seriously, and acting on the feedback received. Leaders for ASC Group B discussed communication strategies three times. Leader 5b indicated frequent huddles serves as a
communication mechanism that promotes teamwork, and Leader 6b echoed the use of huddles.

**Rewards and recognition.** Leaders within ASC Group A noted rewards and recognition six times. Leader 1a indicated they provide monthly lunches, host birthday celebrations, and utilize a kudos board, and Leader 7a noted they offer prizes to team members who are recognized by other staff as being exceptional. Leaders that are part of ASC Group B noted rewards and recognition four times. Leader 1b discussed utilization of care recognition awards, hand written thank you notes, and verbal recognition, and Leader 9b noted they provide recognition lunches.

**Structure.** Leaders within ASC Group A discussed six instances of structural elements that promote teamwork. Leader 5a shared employees are cross-trained to all departments, and Leader 2a indicated regular departmental meetings and an “all hands on deck atmosphere where we are all adequately cross-trained” promote teamwork in their ASC. ASC Group B noted structural elements that promote teamwork three times. Leader 2b shared they host teambuilding exercises during team meetings, and Leader 6b indicated they assign people to different tasks to encourage interaction with other areas of the ASC.

**Culture.** Cultural elements that promote teamwork in the ASC were mentioned by ASC Group A three times. Leader 12a discussed that employees routinely jump in and help each other and Leader 3a shared that they “join in with the staff” and lead by example. Leaders within ASC Group B shared cultural elements four times. Leader 4b stated, “Teamwork must be an action displayed every day by management. All of our
management regularly help their employees.” Leader 7b noted they lead by example by taking out trash, unloading supplies, and transporting patients.

**Medical error.** Leaders were asked which of the following three statements most aligned with their perspective on medical error:

- A blame-free environment when errors or near misses occur is essential
- Leaders should evaluate if the caregiver made a mistake that individuals of similar experience and training would be likely to make under the same circumstances
- When an error results in harm, leadership must hold the individual responsible for the error accountable

Eight leaders within ASC Group A indicated a blame-free environment when errors or near misses occur is essential, two leaders indicated an evaluation should occur to determine if an individual with similar experience and training would likely make a similar error, and one leader indicated individuals must be held accountable for making a medical error. Within ASC Group B, four leaders indicated a blame-free environment when errors or near misses occur is essential, six leaders indicated an evaluation should occur to determine if an individual with similar experience and training would likely make a similar error, and two leaders indicated individuals must be held accountable for making a medical error.

**Safety culture.** Participants of the anonymous online survey were asked to define patient safety culture, identify strategies that promote patient safety culture, as well as discuss barriers to patient safety culture within their ASC.
Patient safety culture definition. Leaders within ASC Group A and ASC Group B largely offered a definition of safety culture that was values based in nature. Upon initial review, 10 unique codes were identified that were ultimately distilled into one theme, namely values based. ASC Group A acknowledged that patient safety culture involves patient-centered care, doing the right thing, protecting patients from harm, enabling team members to speak up, and necessitates a sense of ownership from every member of the team. Leader 1a noted, “Patient safety culture starts at the top. Commitment to patient safety is the responsibility of all team members.” Leader 9a stated that patient safety culture involves “individuals feeling comfortable and confident to speak up when an error or near miss occurs. Staff look to improve patient care, and use evidence-based practice to drive their care.” Leader 12a shared that patient safety culture puts the “patient at the center of our care. All team members strive to provide quality care to our patients. Patient safety culture allows us to learn from errors and brainstorm together on ways to improve.”

ASC Group B included mission alignment, staff ownership, patient-centered care, and maintaining a blame-free environment as elements of patient safety culture. Leader 1b noted, “An environment that has safety precautions in place to protect both internal and external customers, has staff that are trained and aligned with the mission of providing the highest level of quality and safety, and is compliant” with regulatory and accreditation standards is indicative of a culture of patient safety. Leader 12b discussed that patient safety culture involves a patient-first attitude, where everyone in the facility feels like they have the power to speak up when they see something that is not right. Leader 9b stated patient safety culture “is everything we do, on a daily basis, for the
safety of our patients. It includes our policies, attitude, and how we make our daily decisions.”

_Safety culture strategies._ Upon initial review, 11 unique codes were identified that were ultimately distilled into four themes as participants from ASC Group A and ASC Group B discussed strategies for promoting patient safety culture in their ASC, namely leadership, structure, culture, and communication. Leadership encompasses strategies such as employee rounding and coaching, structure involves items such as education and training of staff, team meetings, and in-services, culture includes maintaining an open, non-punitive environment, and communication involves encouraging staff to speak up and sharing stories of events to promote learning. Leader 11a noted they employ constant monitoring and coaching of the care delivery process. Leader 8a stated they use in-services, online learning modules, and quizzes to provide education and training that results in improved patient safety culture. Leader 9a indicated they encourage staff to speak up about errors or near misses and refrain from being punitive when issues need to be addressed. Leader 3a shared they ask staff to treat patients the same way they would like their own family members to be treated to promote patient safety culture.

Leaders from ASC Group B shared similar strategies as those noted by participants from ASC Group A. Leader 4b noted they maintain an open door policy and readily share feedback regarding patient care. Leader 1b indicated message boards, sharing of best practices, and monthly education topics are key strategies in promoting patient safety culture. Leader 6a discussed holding quarterly in-services along with offering online learning modules ensures staff competency and promotes safety culture. Leader 12b shared they hold routine conversations associated with the power to speak up
when necessary and emphasize leadership is available to support them when something does not seem right.

Safety culture barriers. Upon initial review, nine unique codes were identified from which three themes emerged as leaders from ASC Group A and ASC Group B discussed barriers to patient safety culture, namely structure, communication, and culture. Structural concerns included items such as the clinical hierarchy, staff feeling rushed, and inadequate staffing. Communication issues included staff being afraid to speak up and differing opinions. Cultural barriers included inadequate staff engagement and a lack of ownership among team members. Leader 6a noted that their staff “spoke out on the patient safety culture survey that they feel rushed when taking care of their patients.” Leader 12a indicated some employees are either scared to speak up or not aware when an issue needs to be escalated. Leader 3a shared that individual attitudes are a barrier to safety culture, and Leader 6a stated that lack of engaged staff is a challenge faced in their ASC.

Leaders within ASC Group B voiced similar barriers. Leader 4b noted that “the rapid pace and short turnover nature of the ASC” is a barrier to safety culture. Leader 12b indicated the inability to have all team members present at staff meetings presents a challenge for the ASC. Leader 5a discussed upper management creating an environment of blame causes nurses to worry that they may be fired, which impedes the ability to build patient safety culture in the ASC.

Patient experience. Similar themes emerged when leaders from ASC Group A and ASC Group B were discussing strategies and barriers associated with promoting patient experience in their ASC as presented when discussing patient safety culture,
namely structure, communication, culture, and rewards and recognition. Upon initial review, 11 unique codes were identified that were ultimately distilled into the aforementioned four themes. Structural items included education and training and experienced staff, communication included patient rounding and leader rounding, cultural elements included caring team members and a sense of teamwork, and rewards and recognition involved verbal praise and thank you cards.

Leaders within ASC Group A voiced several strategies for promoting patient experience. Leader 7a discussed staff education, consistently holding team meetings, conducting process reviews, and reviewing and acting on patient feedback as strategies to help promote patient experience. Leader 4a noted they have plans to reinstate a communication committee, which was a strategy that proved successful in the past in terms of building patient experience. Leader 8a shared, “We have very kind, caring, and compassionate nurses and staff throughout our entire ASC. All patients and their families are treated with dignity and respect.” Leader 11a indicated star cards, thank you letters, and verbal praise are all strategies to help recognize team members when they promote a positive patient experience.

ASC Group A noted a few barriers to promoting patient experience. Upon initial review, eight unique codes were identified that were ultimately distilled into two themes, namely structure and culture. Leader 2a indicated “trying to maintain a swift flow of patients for efficient turnover of cases while still providing the best standards” is a challenge. Leader 8a shared that some patients do not respond well even to the kindest of nurses, which creates a barrier to promoting patient experience. Leader 7a indicated lack
of engaged staff is a barrier as well. Three leaders did not share any barriers associated with promoting patient experience in their ASC.

Leaders within ASC Group B discussed several similar strategies for promoting patient experience. Upon initial review, 11 unique codes were identified that were ultimately distilled into four themes, namely reward and recognition, structure, communication, and culture. Leader 6b voiced the importance of completing adequate onboarding and orientation of new team members to help promote patient experience. Leader 7b shared that performing patient rounding and ensuring following up communication with the patient’s family if surgery is running long are imperative to promoting patient experience. Leader 12b stated, “I believe happy, engaged employees have the biggest impact on patient experience.” Leader 8b noted that they post patient letters for team members to read, and they offer both verbal and written recognition for exceptional care delivered by team members.

ASC Group B noted several barriers to promoting patient experience. Upon initial review, eight unique codes were identified that were ultimately distilled into two themes, namely structure and culture. Leader 4b stated, “Turnover speed, unexpected operating room delays that impact future patients, and unmet patient expectations” are significant barriers to promoting patient experience. Leader 8b indicated pressure to reduce man hours limits the ability to have team meetings, which diminishes communication about the patient experience. Leader 12b shared that the volume of patients can sometimes be a barrier to promoting patient experience, in that it can reduce the amount of time a team member has to spend with each individual patient.
**Verbatim comments.** Employees and clinicians completing the AHRQ ASC Survey on Patient Safety Culture had the opportunity to document comments about how things are done or could be done in one’s facility that might affect patient safety. The de-identified verbatim comments from employees and clinicians associated with the 40 ASCs selected for site inclusion were exported from the password-protected database to an Excel file for coding. Using a process consistent with how the responses to the anonymous online survey were coded, the verbatim comments were hand coded using an open coding system, moving from one sentence to the next during the first cycle (Babbie, 2017; Saldana, 2009). During the second cycle of hand coding the verbatim comments, a more deliberate approach was taken to look for similarities and differences to more carefully select each code (Creswell & Creswell, 2018; Saldana, 2009). Themes emerged during this process, and notes were made accordingly (Creswell & Creswell, 2018). Additional cycles of open coding continued to ensure accuracy and completeness until it was clear that additional themes were no longer emerging (Saldana, 2009). Ultimately five overarching themes emerged for ASC Group A and ASC Group B, and specific instances of each theme were further delineated as positive or constructive. Positive comments were those that were complimentary in nature, whereas constructive comments were those that indicated a problem, issue, or concern. Table 8 illustrates the themes that emerged while coding the verbatim comments.
Table 8

Themes Associated with Employee and Clinician Comments on the AHRQ ASC Survey on Patient Safety Culture

<table>
<thead>
<tr>
<th>Theme</th>
<th>Positive</th>
<th>Constructive</th>
<th>Positive</th>
<th>Constructive</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC Group A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theme 1: Leadership</td>
<td>13 Instances</td>
<td>3 Instances</td>
<td>7 Instances</td>
<td>24 Instances</td>
</tr>
<tr>
<td>Theme 2: Communication</td>
<td>9 Instances</td>
<td>10 Instances</td>
<td>2 Instances</td>
<td>21 Instances</td>
</tr>
<tr>
<td>Theme 3: Teamwork</td>
<td>9 Instances</td>
<td>0 Instances</td>
<td>10 Instances</td>
<td>6 Instances</td>
</tr>
<tr>
<td>Theme 4: Culture</td>
<td>45 Instances</td>
<td>1 Instance</td>
<td>25 Instances</td>
<td>24 Instances</td>
</tr>
<tr>
<td>Theme 5: Structure</td>
<td>2 Instances</td>
<td>7 Instances</td>
<td>0 Instances</td>
<td>104 Instances</td>
</tr>
<tr>
<td>ASC Group B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Examples of positive comments about leadership from employees and clinicians within ASC Group A include management is proactive, leaders work to make things better, and leaders listen to staff suggestions. Constructive comments about leadership included corporate does not care and leaders are reluctant to hold physicians accountable. In terms of communication, employees and clinicians within ASC Group A noted positive comments such as staff are willing to voice concerns and there is an environment of open communication within the ASC, whereas constructive comments included occasionally patient care information is missing and better communication is needed.

