IMPACT OF THE INCREASED USE OF TELEHEALTH ON HEALTH CARE

MANAGEMENT AND ADMINISTRATION: THE CASE OF NEW CARE

MANAGEMENT PRACTICES

By

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Abstract

The COVID-19 pandemic has brought unprecedented challenges to healthcare systems worldwide, forcing them to adapt and implement alternative modes of healthcare delivery quickly. Telehealth, the delivery of healthcare services through telecommunication technologies, has become crucial in providing continuous care while reducing the risk of virus transmission. This qualitative study aimed to explore healthcare managers' perceptions of the use of telehealth and its impact on healthcare practices during the pandemic, particularly in terms of provision and quality control. A purposive sample of 10 healthcare managers from different healthcare settings in the United States participated in semi-structured interviews conducted via video conferencing. The interviews were transcribed and analyzed using thematic analysis. The findings revealed six overarching themes: (1) perceived benefits of telehealth, including increased accessibility, convenience, and efficiency; (2) challenges and limitations of telehealth; (3) role of telehealth in shaping healthcare practices; (4) implications for quality control, including the need for standardization, training, and evaluation measures; (5) leadership and innovation in telehealth; and (6) future of telehealth in healthcare management. This study provides insights into how healthcare managers perceive the use of telehealth and how it shapes healthcare practices during the COVID-19 pandemic. The findings suggest that telehealth can potentially improve healthcare provision and quality control, but its implementation requires addressing challenges and limitations and adapting to evolving healthcare needs. Future research can build on these findings by exploring the perspectives of other stakeholders, such as healthcare providers and patients, and examining the long-term effects of telehealth on healthcare practices.

Keywords: COVID-19, healthcare administration, telehealth

Dedication

It is with the utmost respect and admiration that I humbly dedicate my dissertation to my beloved mother, who's fearless and determined spirit led her to leave her home country of Haiti and seek a better life in the United States when she was just 27 years old. Despite facing numerous challenges and obstacles along the way, my mother never once lost sight of her dreams and aspirations, and she worked tirelessly to provide my siblings and me with the most wonderful life imaginable. Although my mother's formal education may have been limited, her unwavering strength and resilience have always been an inspiration to me. She is a true pillar of fortitude, and her unwavering commitment to our family is truly exceptional. Throughout my academic journey, my mother has been my constant source of support and encouragement, reminding me of my capabilities and helping me to stay focused on my goals. I am deeply grateful for the love and guidance that my mother has provided me throughout my life. Her unwavering dedication to our family and her constant sacrifices have not gone unnoticed, and I am confident that my work will make her proud. Mom, from the bottom of my heart, I thank you for all that you have done for me and for our family.

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only fueled a burning desire to succeed and prove to myself that I can achieve anything I set my

mind to.

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Section 1: Foundation of the Study

This study was developed to examine the challenges health care leadership faced during the recent pandemic and the increased use of telehealth. This qualitative case study's objective was to investigate how health care administrators and managers think about the expanding use of telehealth and how this affects the management and administration of health care practices regarding the provision of services, the quality control of those services, and the leadership of those positions. The inclusion of section one started with examining the problem that needs to be addressed as one of the potential obstacles that arose during the pandemic. This section describes the study's background, problem, purpose, research questions, paradigms, design, and methodology. This section also discusses triangulation, the research framework, the conceptual framework, terms, assumptions, limitations, delimitations, reducing gaps in the literature, biblical integration, and telehealth.

