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Healthcare Employees' Perceptions on the Effects of Internal Audits

BY

Jeremy O. Mason, MPH

A doctoral project submitted to the faculty of the Medical University of South Carolina  
in partial fulfillment of the requirements for the degree  
Doctor of Health Administration  
in the College of Health Professions

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## Acknowledgments

With my deepest gratitude, I would like to display my appreciation to the individuals who were instrumental in the success of this study. First, and foremost “God”. I give the highest praise to thee. The principles of my faith teach Proverbs 4: 25-26,

*Let your eyes look straight ahead; fix your gaze directly before you. Give careful thought to the paths for your feet and be steadfast in all your ways.*

*~Proverbs 4:25-26*

Secondly, to the distinguished members of my committee, I am severely indebted to you all. Dr. Abby Swanson Kazley, Dr. Jillian Harvey, and Dr. Driscoll DeVaul. As a committee, each of you served as the lighthouse on the immense shores providing guidance with pure positivity and wisdom. Navigating me through choppy waters until we were able to reach the calmness of the shore. I am beyond grateful for each of you!

Thirdly, to the Southern Regional Medical Center, thank you for trusting me with the integrity of your workforce. Your support throughout this study is truly unmatched.

Finally, I would like to thank my family for all of their support and encouraging words throughout this journey. I dedicate this project to my parents, Jerry and Vanessa Mason. You have sacrificed a lifetime of desires to raise me to the best of your ability. I hope to make you proud to call me your son.

Abstract of Doctoral Project Presented to the  
Medical University of South Carolina  
In Partial Fulfillment of the Requirements for the  
Degree of Doctor of Health Administration

HEALTHCARE EMPLOYEES' PERCEPTIONS ON THE EFFECTS OF INTERNAL  
AUDITS

by

Jeremy O. Mason

Chairperson: Abby Swanson Kazley, PhD  
Committee: Jillian Harvey, PhD  
Driscoll DeVaul, DHA

With limited research on the perceptions of internal audits, this study was able to add more literature to the subject. The study's aim was to survey employee perceptions of the effects of internal audits. This study will provide organizations with results pertaining to how employees perceive the usefulness of internal audits. The study team conducted a single-site study and invited the healthcare organization's employee population to participate in the study. The survey captured 40 responses from 361 invitees (11%). The survey explored the perceptions on six categories of internal audits: Efficiency, Ethical Behavior, Effectiveness, Auditor-Auditee Relationship Exchange, Learning from Audit, and Top Management Support. Each category's effect on internal audits was weighed by the "Strongly Agree" selection. 1.) 84 (29.9%) Top management, 2.) 55 (19.6%) Learning from Audit, 3.) 48 (17.1%) Auditor-Auditee Relationship Exchange, 4.) 42 (14.9%) Efficiency, 5.) 38 (13.5%) Ethical Behavior, and 6.) 14 (4.9%) Effectiveness. Furthermore, each category received its top response count for the selection of "Agree". Therefore it was quite evident that each category is perceived to be an effect of internal audits. The survey results of this study can guide organizations on key areas of internal audits.

## Table of Contents

<i>Acknowledgments</i> .....	2
<i>List of Figures</i> .....	5
<i>List of Tables</i> .....	6
<b>1 CHAPTER I: INTRODUCTION</b> .....	<b>7</b>
<b>1.1 Background and Need</b> .....	<b>7</b>
<b>1.2 Research Setting</b> .....	<b>8</b>
<b>1.3 Problem Statement</b> .....	<b>8</b>
<b>1.4 Research Questions</b> .....	<b>12</b>
<b>1.5 Population</b> .....	<b>13</b>
<b>2 CHAPTER II: LITERATURE REVIEW</b> .....	<b>14</b>
<b>2.1 Composition of Internal Audits</b> .....	<b>14</b>
<b>2.2 Quality Management Systems</b> .....	<b>17</b>
<b>2.3 Regulatory Enforcement</b> .....	<b>19</b>
<b>2.4 Perceptions</b> .....	<b>20</b>
<b>2.5 Effectiveness of Internal Audits and Feedback</b> .....	<b>21</b>
<b>2.6 Opportunities for Internal Audit</b> .....	<b>22</b>
<b>2.7 Implementing an Internal Audit System into the Culture of an Organization</b> .....	<b>24</b>
<b>2.8 Summary</b> .....	<b>27</b>
<b>3 CHAPTER III: METHODOLOGY</b> .....	<b>28</b>
<b>3.1 Research Design</b> .....	<b>28</b>
<b>3.2 Sample Selection</b> .....	<b>29</b>
<b>3.3 Instrumentation</b> .....	<b>30</b>
<b>3.4 Data Collection</b> .....	<b>33</b>
<b>3.5 Mixed Methods Data Analysis</b> .....	<b>34</b>
<b>4 CHAPTER IV: RESULTS</b> .....	<b>37</b>
<b>4.1 Descriptive Sample Statistics</b> .....	<b>37</b>
<b>5 CHAPTER V: DISCUSSION</b> .....	<b>49</b>
<b>5.1 Discussion of Results</b> .....	<b>49</b>
<b>5.2 Study Limitations</b> .....	<b>51</b>
<b>5.3 Future Research</b> .....	<b>52</b>
<b>5.4 Conclusion</b> .....	<b>53</b>
<i>References</i> .....	55
<b>Appendix I: Perception of Internal Audit Survey</b> .....	<b>61</b>
<b>Appendix II: Survey Invitation Email</b> .....	<b>64</b>

## **List of Figures**

Figure 1 : Internal Audit Cycle for Governance Purposes .....	12
Figure 2 : Internal Audit Process .....	16
Figure 3 : JBI Model of Evidence-Based Healthcare .....	25
Figure 4 : Sum of Internal Audit Perception Categories by Likert-Scale.....	44

## List of Tables

Table 1 : Survey Items .....	36
Table 2 : Efficiency .....	38
Table 3 : Ethical Behavior .....	39
Table 4 : Effectiveness.....	40
Table 5 : Auditor-Auditee Relationship Exchange.....	41
Table 6 : Learning from Audit.....	42
Table 7 : Top Management Support .....	43
Table 8 : Perspectives on Deficiencies Discovered by an Internal Auditor .....	46
Table 9 : Perspectives on the Quality of an Internal Audit.....	48

# 1 CHAPTER I: INTRODUCTION

## 1.1 Background and Need

Auditing can be found in history as far back as 4000 B.C. Historians have reason to believe that systems of formal record-keeping were instituted by organized businesses and governments in the eastern hemisphere to address concerns about accounting matters and tax collections. It is believed that the origin of auditing occurred when the advancement of a civilization empowered one man to be held responsible for the property of another, which created the advisability for a form of verification upon the fidelity of the former. Over time the Zhao dynasty in China, Babylonia, Greece, the Roman Empire, City States of Italy, etc., have developed systems of checks and balances (Ramamoorti, 2002). In the year 1941, the United States launched the method of Internal Auditing. Prior to the 1950's internal audits focused on financial audits. As time passed, there was a growing void to audit compliance of processes and procedures that are part of internal organizational controls. "Furthermore, internal audits derived from a necessity to have the tool instilled as an integral part of modern business. Corporations cannot avoid the need. If events continue to happen as they do at present, they will have to have it sooner" (Ramamoorti, 2002).

An Internal Audit is the tool of preference for systematic confirmation of the effectiveness and efficiency of business operations within an organization. The tool is used to perform an extensive examination of failures and risks that have occurred due to the organization's administrative, business processes, and internal controls. The evaluation develops a recommendation for the organization to implement in an effort to remediate deficiencies and errors. Contrary to the aforementioned definition, internal audits are perceived as an inspection



of a process with little to no responsibility to establish assurance on information, analytical tools, clarification of information, or the influence of the market.

## **1.2 Research Setting**

A Southern Regional Medical Center (SRMC) in the United States is an acute care facility located in a Southern State. The organization provides acute care services as, Abdominal Transplant, Alzheimer's and Dementia Care from the Mind Center, Cardiac Cath Laboratory, Cardiology, Cancer Care, Child Development, Family Medicine, Gastroenterology, General Pediatrics, General Surgery, Intensive Care, Labor and Delivery, Occupational Therapy, Orthopedics, Pediatric Orthopedics, Physical Therapy, Primary Care, Radiology, Rheumatology, Urology, Women's Care and Wound Care. The organization sits within a mixture of urban and rural communities, mostly embedded in blue-collar and farming laborers.

## **1.3 Problem Statement**

Over the previous four years, the SRMC converted its accrediting services to DNV-GL. CMS granted Deeming DNV-GL as a qualified accreditation organization. DNV-GL considers its organization to be a world-leading certification body. They assist businesses by assuring the performance of their organizations, products, people, facilities, and supply chains through certification, verification, assessment, and training services. DNVs goal in healthcare is to aid their customers in achieving excellence by improving quality and patient safety through hospital accreditation, managing infection risk, management system certification, and training.

DNV-GL incorporates the Industrial Organization Standards (ISO) 9001 Quality Management System into the accreditation process for hospitals' ongoing focus on quality

improvement. This process is constructed in a corrective action approach where hospitals have the basis for accreditation in continuous efforts aligning with their core values and culture. ISO 9001 Quality Management Principles are customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision-making, and relationship management (DNV GL Business Assurance USA, 2015). ISO 9001 defines an internal audit as the “systemic, independent process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria have been fulfilled.” Healthcare organizations must conduct internal audits at planned intervals to verify adherence to the organizational management system and compliance with ISO 9001 requirements. Systemically, organizations must schedule internal audits at regular intervals and gather the required resources for their implementation. Top management support is a critical part of this process. Independence of the internal audit is to be conducted impartially by auditors who are not responsible for the systems, processes, or products being audited. This provides independence of non-biased and conflicts of interest. Audit documentation must provide evidence of compliance via observations, measurements, tests, or other means. Audit results should be communicated to management with recommendations of corrective actions, as deemed necessary, with implementation promptly (ISO 9001 Internal Audit Requirements and Free Checklist, 2019).