Positive comments associated with teamwork from employees and clinicians within ASC Group A included everyone works together and “team effort is consistently applied to maintain patient safety,” and there were no constructive comments related to teamwork from ASC Group A. Culture was viewed in a positive light by such comments as patient safety is top priority and variance reporting is non-punitive, whereas there was
one constructive comment from ASC Group A, namely “morale keeps sinking.” From a structural standpoint, there were two positive comments from ASC Group A specifically related to the facility undergoing a remodel to help promote high quality, safe care. Constructive comments associated with structural components of the ASC included needing more time between patients and needing more staff.

Examples of positive comments about leadership from employees and clinicians within ASC Group B included leaders work to make things better. Constructive comments about leadership included need support from management and leadership does not listen or follow-through. In terms of communication, employees and clinicians within ASC Group B noted positive comments such as information sharing is valued and there is an environment of open communication, whereas constructive comments included staff do not speak up and occasionally patient care information is missing.

A positive comment associated with teamwork from employees and clinicians within ASC Group B was staff members are dedicated, and a constructive comment related to teamwork from ASC Group B was there is a lack of teamwork in the ASC. Culture was viewed in a positive light by such comments as staff routinely follow policy and staff care about patients, whereas constructive comments from ASC Group B included patient safety is not important and metrics are more important than patient care. From a structural standpoint, there were zero positive comments from ASC Group B. Constructive comments associated with structural components of the ASC included patient selection is lacking and more time is needed between patients.
Analysis and Synthesis of Findings

This collective, instrumental case study was designed to understand the relationship between patient safety culture and patient experience within ABC Healthcare’s ASCs, with particular focus on the organizational cultural elements and leadership strategies that promoted patient safety culture, and in turn patient experience. This qualitative study sought to answer three overarching research questions.

Research Question #1

The first research question sought to determine the relationship between patient safety culture and patient experience within a sampling of ambulatory surgery centers. The independent samples $t$-test associated with the OAS CAHPS survey question asking patients to rate the facility on a scale of zero to 10 demonstrated a statistically significant difference between ASC Group A and ASC Group B. That is, ASCs that were rated higher on patient safety culture by employees and clinicians received a higher overall rating on patient experience from patients cared for within the facility. The independent samples $t$-test associated with the second global measure, willingness to recommend the facility, and the three domains, communication, discharge, and facility/personal treatment, all yielded a statistically significant difference between ASC Group A and ASC Group B. That said, it must be acknowledged that while the $t$-tests identified statistically significant differences between the two groups, the sample size was exceptionally large (more than 10,000 data points) which inherently caused even a small difference between the groups to become significant. Additionally, it is important to acknowledge that the independent $t$-tests do not demonstrate causation. That is, there may be additional variables, other than patient safety culture, that ultimately could be
responsible for the difference in patient experience between ASC Group A and ASC Group B. The key question that will be examined further in Chapter 5 is whether the difference noted between the two groups is meaningful.

The Mann-Whitney U test was employed as it is a useful tool in determining the differences between two independent groups when the dependent variable is ordinal (Statistics Solutions, 2019). The Mann-Whitney U test demonstrated a statistically significant difference between ASC Group A and ASC Group B on willingness to recommend the facility, as well as on the communication, discharge, and facility/personal treatment domains ($p < .001$, $p = .005$, $p = .014$, and $p < .001$ respectively). Again, it is important to note that the exceptionally large sample size inherently caused even small differences between the groups to become significant. Additionally, it is important to acknowledge that the Mann-Whitney U test does not demonstrate causation. That is, there may be additional variables, other than patient safety culture, that ultimately could be responsible for the difference in patient experience between ASC Group A and ASC Group B.

In terms of the frequency distributions, ASC Group A received a top box rating more often than ASC Group B. That is, facilities that scored higher on patient safety culture received the highest rating possible with greater frequency on the OAS CAHPS global measures and domains than facilities that received a lower score on patient safety culture. Overall, the independent samples $t$-tests, the Mann-Whitney U tests, and the frequency distributions all demonstrated that ASCs with higher patient safety culture scores tend to also receive better patient experience ratings. As noted previously, it is important to acknowledge that the independent $t$-tests, the Mann-Whitney U tests, and the
frequency distributions do not demonstrate causation. That is, there may be additional variables, other than patient safety culture, that ultimately could be responsible for the difference in patient experience between ASC Group A and ASC Group B. The question that will be examined further in Chapter 5, however, is whether the differences between ASC Group A and ASC Group B are meaningful enough to result in a change in practice.

**Research Question #2**

The second research question was designed to address how healthcare leaders describe organizational cultural elements that enhance patient safety culture and patient experience within a sampling of ambulatory surgery centers. Leaders within ASC Group A discussed organizational cultural elements such as maintaining an open environment with non-punitive reporting, encouraging team members to speak up, and providing forums for open communication such as regular staff meetings as mechanisms to promote patient safety culture. Leaders within ASC Group B also noted the importance of non-punitive reporting and encouraging staff to speak up, as well as maintaining an open door policy, and providing forums for open communication such as regular staff meetings to improve patient safety culture.

Leaders from ASC Group A discussed promoting teamwork and encouraging staff to behave in a kind, caring manner as strategies to promote the patient experience. Leaders from ASC Group B highlighted mission alignment, engaging staff, and encouraging staff to treat patients like family as mechanisms to enhance the patient experience. There was consistency between ASC Group A and ASC Group B in describing organizational cultural elements that enhance patient safety culture and patient experience within a sampling of ambulatory surgery centers.
Research Question #3

The third research question was designed to address how healthcare leaders describe leadership strategies that may influence patient safety culture, and in turn patient experience, throughout ambulatory surgery centers. Leaders within ASC Group A discussed routinely rounding on team members, ensuring adequate safety measures are in place, providing education and training on patient safety components, and working closely with staff as strategies that may influence patient safety culture. Leaders from ASC Group B noted maintaining adequate staffing levels, providing education and training, and sharing best practices as leadership strategies that may promote patient safety culture.

Leadership strategies for building patient experience discussed by leaders of ASC Group A included rounding and utilizing feedback for process improvement. Leaders within ASC Group B discussed rounding, sharing patient stories, and maintaining one-to-one nurse-to-patient ratios as strategies that may influence patient experience throughout ASCs.

Summary

In summary, a collective, instrumental case study was utilized to examine patient safety culture and patient experience and the associated relationship between the two concepts, with particular focus on organizational cultural elements and leadership strategies that promote patient safety culture, and in turn patient experience. Independent t-tests, Mann-Whitney U tests, and frequency distributions supported answering the first research question, which sought to define the relationship between patient safety culture and patient experience in an ASC setting. Thematic analysis of the anonymous online
survey developed to obtain the perceptions of formal leaders in terms of organizational cultural elements and leadership strategies that promote patient safety culture and in turn patient experience yielded consistent responses from leaders in ASC Group A and ASC Group B, which addressed the second and third overarching research questions.
FIVE: CONCLUSIONS AND RECOMMENDATIONS

Introduction

The Agency for Healthcare Research and Quality (AHRQ) asserts four patient safety culture tenets, including an acknowledgement of the high-risk nature of healthcare operations, a blame-free environment when errors or near misses occur, multidisciplinary collaboration to seek solutions to patient safety issues, and a commitment of adequate resources for the elimination of safety concerns (Abrahamson et al., 2016; AHRQ, 2017). While substantial research exists related to patient safety culture in acute care settings, research is limited specific to outpatient ASC environments. Abrahamson et al. (2016) established that patient safety culture not only enhances the delivery of safe care, but also influences patient experience in acute care settings.

With the 2016 release of the OAS CAHPS survey, greater emphasis must be placed on patient experience in ASCs because the results will become publicly available and may affect CMS reimbursement to ASCs in the future (Elliott et al., 2016). Considering that roughly 10,000 Americans turn 65 daily and as such become eligible for Medicare, a reduction in CMS reimbursement to ASCs could be significant (Lofgren & Clancy, 2015). Research associated with the measurable impact of patient safety culture on patient experience in an ASC environment is lacking in the current literature. This study was designed to contribute to existing literature by evaluating the relationship between patient safety culture and patient experience in the ASC environment.

The following section of the Dissertation in Practice addresses the aim of the study through a proposed solution. The implications for implementation of the proposed solution, potential barriers, as well as the leader’s role in implementation are discussed.
The timeline for implementation of the proposed solution is provided, followed by the practical implications, the implications for future research, and the implications for leadership theory and practice. Finally, a succinct overview of the Dissertation in Practice is offered to address how this study contributes to the greater good of healthcare.

**Purpose of the Study**

The purpose of this collective, instrumental case study was to understand the relationship between patient safety culture and patient experience within ABC Healthcare’s ASCs, with particular focus on the organizational cultural elements and leadership strategies that promoted patient safety culture, and in turn patient experience. Patient safety culture was evaluated through the AHRQ ASC Survey on Patient Safety Culture. Patient experience was evaluated through OAS CAHPS surveys. An anonymous online survey administered to formal leaders within ABC Healthcare’s ASCs selected for site inclusion enhanced understanding of the organizational cultural characteristics and leadership strategies that supported or detracted from patient safety culture.