Background of the Problem

The adoption of new technology has the potential to improve health care services. Powerful new health information technologies (HITs) are promising to enhance health care delivery, health promotion, and patient satisfaction (Ahmed et al., 2021; AlQudah et al., 2021). Moreover, using information technologies can help increase the work efficiency and effectiveness of staff and practitioners in the health care domain (AlQudah et al., 2021). Thus, the applications and acceptance of different information technologies have been explored in the health care sector (AlQudah et al., 2021). Common health care technologies include health information websites (e.g., Medline Plus, Web MD, and Health Finder), mobile applications, electronic health records, picture archiving, communication systems, online social support networks, telemedicine, and advanced telehealth technologies (Ahmed et al., 2021; AlQudah et

al., 2021). Telehealth is an information and communication technology domain that enables remote health care. Telehealth is a broad term that describes various telecommunication and information technology services beyond traditional health care services (Mahoney, 2020). Telehealth is often used interchangeably with telemedicine; however, telehealth is an umbrella term to describe any health care service delivered at a distance, whereas telemedicine is a subset of telehealth that refers to direct provider-to-patient service (Mahoney, 2020). Mullick et al. (2020) also delineated telehealth from telemedicine in its scope, with telemedicine describing remote clinical services such as diagnosis and monitoring, while telehealth included primitive, preventative, and curative care delivery, which includes non-clinical applications such as provider and administrator education. Countries all over the world continue to issue legislation for telemedicine implementation as it continues to be distinguished as one of the safest interactive means between patients and clinicians in a world where social distancing has become a necessity (Fisk et al., 2020; Han et al., 2020; Naik et al., 2022).

Telehealth and telemedicine are increasingly utilized due to the Coronavirus Disease (COVID-19) pandemic. The COVID-19 pandemic has forced health care organizations to manage capacity, financial loss, and redesign care, thus forcing health care leaders to make the critical decision to reduce or release the workforce or to shift their employees to remote work setups, including clinicians working with telehealth technologies to deliver care (Begun & Jiang, 2020). Since the beginning of the pandemic, telehealth has allowed the remote triage of patients, remote care, remote diagnosis, routine follow-up care, and rapid access to information. Moreover, this care delivery approach has helped to reduce the demand for emergency services and to increase health care accessibility for some patients (Breton et al., 2021; Jnr, 2020). The

expanded use of telehealth can permanently transform health care delivery systems and accessibility (Goldberg et al., 2022).

Health care managers must take advantage of telehealth and adequately handle the challenges of utilizing new health care technologies. Health care managers are challenged to develop a clear understanding of the current global and local context, along with informed projections, and they must accordingly prepare for future emergencies, manage the backlog of paused services, maximize organizational performance, sustain innovations, and imagine future possibilities among many other responsibilities (Geerts et al., 2021). Although the expansion of telehealth and telemedicine have been declared as a global public health response to gain control of the virus, many health care services across the globe are operated differently due to differences in the architecture of health care systems, influences of the local culture, and the nature of regulations (Benis et al., 2021). It is essential to conceptualize leadership in digital health services to enable better support for health care digitalization and improve the likelihood of successful HIT implementation (Laukka et al., 2020). However, to date, most of the studies on telehealth and telemedicine have focused on its technical implementation (American Medical Association, 2020), barriers, and facilitators (Almathami et al., 2020; Benis et al., 2021; Julien et al., 2020), and the individual perceptions of patients and practitioners (Altmann et al., 2022). Limited studies have been found on the perspective of health care leaders on the utility of telehealth and the challenges encountered in its adoption.

Problem Statement

The general problem addressed was the failure of health care managers to manage increased telehealth use, resulting in the inability of organizations to control health care management and administration, the cost of health care services, and new care management

practices. Shachar et al. (2020) stated that the health care managers' management of telehealth services is problematic, making it hard to control health care management and administration. In a recent study, Snoswell et al. (2020) noted that many health care managers struggle with managing increased telehealth use, causing the inability of organizations to control the cost of health care services. Gaveikaite et al. (2020) supported these views by explaining that health care managers have difficulty managing changes made by increased telehealth use, keeping organizations from controlling new care management practices. The specific problem to be addressed was the potential challenges health care administrators in the hospital industry faced during the recent pandemic in managing increased telehealth use. They are potentially resulting in organizations' inability to control health care management and administration, the cost of health care services, and new care management practices.