The audit will assess performance, policy adherence, quality of care, patient safety culture, and work/service processes. This study will examine audits' efficiency and effectiveness and provide insight into the process (Alzeban & Gwilliam, 2014). Several studies considered internal audit effectiveness by reference to the ability of the function to satisfy the needs of auditees (Barrett, 1986). Those studies sought to measure the auditee's satisfaction with the work of the internal auditor. Other studies used indirect measures, especially the extent to which

internal audit recommendations are endorsed and acted upon (Sawyer, 1995). However, there is a scarcity of research that focuses specifically on the perception of internal audits.

Furthermore, to some extent, there needs to be more literature regarding employee perceptions pertaining to internal audits in the healthcare arena. With insufficient resources available to identify how employees perceive internal audits, this study looks to decrease the void in the world of research. This study can provide organizations with insight into the study's perception measures to build other healthcare organizations' internal audit programs that will potentially enhance organizational culture, employee perceptions, and understanding of the purpose and need for internal audits.

There are arguments in favor of more comprehensive measures of the capacity of internal audits to evaluate the achievement of the organizational goals and objectives to provide solutions should these goals not be reached. This notion demands an assessment of those dimensions of business activity that the internal audit observes and has the capacity to influence, including organizational performance (Gramling et al., 2004). Issues are present in surveys as participants are usually uncomfortable or unwilling to share information that does not reflect well on them in their social environment, even if they know their responses are entirely anonymous. On some occasions, participants may understate the extent to which they experience a certain feeling, depending on how socially appropriate or desirable they interpret their response. Researchers are expected to provide the most clarity that anonymity will be executed for the participant, and honest responses are highly encouraged.

SRMC created an internal audit department as a microcosm of the DNV Healthcare Accrediting Body. However, it is difficult for the organization to assess the effectiveness of internal audits. The organization could not properly identify transgression of departmental

processes being performed and reduce the critical damage that has been made aware to the organization, which also serves as prevention to damage in the foreseeable future. There is anecdotal evidence that internally audited departments are not aligned with organizational goals. Furthermore, internal audits may or may not affect the organization's culture. Often, an audit is not perceived by the organization as a vital process. Auditees have detailed auditors in malicious terms, such as inspectors, policemen, prosecutors, investigators, and accusers (Ma'ayan & Carmeli, 2015). Therefore, it is essential for top management to understand the audits from the employee's perspective and address any misleading perceptions of internal audits and what they mean for the organization.

Designing an impactful auditing system is a very challenging task. Focusing on how internal audits drive improvement in core performance areas, quality of care, adaptivity, and effectiveness in the organization are highly sought out within this study. In Figure 1, you will see a diagram of the organization of internal audits in Dutch hospitals. This diagram is very similar to the SRMC internal audit structure, which is further explained in Chapter 2, detailing internal audit programs in various world regions. This study will focus on employee perceptions of the internal audit function. The stakeholders will include physicians, managers, administration, quality management oversight committee, and support staff.

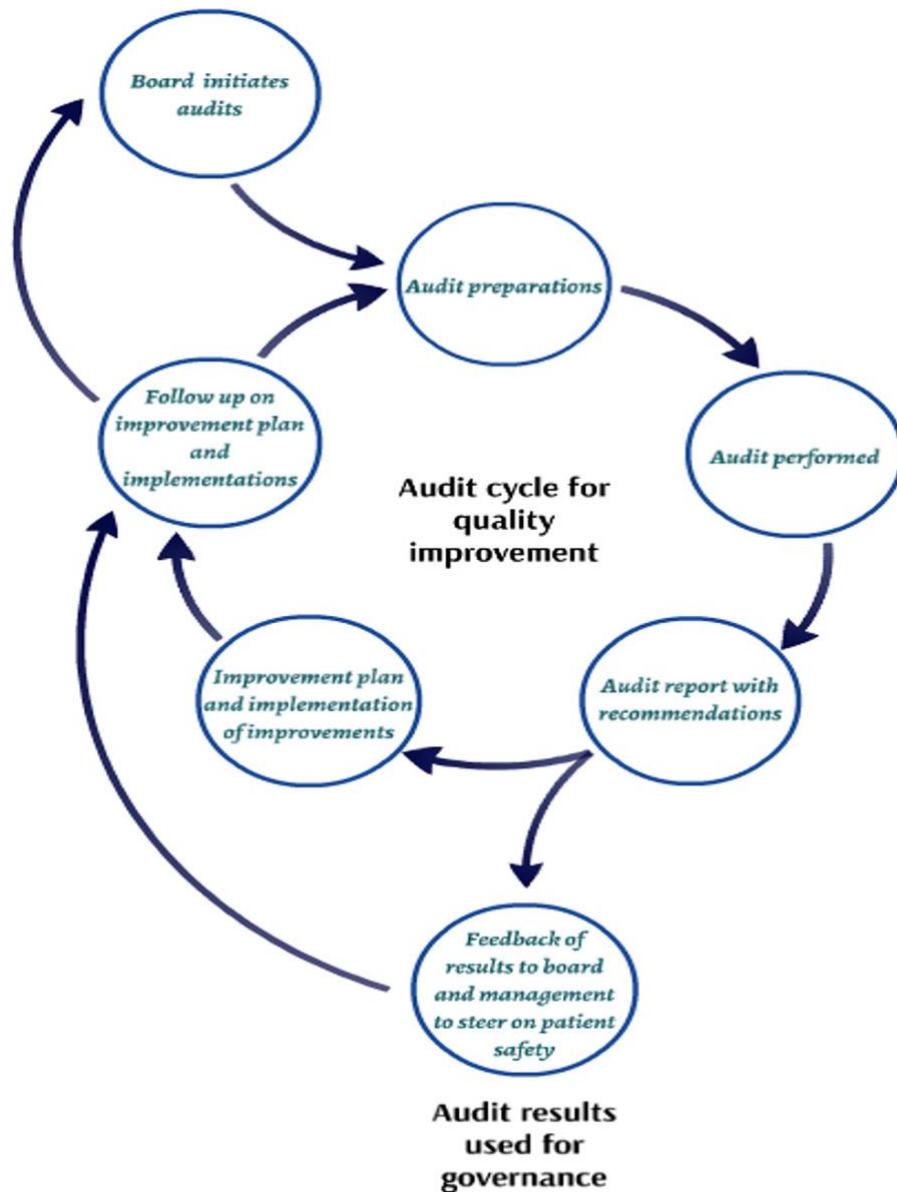


Figure 1: Internal audit cycle for governance purposes (van Gelderen et al., 2017)

Source: The British Medical Journal, 2017

#### 1.4 Research Questions

This study aims to survey employee perceptions on the effects of internal audits. This study will provide organizations with results from this study on how employees perceive the usefulness of internal audits. The measures in this study are items listed on a survey via

REDCap. The data gathered from the survey will inhibit this study by providing data analysis on employee perceptions through a mixed methods approach. This study aims to find answers to the following questions:

1. What are employees' perceptions of internal audit effectiveness of performance: efficiency, effectiveness, and culture within the organization?
2. What are the employee's perceptions of the auditor's capacity?

## **1.5 Population**

The organization employs 361 employees and houses 52 beds. The organization provides health care to a county in the southern state with an estimated population of 21,629 citizens.

## 2 CHAPTER II: LITERATURE REVIEW

### 2.1 Composition of Internal Audits

Audits are composed of various options that create outcomes for organizational settings. As a brief synopsis, the literature review will provide insight. Audits can serve three separate areas (Hut-Mossel et al., 2021):

- a. External audits will provide insight into compliance with external credential criteria (e.g., accreditation, certification, external peer reviews)
- b. Clinical audits conducted by healthcare professionals voluntarily
- c. As it relates to this study, internal audits, which are primarily in preparation for an external audit

Internal audits have become one of the critical practices for organizations to control their processes' adherence to standard procedures and regulations. Internal audits aim to help organizations meet their goals and objectives. Internal audits are presumed to help improve the value of the organization's services. It is assumed that internal audits also contribute to the organization's value.

Internal audits are often conducted by internal auditors within an organization. This study will review the effectiveness of internal audits from an employee's perception. The internal audits pertaining to this study were housed in a hospital setting. Hospitals departmentalize internal audits within their quality department with the quality officer as the responsible personnel.

It is suggested that internal audits are performed by personnel outside the proposed department to be audited. The separation will bring a nonbiased review and opinion to establish more validity to the audit when the audit is completed by an independent employee that does not work within the department that's being audited. Organizations implement internal audits as a tool to evaluate patient care, business procedures, departmental processes, etc., against healthcare standards (Hut-Mossel et al., 2021). More than often, internal audits are used to improve the quality of care. It is perceived that when a comparison is made between internal audits and external audits, looming threats to quality are more swiftly revealed, providing an opportunity for the organization to adapt its process to improve quality at the organizational level.

The external audit framework often uses internal audits to prevent performance standards from dropping between two external audits. Hospital quality management systems use internal audits to evaluate effectiveness and focus more on organizational performance and less on the behavior of healthcare professionals and patient outcomes (Hut-Mossel et al., 2021). van Gelderen et al., studied hospitals in the Netherlands, where they refer to internal audits as a systemic evaluation of the quality system of a hospital which aims to improve patient safety by measuring the performance of healthcare providers and preconditions for safe care and comparing these outcomes with standards and guidelines.