**Aim of the Study**

The aim of this study was to create evidence-based leadership strategies to improve patient safety culture, and in turn patient experience, throughout ASCs. Improving patient safety culture and patient experience in the ASC setting will help ensure the delivery of safe, high-quality care, and minimize risk to CMS reimbursement (Owens et al., 2017).
Proposed Solution

The descriptive analysis of the OAS CAHPS survey results from patients who had surgery between January and March 2018 yielded a statistically significant difference between groups for each of the two global measures as well as the three domains. That is, ASCs receiving a high patient safety culture rating also received a better score on patient experience as compared to ASCs with a lower rating on patient safety culture. When examining the mean scores, however, it is important to acknowledge that the differences are small. For facility rating, the difference in means between ASC Group A and ASC Group B is .09, and for willingness to recommend, the difference is .04. The differences are also relatively small for the communication, discharge, and facility/personal treatment domains, with a difference of .02, .01, and .02 respectively. The differences are statistically significant largely because of the exceptionally large sample size of greater than 10,000 data points. Additionally, it is important to acknowledge that there may be additional variables other than patient safety culture, such as the longevity of the nursing staff or the patient population served, that ultimately could be responsible for the difference in patient experience between ASC Group A and ASC Group B. The key question that will be examined further is whether the differences noted between ASC Group A and ASC Group B should point to a change in practice.

Thematic analysis allowed for a thorough examination of the data by identifying commonalities and differences that extended throughout the responses to the anonymous online survey administered to formal leaders within ABC Healthcare, as well as throughout the verbatim comments from employees and clinicians associated with the AHRQ ASC Survey on Patient Safety Culture. Examination of these two data sets
yielded a greater understanding of the meaningful differences between ASC Group A and ASC Group B, which allowed for the development of three evidence-based leadership strategies that improve patient safety culture, and in turn may improve patient experience, throughout ASCs:

(1) Leaders should employ a combination of active and passive communication strategies on a frequent basis to promote an open, transparent environment where necessary information is readily shared with all stakeholders.

(2) Leaders should ensure structural elements are in place, including appropriate education and training for staff, reasonable staffing levels, and adequate supplies and equipment, to demonstrate that the delivery of high quality, safe, patient-centered care is of utmost importance.

(3) Leaders should promote a blame-free environment when errors or near misses occur to ensure staff feel empowered to speak up.

**Support for the Solution**

The anonymous online survey administered to formal leaders within ABC Healthcare coupled with the verbatim comments from team members and physicians on the AHRQ ASC Survey on Patient Safety Culture allowed for the evaluation of both the leader’s perspective as well as that of employees and clinicians within the ASCs that encompassed ASC Group A and ASC Group B. Leaders and employees alike shared a great deal about communication strategies that promoted or detracted from patient safety culture, which led to the development of the first evidence-based leadership strategy. Structural elements that promoted or detracted from patient safety culture and, in turn, may detract from patient experience were also a point of discussion from both leaders and
employees, thus resulting in the second leadership strategy. The leaders’ perspective on responding to medical error provided the underlying foundation for the third and final evidence-based leadership strategy.

**Communication.** The first evidence-based leadership strategy that will likely improve patient safety culture and, in turn, may improve patient experience throughout ASCs involves leaders employing a combination of active and passive communication strategies on a frequent basis to promote an open, transparent environment where necessary information is readily shared with all stakeholders. Active communication strategies include team meetings, huddles, and one-on-one rounding sessions where the leader and followers are actively engaged in the communication process at the same time. Passive communication strategies include tools such as communication boards, emails, text messages, and flyers where the leader provides information to team members that can be absorbed when convenient. Formal leaders within ASC Group A, the more highly rated group, indicated use of both active and passive communication strategies with greater frequency than those within ASC Group B.

From the employee and clinician perspective, the majority of participants of ASC Group A indicated there was a sense of open communication within their facility, whereas just a few noted that better communication was needed within the ASC. On the other hand, the majority of participants from ASC Group B indicated better communication was needed within the facility and only a couple were pleased with the level of open communication, the opposite of what was found in the high performing group. Additionally, participants of ASC Group B were more likely to indicate that leaders demonstrated an unwillingness to listen to input from staff. The findings reveal
that facilities in which the leader employed both active and passive communication strategies with greater frequency had employees and clinicians that felt a greater sense of open communication within the ASC, felt less overall improvement in communication was necessary, and believed that leaders actually listened to input from staff.

Communication was noted when leaders were asked about productivity management and overall staffing of the facility. ASCs strive to offer high value care, meaning the goal is to deliver high quality, safe, patient-centered care in a cost-effective manner. Leaders must effectively manage productivity, which is essentially a measure of the man hours per patient, or more plainly, staffing ratios. The findings revealed that the use of active communication strategies, as opposed to passive communication or refraining from engaging in addressing the subject all together, resulted in a more positive perception among team members of overall staffing levels. Interestingly enough, while only six leaders within ASC Group A and seven leaders within ASC Group B felt their ASC was staffed appropriately, the perception among employees and clinicians in each group varied significantly. In facilities where leaders employed active communication strategies when discussing productivity management with team members with greater frequency, there was an overall feeling among employees and clinicians that the facility was staffed adequately and there were fewer instances of employees and clinicians feeling rushed when delivering care.

**Structure.** The second evidence-based leadership strategy that will likely improve patient safety culture and in turn may improve patient experience throughout ASCs, involves leaders ensuring structural elements are in place that demonstrate the delivery of high quality, safe, patient-centered care is of utmost importance. Structure
first emerged as a theme when leaders were asked how they promote teamwork within their ASC. Formal leaders within ASC Group A mentioned structural elements, such as cross-training team members to all departments and holding regular team meetings, with greater frequency than leaders from ASC Group B.

Structure again emerged as leaders were asked to discuss strategies that promote patient safety culture. Leaders within ASC Group A noted structural items such as ensuring safety measures are in place and providing adequate education and training for staff as important components in promoting safety culture. In this instance, however, leaders within ASC Group B noted structural elements with even greater frequency than ASC Group A in terms of promoting safety culture, citing the additional examples of readily sharing best practices and ensuring appropriate policies and checklists are in place.

Employees and clinicians provided what is perhaps the greatest insight into the importance of structural elements in promoting safety culture through their feedback on the AHRQ ASC Survey on Patient Safety Culture. While participants of ASC Group A shared some constructive comments related to structural elements within their facility, including improved training for staff and a need for better cleaning between patients, team members within ASC Group B shared more than 100 constructive comments related to structural elements. This articulated that facilities that have greater structure in place in terms of providing education and training for staff, ensuring appropriate staffing levels, and maintaining adequate supplies and equipment demonstrated stronger patient safety culture. Therefore, placing emphasis on providing appropriate structural elements within
the ASC will likely lead to improved patient safety culture and, in turn, may improve patient experience.

**Medical error.** The third evidence-based leadership strategy that will improve patient safety culture and may in turn improve patient experience throughout ASCs involves leaders promoting a blame-free environment when errors or near misses occur to enable staff to feel empowered to speak up. Formal leaders within ASC Group A overwhelmingly aligned with the essential nature of maintaining a blame-free environment when errors or near misses occur. Leaders within ASC Group B, on the other hand, leaned toward evaluating if the caregiver made a mistake that individuals of similar experience and training would likely have made under the same circumstances.

From the employee and clinician perspective, one participant within ASC Group A indicated that staff were willing to voice concerns and one noted that variance reporting was non-punitive. When specifically evaluating leadership, employees and clinicians within ASC Group A indicated that leadership holds staff accountable for following polices, leaders work to make things better, and patient safety is top priority within the ASC. On the other hand, within ASC Group B, participants indicated staff were not willing to speak up. Additionally, when specifically evaluating leadership, it was noted leaders do not hold staff or physicians accountable for following policies, just one participant noted leaders work to make things better, and only a few participants noted that patient safety is top priority within the ASC. The findings reveal that facilities in which the leader promotes a blame-free environment tend to see greater willingness in terms of employees voicing concerns, a more positive perception of the leader’s ability to hold staff accountable for following policy, and in turn overall patient safety culture is
also viewed in a more positive light. This is consistent with AHRQ’s assertion that maintaining a blame-free environment when errors or near misses occur, where team members feel comfortable reporting issues without fear of reprisal, is one of four patient safety culture tenets (Abrahamson et al., 2016; AHRQ, 2017).

Factors and Stakeholders Related to the Solution

The proposed solution requires active focus and engagement from center leadership in order to have a meaningful impact on patient safety culture. Each ASC typically has at least two formal leaders, namely an Administrator and a Director of Nursing, which provides an opportunity for identified activities to be managed by more than one individual, somewhat decreasing any potential individual burden. It is important to highlight the required contribution from staff and physicians within the ASC, as well. Multidisciplinary collaboration, established by AHRQ as one of four patient safety culture tenets, is essential in successfully implementing the proposed solution within an ASC (Abrahamson et al., 2016; AHRQ, 2017). Finally, should an ASC be part of a larger healthcare entity, it is imperative that corporate leaders are also supportive of the proposed solution to ensure adequate resources are available for individual facilities.

Some components of the proposed solution, such as providing appropriate education and training for staff, maintaining reasonable staffing levels, and ensuring adequate supplies and equipment, are requirements of accreditation agencies, state licensure organizations, as well as CMS (Centers for Medicare & Medicaid Services, 2015). As such, ASCs lacking in these areas are not only potentially diminishing patient safety culture and possibly in turn patient experience, but are also in jeopardy of risking state licensure, CMS certification, and accreditation status. This further emphasizes the
practical nature of the proposed solution, in that much of the work should already be on the leader’s priority list.

**Policies influencing the proposed solution.** The first part of the proposed solution involves leaders employing a combination of active and passive communication strategies on a frequent basis to promote an open, transparent environment where necessary information is readily shared. ASCs should establish a policy that guides the minimum frequency of team meetings, and consistent with the results of this research, monthly appears to be an appropriate standard. Establishing a policy such as this will enable leaders and staff to hold each other accountable, meaning leaders will be more engaged in ensuring routine team meetings take place, and staff will understand their responsibility in participating in the meetings.

Along these same lines, ASCs should consider a policy associated with daily huddles. Daily huddles will allow for timely communication between those caring for patients on a given day. Huddles are rather informal in nature, and because they should not take more than a few minutes, it is reasonable to make this a daily practice within an ASC. Huddles create a forum for multidisciplinary collaboration on a consistent basis, which is imperative in building patient safety culture (Abrahamson et al., 2016; AHRQ, 2017).

Passive communication also requires consideration from a policy standpoint. Use of communication boards can be an effective mechanism of communication when placed in high traffic areas within the ASC, such as outside the locker room or near the time clock, however, it is important to ensure the content is up-to-date and changed frequently to garner the attention of the intended audience. Email also provides an efficient means
of passive communication. Because nurses and other clinicians performing patient care are not in a job function that includes a lot of time at a desk, ASCs should consider establishing guidelines for how frequently staff view their email to ensure the content is absorbed in a reasonable timeframe.