Purpose Statement

This qualitative case study explored how health care managers perceive the increased use of telehealth and how it shapes health care management and administration practices regarding service provision, quality control, and leadership. The COVID-19 pandemic dramatically shifted health care management by affecting how care is delivered, charged, and governed (Thomas et al., 2022). One such sudden change was the increased use of telehealth by health care providers and patients due to quarantine restrictions and a shortage of personnel during the peak of virus dissemination. The effect of increased telehealth use on health care management is under-researched, requiring a more thorough analysis of this phenomenon.

Research Questions

Despite the poised advantages of telehealth as an alternative and complementary approach to health care, it is rarely utilized. This research aimed to establish reasons for failing to

exploit telehealth by creating new opportunities and overcoming barriers to providing care. The latter includes the role of leaders and health care managers; and their perception of the different ways telehealth can be exploited. There are two questions this research sought to answer.

RQ1. What are healthcare managers' perceptions regarding telehealth use and their health care management and administration service provision, quality control, and leadership practices during and after the COVID-19 pandemic?

RQ1a. What leadership actions contribute to telehealth use's impact on health care management and administration policy?

RQ2. How do healthcare manager's leadership practices shape telehealth implementation in terms of service provision and quality control during and after the COVID-19 pandemic?

RQ2a. How has telehealth changed healthcare managers' practices in terms of service provision, quality control, and leadership?

Nature of the Study

During the recent pandemic, health care administrators in the southern United States hospital industry faced potential challenges managing increased telehealth use. This resulted in organizations' inability to control health care management and administration, the cost of health care services, and new care management practices. A review of the qualitative methodology examined these potential challenges. Evaluation research for this qualitative study consisted of a narrative approach to analyze the specifics of individual experiences and peer-reviewed, scholarly research material. This process enabled the researcher to locate recurring themes within the context of the participants and case studies.

Discussion of Research Paradigms

A research paradigm typically reflects the researcher's beliefs about the world they live in and would like to reside in (Kivunja & Kuyini, 2017). Conducting exploratory studies into the many different research paradigms is beneficial to gain a deeper understanding. In addition, to better understand how it affects the approach to the issue the researcher is attempting to solve. To appropriately select a research paradigm that is in line with the beliefs that one maintains, it is necessary to have the awareness that comes from knowing oneself. The use of paradigms, which are collections of beliefs, serves as frameworks for research and assists with connecting to ontology and epistemology to bolster the choice of research methodologies. This process is known as a paradigm shift (Corry et al., 2019). If the researcher does not fully comprehend each of the four significant paradigms, it can be challenging to articulate and apply a research paradigm in a study. Positivism, post-positivism, constructivism, and pragmatism are the main paradigms of research. Before choosing a paradigm, it is essential to investigate them thoroughly. The individual's philosophical orientation has significant implications for every decision made during the research process, including selecting methodology and methods (Kivunja & Kuyini, 2017). Each paradigm influences the researcher's perspective on what is studied, how it is studied, and the interpretation of results in a distinctive manner.

Positivism. As a research paradigm, positivism is the belief that there is one objective reality, which we seek to ascertain through accumulating factual knowledge through observation. Positivists believe that there is such a thing as objective truth and that the purpose of science is to uncover this truth. The researcher needs to be unbiased and use methods that do not attach any value to the data they collect (Corry et al., 2019). The positivists' logical observation of the social world is a critical stage in data collection and interpretation using measurable and verifiable

means. When researchers conduct an investigation using positivism, they think and act independently using inductive reasoning. The positivist research paradigm investigates the procedure of collecting data, observing regularities, and deducing laws (Kankam, 2019).

Post-Positivism. When comparing ontological and epistemological views, post-positivism is similar to positivism. Post-positivism aims to define a single objective reality while acknowledging that they may never fully comprehend it. According to post-positivism, all knowledge is socially constructed through multiple, subjective, and human creations and is, therefore, not necessarily a neutral construct (Kankam, 2019). Post-positivists remain unwavering in their conviction that every observation is prone to error. Inherent biases from social interactions are recognized in the research process under this paradigm, which accepts imperfect reality. Though some biases are present in research because researchers are involved in the subject matter being studied and could impact the study, these biases are typically managed.