*Figure 2: Internal Audit Process*

Source: Health Policy, 2020

Auditors are trained nurses, medical specialists, allied healthcare professionals, and quality officers. Audit teams may carry anywhere between 5 and 20 people per hospital or organization. The auditors are prepared to be knowledgeable on theory, conversation, social skills, and analytical methods (Gelderen et al., 2017). Internal audits consist of 5 phases (Hanskamp-Sebregts et al., 2020):

- a. Preparation
- b. Execution
- c. Reporting
- d. Development and implementation of an improvement plan
- e. Follow-up on all audit findings (Figure 2)

## 2.2 Quality Management Systems

The 1996 Care Institutions Quality Act and the constitution of the Netherlands Institute for Accreditation in Healthcare (NIAZ) provide a combination of standards where nearly all Dutch hospitals have adopted the tool of internal audits. As a requirement of the Care Institutions Quality Act, hospitals must have a quality management system, including the assurance that quality activities are undertaken (Wagner et al., 2006). To receive accreditation by the NIAZ and be standardized as safe care to third parties (e.g., healthcare consumers and healthcare insurers), an internal audit system must be in place (van Gelderen et al., 2017).

In the United States, the Centers for Medicare and Medicaid Services (CMS) collects quality data from hospitals under the Inpatient Prospective Payment System housed in the Hospital Inpatient Quality Reporting Program. Hospitals are tasked with driving quality improvement through measurement and transparency by publicly displaying data to help consumers make more informed decisions related to their healthcare provider. CMS's goal with quality programs is to intentionally drive down the cost of inpatient care and improve the quality of care for all patients. CMS has also tied payment incentives to a portion of data from reported measures reporting quality and care efficiency. This also includes Hospital-Acquired Condition Reduction Program, Hospital Value-Based Purchasing Program, and Hospital Readmissions Reduction Program (Hospital Inpatient Quality Reporting Program | CMS, n.d.).

CMS develops Conditions of Participation (CoP) that healthcare organizations must abide by to begin and continue participating in the Medicare and Medicaid programs. CMS truly believes that health and safety standards are the foundation for improving quality and protecting CMS beneficiaries. CMS upholds COP standards to the accrediting organizations recognized by CMS, ensuring that the standards meet or exceed CoPs (Conditions for Coverage (CfCs) &

Conditions of Participation (CoPs) | CMS, n.d.). Hospitals that participate abide by CoP as a requirement of CMS. Hospitals must develop, implement, and maintain a practical, ongoing, hospital-wide data-driven quality assessment and performance improvement program. The hospital's governing body must ensure that the program mirrors the complexity of the hospital's organization and services; involves all hospital departments and services (including those services furnished under contract or arrangement), and focuses on indicators related to improved health outcomes and the prevention and reduction of medical errors. The hospital must maintain and demonstrate evidence of its Quality Assessment and Performance Improvement program review by CMS (National Archives and Records Administration, 2015).

Organizations are responsible for establishing internal audit requirements. Usually, this is the responsibility of the quality manager. The quality manager must establish the following (ISO 9001 Internal Audit Requirements and Free Checklist, 2019):

- a. Develop the organization's audit program
- b. Define the criteria and scope of the audit
- c. Select auditors that are independent of the systems or process, or products being audited
- d. Report results to the manager
- e. Implement recommendations
- f. Retain the documentation as evidence of implementation

A checklist is provided by ISO 9001 for internal audits, which is a requirement for organizations to use. The checks-list is conformed with a questionnaire that assesses the organization's context, leadership, planning and quality management systems, support structures, operations, performance evaluations, and areas for improvement.

### **2.3 Regulatory Enforcement**

Weske et al., conducted a study titled “Using regulatory enforcement theory to explain compliance with quality and patient safety.: the case of internal audits”. This study explored how implementation actions are linked to compliance. The study was designed to contribute to the knowledge of how to increase compliance with obligatory rules and regulations (Weske et al., 2018). Two enforcement styles are used widely throughout this study:

- a. Catalytic – based on the assumption that individuals are motivated to comply with the rules, but they may not be capable of doing so because they are not equipped with resources to be compliant or lack the understanding of the necessary needs to be compliant.
- b. Coercive – assumptive perception that individuals are unwilling to comply with regulations and must be challenged with sanctions to impose on individuals out of compliance.

The results determined that all auditors use catalytic enforcement actions based on dialogue and suggestions. Catalytic actions are for improvement and depend on the leader's motivation. Motivated leaders are more inclined to conduct improvement actions based on audit results. The internal audit contributes to their capacity by increasing their knowledge. Therefore, the findings imply that the effectiveness of enforcement actions depends on the pre-existing motivation of leaders (Weske et al., 2018).

## 2.4 Perceptions

Perception is our physical knowledge of the world around us and involves the gratitude of ecological motivations and actions in reaction to these motivations. Through the perceptual process, we obtain evidence about possessions and atmosphere elements essential to our existence. Perception can be derived into two forms :

- a. generates our understanding of the world around us
- b. it moves us to action within our atmosphere

Touch, sight, smell, taste, and hearing are the five human senses that establish perception. Also, a set of senses include the ability to identify changes in body positions, movements, and reasoning procedures required to process information, such as identifying the face of an associate or noticing a familiar aroma (Arulalan & Anojan, 2014).

A study based at the University of KwaZulu-Natal sought to assess employee perceptions of the internal audit process using a qualitative data collection method. The study highlights the perception definition as the development of views that an individual has developed about a person being influenced by information that the individual has gathered and the degree to which one can properly interpret the information. This can also be described as having access to the same information as another individual regarding a specific scenario or condition. However, they all still reach different conclusions due to differences in the process of interpreting the information at hand (Thobile, n.d.).

Thobile, concluded that pertaining to the evidence that had been collected from the analysis of interviews, the perception of internal audits is generally positive, with a small sample of negative perceptions. The majority of the respondents gave positive responses to the questions asked. Furthermore, the results reflected that the employees understand the purpose of

an internal audit within the organization. However, there are signs that they need to understand unequivocally the role of a provider of advisory assistance. Additionally, internal audit activity is perceived as adding value in helping the organization to accomplish objectives, excluding the respondents that inaccurately associated projects performed in the organization with ones carried out by the internal audit unit (Thobile, n.d.).

## **2.5 Effectiveness of Internal Audits and Feedback**

Christina et al., presented a study that explored the perception of acute care nurses on factors influencing the effectiveness of Audit and Feedback (A&F). The study details how nurses described the relevance of A&F. Nurses had not truly been educated on the relationship of A&F and the prioritization of audit criteria, as it aided in the factors that influenced their response to A&F. It appears that timing of the A&F and feedback characteristics affected the nurse's response to A&F.

The lack of understanding behind A&F could potentially lead nurses to ignore the feedback, ultimately creating a less effective process. It is speculated that there may have been a lack of transparency from the management. The study states that when feedback recipients were not adequately informed about A&F, it could lead to staff alienation from quality improvement efforts and lost opportunity for learning (Sinuff et al., 2015). Past studies have mentioned that there is importance to having stakeholders involved in the process of quality improvement (Dixon-Woods et al., 2012).

To explain the link between audit criteria and a nurse's lack of understanding of how they pair with patient outcomes, an example of preventing a hemorrhage (patient outcome) can be discussed. The nurse's primary focus at the moment is preventing the hemorrhage caused by

heparin overdose without necessarily realizing that using the drug library on the IV smart pump (audit criteria) could assist the nurse in achieving such. It is presumed that eventually, nurses may feel that important quality indicators that have not been quantified or used for audit criteria, such as patient satisfaction, are of less impact on the management involved in A&F (Giesbers et al., 2013). In prioritization of audit criteria, the nurse would mention that audit criteria must reflect their care priorities, or this could lead the nurse to disregard the feedback, which further reduces the effectiveness of A&F (Christina et al., 2016).

According to Ebright et al., to achieve desired patient outcomes in the acute care environment, RNs balanced trade-offs as part of their work to achieve personal and organizational goals. The nurse would feel a sense of frustration if they received more feedback applied to a completed patient task that was not of importance as compared to a lack of response to a patient's acute care task that has been completed. As it pertains to the timing of A&F, coordinating the timing of the A&F is essential to accommodate the nurse's existing plan of care. This will allow the nurse enough time to fulfill the audit criteria. Potentially this will lead auditors to obtain a more accurate adherence rate for nurses, who are developing more positive feelings about the support they are provided with adequate timing to accomplish their work (Christina et al., 2016). Larson et al., stated that feedback characteristics are more effective when delivered in a way that is readily accessible to the learner and that the learner knows how to interpret and act on the results as they are received.

## **2.6 Opportunities for Internal Audit**

There is a great need for hospital organizations to structurally compose internal audits with integrity between internal audits and external supervision. Structurally sharing internal

audit results with external supervisors can reduce the supervisory burden for hospital boards and healthcare professionals and promote the effectiveness of external supervision of supervisory bodies. After all, the number of external demands is growing (Blume et al., 2016). It is essential that the internal audit information is reliable, relevant, and risk-oriented and has been collected by context experts or trained auditors. Internal audit information summarizes all information about the quality and safety of care (Hanskamp-Sebregts et al., 2020). Internal audit results share information to represent the level of compliance that's being practiced for the audit program. Internal audits can display the level of care being provided to patients, patient outcomes, and patient experiences with provided care.