Policies should be in place to ensure adequate education and training of staff. Policies should address the education and training required at the point of hire, as well as on-going and/or annual requirements to ensure compliance with all regulatory, certification, and accreditation bodies. Consideration should also be given to providing staff with opportunities for education and training beyond what is required from such bodies. Policies to address this could involve providing reimbursement for certification exams, as well as tuition reimbursement for formal higher education programs to promote advanced learning when possible.

Leaders should develop a staffing policy that allows for high quality, safe, patient-centered care. ASCs are designed to be the pinnacle of efficiency, which makes this care setting desirable for patients because out-of-pocket costs tend to be less than what they may find in a hospital setting for the same care. Thus, leaders within ASCs must be exceptionally thoughtful when developing a staffing policy that ensures resources are used appropriately, meaning the center is neither overstaffed nor understaffed. Another area of significant resource allocation in an ASC is with regard to adequate supplies and equipment. Policies should address how supplies and equipment are procured from reputable vendors. Additionally, policies should direct how supplies are stored to ensure regulatory requirements are met, and they should discuss how equipment is cleaned and serviced to ensure proper functioning.
Finally, ASCs should develop a policy that articulates that a blame-free environment when errors or near misses occur, where team members feel comfortable reporting issues without fear of reprisal, is in place (Abrahamson et al., 2016; AHRQ, 2017). Implementing such a policy would demonstrate leadership’s commitment to staff and physicians in promoting a non-punitive environment, where reporting is welcomed and encouraged. When the ASC environment encourages learning from errors or near misses as opposed to finding blame, there is a greater likelihood that every team member will feel comfortable speaking up immediately when an issue arises. In speaking up, risk of patient harm can be minimized, and the overall experience of the patient may improve.

**Potential barriers and obstacles to proposed solution.** There are several potential barriers to the proposed solution that should be considered. Utilization of both active and passive communication strategies on a consistent basis requires leaders to devote significant time and energy to ensuring messages are clear, accurate, and timely. It may appear to a leader that it is an inefficient use of one’s time to communicate a message in a team meeting, for example, and then share the exact same item on a communication board. However, it is the reinforcement of the message and offering it in multiple formats that ultimately ensures greater likelihood of absorption of the information, thus more likely leading to a more open, transparent environment. Staff must also be engaged in the communication process, therefore team members must be willing to listen and absorb content, regardless of the manner in which the leader disseminates information.

Perhaps the greatest barrier associated with providing adequate education and training is that of time. In order for a team member to attend an educational offering, it
means they are unable to perform patient care functions at the same time. Thus, in order to allow one team member to attend a training session, they must ensure another individual is able to cover their shift. In an environment where staffing levels are already of utmost concern, pulling team members away from patient care activities can be exceptionally challenging. Working with senior leaders in the organization to approve a specific budget allocation for education and training may serve to remedy at least part of the productivity concern.

One potential obstacle associated with maintaining adequate staffing levels is recruiting and hiring competent clinicians with a current shortage of nurses at the time of this study. ASCs tend to prefer to hire experienced nurses as opposed to new graduates to ensure they are able to effectively manage emergencies in an outpatient environment that is typically not on a hospital campus, further restricting the applicant pool when an ASC has a vacancy. Use of staffing agencies to ensure adequate staffing levels, while an option, is typically an expensive alternative, and offering overtime to staff to work additional hours must also be minimized, not only from a cost perspective, but also to avoid burnout. Partnering with local nursing schools to provide opportunities for nursing students to rotate through the ASC environment may serve as a mechanism to provide adequate training for nursing students while creating a pipeline for new talent.

The key barrier in terms of providing adequate supplies and equipment is cost. It may be tempting, for example, to minimize the number of instrument sets because of the cost, which can in turn lead to staff feeling rushed when cleaning and sterilizing equipment between patients. Another potential obstacle in maintaining adequate supplies and equipment involves industry shortages. Environmental issues, such as hurricanes or
blizzards, can interrupt production and/or transport of supplies and equipment, which can be a challenging scenario in the ASC environment.

Finally, the main obstacle in promoting a blame-free environment is trust (Abrahamson et al., 2016; AHRQ, 2017). It is exceptionally easy for leaders to say staff and physicians will not be subject to discipline or termination because of an error or near miss, but team members and physicians must trust that is indeed the case in order to feel comfortable speaking up. Prior experiences certainly influence the level of trust staff and physicians have in leadership, therefore leaders must actively demonstrate a non-punitive response to errors or near misses to build trust among the team.

**Financial or budgetary issues related to the proposed solution.** Team meetings along with education and training, while essential to building patient safety culture, are considered non-productive activities since ASCs only seek reimbursement for direct patient care. Thus, it is imperative for leaders to include a budget allocation for these types of activities. Education and training activities are expensive to the organization. Inaction, however, results in the lack of a knowledgeable, skillful workforce. Direct costs include the salaries of trainers that present course content, the salaries of team members engaged in education and training, as well as books and other materials. Indirect costs include the salaries of clinicians providing patient care while others are engaged in education and training activities. Passive communication strategies require some cost if items such as flyers or newsletters are utilized, however these costs can be minimized by utilizing electronic means of dissemination.

Staffing levels are typically measured in terms of man hours per patient, but this alone should not be the only budgetary consideration. The acuity level of patients served
is an important consideration, as is the minimum required nurse-to-patient ratios per industry standards. For example, even if only one patient is present in the post anesthesia care unit (PACU), it is standard practice to ensure two nurses are available. If the patient needs to be in PACU for two hours, the total man hours per patient is four (two-to-one nurse-to-patient ratio). On the other hand, if two patients are present in PACU, two nurses would be considered appropriate for the delivery of safe care. In this instance, however, if each patient was in PACU for two hours, the man hours per patient would be two (one-to-one nurse-to-patient ratio). In both scenarios, the patient would receive high quality, safe, patient-centered care, but the first case would result in twice the man hours per patient. Leaders must also consider the scheduling patterns of physicians and encourage efficient use of the ASC to maximize financial targets.

Supplies and equipment tend to make up a significant portion of the overall costs of the ASC. Appropriate budgetary considerations must be made to ensure adequate supplies and equipment are on hand when needed. Additionally, leaders need to be mindful of the costs involved with ensuring routine maintenance of equipment, as well as the life of a given piece of equipment so that they can budget for replacement when necessary.

The main cost associated with promoting a blame-free environment is difficult to quantify. Any time an error or near miss occurs, time must be spent in evaluating the error, mitigating additional harm, and implementing processes and procedures to minimize risk of recurrence. Leaders who are quick to place blame when an error or near miss occurs may move through this process more quickly, which theoretically would minimize cost. However, leaders who are committed to promoting a blame-free
environment are likely more thoughtful in moving through the investigation process with
the goal of identifying all potential root causes and system failures to ensure true learning
from the event. That said, the additional time investment associated with promoting a
blame-free environment is likely offset by the greater potential for true learning from the
event, thus minimizing risk of recurrence.

**Other issues or stakeholders related to the proposed solution.** Leaders must
be keenly aware of the focus and engagement required to successfully implement the
proposed solution. It is not uncommon for an unusual amount of energy to be present at
the beginning of a change, only to diminish over time. Thoughtfully using a combination
of active and passive communication strategies on a consistent basis will be challenging,
therefore leaders need to employ a high degree of discipline in maintaining this change
over time. Additionally, while education and training, maintaining reasonable staffing
levels, and ensuring adequate supplies and equipment are largely guided by regulatory
and accreditation requirements, leaders need to obtain input from staff and physicians on
a routine basis to ensure their needs are being met for working toward improvement that
goes beyond meeting minimum standards to maintain licensure, etcetera.

Promoting a blame-free environment when errors or near misses occur is
imperative in building patient safety culture. Leaders must be mindful, however, that this
cannot necessarily be a blanket policy, as events that occur because of an intentional
departure from standard of care or knowingly engaging in harmful activities may require
disciplinary action or termination. In these instances, much care must be taken to not
diminish the level trust between the leader and followers.
**Change theory.** The proposed solution involves a planned, revolutionary change for ASC Group B (Burke, 2014). Focused on three overarching evidence-based leadership strategies, the proposed solution involves employing active and passive communication strategies on a frequent basis to promote an open, transparent environment; ensuring key structural elements are in place such as education and training, reasonable staffing levels, and adequate supplies and equipment; and promoting a blame-free environment when errors or near misses occur. These evidence-based leadership strategies should result in modification to the patient safety culture within ASC Group B and may positively affect the overall patient experience, and ultimately result in a change to the deep structure of the organization (Burke, 2014).

Changing the culture of an organization is not an easy task; therefore, the change plan associated with the proposed solution will be highly structured to yield greater success (Burke, 2014). The evidence supporting the proposed solution obtained from conducting the collective, instrumental case study within 40 of ABC Healthcare’s ASCs will likely improve buy-in from stakeholders (Burke, 2014; Gardner, 2004).

Additionally, using essential components of change theory and approaching the proposed solution from the viewpoint of key stakeholders, specifically that of patients, physicians, and employees, will also garner greater success (Burke, 2014; O’Toole, 1999).

**Implementation of the Proposed Solution**

Implementation of the proposed solution will require a thoughtful approach on the part of the leader to ensure success. Team members and physicians need to be engaged in the process, as building safety culture is not something the leader can accomplish alone. The end goal, namely to improve patient safety culture, needs to be made clear for
all team members involved in the proposed solution, and the leader needs to be willing to “stay the course” as improving safety culture will take time (Burke, 2014, p. 10).

Burke (2014) noted that organizational change should be data-based and measured to ensure success. ASCs should administer the AHRQ ASC Survey on Patient Safety Culture after the proposed solution has been implemented to more accurately gauge if the proposed solution has accomplished the intended objective. A second measure that can be used over time (Burke, 2014) are OAS CAHPS surveys to measure patient experience. By routinely administering the OAS CAHPS surveys, leaders can more fully understand if the proposed solution is positively affecting patient experience.

Factors and Stakeholders Related to the Implementation of the Solution

The leader of the ASC will maintain overall responsibility for initiating the proposed solution. The leadership style of the leader is a crucial consideration. Laissez-faire management is more likely to be present in ASCs where patient safety culture is lacking. Transformational leadership practices often lead to high quality outcomes and improved retention (Lavoie-Tremblay et al., 2015), and as such are more likely to be found in top-performing ASCs for patient safety culture and patient experience. Servant leadership may be a mechanism to shape individual and organizational behavior (Johnson, 2015), and, much like transformational leadership, is more likely found in ASCs where patient safety culture and patient experience are clear priorities. Burke (2014) acknowledged that the ideal leader to drive change is one that is motivated to make things better as well as one that demonstrates a high level of emotional intelligence and self-confidence. Thus, while an existing ASC leader may not inherently demonstrate
characteristics of a transformational or servant leader, demonstrating a willingness to make things better is an important place to start.