Pragmatism. The viewpoint of pragmatism is to concentrate on the problem that has been recognized rather than the view of reality by using the various tools at one's disposal to comprehend the situation better. The belief that theories can be contextual and generalized is the foundation of pragmatism, which emphasizes shared meanings and joint actions. Pragmatism can evaluate the adaptability of observations into theories and then evaluate them by applying the knowledge gained from the action (Kankam, 2019). Pragmatism is concerned with meaning, specifically how the meaning of ideas lies not in the ideas themselves but in the consequences of those ideas. Researchers can apply this paradigm based on more than one method for a single case study because the pragmatism research paradigm emphasizes what works rather than methodology (Kankam, 2019).

Constructivism. The researcher's goal is not to discover a universal truth or human experience about context and value but to understand individuals' interpretations and the constructs they interact with (Kankam, 2019). If an individual believes in multiple socially constructed realities, the researcher seeks to understand their subjective worldview. Constructivists prefer qualitative data over objective facts (Winit-Watjana, 2016). Like positivism, constructivism aims to observe as a way to gather information. Constructivism examines how people think, what they do, and how they approach problems like distributed leadership in social formations. Using this method to study qualitative research in organizations allows the researcher to explore ethics, leadership, and cultural factors.

Researcher's Paradigm: Constructivism. My research paradigm is constructivism. The researcher's role is part of the social construct being studied and is determined by the person being studied. Constructivism's epistemology collects knowledge on subjective meanings in a defined social context. Constructivism is an approach to qualitative analysis constructing the meaning of life by analyzing the data gathered from participants (Vaishnavi & Kuechler, 2015). This study utilized a descriptive qualitative research design. Specifically, since many aspects of the impact of telehealth on health care management are not yet clear, it was critical to determine managers' opinions on this trend regarding implications for service provision, quality control, and leadership. The effect of increased telehealth use on health care management is under-researched, which requires a more thorough analysis of this phenomenon. The researcher believes people understand and interpret the world through experience and reflection. Christians experience and believe in a subjective reality based on God's work. People interpret God's presence in their lives differently, and their subjective experiences influence how they understand His will and purpose. Uncommitted impartiality is impractical, so the framework and

background must be realistic. The researcher identified different epistemological, ontological, and religious beliefs and how the various methodologies directly impact one approach to research.

Discussion of Design

A comparison of fixed, flexible, and mixed research methodologies further examined what types of research are best suited to be studied by each design type. A discussion of the various types of designs showed why flexible design was the most suitable option for the research project. Specifically, since many aspects of the impact of telehealth on health care management still need to be clarified, it is critical to determine managers' opinions on this trend regarding implications for service provision, quality control, and leadership. The effect of increased telehealth use on health care management is under-researched, which requires a more thorough analysis of this phenomenon. This study used a qualitative approach and a versatile design; specifically, the researcher used a single case study design.

Fixed Methods Designs. Research design is the research methods and processes framework. The design helps researchers hone their research methodologies and set up successful projects. How data are collected, measured, analyzed, and interpreted affects a study's validity and reliability. There are many possible research designs; the researcher chose one based on research priorities. Research designs can be vital in one area and weak in another, so choosing one involves trade-offs. A fixed method study is rigid before data collection. Fixed designs focus on variables that can be measured and compared. Variables are often numerical and quantified. Quantitative research is a method for putting objective theories to the test by investigating the connections between different variables. In turn, these variables can be measured using instruments, which allows for numbered data to be analyzed using statistical procedures.

The research on assessing the potential challenges health care administrators in the southern U.S. hospital industry faced during the recent pandemic in managing increased telehealth use can be conducted by collecting quantitative data. A quantitative study typically involves collecting data from many individuals representing the population of interest. If the researcher's objective is to measure variables, find correlations, and test hypotheses, then the method most appropriate for the researcher would be a fixed method design. Descriptive, correlational, causal-comparative, quasi-experimental, and experimental research are the primary subtypes that fall under the umbrella of quantitative research. Interviews, observations, and content analysis are qualitative data collection methods that a researcher can use (Creswell, 2017).