There are arguments in favor of more comprehensive measures of the capacity of internal audits to evaluate the achievement of the organization's goals and objectives and to provide solutions should these goals not be reached. This notion demands an assessment of those dimensions of business activity that the internal audit observes and has the capacity to influence, including organizational performance (Gramling et al., 2004). Issues are present in interviews/surveys as participants are usually uncomfortable or unwilling to share information that does not reflect well on them in their social environment, even if they know their responses are entirely anonymous. On some occasions, participants may understate the extent to which they experience a certain feeling, depending on how socially appropriate or desirable they interpret their response to be.

Researchers are expected to provide the most clarity that anonymity will be executed for the participant, and honest responses are highly encouraged. It is strongly advised that researchers should lead with less intimidating questions to make the participant feel comfortable before asking anything that may be difficult to answer honestly. A suggested option is to



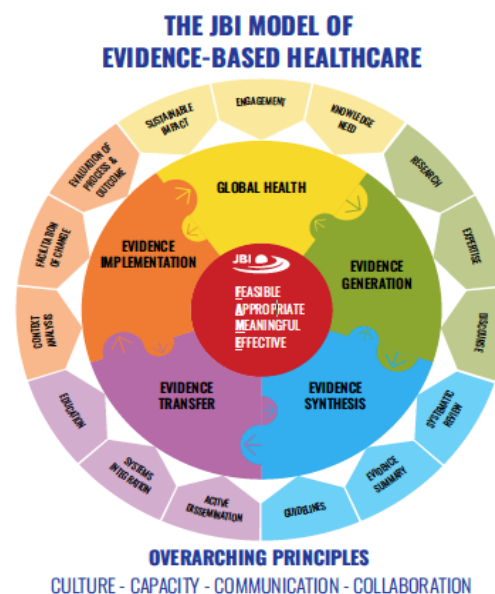
structure the format of the questions in a way that will normalize the behavior, e.g., “As you know, many people do... To what extent do you do X?”.

## **2.7 Implementing an Internal Audit System into the Culture of an Organization**

The arts and other manifestations of human intellectual achievement are regarded collectively. Second, is the customs, art, social institutions, and achievements of a particular nation, people, or other social groups (Oxford Languages and Google – English | Oxford Languages, 2022). In organizations, culture is formed to represent shared thoughts and values concerning behavior in healthcare organizations. Healthcare organizations host multiple subcultures that produce elements for change or potentially cause interruptions in quality improvement initiatives. Culture and quality improvement are dependent upon each other. Specificity around culture and performance allows organizations to comprehend the possible relationship between quality improvement initiatives being upheld by culture and service quality. We look to move beyond the appropriation of culture as simply a rhetorical tool used by politicians and in policy edicts.

Employee-oriented culture demonstrates that an organization can treat employees as an organizational asset and key stakeholders on their path to a successful career. Equivalently, customer-oriented places the customers’ satisfaction as the organization’s top focus. Within a hospital, it is ideal that the structure is centered around patient and physician focus. These cultures have similarities to customer and employee-oriented cultures. Employee-oriented values encompass how an organization’s members are expected to interact with engaging employees’ trust and empowerment (Deng et al., 2019). Public hospitals managed by the government are a culture in which the patient serves at the center of the culture as a government

requirement. The institute that manages hospitals' focus is mainly on patients and healthcare quality as its overarching goal. Previous studies have demonstrated that patient-oriented culture in a public hospital promotes physicians' performance (Deng et al., 2019). The Mayo Clinic has led the charge with its success in instilling the organization's core value of putting the patient first. Organizations that focus on key factors of customers and employees typically perform better than those that do not have similar organizational culture (Deng et al., 2019).



*Figure 3: JBI Model of Evidence-Based Healthcare*

Source: Journal of Clinical Epidemiology, 2022

The Joanna Briggs Institute (JBI) model of Evidence-Based Healthcare established a framework where people, process, evidence, and technology served as the outline for implementation (Figure 3). To implement the framework properly, JBI created a culture that was quite aware that implementation is not a technological or theoretical process; it is a human

process (Lockwood et al., 2022), as well as an integration of strategies with human behavior theory interventions. Theory-informed change, presented by Cane, O'Connor, and Michie, described change as human-centered and implementation as a person-centric process. This approach was parallel with the JBI strategy of implementation (Lockwood et al., 2022). It is not often that healthcare professionals are provided formal training opportunities in the implementation process. Education is crucial for implementation. A culture for healthcare professionals to receive support to develop skills for implementation and facilitate organizational quality improvement is critical (Lockwood et al., 2022). The perceived outcome will be to produce leaders who can support organizations and individuals through the evidence-based implementation, which has proven to be a success (Lockwood et al., 2022).

It's presumed that top management with interest in innovations and coordinating work with implementation, sharing of new ideas, and innovations with other organizations function as facilitators to change (Glenngård & Anell, 2021). This can also lead to the case of organizational culture, which is characterized by openness toward new ideas and a willingness to carry its potential risks, particularly when external factors do not trigger change. Increasingly performance measurement, as in audit and feedback activities, in healthcare can be used to support external accountability to improve provider performance (Glenngård & Anell, 2021).

A study conducted by Sykes et al., details how an organization developed accreditation mechanisms through organizational implementation. The mechanisms are tools for the corporate nursing teams to assess performance. The accreditation audits have received national recognition as a recommended audit. This further suggests that implementation may be necessary to develop the collective leadership and supportive culture that will produce improvements from an accreditation system as such (Kluger & DeNisi, 1996).

van Gelderen et al., made a note in a study based on the evaluation of internal audits within an organization, hospital boards use audit tools to assist in their task of governing the culture of patient safety, 2017. Board members suggest that audit results serve as an incentive for the hospital board to adjust hospital policy and culture. In the recorded interviews, it has been stated that internal audit results were the cause for changes to happen swiftly, whether readjustments were needed by the board itself or departments (van Gelderen et al., 2017). The audits were the catalyst for the change.

## **2.8 Summary**

In summary, the context of the literature review has surveyed an extensive volume of literature relating to internal audits. The review details studies that explore the results of an internal audit's effectiveness, perception, and culture. There is much dialog that details the origin of regulatory agencies which use internal audits as a risk-based-management tool in North America, Africa, and Europe. Each of the three continents uses internal audits in a similar fashion that ensures the quality of patient care is positioned as the center stone of operations. Throughout the findings, the research on employee perspective speaks very little about how employees perceive internal audits. This study can bring about awareness of many factors that can alter employees' preconceived notions about internal audits. Organizations that are engaging in quality management systems would serve as a great benefactor from the results of this study, as trends are established to identify areas of implementation to better support the motivation for improved performance within management, employees, and departments that are subjects of an internal audit.

### **3 CHAPTER III: METHODOLOGY**

The mixed methods research and data collection utilized in this study sought to identify employees' perceptions on the effect of internal audits within the SRMC located in the United States. In theory, the results of this study are to advance existing knowledge in the discipline of internal audits and potentially present solvency to organizations that are utilizing internal audits in the initial stages of quality management. Ideally, the study will identify employee perceptions that benefit an organization. The data will provide organizations with employees' perceived understanding, support, and outcomes of internal audits. However, there is a need to focus on how internal audits drive improvement in three core performance dimensions: culture, efficiency, and organizational effectiveness.

#### **3.1 Research Design**

This study will use a survey research design that includes a structured survey. Survey research studies acknowledge that participants' responses to survey questions provides an excellent measure of the attitudes and behaviors being tested (Developing and Testing Survey Questions, n.d.). In addition, inferences can be drawn from survey responses. Survey research occasionally provides generalized information pertaining to the questionnaire. This design was configured to gather data to measure the actions, intentions, and attitudes of people, usually representative samples of the populations being studied. Measures must be aggregated to describe the population. According to Fowler and Mangione, "The standard for the success of a survey is how well the data measures the aspect of the population the researchers are trying to describe. The goal of a survey is to produce accurate statistics (Houtkoop-Steenstra & Houtkoop-Steenstra, 2000, p. 1).

This study focuses on audited organizational departments where a process or procedure had recently been audited to optimize departmental performance improvement since the inception of the Quality Management Oversight Committee Internal Audit Program.

### **3.2 Sample Selection**

The entire Medical Center and those departments that participated in the internal audit program from January 2022 – December 2022 will be invited to participate in the survey:

- a. **Surgery Unit:** The subjects of an internal audit conducted by the performance improvement coordinator. The internal audit aimed to investigate the surgeon's preference card process, procedures, and policy. The auditees and affected personnel from the audit are 4 RN IIs, and 10 Surgical Technicians, 4 Surgeons.
- b. **Patient Access:** The patient access department participated in an internal audit that reviewed the Emergency Medical Treatment and Labor Act's (EMTALA) policy and procedures upheld by the registrars. The auditees and affected personnel from the audit are 12 registrars who conduct patient access across the organization for departments that conduct inpatient and outpatient services.
- c. **Medical-Surgical Nurse:** This department focuses on operating two floors for adult inpatient care. These patients are preparing for or recovering from a surgical procedure, acute care, and Intensive Care Unit. The internal audit reviewed processes, procedures, and policies formed to establish discharge

instructions/care transitions. 45 Medical surgical nurses were either audited or affected by the internal audit.

- d. Dietary: This department is operated by an outsourced food service vendor specializing in healthcare for patients, hospital staff, and guests. The internal audit conducted in this department was to review policies and procedures developed to store food items, dietary plans, and food preparations. Fifteen contracted employees were included in the audit or affected by the audit results.
- e. Case Management: The organization's case management department was audited on the execution of Important Message from Medicare (IMM). There are 2 case managers and one social worker that has been audited or affected by the internal audit performed.