Team members and physicians need to be engaged in the proposed solution as well. The proposed solution centers on concepts that inherently require participation from followers. Active and passive communication strategies, for example, both require the intended audience members to engage in dialogue, share their perspective, and demonstrate a willingness to ask questions when something is unclear. Education and training help participants learn to engage in the process, listen, and demonstrate attainment of new skills. Leaders and followers must commit to working together to build an environment where everyone engages in safe practices and demonstrates a genuine desire to do what is best for the patient under all circumstances.

**Leader’s role in implementing proposed solution.** Leaders play a fundamental role in implementing the proposed solution. Employing a combination of active and passive communication strategies on a frequent basis to promote an open, transparent environment where necessary information is readily shared requires focus and engagement from the leader. Leaders should consider scheduling team meetings, huddles, one-on-one rounding sessions, etcetera, on consistent days and/or at set times to encourage development of a routine. For example, hosting a team meeting on the first Wednesday of each month, conducting daily huddles at nine o’clock in the morning, and holding one-on-one rounding sessions the third week of each month will allow both the leader and followers to know what to expect, and encourage active communication to take place. Passive communication can be managed in a similar fashion, with
Ensuring structural elements are in place to demonstrate that the delivery of high quality, safe, patient-centered care is of utmost importance also requires considerable effort from leaders. This part of the proposed solution may vary somewhat from one ASC to the next as education and training, staffing, and supply and equipment needs are not necessarily identical in all facilities. To begin, leaders should perform a needs assessment for each area to identify gaps. This process should involve actively engaging team members, including physicians, to ensure the leader gains a full understanding of where the ASC is positioned well, and what areas require improvement.

Once the needs assessment is complete, leaders should develop a project plan to map out the implementation timeframe and necessary resources. Communicating the plan to all stakeholders will be key, as this will demonstrate that there is focused attention on building the structural elements necessary for improving patient safety culture. Leaders need to fully understand that this will be an ongoing process, as education and training needs will change over time, as will staffing, supply, and equipment needs.

Promoting a blame-free environment when errors or near misses occur that enables staff to feel empowered to speak up requires careful attention of the leader. When an error occurs that results in patient harm, those involved in the care of the patient are often the second victims. Tremendous guilt, a sense of disappointment in oneself, as well as fear of potential consequences often accompany patient safety events. Servant leadership can help develop a blame-free environment by promoting organizational culture that puts employees first and encourages well-being and growth (Neubert et al.,
Additionally, transformational leadership can also promote a blame-free environment by emphasizing individualized consideration that evokes compassion and empathy, and aids in establishing quality relationships with employees (Bass, 1998). Laissez-faire leadership, on the other hand, is associated with blame when errors occur, and managers are likely to find quick fixes, be indecisive, or become hostile rather than investigate root causes (Merrill, 2015). Transformational and servant leaders are often somewhat better positioned to successfully implement the third component of the proposed solution. This is not to say other types of leaders cannot be successful, however, it is important for leaders to understand they may need to shift their style to yield success.

**Building support for the proposed solution.** While leaders play a fundamental role in implementing the proposed solution, they cannot work alone. It is essential for the leader to harness the power of change champions throughout this process (Burke, 2014). Change champions may include individuals that are leaders by title, such as charge nurses, or team members that are informal leaders within the facility. These charismatic individuals have the ability to reduce resistance to planned change (Rogers, 2003). Change champions can work together on specific tasks while also persuading others that the proposed solution will positively affect the ASC (Burke, 2014).

Another mechanism to improve stakeholder buy-in is to utilize the two-way symmetrical model of communication, which involves a reciprocal relationship between leadership understanding the viewpoints of team members, and team members understanding the viewpoints of leadership (Grunig & Grunig, 1992). The two-way symmetrical model is associated with a participative culture where open communication
exists, and may inherently involve cooperation, negotiation, and compromise (Grunig & Grunig, 1992). Improving patient safety culture requires support and engagement from the entire team, thus ensuring tools are in place to build a mutual understanding of needs and expectations will allow for the proposed solution to be implemented in a manner that feels good and can be supported by all stakeholders.

The proposed solution involves three evidence-based leadership strategies that promote patient safety culture and in turn may improve patient experience. On the surface, the strategies appear to be fairly straightforward and simple to implement. A fair amount of discipline, however, is required on the part of the leader to ensure sustained success. For example, if the leader were to communicate to the team that daily huddles are required to facilitate active communication and then the leader fails to ensure the team pulls together each day, stakeholder buy-in with the entire initiative will be diminished. Consistent follow through will demonstrate to team members and physicians the leader’s commitment to improving patient safety culture, which will in turn garner greater support from stakeholders.

**Evaluation and timeline for implementation and assessment.** Implementation of the proposed solution should occur in phases to yield success. The first component of the solution, employing a combination of active and passive communication strategies on a frequent basis to promote an open, transparent environment where necessary information is readily shared, should be the initial focus of the leader. Because communication failures are ultimately responsible for upwards of 70 percent of preventable medical errors (Vogus et al., 2010), improving communication throughout the ASC is a logical starting point. A realistic timeframe to launch this component is
likely six weeks. In that time, it would be reasonable to expect the leader to engage
countermeasures champions to help promote the initiative, host an initial stakeholder meeting to
outline the purpose and goals of the proposed solution, and enter placeholders on the
calendar for ongoing team meetings, huddles, one-on-one rounding sessions,
communication board updates, etcetera.

The second component of the proposed solution, ensuring structural elements are
in place including appropriate education and training for staff, reasonable staffing levels,
and adequate supplies and equipment, will necessitate planning prior to implementation.
Leaders should complete a needs assessment associated with each of the three areas
outlined for this component. The assessment should include items that are working well
that should be maintained, as well as areas that require modification. Engaging all
stakeholders in this process will be necessary to ensure a full understanding of the areas
that require adjustment. Additionally, regulatory and accreditation requirements should
be reviewed to verify that the ASC is in compliance, and if not, necessary changes should
be incorporated in the needs assessment. An important component of the needs
assessment will be budgetary considerations, which may play a significant role in the
timing of full implementation. The needs assessment should take approximately one
month to complete, and depending on the type and volume of modifications needed,
could take up to one year to fully implement.

The third and final component of the proposed solution, promoting a blame-free
environment when errors or near misses occur to enable staff to feel empowered to speak
up, also requires thoughtful attention. The implementation timeframe is largely
dependent on two factors, the leader’s current leadership style, and the number of events
and near misses that occur within the facility. The leader’s current leadership style may make a meaningful difference in successfully implementing this component of the proposed solution. As noted previously, servant and transformational leaders likely already exude the characteristics that promote a blame-free environment, whereas laissez-faire leaders will need to adjust their style. Additionally, in order for team members and physicians to trust that a blame-free environment exists within the ASC, they will need to observe how the leader actually manages events and near misses. As such, full implementation of this component could happen relatively quickly in ASCs that have a servant or transformational leader in place that may have fostered a high degree of trust with stakeholders, whereas implementation could take considerable time if trust is lacking.

The AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS surveys are two essential tools that may be used to assess whether the proposed solution improved patient safety culture and in turn patient experience in ASCs. In the best-case scenario, the ASC will administer the AHRQ ASC Survey on Patient Safety Culture prior to implementing the proposed solution to serve as a benchmark. After the three components of the proposed solution are fully implemented, the ASC should administer the survey again to determine if meaningful change occurred. Along the same lines, OAS CAHPS surveys administered prior to implementation of the proposed solution can serve as a baseline, and then surveys administered after execution can serve as an assessment of whether or not the evidence-based leadership strategies may have had a meaningful impact on patient experience.
Implications

Practical Implications

This Dissertation in Practice contributes to improving the healthcare industry by supporting the development of evidence-based leadership strategies that will improve patient safety culture, thereby potentially enhancing patient experience. This is a meaningful contribution to the industry in a variety of ways. One, enhancing patient safety culture helps ensure the delivery of high quality, safe, patient-centered care in ASCs, which minimizes the risk of causing iatrogenic harm. Two, this research demonstrated that ASCs that have higher levels of patient safety culture may provide better experiences for their patients. Should CMS begin to tie reimbursement to OAS CAHPS performance in a similar fashion it currently ties reimbursement to HCAHPS performance in the acute care setting, risk to reimbursement in the ASC environment will be minimized. Finally, by arming leaders with evidence-based leadership strategies to promote patient safety culture and in turn potentially improve patient experience within their ASC, team members and physicians are provided an environment within which they can do their best work.

This Dissertation in Practice adds to existing scholarly research and literature by exploring a care setting, namely ASCs, that has received little attention to date. It specifically evaluates patient experience through the lens of OAS CAHPS, of which minimal research currently exists. The OAS CAHPS survey was released by CMS in 2016, whereas the survey that measures patient experience in the inpatient hospital setting, HCAHPS, has been in place since 2006 (Centers for Medicare & Medicaid Services, 2016), and thus has been the subject of more research. Additionally, this
research specifically addressed organizational cultural elements that improve patient safety culture from a multidisciplinary perspective, which is lacking in current literature. Contributing to existing research associated with outpatient settings is particularly important because ASCs tend to promote a fast, efficient work pace, and as such there is increased risk that there may be diminished focus on patient safety (Geier & Gelardi-Slosburg, 2009). The findings of this research revealed that three leadership strategies make a meaningful impact on patient safety culture in fast-paced care environments.

While this Dissertation in Practice used a collective, instrumental case study to explore the relationship between patient safety culture and patient experience within ABC Healthcare’s ASCs, certain concepts are applicable on an interdisciplinary scale. The concepts of safety, quality, and stakeholder experience are applicable across industries. Each of the three evidence-based leadership strategies, namely employing a combination of active and passive communication strategies to promote a transparent environment, ensuring structural elements are in place such as appropriate education and training, reasonable staffing levels, and adequate supplies and equipment, and promoting a blame-free environment when errors or near misses occur, are pertinent to a variety of industries.

**Implications for Future Research**

The descriptive analysis performed as part of this research demonstrated a statistically significant difference between high performing ASCs and low performing ASCs on patient safety culture for each of the two global measures and three domains on OAS CAHPS. Future research could evaluate additional variables that may positively affect patient experience in an effort to help guide the development of additional
leadership strategies that improve patient experience in the ASC setting. A mixed methods approach could begin with a quantitative component involving correlation analysis, and qualitative interviews could further probe significant findings by exploring various aspects of patient experience in ASCs.

It would also be exceptionally beneficial to the industry for future research to focus on evaluating if there is a connection between patient safety culture and patient outcomes. In other words, do patients treated within ASCs that have developed strong patient safety culture have better outcomes than patients treated in ASCs lacking in safety culture? Additionally, exploring whether iatrogenic harm is reduced in ASCs that demonstrate a high level of patient safety culture would be of benefit. A quantitative study using existing data sets would likely begin to answer these research questions.