Flexible Methods Designs. Flexible designs allow for greater freedom during the data collection process. If the variable of interest cannot be measured quantitatively, the researcher can use a design that allows for some flexibility. A flexible design is primarily theory-driven and requires only a small number of respondents. During the data collection process, flexible designs allow for greater freedom. The researcher can collect qualitative data to assess the potential challenges health care administrators in the southern U.S. hospital industry faced during the recent pandemic in managing increased telehealth use and the inability to control health care management because of the nature of the feedback that was received. The researcher employed techniques where the primary focus was on providing an answer to the research question. Interviews with open-ended questions, focus groups, case studies, and literature reviews are just some methods that can be used to collect data.

Data collection was conducted using semi-structured interviews, which the researcher for this case study developed. Semi-structured interviews allowed the researcher to ask planned and

unplanned questions to explore the topic in detail. The data collection method is beneficial when the phenomenon or an event is under-researched. Recruited participants attended online interview sessions organized in Zoom. All interviews were recorded and transcribed.

Mixed Methods Designs. A mixed-methods study can be qualitative and quantitative. Since its first comprehensive overview was published in 2003, many researchers have begun using the method in their investigations (Creswell, 2017). Combining the two approaches enables the researcher to understand how restricted communication hinders the feedback process and reduces the extent to which organizational goals and missions can be realized. Mixed study designs capitalize on the benefits of using quantitative and qualitative approaches, and the design has become increasingly popular in recent years. The problem in this study was the failure of health care managers to manage increased telehealth use, the inability of organizations to control health care management and administration, the cost of health care services, and new care management practices. Due to these issues, employing qualitative and quantitative approaches may not have been the most effective methodology.

Discussion of Method

Qualitative research methods vary by study type. Qualitative research gathers and analyzes non-numerical data to understand better concepts, opinions, or experiences that provide in-depth insights into a problem or new ideas for further research. Methods such as narrative, phenomenological, grounded theory, ethnographic, and single case study research are common types of qualitative research approaches. This study employed a case study design using qualitative methods.

Narrative. When conducting narrative research, the researcher investigates how stories are told to comprehend how participants interpret and make sense of their unique experiences.

Narrative research emphasizes exploration by requiring the researcher to get intimately acquainted with the participants' lived experiences and social constructions of reality (Abkhezr et al., 2020). This method focuses on the participants' lives as told through their stories to determine how they derive meaning from the events. Narrative researchers use collaborative construction with participants by building a relationship based on rapport and trust to be empathic, nonjudgmental, concerned, tolerant, and emotionally responsive, allowing researchers to better understand the participants' experiences. Narrative research concentrates on the personal and social aspects by elucidating the sociocultural context of an individual's story in the context of their culture (Carless & Douglas, 2017). The research may take the form of open interviews so that participants can talk about topics significant to their narratives. Toledano and Anderson (2020) said that by highlighting subjectivity in each experience, narratives suggest that the same phenomenon may mean different things to different people, which may be seen as a weakness of interpretation, especially compared to conventional logical positivism. In addition, collecting the narrative takes a significant amount of time, and there is a possibility that the narrative needs to accurately represent a larger population, which reduces the significance of the results.

Phenomenology. Qualitative research excels at understanding the phenomenon of interest holistically and in context. Phenomenology is very popular but may be misunderstood. Researchers use phenomenology differently. It can be an inquiry paradigm, interpretive theory, philosophy, analytical perspective, major qualitative research tradition, or research method framework. Phenomenological studies demonstrate how people make sense of their experiences and how they give them meaning. Phenomenology is currently applied to various social and human sciences fields, such as sociology, education, psychology, nursing, and health sciences (Creswell, 2007). Phenomenology studies how people make sense of the world and their

experiences to form a worldview. Phenomenologists are interested in how people construct meaning from their lived experiences (Stilwell & Harman, 2021). They concentrate on creating meaning as the core element of human experience while assuming some degree of consistency in human interpretation. The essence is the central meaning that can be grasped by all parties involved by referring to a phenomenon that all people experience. Patton (2002) differentiated between conducting an actual phenomenological study and applying a phenomenological perspective to an existing study. Patton's position was that one could employ a general phenomenological perspective to elucidate the importance of using methods that capture people's world experience without conducting a phenomenological study that focuses on the essence of shared experience. He supported this position by arguing that one can employ a general phenomenological perspective to elucidate the importance of using methods that capture people's experiences of the world.