### **3.3 Instrumentation**

This study will use Carmeli and Ma'ayan's survey tool that was created for their study "Internal Audit as a Source of Ethical Behavior, Efficiency, and Effectiveness in Work Units" (2015). The measurement tool will consist of the following:

1. Performance improvement (PI): consists of three dimensions: efficiency, effectiveness, and ethical behavior. The PI in question would derive directly from the audit performed in the surveyed department. Respondents were asked to focus on the degree of improvement resulting from the audit activity. In conformity with Goodman, Ravlin, and Schminke, it's suggested that "group measures of performance must be both fine-grained and related to the task"

(Goodman et al., 1986). Six items were used from Ancona and Caldwell's study to assess Efficiency and effectiveness (Ancona & Caldwell, 1992). Ethical behavior was assessed by five items in research from Carmeli and Zisu (2009).

2. Learning from the Audit: Five items were gathered in research from Eden and Moriah's Study (1996), as seen in Carmeli and Ma'ayan's study. The study used the five items to assess the extent to which auditees learned from the audit at the department level. These items are described below:
3. Auditor-Auditee Relationship Exchange: Linden and Graen (1980) developed six items that the study used to assess the exchanges between auditors and auditees. Carmeli and Ma'ayan revised the original scale developed by Linden and Graen, which was created to assess leader-member exchange. The SRMC organizational structure does not encompass auditors and auditees are to be engaged in a hierarchical relationship. Unlike a leader-member exchange, auditors do not assess auditees' career projections, and their relationships have no continuity (Ma'ayan & Carmeli, 2015).
4. Top Management Support: We were able to adapt six items from Carmeli and Ma'ayan. The origin for these items is from Penini and Carmeli's (2009) with slight alterations by Carmeli and Ma'ayan to adjust the term "my organization" with "the organization's management" to further reflect management support for the audit activity and account for possible cultural differences in the sample (Ma'ayan & Carmeli, 2015).
5. Auditor Capacity: In line with the Ma'ayan study, the study team assessed one dimension of auditor capacity; Skills. Two items were used from Carmeli and



Ma'ayan survey tool and converted to open-ended questions. The restructuring of the question enables participants to provide their responses genuinely while using their thoughts and words.

The survey tool consisted of 31 items (Table 1) and used two open-ended questions, allowing the participants to transcribe their responses to the question in their thoughts and words. The remaining 29 items are close-ended questions. Close-ended questions provide the participants with accessible response options for the participants to choose and they also simplify the analysis of data for the study team. The close-ended questions in this study will require the participants to select answers from the 5-point Likert scale listed next to the question. A 5-point Likert scale will gauge employee perceptions of internal audits that they have participated in or have been affected by the audit results. The Likert scale is a psychometric and unidimensional scale from which respondents select the best option. The scale represents people's opinions and attitudes to a topic or subject matter. Ranges provided by the scale range from "strongly agree" to "strongly disagree". Psychometric scales are typically used to represent the opinions and attitudes of people toward a topic or subject matter. Incorporating the Likert scale merger into survey questionnaires enables questionnaires to use the function of a rating scale. With the rating scale outcomes providing a continuum from highest to lowest points and intermediate points between the two extremities, this study found value in the Likert scale and its components to help depict a relative assessment of employee perceptions with reduced biases and further the reduction of unclear interpretations.

To adapt the survey to the context of the study site, we specifically removed three items that had no relationship to the study's intent. The first item to be removed, "internal audit helps to increase savings in the unit, " was removed because the internal audit conclusion and the study

timeline would not provide enough time to calculate the savings accurately. The savings may not be determined for another year post achieved sustainability of the recommendations that were implemented. Secondly, “the internal audit compels members to keep customers’ information strictly confidential”, the organization is required to adhere to the Health Insurance Portability Accountability Act of 1996 (HIPAA), a federal law that implements national standards to secure and protect sensitive patient health information from being disclosed without the patient’s knowledge or consent. Thirdly, “we reject everything that emerged during the audit”. The audited departments are not empowered to reject the findings of the internal audit. The initiation calls for an internal audit, findings and recommendations of the audit are controlled by a majority vote from members of the Quality Management Oversight Committee.

### **3.4 Data Collection**

The study will administer a REDCap (Research Electronic Data Capture) survey as approved by the SRMC’s Internal Review Board study protocol (Harris et al., 2009). REDCap is a secure web application for constructing and managing survey questionnaires and databases stored and accessed online. SRMC will serve as the host for REDCap. The study will establish an initiation and termination window that will be accommodatingly flexible to circumvent any issues on the horizon for each participating employee.

The study team will disburse electronic invitations on February 28, 2023, via email to the organization's email server requesting participation from employees that have directly or indirectly experienced internal audits performed within their department. The REDCap survey window initiation and termination will expand over four consecutive days, February 28, 2023 – March 3, 2023. A daily email will be issued to the organization's email server requesting

employee participation. This email will continue until March 3<sup>rd</sup>. The main objective of using REDCap is to obtain and evaluate the opinions of the employee's perspectives from their participation in an internal audit and those indirectly affected by the internal audit.

Communication took place between the employees and the study team to elaborate on the purpose of the survey, thus increasing data integrity.

The measures are obtained by aggregating auditee responses to survey questions into percentages of the internal audit categories, including performance improvement, auditor-auditee relationship exchange, learning from audit, and top management support. Themes were developed to analyze data on the auditor capacity section of the survey. A key factor that facilitates a good survey response rate is identifying a survey questionnaire that is not time-consuming and can reach completion within a 10-15 minute time frame.

### **3.5 Mixed Methods Data Analysis**

This section details mixed methods for the descriptive quantitative data and qualitative data analysis. The following steps for data analysis are detailed as follows:

#### *Quantitative analysis*

1. The data will be exported from REDCap to Excel for analysis.
2. Descriptive statistics will summarize the Likert scale responses, including reporting the percentage of respondents for each question choice. The Likert rating scale encompasses 5 points as in; 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The item response rate is calculated to display the percentage rate of how employees perceived each measure to be “strongly agree” to “strongly disagree”.

3. In healthcare, organizational leaders are also interested in the “top box” responses, defined as the percentage of respondents who select the highest (most positive) response choice. The measure percentage rates are then listed in ranking order. Each category with the highest “strongly agree” percentage rate was listed at the top tier measure to represent strong points within the internal audit. Each measure was identified in descending order according to the Likert scale rating. This approach allowed the study team to identify strong points of the internal audit function within the organization.
4. The overall assessment of each category gave a review of the organizational culture pertaining to internal audits performance improvement (efficiency, ethicality, effectiveness), auditor-auditee relationship, learning from the audit, and top management support. This further allowed the study team to identify weaknesses within the organization's internal audit function. Areas for improvement were shown in low percentage ratings.

#### *Qualitative analysis*

The open-ended questions content analysis will code, categorize, and thematically detail data. At the termination of the REDCap survey window, the data are placed into a Microsoft Excel spreadsheet. Responses from each participant will be gathered into Dedoose 9.0.86 software to develop themes of responses. Based on a review of the literature, codes were developed to aggregate text responses for survey questions 30 and 31 (Table 1). The code book will be based on 95 responses where codes are compared, and all viewpoints will be considered in establishing the themes. Next, the codes are applied to text or sections by code. Finally, the codes were categorized into comprehensive subjects to establish the themes which describe the respondents’ perspectives.

Table 1: Survey Items

#	Measure	Survey Question	
1	Department performance improvement	The internal audit makes work processes more efficient in the unit (efficiency)	
2		The unit's performance following the internal audit is better (efficiency)	
3		The internal audit improves the quality of work outcomes in the unit (efficiency)	
4		The internal audit helps the unit to become more productive (efficiency)	
5		The internal audit diminishes the occurrence of wrongdoing in the unit (ethical)	
6		The internal audit contributes to members' adherence to our ethical code (ethical)	
7		The internal audit prompts employees to comply with the organizational rules (ethical)	
8		The internal audit motivates the unit's members to voice personal accountability (ethical)	
9		The internal audit helps to preserve employees' rights in the unit (ethical)	
10		The internal audit helps our unit to meet its work goals and perform well above its expectations (effectiveness)	
11		After an audit, the unit performance shows continuous improvement (effectiveness)	
12	Auditor-auditee relationship exchange	During the audit, auditor and auditees discussed recommendations to overcome difficulties	
13		During the audit, we felt the auditor's work was constructive	
14		During the audit, we felt the auditor understood our problems and needs	
15		During the audit, we developed a positive opinion about the auditor's work	
16		During the audit, we shared problems we encountered at work	
17		The auditor enjoyed our full cooperation	
18		We learned how to improve work processes from the audit	
19	Learning from audit	The internal audit provided important feedback for the unit on how we do the work	
20		The internal audit enhanced our "know-how" skills	
21		Reflecting on the audit findings contributed to our knowledge	
22		In the unit, we rectified errors and mistakes following the internal audit	
23		Top management support	The top management paid attention to the internal auditor's comments
24			The top management really cares about the internal audit and its findings
25			The top management considers the internal auditing to be a valuable element
26			The top management showed very little support for the auditing process
27			Employees were supported during all stages of the internal audit process
28			Employees were provided with sufficient resources to learn and improve following the internal audit process
29	The top management encouraged us to cooperate with the internal auditor		
30	Auditor Capacity		How do you feel about the deficiencies found by the auditor
31		How do you feel about the quality of the audit	

## 4 CHAPTER IV: RESULTS

### 4.1 Descriptive Sample Statistics

#### *Survey Response*

The survey was distributed to 361 recipient employees from the Southern Research Medical Center. The study purposefully selected the first 40 (11%) participants of the 361 recipients for this pilot study. All participants are anonymous. There was no identifying information collected during this survey. Forty respondents completed the survey. Seven surveys were submitted without responses to all questions. The incomplete areas in the survey are listed as Category: Survey question, (Missing count). 1) Ethical: The internal audit helps to preserve employees' rights in the unit, (1), 2) Effectiveness: The internal audit helps our unit to meet its work goals and perform well above its expectations, (1). 3) Effectiveness: After an audit, the unit performance shows continuous improvement, (1). 4) Auditor-Auditee Relationship Exchange: During the audit, we felt the auditor's work was constructive, (1). 5) Auditor-Auditee Relationship Exchange: During the audit, we felt the auditor understood our problems and needs, (1). 6) Auditor-Auditee Relationship Exchange: During the audit, we shared problems we encountered at work, (1). 7) Learning From Audit: The internal audit provided important feedback for the unit on how we do the work, (1). 8) Learning from Audit: Reflecting on the audit findings contributed to our knowledge, (2). 9) Learning from Audit: In the unit, we rectified errors and mistakes following the internal audit, (2). 10) Top Management Support: The top management considers internal auditing to be a valuable element, (1). 11) Top Management Support: Employees were provided with sufficient resources to learn and improve

following the internal audit process, (1). 12) Auditor Capacity: How do you feel about the deficiencies found by the auditor, (1).