Owens et al. (2017) noted that organizations performing in the top quartile for culture outperformed the bottom quartile in terms of overall employee engagement. Because patient safety culture is a subset of organizational culture, future research could examine whether patient safety culture improves as the level of employee engagement also improves. Leadership style could also be evaluated in greater depth to determine which particular style of leadership has the most meaningful impact on patient safety culture. A case study could be an effective research methodology for these particular studies.

One final area of future research could involve examining how inviting the patient to participate in patient safety interventions could potentially affect outcomes and/or iatrogenic harm. That is, we know that safety culture has been found to positively moderate the effectiveness of other technically oriented safety interventions, such as
checklists, training/education, or procedural algorithms (Daugherty et al., 2016), but does involving the patient in such interventions improve outcomes? Team members and physicians, for example, are required to conduct a structured time out process in the operating room. It would be interesting to examine if actively involving the patient in the pre-anesthesia briefing of the time out process would result in improved outcomes and/or reduced iatrogenic harm. Using a mixed methods approach, starting with a quantitative study in a controlled research setting followed by qualitative interviews of both patients and staff, could be an effective methodology to answer the research questions.

**Implications for Leadership Theory and Practice**

A significant focus of this research was on the organizational cultural elements and leadership strategies that promoted patient safety culture, and in turn may have promoted patient experience. Leaders play an important role in developing the culture of the organization. Lowney (2003) noted that the Jesuits became leaders by understanding their values, adapting to changing conditions, engaging others, and energizing those around them through shared ambitions. Teams perform best when they appreciate that their purpose is not all about them (Lowney, 2011). Patient safety culture at its core is a commitment to the safety and wellbeing of patients (Owens et al., 2017).

I anticipated that transformational and servant leadership characteristics would likely emerge during the course of this research. Transformational leadership characteristics are associated with promoting patient safety (Merrill, 2015) largely because of the high quality relationship between leader and follower that develops out of a motivational and inspirational leadership style (Bass, 1998). Servant leadership promotes an organizational culture that puts employees and patients first, promotes well-
being and growth, and considers the interests of customers and the community (Neubert et al., 2016). I also postulated that laissez-fare leadership would be the least likely to emerge in top performing ASCs on patient safety culture as it is associated with blame when errors occur, and managers are likely to find quick fixes, be indecisive, or become hostile rather than investigate root causes (Merrill, 2015). While the research did not specifically evaluate leadership style in a truly objective manner, employees and clinicians from low performing ASCs on patient safety culture noted instances of hostile leadership, indicated leaders do not listen or follow through, and shared that management does not support patient safety. On the other hand, employees and clinicians from high performing ASCs on patient safety culture indicated that leaders work to make things better, leaders listen to staff suggestions, and patient safety is a priority within the facility.

Lowney (2003) noted that individuals perform optimally when they are part of an organizational culture that makes them feel valued, trusted, and respected by a caring leader. The proposed solution in this Dissertation in Practice first addresses the necessity of building an open, transparent environment through both active and passive communication strategies. The second component involves providing education and training, reasonable staffing levels, and adequate supplies and equipment, or more plainly, essential structural elements. The third component of the proposed solution involves promoting a blame-free environment to encourage speaking up behaviors. A prerequisite of trust is respect, and leaders demonstrate respect by providing followers with relevant information and actively soliciting their input (Bennis, Goleman, & O’Toole, 2008). Leaders demonstrate genuine care and concern for followers by working
with compassion and empathy, by promoting well-being and growth, and considering the interests of all stakeholders (Bass 1998; Neubert et al., 2016). This Dissertation in Practice articulated that the study’s implications, namely that leadership strategies that promote patient safety culture also may affect patient experience, inform leadership theory and practice.

Summary of the Study

The purpose of this collective, instrumental case study was to understand the relationship between patient safety culture and patient experience within ABC Healthcare’s ASCs, with particular focus on the organizational cultural elements and leadership strategies that promoted patient safety culture, and in turn patient experience. Patient safety culture was evaluated through the AHRQ ASC Survey on Patient Safety Culture. Patient experience was evaluated through OAS CAHPS surveys. An anonymous online survey administered to formal leaders within ABC Healthcare’s ASCs selected for site inclusion enhanced understanding of the organizational cultural characteristics and leadership strategies that supported or detracted from patient safety culture.

The proposed solution involves the following three components:

(1) Leaders should employ a combination of active and passive communication strategies on a frequent basis to promote an open, transparent environment where necessary information is readily shared with all stakeholders.

(2) Leaders should ensure structural elements are in place, including appropriate education and training for staff, reasonable staffing levels, and adequate supplies.
and equipment, to demonstrate that the delivery of high quality, safe, patient-centered care is of utmost importance.

(3) Leaders should promote a blame-free environment when errors or near misses occur to ensure staff feel empowered to speak up.

Implementation of the proposed solution should occur in phases to yield success. Because communication failures are ultimately responsible for upwards of 70 percent of preventable medical errors (Vogus et al., 2010), beginning with a focus on the use of active and passive communication strategies is a logical starting point. The leader should engage change champions to help promote the initiative, host an initial stakeholder meeting to outline the purpose and goals of the proposed solution, and enter placeholders on the calendar for elements associated with active and passive communication strategies such as routine team meetings and use of communication boards.

Next, leaders should complete a needs assessment associated with each of the three necessary structural elements, namely education and training, reasonable staffing levels, and adequate supplies and equipment. The assessment should include items that are working well that should be maintained, as well as areas that require modification. Engaging all stakeholders in this process will be necessary to ensure a full understanding of the areas that require adjustment. Additionally, regulatory and accreditation requirements should be reviewed to verify that the ASC is in compliance, and if not, necessary changes should be incorporated in the needs assessment. An important component of the needs assessment will be budgetary considerations, which may play a significant role in the timing of full implementation.
The leader’s current leadership style may make a meaningful difference in successfully implementing the third and final component of the proposed solution. Servant and transformational leaders likely already exude the characteristics that promote a blame-free environment, whereas laissez-faire leaders will need to adjust their style. Additionally, in order for team members and physicians to trust that a blame-free environment exists within the ASC, they will need to observe how the leader actually manages events and near misses. As such, full implementation of this component could happen relatively quickly in ASCs that have a servant or transformational leader in place that has fostered a high degree of trust with stakeholders, whereas implementation could take considerable time if the leader needs to adjust their style or if trust is lacking.

The AHRQ ASC Survey on Patient Safety Culture and OAS CAHPS surveys are two essential tools that may be used to assess if the proposed solution improved patient safety culture and in turn may improve patient experience in ASCs. Surgery centers should administer the AHRQ ASC Survey on Patient Safety Culture prior to implementing the proposed solution to serve as a benchmark. After the three components of the proposed solution are fully implemented, the ASC should administer the survey again to determine if meaningful change occurred. Along the same lines, OAS CAHPS surveys administered prior to implementation of the proposed solution can serve as a baseline, and then surveys administered after execution can serve as an assessment of whether or not the evidence-based leadership strategies may have had a meaningful impact on patient experience.

This Dissertation in Practice contributes to the greater good of the healthcare industry by supporting the development of evidence-based leadership strategies that will
improve patient safety culture, thereby potentially enhancing patient experience. This is a meaningful contribution to the industry in a variety of ways. One, enhancing patient safety culture ensures the delivery of high quality, safe, patient-centered care in ASCs, which minimizes the risk of causing iatrogenic harm. Two, this research demonstrated that ASCs that have higher levels of patient safety culture may provide better experiences for their patients, and should CMS begin to tie reimbursement to OAS CAHPS performance in a similar fashion it currently ties reimbursement to HCAHPS performance in the acute care setting, risk to reimbursement in the ASC environment may be minimized. Finally, by arming leaders with evidence-based leadership strategies to promote patient safety culture and in turn potentially improve patient experience within their ASC, team members and physicians are provided an environment within which they can do their best work.

This Dissertation in Practice adds to existing scholarly research and literature by exploring a care setting, namely ASCs, that has received little attention to date. Further, it specifically evaluates patient experience through the lens of OAS CAHPS of which minimal research currently exists. Lastly, it specifically addresses organizational cultural elements that improve patient safety culture from a multidisciplinary perspective, which is lacking in current literature. While this Dissertation in Practice used a collective, instrumental case study to explore the relationship between patient safety culture and patient experience within ABC Healthcare’s ASCs, certain concepts hold applicable on an interdisciplinary scale. The concepts of safety, quality, and stakeholder experience are applicable across industries, and each of the three evidence-based leadership strategies are pertinent to a variety of industries.
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doi:10.111/j.1467.9566.2012.01520.x

doi:10.2147/JMDH.S149011


doi:10.111/jan.12860


doi:10.1016/j.amjsurg.2016.10.027
# Ambulatory Surgery Center Survey on Patient Safety

This survey asks for your opinions about patient safety in ambulatory surgery centers (ASCs). ASCs are facilities where patients have surgeries, procedures, and treatments and are not expected to need an inpatient stay. Answer only about the facility where you received this survey. The survey will take about 10 minutes to complete.

- **Doctors** means all physicians (MDs or DOs), podiatrists, dentists, and others who perform surgeries, procedures, or treatments, including delivery of anesthesia, in this facility.

- **Staff** means **ALL others (clinical and nonclinical)** who work in your facility, whether they are employed directly by your facility or are contract/per diem/agency staff.

- **Patient safety** is the prevention of harm resulting from the processes of health care delivery. Such prevention includes reducing mistakes, errors, incidents, events, or problems that lead to patient harm or could negatively affect patients.

- If a question does not apply to you or you don’t know the answer, please answer “Does not apply or Don’t know.”