  Grounded Theory. In order to develop plausible theories about a topic of interest, researchers compile vast amounts of relevant data. The goal of a grounded theory methodology is to use data collected in the field, with the primary focus being research into the behavior and relationships of many individuals (Creswell & Poth, 2018). The goal of grounded theory is to comprehend the viewpoint of an individual with direct experience of the phenomenon being studied. The grounded theory aims to generate a theory based on data shaped by participants' perspectives, allowing it to move beyond description and toward the theoretical explanation of a process or phenomenon (Turner & Astin, 2021). In grounded theory research, the researcher constructs a theory rather than putting it to the test and must maintain an open mind throughout the investigation. Before beginning the analysis during data collection, the researcher has no preconceived notions about how the results will turn out.

Ethnography. Ethnography investigates the composition and behavior of a specific community or group. The purpose of conducting ethnographic research is to paint a complete picture of the social group being examined by describing various aspects of the social and cultural structure of the group in question. These aspects may include the history of the group, their religion, their economy, their politics, or their environment. In ethnographic studies, there is a wide variety of data collection methods; however, observation and interviews are the most common. Although some authors voiced concerns that the medical industry might improperly use anthropological research techniques or only apply them superficially (Meyer, 2000), others emphasized the importance of recognizing the value of ethnographic research techniques and incorporating them into health care research. In primary care research, ethnographers frequently collaborate in multidisciplinary groups to gain access to the insights and knowledge of specialists from various fields. The ethnographer can build relationships and better understand the larger social context embedded in the research when they can spend more time in the field and participate in immersive experiences (Townsend & Cushion, 2021). According to Savage, the term ethnography can describe any small-scale social research conducted in everyday settings and uses various methods that are continually evolving in design to become more time efficient as more people are interviewed. In addition to this, they offer a complete source of data (Grbich, 1999).

Case Study. The case study method is advantageous when a thorough understanding of an issue, event, or phenomenon of interest is required in its natural real-world context (Rashid et al., 2019). Case studies can be used to explain, describe, or investigate events or phenomena in their everyday contexts (Yin, 2009). These can aid in understanding and explaining causal links and pathways resulting from a new policy initiative or service development. In contrast to

experimental designs, which seek to test a specific hypothesis by manipulating the environment, the case study method lends itself well to capturing information on more explanatory questions. The case study method can provide additional insight into what delivery gaps exist or why one implementation strategy may be chosen (Flanigan, 2018).

      Appropriateness of Single Case Study. Single case studies are the source of a new understanding of human behavior in modern psychology, psychiatry, neurology, and the cognitive sciences. They encourage studies of rare phenomena, clinical innovations, psychological theories, and theoretical assumptions (Bao et al., 2017). The first research question in this study explored the broad view of health care managers' perceptions regarding how increased telehealth use has altered health care management and administration policy. This question required flexibility through fluid hierarchical leadership models. The researcher chose this methodology and identified themes. Reviewing the research data can reveal themes, but the researcher must choose narrative descriptions that fit the questions. The second question investigated health care managers' perceptions regarding how increased telehealth use has changed the cost of health care services and how leadership behaviors contribute to increased telehealth use's impact on the cost of health care services. The qualitative method was appropriate for this study because it is suitable for exploring the perceptions of health care managers (Leedy & Ormrod, 2016). A single case was deemed more appropriate as it allowed for a deep exploration and understanding of the individual's experience and perspective. This approach enabled a rich and detailed analysis of the factors that influenced the use of telehealth, as well as the outcomes and implications of this experience. Moreover, a single case study provided valuable insights and lessons that could inform the development of telehealth programs and policies and improve healthcare delivery in general.