Efficiency is measured in Table 2, survey questions 1-4. Seventeen (43%) of employees are in agreeance that internal audits make work processes more efficient in the unit. Twenty-three participants agree that work performance following the internal audit is better. 53% of participants selected that outcomes are improved after an internal audit is conducted. Out of 40 participants, 25 (63%) confirm that a unit’s productivity is improved with the help of an internal audit.

Table 2: Efficiency

Efficiency	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Total</i>
<b># Survey Question</b>	<b># (%)</b>	<b># (%)</b>	<b># (%)</b>	<b># (%)</b>	<b># (%)</b>	<b># (%)</b>
1. The internal audit makes work processes more efficient in the unit	0 (0%)	2 (5%)	6 (15%)	17 (43%)	15 (38%)	40 (100%)
2. The unit's performance following the internal audit is better	0 (0%)	2 (5%)	6 (15%)	23 (58%)	9 (23%)	40 (100%)
3. The internal audit improves the quality of work outcomes in the unit	0 (0%)	3 (7.5%)	5 (12.5%)	21 (53%)	11 (28%)	40 (100%)
4. The internal audit helps the unit to become more productive	0 (0%)	2 (5%)	6 (15%)	25 (63%)	7 (18%)	40 (100%)
Total	0 (0%)	9 (5.63%)	23 (14.38)	86 (54%)	35 (27%)	160 (100%)

Table 3. displays how ethical behavior is depicted from the perception of employees at the southern hospital in questions 5-9. Nineteen (48%) respondents have determined that internal audits diminish the occurrence of wrongdoing in the unit compared to the 7 (17.5%) that

disagree. Approximately twelve percent (12.5%) of participants do not agree that internal audits contribute to member adherence to the organization's ethical code, which differs by 42.5% of the employees that agree. The most valued response for ethical behavior is 24 (60%) of participants agree that internal audits prompt employees to comply with organizational rules. 2 (5%) employees strongly disagree that internal audits motivate the unit's members to voice their personal accountability in comparison to the 7 (18%) employees that strongly agree. In the preservation of employee rights within the unit, neutral and agree selections both result in 13 (33.3%) (Table 3).

Table 3: Ethical Behavior

Ethical Behavior	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Total</i>
# Survey Question	# (%)	# (%)	# (%)	# (%)	# (%)	# (%)
5. The internal audit diminishes the occurrence of wrongdoing in the unit	1 (3%)	7 (17.5%)	6 (15%)	19 (48%)	7 (18%)	40 (100%)
6. The internal audit contributes to members' adherence to our ethical code	0 (0%)	5 (12.5%)	7 (17.5%)	22 (55%)	6 (15%)	40 (100%)
7. The internal audit prompts employees to comply with the organizational rules	0 (0%)	1 (2.5%)	3 (7.5%)	24 (60%)	12 (30%)	40 (100%)
8. The internal audit motivates the unit's members to voice personal accountability	2 (5%)	3 (7.5%)	11 (27.5%)	17 (43%)	7 (18%)	40 (100%)
9. The internal audit helps to preserve employees' rights in the unit	1 (3%)	6 (15.4%)	13 (33.3%)	13 (33.3%)	6 (15%)	39 (100%)
Total	4 (2%)	19 (11%)	40 (20%)	95 (48%)	38 (19%)	100 (100%)

Survey questions 10-11 evaluate the effectiveness of internal audits. The study has identified that 46.2% of employees believe that internal audits help their unit to accomplish work



goals and exceed expectations. Nearly half (48.7%) of all participants are in the belief that the post-audit unit performance shows continuous improvement (Table 4).

Table 4: Effectiveness

Effectiveness	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Total</i>
# Survey Question	# (%)	# (%)	# (%)	# (%)	# (%)	# (%)
10. The internal audit helps our unit to meet its work goals and perform well above its expectations	0 (0%)	1 (2.6%)	10 (25.6%)	18 (46.2%)	10 (25.6%)	39 (97.5%)
11. After an audit, the unit performance shows continuous improvement	0 (0%)	2 (5.10%)	14 (35.9%)	19 (48.7%)	4 (10.3%)	39 (97.5%)
Total	0 (0%)	3 (3.85%)	24 (30.75%)	37 (48%)	14 (18%)	78 (97.5%)

The study investigated the auditor-auditee relationship exchange questions 12-17 by aggregating results from the survey. The study finds that question number 17 has the highest response rate at 53%. A total of 21 out of 40 participants responded. Participants agree that the auditor enjoyed their full cooperation (Table 5).

Table 5: Auditor-Auditee Relationship Exchange

Auditor-Auditee Relationship Exchange	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Total</i>
# Survey Question	# (%)	# (%)	# (%)	# (%)	# (%)	# (%)
12. During the audit, auditor and auditees discussed recommendations to overcome difficulties	0 (0%)	3 (7.5%)	10 (25%)	18 (45%)	9 (23%)	40 (100%)
13. During the audit, we felt the auditor's work was constructive	0 (0%)	4 (10.3%)	9 (23.1%)	17 (44%)	9 (23%)	39 (97.5%)
14. During the audit, we felt the auditor understood our problems and needs	0 (0%)	4 (10.3%)	12 (30.8%)	15 (39%)	8 (21%)	39 (97.5%)
15. During the audit, we developed a positive opinion about the auditor's work	0 (0%)	3 (7.5%)	14 (35%)	17 (43%)	6 (15%)	40 (100%)
16. During the audit, we shared problems we encountered at work	1 (3%)	0 (0%)	9 (23.1%)	21 (54%)	8 (21%)	39 (97.5%)
17. The auditor enjoyed our full cooperation	0 (0%)	1 (2.5%)	10 (25%)	21 (53%)	8 (20%)	40 (100%)
Total	1 (0%)	15 (6.35%)	64 (27%)	109 (46%)	48 (20%)	237(98.7%)

Survey question 18-22 allows the participants to display their perception of the ability to learn from internal audits. Question 18 has the highest response rate 21 (53%). It's depicted that auditees learn how to improve work process from the audit. The ability to learn how to improve a work process is comparable to the unit rectifying errors and mistakes from the audit (Table 6).

Table 6: Learning from Audit

Learning from Audit	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Total</i>
# Survey Question	# (%)	# (%)	# (%)	# (%)	# (%)	# (%)
18. We learned how to improve work processes from the audit	0 (0%)	2 (5%)	6 (15%)	21 (53%)	11 (28%)	40 (100%)
19. The internal audit provided important feedback for the unit on how we do the work	0 (0%)	4 (10.3%)	5 (12.8%)	17 (44%)	13 (33%)	39 (97.5%)
20. The internal audit enhanced our "know-how" skills	0 (0%)	4 (10%)	8 (20%)	17 (43%)	11 (28%)	40 (100%)
21. Reflecting on the audit findings contributed to our knowledge	0 (0%)	1 (2.6%)	7 (18.4%)	18 (47%)	12 (32%)	38 (95%)
22. In the unit, we rectified errors and mistakes following the internal audit	0 (0%)	3 (7.9%)	7 (18.4%)	20 (53%)	8 (21%)	38 (95%)
Total	0 (0%)	14 (7%)	33 (16.92%)	93 (48%)	55 (28%)	195(97.5%)

This section of the survey reviews organizational support provided by top management. The survey produced the employees' perceptions in survey questions 23-29, as seen in Table 7. The most valued survey question by participants is question 25. Nineteen participants strongly agree that the internal audit tool is highly valuable to top management (Table 7).