## SECTION A: Working in This Facility

**How often do the following statements apply to your facility?**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
<th>Does not apply or Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Important patient care information is clearly communicated across areas in this facility</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>2. We feel comfortable asking questions when something doesn’t seem right</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>3. We have enough staff to handle the workload</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>4. When we see someone with more authority doing something unsafe for patients, we speak up</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>5. Key information about patients is missing when it is needed</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>6. Our ideas and suggestions are valued in this facility</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>7. We share key information about patients as soon as it becomes available</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>8. There is enough time between procedures to properly prepare for the next one</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>9. Within this facility, we do a good job communicating information that affects patient care</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>10. We feel rushed when taking care of patients</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
</tbody>
</table>
### SECTION B: Teamwork and Training

**How much do you agree or disagree with the following statements?**

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Does not apply or Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When someone in this facility gets really busy, others help out.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>2. Staff who are new to this facility receive adequate orientation.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>3. Staff feel pressured to do tasks they haven’t been trained to do.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>4. Doctors and staff clearly understand each other’s roles and responsibilities.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>5. We get the on-the-job training we need in this facility.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>6. Our facility allows disrespectful behavior by those working here.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>7. Staff get the refresher training they need.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>8. We work together as an effective team.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
</tbody>
</table>

### SECTION C: Organizational Learning/Response to Mistakes

**How much do you agree or disagree with the following statements?**

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Does not apply or Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. This facility actively looks for ways to improve patient safety.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>2. Staff are treated fairly when they make mistakes.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>3. We make improvements when someone points out patient safety problems.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>4. Learning, rather than blame, is emphasized when mistakes are made.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>5. Staff are told about patient safety problems that happen in this facility.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
<tr>
<td>6. We are good at changing processes to make sure the same patient safety problems don't happen again.</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
<td>□ 9</td>
</tr>
</tbody>
</table>
### SECTION D: Near-Miss Documentation

- When something happens that could harm the patient, but does not, how often is it documented in an incident or occurrence report?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
<th>Does not apply or Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>

### SECTION E: Management Support for Patient Safety

- How much do you agree or disagree with the following statements?

1. Managers encourage everyone to suggest ways to improve patient safety.
2. Management examines near-miss events that could have harmed patients but did not.
3. Management provides adequate resources to improve patient safety.

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Does not apply or Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>

### SECTION F: Overall Rating

- Please give your facility an overall rating on patient safety.

<table>
<thead>
<tr>
<th>Rating</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very good</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SECTION G: Communication in the Surgery/Procedure Room

- Are you typically in the surgery/procedure room during surgeries, procedures, or treatments?
  - Yes → Continue below
  - No → Go to Section H

- In the past 6 months, how often were the following actions done in your facility?

1. Just before the start of procedures, all team members stopped to discuss the overall plan of what was to be done.
2. Just before the start of procedures, the doctor encouraged all team members to speak up at any time if they had any concerns.
3. Immediately after procedures, team members discussed any concerns for patient recovery.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
<th>Does not apply or Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>
### SECTION H: Background Questions

1. What is your position in this facility? Check **ONE** category that best applies to your job.
   - a. Anesthesiologist
   - b. Doctor/Physician (excluding Anesthesiologists) or Surgeon
   - c. Certified Registered Nurse Anesthetist (CRNA)
   - d. Physician Assistant or Nurse Practitioner
   - e. Management: Medical Director, Center Director, Clinical Director/Administrator, Nurse Manager, Business Manager, Materials Manager, Office Manager, Other Manager
   - f. Nurse: Registered Nurse (RN), Licensed Practical Nurse (LPN)/Licensed Vocational Nurse (LVN)
   - g. Technician: Surgical/Scrub Technician, Sterile Processing Technician, X-Ray Technician, Other Technician
   - h. Other Clinical Staff or Clinical Support Staff: Anesthesiologist Assistant, Nurse Assistant, Medical Assistant, Other Clinical Staff or Clinical Support Staff
   - i. Administrative, Clerical, or Business Staff: Billing, Front Desk, Receptionist, Insurance Processor, Medical Records, Scheduler, Other Administrative or Clerical Staff Position
   - j. Other Position; Please Specify: __________________________

2. Typically, how many hours per week do you work in this facility?
   - a. 1 to 16 hours per week
   - b. 17 to 31 hours per week
   - c. 32 to 40 hours per week
   - d. More than 40 hours per week

### SECTION I: Your Comments

Please feel free to write any comments about how things are done or could be done in your facility that might affect patient safety.

---

Thank you for completing this survey.
Appendix B

Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery Survey (OAS CAHPS®)

A patient experience of care survey about outpatient and ambulatory surgeries and procedures

2016

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0938-1240. The time required to complete this information collection is estimated to average 8 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: CMS, 7500 Security Boulevard, Attn: PRA Reports Clearance Officer, Mail Stop C4-26-05, Baltimore, Maryland 21244-1850.
**Survey Instructions**

Answer all the questions by checking the box to the left of your answer.

You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

☑ Yes
☐ No ➔ If No, go to #1

This survey asks about your experience at the facility named in the cover letter. For this survey, we use the term "procedure" for diagnostic, surgical or other procedures. We refer to "facility" as the place where you had your procedure.

Please answer these questions only for the procedure(s) you had on the date included in the cover letter. Do not include any other procedures in your answers.

**I. Before Your Procedure**

The first few questions are about getting ready for your procedure. Include any information you received before and on the day of your procedure.

1. Before your procedure, did your doctor or anyone from the facility give you all the information you needed about your procedure?
   1. Yes, definitely
   2. Yes, somewhat
   3. No

2. Before your procedure, did your doctor or anyone from the facility give you easy to understand instructions about getting ready for your procedure?
   1. Yes, definitely
   2. Yes, somewhat
   3. No

**II. About the Facility and Staff**

The next questions ask about the day of your procedure.

3. Did the check-in process run smoothly?
   1. Yes, definitely
   2. Yes, somewhat
   3. No

4. Was the facility clean?
   1. Yes, definitely
   2. Yes, somewhat
   3. No

5. Were the clerks and receptionists at the facility as helpful as you thought they should be?
   1. Yes, definitely
   2. Yes, somewhat
   3. No

6. Did the clerks and receptionists at the facility treat you with courtesy and respect?
   1. Yes, definitely
   2. Yes, somewhat
   3. No
7. Did the doctors and nurses treat you with courtesy and respect?
   - 1 Yes, definitely
   - 2 Yes, somewhat
   - 3 No

8. Did the doctors and nurses make sure you were as comfortable as possible?
   - 1 Yes, definitely
   - 2 Yes, somewhat
   - 3 No

III. COMMUNICATIONS ABOUT YOUR PROCEDURE

   As a reminder, please include any information you received before and on the day of the procedure.

9. Did the doctors and nurses explain your procedure in a way that was easy to understand?
   - 1 Yes, definitely
   - 2 Yes, somewhat
   - 3 No

10. Anesthesia is something that would make you feel sleepy or go to sleep during your procedure. Were you given anesthesia?
    - 1 Yes
    - 2 No → If No, go to #13

11. Did your doctor or anyone from the facility explain the process of giving anesthesia in a way that was easy to understand?
    - 1 Yes, definitely
    - 2 Yes, somewhat
    - 3 No

12. Did your doctor or anyone from the facility explain the possible side effects of the anesthesia in a way that was easy to understand?
    - 1 Yes, definitely
    - 2 Yes, somewhat
    - 3 No

13. Discharge instructions include things like symptoms you should watch for after your procedure, instructions about medicines, and home care. Before you left the facility, did you get written discharge instructions?
    - 1 Yes
    - 2 No

IV. YOUR RECOVERY

14. Did your doctor or anyone from the facility prepare you for what to expect during your recovery?
    - 1 Yes, definitely
    - 2 Yes, somewhat
    - 3 No
15. Some ways to control pain include prescription medicine, over-the-counter pain relievers or ice packs. Did your doctor or anyone from the facility give you information about what to do if you had pain as a result of your procedure?
   1. Yes, definitely
   2. Yes, somewhat
   3. No

16. At any time after leaving the facility, did you have pain as a result of your procedure?
   1. Yes
   2. No

17. Before you left the facility, did your doctor or anyone from the facility give you information about what to do if you had nausea or vomiting?
   1. Yes, definitely
   2. Yes, somewhat
   3. No

18. At any time after leaving the facility, did you have nausea or vomiting as a result of either your procedure or the anesthesia?
   1. Yes
   2. No

19. Before you left the facility, did your doctor or anyone from the facility give you information about what to do if you had bleeding as a result of your procedure?
   1. Yes, definitely
   2. Yes, somewhat
   3. No

20. At any time after leaving the facility, did you have bleeding as a result of your procedure?
   1. Yes
   2. No

21. Possible signs of infection include fever, swelling, heat, drainage or redness. Before you left the facility, did your doctor or anyone from the facility give you information about what to do if you had possible signs of infection?
   1. Yes, definitely
   2. Yes, somewhat
   3. No

22. At any time after leaving the facility, did you have any signs of infection?
   1. Yes
   2. No
V. YOUR OVERALL EXPERIENCE

23. Using any number from 0 to 10, where 0 is the worst facility possible and 10 is the best facility possible, what number would you use to rate this facility?

☐ 0 Worst facility possible
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 10 Best facility possible

24. Would you recommend this facility to your friends and family?

1 ☐ Definitely no
2 ☐ Probably no
3 ☐ Probably yes
4 ☐ Definitely yes

VI. ABOUT YOU

25. In general, how would you rate your overall health?

1 ☐ Excellent
2 ☐ Very good
3 ☐ Good
4 ☐ Fair
5 ☐ Poor

26. In general, how would you rate your overall mental or emotional health?

☐ Excellent
☐ Very good
☐ Good
☐ Fair
☐ Poor

27. What is your age?

1 ☐ 18 to 24
2 ☐ 25 to 34
3 ☐ 35 to 44
4 ☐ 45 to 54
5 ☐ 55 to 64
6 ☐ 65 to 74
7 ☐ 75 to 79
8 ☐ 80 to 84
9 ☐ 85 or older

28. Are you male or female?

1 ☐ Male
2 ☐ Female

29. What is the highest grade or level of school that you have completed?

1 ☐ 8th grade or less
2 ☐ Some high school, but did not graduate
3 ☐ High school graduate or GED
4 ☐ Some college or 2-year degree
5 ☐ 4-year college graduate
6 ☐ More than 4-year college degree
30. Are you of Hispanic, Latino, or Spanish origin?
   1. Yes, Hispanic, Latino, or Spanish
   2. No, not Hispanic, Latino, or Spanish \(\Rightarrow\) If No, go to #32

31. Which group best describes you?
   1. Mexican, Mexican American, Chicano
   2. Puerto Rican
   3. Cuban
   4. Another Hispanic, Latino, or Spanish origin

32. What is your race? You may select one or more categories.
   1. White
   2. Black or African American
   3. American Indian or Alaska Native
   4. Asian Indian
   5. Chinese
   6. Filipino
   7. Japanese
   8. Korean
   9. Vietnamese
  10. Other Asian
  11. Native Hawaiian
  12. Guamanian or Chamorro
  13. Samoan
  14. Other Pacific Islander

33. How well do you speak English?
   1. Very well
   2. Well
   3. Not well
   4. Not at all

34. Do you speak a language other than English at home?
   1. Yes
   2. No \(\Rightarrow\) If No, go to #36

36. What is that language?
   1. Spanish
   2. Other Language
      (PLEASE SPECIFY):
      
      (Please print.)

36. Did someone help you complete this survey?
   1. Yes
   2. No \(\Rightarrow\) If No, go to END.

37. How did that person help you? Check all that apply.
   1. Read the questions to me
   2. Wrote down the answers I gave
   3. Answered the questions for me
   4. Translated the questions into my language
   5. Helped in some other way:
      (EXPLAIN):
      
      (Please print.)

6. No one helped me complete this survey

END
Appendix C

Examining the Relationship Between Patient Safety Culture and Patient Experience in Ambulatory Surgery Centers

Invitation to Participate in an Anonymous Web-Based Survey

You are invited to participate in this anonymous web-based online survey designed to understand the relationship between patient safety culture and patient experience in an outpatient ambulatory surgery center setting. Important things to know:
Taking part in this research is voluntary. You can choose not to be in this study, or stop at any time.
If you decide not to be in the study, your choice will not affect your relationship with the investigator of this study. There will be no penalty to you.

If you agree to participate in this study:
Formal leaders within 40 ambulatory surgery centers will be involved in this study.
An anonymous online survey will be administered.
Only the anonymous online survey will be required for participation.
You will not be compensated for your participation.
The anonymous online survey will last approximately 20 minutes.
The potential benefit of the study is the development of evidenced-based leadership strategies that could improve patient safety culture throughout surgery centers, in turn hopefully positively affecting the experience of patients.
There is no more risk expected than is encountered in everyday life.

Introduction
This study is designed to collect data for a research project about patient safety culture, a subset of organizational culture, in the outpatient ambulatory surgery center setting. You have been randomly selected to participate in this study because you are a formal leader employed at an HCA Healthcare surgery center. The principal investigator, Stephanie Landry, is available to answer any questions you may have about the project.

Study Purpose and Procedures
This study involves research. The purpose of the research is to understand the relationship between patient safety culture and patient experience within 40 of HCA Healthcare’s surgery centers. The expected duration of your participation is one 20-minute web-based online survey. The purpose of the survey is to obtain your perceptions about patient safety culture within the surgery center you work.

Benefits of Participating in the Study
No direct benefits to the participant can be expected. The benefit of the study to society is the development of evidenced-based leadership strategies that could improve patient safety culture throughout surgery centers, in turn hopefully positively affecting the experience of patients.

Risks of Participating in the Study
No more risk than is encountered in everyday life is expected.

Confidentiality
Your survey answers will be sent to a link at SurveyMonkey.com where data will be stored in a password protected electronic format. Survey Monkey does not collect identifying information such as your name, email address, or IP address. Therefore, your responses will remain anonymous. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study.

Disclosure of Appropriate Alternatives
The alternative to participate would be to choose not to participate.
Compensation for Participation
There is no compensation for participation in this study.

Contact Information
For answers to general questions concerning this research or in case of a research-related injury, contact Stephanie Landry at [contact information]

1. ELECTRONIC CONSENT: Please select your choice below. You may print a copy of this consent form for your records. Clicking on the "Agree" button indicates that you have read the above information, you voluntarily agree to participate, and you are 18 years of age or older.

   ○ Agree
   ○ Disagree

2. Have you been in a formal leadership position within the same ASC for at least 18 months?

   ○ Yes
   ○ No

3. What mechanisms do you utilize to communicate important information to team members?

   [Blank space for response]

4. How frequently do you conduct employee rounding?

   [Blank space for response]

5. How do you discuss productivity management with team members?

   [Blank space for response]

6. Do you believe your ASC is adequately staffed? Why or why not?

   [Blank space for response]
7. How do you promote teamwork within your ASC?

8. Which of the following statements is the most aligned with your perspective on medical error?
   - A blame-free environment when errors or near misses occur is essential.
   - Leaders should evaluate if the caregiver made a mistake that individuals of similar experience and training would be likely to make under the same circumstances.
   - When an error results in harm, leadership must hold the individual responsible for the error accountable.

9. How do you define patient safety culture?

10. What strategies do you use to promote patient safety culture within your facility?

11. What are the barriers to promoting patient safety culture in your facility?

12. What strategies do you use to promote an exceptional patient experience within your facility?

13. What are the barriers to promoting an exceptional patient experience in your facility?

Thank you for participating in this anonymous survey to help us understand the relationship between patient safety culture and patient experience in ambulatory surgery centers. If you have any questions about this research or are interested in obtaining an abstract of the final study so that you can learn about the results of this project, please contact Stephanie Landry at [email address]. Thank you again for your time.
Appendix D

Recruitment Email Verbiage

Leaders,

As a formal leader within ABC Healthcare, you are invited to participate in an anonymous web-based online survey designed to understand the relationship between patient safety culture and patient experience in an outpatient ambulatory surgery center setting. The online survey will take approximately 20 minutes to complete. Please click on the following link to learn more about the survey: surveymonkeylink.com.

You will be able to complete the survey at your convenience between (date) and (date). I am hopeful this study will enable the development of evidence-based leadership strategies that could improve patient safety culture throughout ASCs. Thank you in advance for your consideration.

Regards,

Stephanie Landry, Principle Investigator
Doctoral Candidate
Interdisciplinary Leadership Doctoral Program
Creighton University
Appendix E

Recruitment Email Follow-Up Verbiage

Leaders,

In follow-up to the email sent on (date), you are invited to participate in an anonymous web-based online survey designed to understand the relationship between patient safety culture and patient experience in an outpatient ambulatory surgery center setting. If you have already completed the survey, thank you! If you have not completed the survey and may be interested in participating, please visit the following link to learn more about the survey: surveymonkeylink.com.

The survey will remain open until (date). I am hopeful this study will enable the development of evidence-based leadership strategies that could improve patient safety culture throughout ASCs. Thank you in advance for your consideration.

Regards,

Stephanie Landry, Principle Investigator
Doctoral Candidate
Interdisciplinary Leadership Doctoral Program
Creighton University
Institutional Review Board
2500 California Plaza • Omaha, Nebraska 68178
phone: 402.280.2126 • fax: 402.280.4766 • email: irb@creighton.edu

DATE: October 22, 2018
TO: Stephanie Landry
FROM: Creighton University IRB-02 Social Behavioral

PROJECT TITLE: [1307129-1] Examining the Relationship Between Patient Safety Culture and Patient Experience in Ambulatory Surgery Center Settings
SUBMISSION TYPE: New Project

ACTION: APPROVED

EFFECTIVE DATE: October 22, 2018
EXPIRATION DATE: October 21, 2019
TYPE OF REVIEW: Expedited Review

Thank you for your submission of New Project materials for this project. This project was reviewed using the expedited process, in which two or more IRB members review the protocol and attachments and make recommendations as to approval and/or modification. The reviewers for the above project have recommended that this project be approved. The following documents were received, reviewed and approved:

- Consent Form - CREIGHTON UNIVERSITY RESEARCH INFORMED CONSENT.docx (UPDATED: 09/30/2018)
- Creighton - IRB Application Form - Creighton - IRB Application Form (UPDATED: 10/15/2018)
- Data Collection - CREIGHTON UNIVERSITY RESEARCH DATA COLLECTION POINTS.docx
  (UPDATED: 10/15/2018)
- Other - CREIGHTON UNIVERSITY RESEARCH RECRUITMENT EMAIL VERBIAGE.docx
  (UPDATED: 09/30/2018)
- Proposal - SLandry_DIP Chapter 1, 2 and 3_100818.docx (UPDATED: 10/8/2018)

The Creighton University IRB-02 Social Behavioral has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

The reviewers of this project have recommended approval. The consent documentation has been waived as, per 45 CFR 46.117, this research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.
1. Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant.

2. Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the Application for Modification of Approved Research for this procedure.

3. All UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office. Please use the New Information Reporting application for this procedure. All FDA and sponsor reporting requirements should also be followed.

4. Advertisements, letters, internet postings, any other media for subject recruitment, and information given to subjects for use in this study require approval before posting or distribution. Please use the Request for Review of Supplemental Documents form when requesting review for supplemental documents.

5. This project has been determined to be a minimal risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the Reporting Form for Continuing Review/Project Termination for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date. If you complete this project within the year, you are required to close the study and submit a final report before the expiration date.

If you have any questions, please contact Kathleen Stibbs at (402) 280-2126 or kathleenstibbs@creighton.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Creighton University IRB-02 Social Behavioral's records.
Appendix G

Institutional Review Board
Creighton University
2500 California Plaza • Omaha, Nebraska 68178
phone: 402.280.2126 • fax: 402.280.4766 • email: irb@creighton.edu

DATE: June 13, 2019
TO: Stephanie Landry
FROM: Creighton University IRB-02 Social Behavioral
PROJECT TITLE: [1307129-2] Examining the Relationship Between Patient Safety Culture and Patient Experience in Ambulatory Surgery Center Settings
SUBMISSION TYPE: Amendment/Modification
ACTION: APPROVED
EFFECTIVE DATE: June 13, 2019
EXPIRATION DATE: June 12, 2020
TYPE OF REVIEW: Expedited Review

Thank you for your submission of Amendment/Modification materials for this project. This project was reviewed using the expedited process, in which two or more IRB members review the protocol and attachments and make recommendations as to approval and/or modification. The reviewers for the above project have recommended that this project be approved. The following documents were received, reviewed and approved:

- Consent Form - CREIGHTON UNIVERSITY RESEARCH INFORMED CONSENT_Tracked Changes May 2019.docx (UPDATED: 06/5/2019)
- Consent Form - CREIGHTON UNIVERSITY RESEARCH INFORMED CONSENT.docx (UPDATED: 06/5/2019)
- Other - CREIGHTON UNIVERSITY RESEARCH RECRUITMENT EMAIL VERBIAGE_Tracked Changes_May 2019.docx (UPDATED: 05/29/2019)
- Other - CREIGHTON UNIVERSITY RESEARCH RECRUITMENT EMAIL VERBIAGE.docx (UPDATED: 05/29/2019)
- Proposal - SLandry_DIP Chapter 3 Amended_052919.docx (UPDATED: 05/29/2019)
- Proposal - Section Three Project Methodology_Tracked Changes_May 2019.docx (UPDATED: 05/29/2019)

The Creighton University IRB-02 Social Behavioral has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.
The reviewers of this project have recommended approval. The consent documentation has been waived as, per 45 CFR 46.117, this research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

1. Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

2. Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the Application for Modification of Approved Research for this procedure.

3. ALL UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office. Please use the New Information Reporting application for this procedure. All FDA and sponsor reporting requirements should also be followed.

4. Advertisements, letters, internet postings, any other media for subject recruitment, and information given to subjects for use in this study require approval before posting or distribution. Please use the Request for Review of Supplemental Documents form when requesting review for supplemental documents.

5. This project has been determined to be a minimal risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the Reporting Form for Continuing Review/Project Termination for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date. If you complete this project within the year, you are required to close the study and submit a final report before the expiration date.

If you have any questions, please contact Kathleen Stibbs at (402) 280-2126 or kathleenstibs@creighton.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Creighton University IRB-02 Social Behavioral’s records.