Table 7: Top Management Support

Top Management Support	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Total</i>
# Survey Question	# (%)	# (%)	# (%)	# (%)	# (%)	# (%)
23. The top management paid attention to the internal auditor's comments	0 (0%)	2 (5%)	8 (20%)	15 (38%)	15 (38%)	40 (100%)
24. The top management really cares about the internal audit and its findings	0 (0%)	1 (2.5%)	8 (20%)	13 (33%)	18 (45%)	40 (100%)
25. The top management considers the internal auditing to be a valuable element	0 (0%)	0 (0%)	7 (17.9%)	13 (33%)	19 (49%)	39 (97.5%)
26. The top management showed very little support for the auditing process	12 (30%)	15 (37.5%)	8 (20%)	3 (8%)	2 (5%)	40 (100%)
27. Employees were supported during all stages of the internal audit process	0 (0%)	4 (10%)	12 (30%)	17 (43%)	7 (18%)	40 (100%)
28. Employees were provided with sufficient resources to learn and improve following the internal audit process	0 (0%)	1 (2.6%)	14 (35.9%)	16 (41%)	8 (21%)	39 (97.5%)
29. The top management encouraged us to cooperate with the internal auditor	0 (0%)	1 (2.5%)	7 (17.5%)	17 (43%)	15 (38%)	40 (100%)
Total	12 (4%)	24 (8.59%)	71 (23%)	94 (34%)	84 (30%)	278(99.2%)

Using the survey responses for the 5-point Likert-scale, the study has calculated the sum for each category by the 5-Point Likert-scale selections. “Strongly Disagree” highest sum count is 84 responses for Top Management Support. For a second top ranking, Top Management Support has twenty-four responses as the highest response count in the selection of “Disagree”. The selection of “Neutral” has two categories (Auditor-Auditee Relationship Exchange and Top Management Support) cinched, with 64 responses as the highest response count. s. The selection

of “Average” displays all categories as the highest response count when compared to all opposing 5-points of the Likert-scale, as seen in Figure 4, with the highest response count of one hundred and nine for Auditor-Auditee Relationship Exchange. Lastly, “Strongly Agree” has 84 responses for Top Management Support. Also, in Figure 4, the selection “Strongly Agree” is considered to be the selection that’s deemed as the most effective perception that can be selected as a survey response. In ranking order from descending fashion starting with the highest response count, the categories are: 1.) 84(29.9%) Top Management, 2.) 55 (19.6%) Learning from Audit, 3.) 48 (17.1)% Auditor-Auditee Relationship Exchange, 4.) 42 (14.9%) Efficiency, 5.) 38 (13.5%) Ethical Behavior, 6.) 14 (4.9%) Effectiveness (Figure 4).

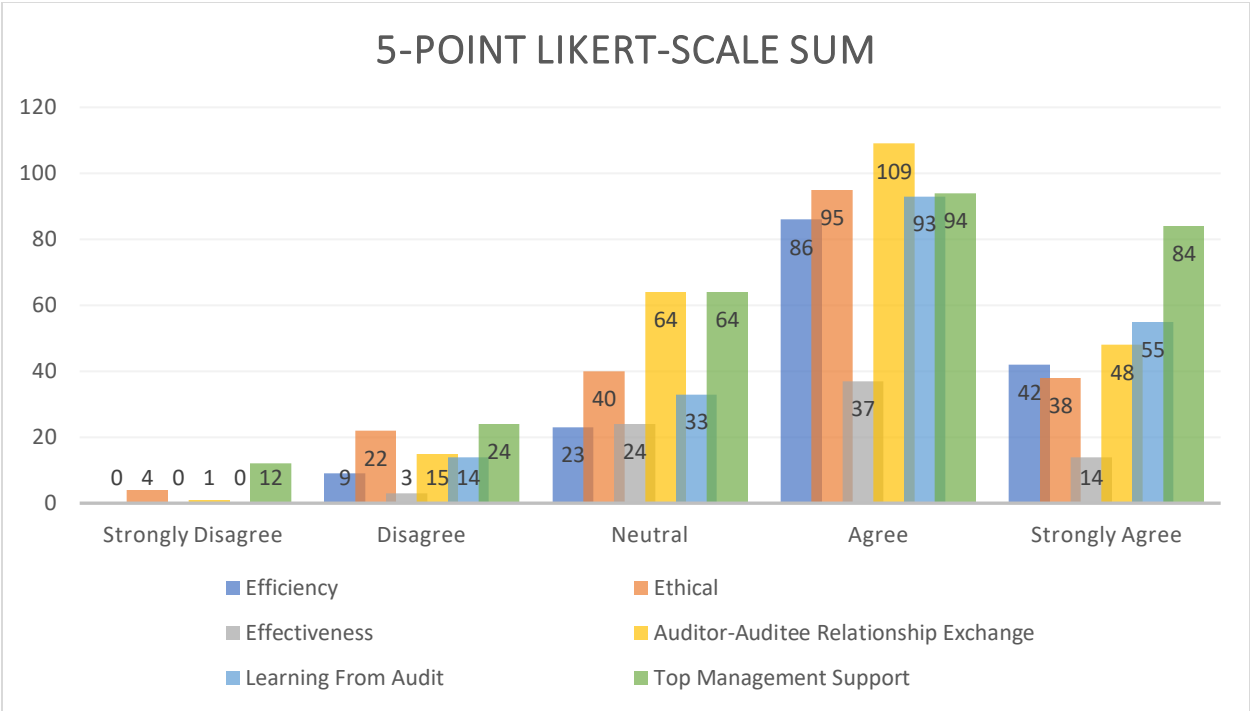


Figure 4: Sum of Internal Audit Perception Categories by Likert-Scale

The study team evaluated survey responses in the qualitative portion of the survey for question 30. A total of 39 out of 40 participants responded to this portion. The most common theme to derive is that “audit deficiencies encourage improvement.” (Table 8). There were 16 responses from 15 of the participants that fed into codes to develop the theme. There is a positive outlook on identifying deficiencies, with a participant stating, “It gives us the chance to correct what has been wrong and have a chance to do the job right.”. Secondly, there were 12 responses from 12 participants that declared a theme “audit non-applicable” for output of deficiencies” (Table 8). A participant is quoted saying, “I do not feel it is used correctly or the information that is gathered is used properly.”. This statement was grouped with other codes that described the deficiency output as non-applicable. The final most common theme for question 30 is “post audit reflections reveal latent deficiencies” (Table 8). A total of 10 responses from 8 participants fed into the theme. The study shares a participant response as quoted “many things that you do are just processes that are learned behavior that is morphed from the standard over the years from person to person and you don’t realize you are doing anything wrong until another set of eyes (auditor) comes in to observe.” (Table 8). Table 8 presents a total of 4 themes (the most common are in bold), 45 responses, and 39 participants (4 participants contributed to multiple themes).

Table 8: Perspectives on Deficiencies Discovered by an Internal Auditor

<b>Themes</b>	<b>Code Total</b>	<b>Participants</b>	<b>Excerpts of Most Common Themes</b>
<b>30. How do you feel about the deficiencies found by the auditor (Perceptions of deficiencies)?</b>			
<b>Audit deficiencies encourage improvement</b>	<b>16</b>	<b>15</b>	<b>“It gives us the chance to correct what has been wrong and have a chance to do the job right.”</b>
<b>Audit non-applicable</b>	<b>12</b>	<b>12</b>	<b>“I do not feel it is used correctly or the information that is gathered is used properly.”</b>
<b>Post audit reflections reveal latent deficiencies</b>	<b>10</b>	<b>8</b>	<b>“Many things that you do are just processes that are learned behavior that is morphed from the standard over the years from person to person and you don't realize you are doing anything wrong until another set of eyes (auditor) comes in to observe.”</b>
Deficiencies are perceived in various views	<b>7</b>	<b>7</b>	

The study team reviewed the survey responses in the qualitative portion of the survey for question 31. A total of 39 out of 40 participants completed question 31. The most common theme formed is “auditors' work perceived efficient and good”. There were 20 responses from 20 participants that fed into codes to develop the theme. There’s a consensus from 50% of the participants that state the quality of the internal auditor’s work is efficient and good. A participant stated, “The audit was done professionally and with transparency with little pushback from employees who thought the audit to be a witch hunt.”. Secondly, nine participants provided ten responses declaring the theme “organization’s structure contributes to audit’s outcome” (Table 9). A participant stated, “ The quality of the audit is determined by the policies and procedures that we have in place around a particular area. The auditor is only as good as their experience and our standards. However, with collaboration, an auditor can help to create some great procedures! Internal Auditors are like seatbelts. You need them because they save lives... but only if you use them!!”. This statement was grouped with other codes that described how an organization’s structure contributes to an audit’s outcome. Table 9 presents five themes (the most common are in bold), 50 responses, and 39 participants (8 participants contributed to multiple themes).



Table 9: Perspectives on the Quality of an Internal Audit

Themes	Code Total	Participants	Excerpts of Most Common Themes
<b>31. How do you feel about the quality of the audit (Perceptions on quality)?</b>			
<b>Auditors work perceived efficient and good</b>	<b>20</b>	<b>20</b>	<b>“The audit was done professionally and with transparency with little push back from employees who thought the audit to be a witch hunt.”</b>
<b>Organization’s structure contributes to audit’s outcome</b>	<b>10</b>	<b>9</b>	<b>“The quality of the audit is determined by the policies and procedures that we in place around a particular area. The auditor is only as good as their experience and our standards. However, with collaboration an auditor can help to create some great procedures! Internal Auditors are like seatbelts. You need them because they save lives... but only if you use them!!”</b>
Discrepancy in the conclusion of the auditor’s work	<b>9</b>	<b>9</b>	
Internal audit provides helpful attributes	<b>6</b>	<b>6</b>	
Strength derives from auditors’ collaboration	<b>5</b>	<b>5</b>	

## 5 CHAPTER V: DISCUSSION

### 5.1 Discussion of Results

This study is one of the few that examines employee perceptions of internal audits. However, this study is the only one that dives into healthcare employees' perceptions on the effects of internal audits from a single organization. The following highlights the most significant results that will give organizations an idea of key areas of an internal audit that employees find beneficial and need improvement. All quantitative categories except for Top Management Support will identify the survey's top-response count for the selection of "agree".

Performance Improvement will be the first area to be discussed. Efficiency, ethical behavior, and effectiveness are the categories that measure performance improvement. The top-response count for efficiency survey questions includes 1.) The internal audit helps the unit to become more productive, and 2.) The unit's performance following the internal audit is better. These areas detail that the efficiency of the internal audits is present. Ethical behavior top-response count for ethical behavior is 1.) The internal audit prompts employees to comply with the organizational rules, and 2.) The internal audit contributes to members' adherence to our ethical code. With those two questions, there's a strong implication that an internal audit improves adherence to ethical adherence. The study does find that question 9; the internal audit helps to preserve employees' rights in the unit? Has a mirroring response rate for Neutral and Agree. In the effectiveness category, the top-response question is After an audit, the unit performance shows continuous improvement? This is a desired outcome of internal audits as organizations are venturing to gain sustainable improvements with continuous improvements in the unit's performance. As stated in the literature, motivated leaders are inclined to implement improvement actions based on audit results (Weske et al., 2018). Participants responded to

survey questions, resulting in a top-response count for each category under performance improvement. Those results confirm that internal audits produce efficiency, ethical behavior, and effectiveness.

Auditor-Auditee Relationship Exchange's top-response count for survey questions is question 16; during the audit, we shared problems that we encountered at work, and in question 17, the auditor enjoyed our full cooperation. Past studies have mentioned that there's an importance to having stakeholders involved in the process of quality improvement (Dixon-Woods et al., 2012). An additional study in the literature review shares that audit criteria must reflect nurses' care priorities, or this could lead the nurse to disregard the feedback, which further reduces the effectiveness of A&F (Christina et al., 2016). Question 15, examining if participants developed a positive opinion about the auditor's work, was balanced in the "neutral" selection, which differs by three selections compared to the "agree" selection.

Learning from Audit survey questions, top-response counts are question 18; we learn how to improve the work process from audit, and question 22, in the unit, we rectified errors and mistakes following the internal audit. The results can be attributed to Larson et al., statement on why auditees can learn from audits "Feedback characteristics are more effective when delivered in a way that is readily accessible to the learner, and that the learner knows how to interpret and act on the results as they are received."

Top Management Support is an emerging category in the survey where the study team finds that "strongly agree" represents the top-response counts for the category. Top responses derive from question 24; top management really cares about the internal audit and its findings, and in question 25, top management considers internal auditing a valuable element. It's discussed

in past studies that top management with interest in innovations and coordinating work with implementation function as facilitators to change (Glenngård & Anell, 2021).

The qualitative data for the Auditor Capacity category of the survey has the top-response count survey from question 31; how do you feel about the quality of the audit? The offspring of a theme is “auditors' work perceived good and efficient”. The study team extracted an excerpt from the survey response that speaks on how their experience with an “auditor was professional and transparent”, which changed a preconceived notion that audits are “witch hunts.” This relates to a past study in the literature review where it was discovered that a lack of transparency from audit and feedback results could lead to the alienation of staff from quality improvement efforts and lost learning opportunity (Sinuff et al., 2015).

## **5.2 Study Limitations**

The mixed method research design implemented a survey tool to gather genuine responses from participants using a valid survey tool that provided a great advantage for the study team. Due to the nature of the study, there were slight adjustments made to better fit the mixed-method research design. Potentially this may have caused confusion amongst participants on how they conceive the true intentions of the questions resulting in an altered response. The study was disbursed by the organization’s internal auditor, who also serves as the researcher of the study. The association between the researcher and the researcher’s occupational role as an internal auditor may have generated biased responses, even though participants were informed that their participation is anonymous and non-identifying information would be collected. The study restrictions on the timeline completion only allowed a four-day period for data collection. The survey tool was distributed to 361 employees of the organization. The return rate was 11%

totaling 40 surveys. Although the study met the defined limit of approved participants, this restrictive number may have excluded idea participants with internal audit experience. The software used to design the mixed methods survey collection tool was not equipped with a program code to reject and notify participants of incomplete surveys. The absence of rejection allowed for incomplete surveys to be submitted. With incomplete surveys, there were categories on the survey tool that did not capture a response for all questions if the participant neglected a question intentionally or mistakenly. This event perpetuates unequal response rates when evaluating collected data. This also caused the inability to draw conclusive inferences. The surveys were self-reported to allow the participants to be truthful in their responses without the pressures of a survey administrator overseeing the survey as it's being conducted. Later the study team realized that the participant could inaccurately interpret self-administered surveys. A looming limitation of the study is that all participants may not have shared relatable experiences with internal audits. Depending on their organizational occupation level, i.e., management or support staff, their understanding or experiences of internal audits can be adverse.

### **5.3 Future Research**

The current study provided a general review of the organization as a whole and voided an opportunity to take a deeper dive into an organization. There is great potential for future research on a single-site study to evaluate the perceptions on the effects of an internal audit with demographics of occupation, age, sex, and years of service in the organization. The possibility presents for a multi-generational study with comparisons of the sample pool. This study would produce evidence for organizations to use when developing their internal audit program with the

proper resources to address organizational support for a multi-generational workforce and garner stronger stakeholder buy-in.

#### **5.4 Conclusion**

In evaluating the survey responses, participants have displayed their perspectives on internal audits. As identified by the participants, all categories hold a positive effect on internal audit perceptions of employees within the organization. While examining the survey responses, it seems that the participants have a common behavior of selecting “agree” as the most dominant selection and “strongly agree” as the highest selection. The category of performance improvement is evaluated in the areas of efficiency, ethical behavior, and effectiveness. Participants identify their perspectives on how each of these presents a means of enhanced productivity, compliance adherence, and improvements post-internal audit. The communication channels are open between the internal auditor and employees with positive working relationships. To conclude the examination with a generalization of all categories, the culture of the organization is one that aims to produce performance improvement across the organization with support from top management with provided adequate resources.

The study team recommends that organizations seeking to establish an internal audit program in their quality management system should consider how the strengths of this study also have areas of concern for employees. Top management support is a highly revered category for internal audits, and it’s strongly recommended that top management provide resources to assist in learning opportunities and improve work performance post-audit. Communication between auditor and auditees are essential to conducting an effective audit. Therefore, it’s recommended that top management and middle managers communicate the internal audit findings and

recommendations to support staff. Transparency of the audit findings is helpful in establishing accountability in departmental performance with support staff.

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## Appendix I: Perception of Internal Audit Survey

### Perception of Internal Audit Survey Tool

Please complete the survey below.

Thank you!

Performance Improvement		1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree
1)	The internal audit makes work processes more efficient in the unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2)	The unit's performance following the internal audit is better	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3)	The internal audit improves the quality of work outcomes in the unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4)	The internal audit helps the unit to become more productive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5)	The internal audit diminishes the occurrence of wrongdoing in the unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6)	The internal audit contributes to members' adherence to our ethical code	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7)	The internal audit prompts employees to comply with the organizational rules	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8)	The internal audit motivates the unit's members to voice personal accountability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9)	The internal audit helps to preserve employees' rights in the unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10)	The internal audit helps our unit to meet its work goals and perform well above its expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11)	After an audit, the unit performance shows continuous improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Auditor-Auditee Relationship Exchange**

	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree
12) During the audit, auditor and auditees discussed recommendations to overcome difficulties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13) During the audit, we felt the auditor's work was constructive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14) During the audit, we felt the auditor understood our problems and needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15) During the audit, we developed a positive opinion about the auditor's work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16) During the audit, we shared problems we encountered at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17) The auditor enjoyed our full cooperation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Learning From Audit**

	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree
18) We learned how to improve work processes from the audit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19) The internal audit provided important feedback for the unit on how we do the work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20) The internal audit enhanced our "know-how" skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21) Reflecting on the audit findings contributed to our knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22) In the unit, we rectified errors and mistakes following the internal audit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Top Management Support**

	1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree
23) The top management paid attention to the internal auditor's comments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24) The top management really cares about the internal audit and its findings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25)					

- |   |                       |                       |                       |                       |                       |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| The top management considers the internal auditing to be a valuable element                                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 26) The top management showed very little support for the auditing process                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 27) Employees were supported during all stages of the internal audit process                                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 28) Employees were provided with sufficient resources to learn and improve following the internal audit process | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 29) The top management encouraged us to cooperate with the internal auditor                                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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30) How do you feel about the deficiencies found by the auditor?

(Please type your thoughts in the text box above.)

---

31) How do you feel about the quality of the audit

(Please type your thoughts in the text box above.)



## Appendix II: Survey Invitation Email

Dear SRMC,

I am a doctoral student in the Doctor of Health Administration program in the Department of Health Science/School of Health Related Professions at the Medical University of South Carolina. I am conducting a research study to assess “Healthcare Employees’ Perception on the Effects of Internal Audits”. The purpose of this study is to increase literature of employees' perception on internal audit performance: efficiency, effectiveness, and culture. Healthcare organization’s quality management system will be able to use this study to assist in the development of an internal audit program.

You are being invited to participate in this study because as an employee of SRMC you have either participated in an internal audit or your job responsibilities as an employee may have been altered by recommendations that derived from an internal audit. If you agree to participate, you will take a brief survey that will take no longer than 15 minutes to complete. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty and you will not be affected in any way. The questionnaire is anonymous. The results of the research study may be published, but your name will not be known.

Your participation in this study is greatly appreciated. You can access the survey via the following link: <https://redcap.srmc.edu/surveys/?s=339PA4JC9W3EYJML>

If you have any questions concerning the research study, please contact me Jeremy Mason at 662.242.0035 or email [masonje@musc.edu](mailto:masonje@musc.edu).

You may also contact the PI, Dr. Driscoll DeVaul, Assistant Dean of Academic Affairs, School of Health Related Professions at 601.815.9699. or email [ddevaul@srmc.edu](mailto:ddevaul@srmc.edu).

submission of the questionnaire will be considered your consent to participate. Thank you.

Sincerely,

**Jeremy O. Mason, MPH**

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Doctor of Health Administration

Student Researcher