Before deciding on a strategy congruent with the research objective, a qualitative case study can collect data that best answers the research questions. This process can then be compared to all methods and designs. Case study research provides diverse options for data collection methods and analytical techniques, such as incorporating surveys, observations, and interviews (Yin, 2014). The qualitative method is appropriate for exploring a phenomenon that cannot be investigated using the quantitative approach (Merriam, 2009). In the quantitative method, context-specific knowledge is necessary to examine the research question (Bernard, 2013). Quantitative research is not appropriate for exploring the perceptions of health care managers since it limits them to the variables (Blumberg et al., 2014). The qualitative case study design is most suitable for investigating the perceptions of health care managers (Yin, 2009). Therefore, the case study design was chosen to address this study's research questions. The specific problem to be addressed was the potential challenges health care administrators in the southern U.S. hospital industry faced during the recent pandemic in managing increased telehealth use. These challenges potentially result in organizations' inability to control health care management and administration, the cost of health care services, and new care management practices.

This qualitative case study design was appropriate because it focuses on health care managers' perceptions of how increased telehealth use has altered health care management and administration, the cost of health care services, and new care management practices. The qualitative case study design corresponds to constructivism, consistent with the researcher's research paradigm. Therefore, the qualitative case study was most appropriate for the study.

Conducting a qualitative study proved to be the best choice for a study related to the increased use of telehealth during COVID-19 because it provided a more comprehensive

understanding of the experiences and perspectives of healthcare providers. This study allowed

the researcher to explore the barriers and facilitators of telehealth use and the quality of care

provided through telehealth services. Additionally, qualitative research helped to identify

potential areas for improvement in telehealth services, such as the need for more training and

support for healthcare professionals. By using a qualitative approach, the researcher was able to

gather rich and detailed data that could inform policy and practice in the healthcare industry and

ultimately contribute to improving the quality of patient care.

Discussion of Triangulation

Triangulation is a technique used to strengthen the credibility and validity of research

results. Credibility refers to a study's trustworthiness and believability; validity refers to the

extent to which a study accurately reflects or evaluates the investigated concept or ideas

(Farquhar et al., 2020). By combining theories, methods, or observers in a research study,

triangulation can help overcome fundamental biases caused by using a single method or

observer. Triangulation is also an attempt to explore and explain complex human behavior using

a variety of methods in order to provide readers with a more balanced explanation (Piccioli,

2019). Data validation is made possible through this method, which applies to quantitative and

qualitative research. Research can be improved by using triangulation because it provides a

variety of datasets that can explain various facets of a phenomenon of interest (Renz et al.,

2018). The results of a study can be better understood with the help of triangulation (Heale &

Forbes, 2013). The idea that having multiple lines of evidence that all point to the same

conclusion provides more confidence in the overall findings of the research is fundamental to the

triangulation of a study's findings.

Qualitative Methods of Triangulation. To enhance the quality of case studies, the researcher must have access to raw data, an explanation of negative cases, multiple data sources, theoretical connections, and evidence of data triangulation (Farquhar et al., 2020). The purpose of triangulation is to validate the study by combining the findings of multiple sources in order to verify their reliability. Triangulation of data or sources draws on information from several different places. Source triangulation is the practice of conducting interviews with various informants at varying times with the presumption that multiple sources, which may differ in terms of time, location, or other factors, contribute to the degree of convergent validity or enhanced confidence.

Triangulation in research is when two or more researchers look at the same evidence from different perspectives and come to the same conclusion, which helps eliminate bias (Farquhar et al., 2020). Triangulation can also be done theoretically, which is the third type. In theoretical triangulation, new insights are gained by examining data sets through the lenses of various theoretical perspectives. This process includes the following steps: defining the theoretical perspectives that will be used, conducting data analysis through the theoretical lenses, and developing a theory to account for the divergent explanations (Heale & Forbes, 2013). Evaluating the research using its many different units of analysis is known as unit triangulation. A close relationship exists between unit triangulation and sampling in case study research. In the case of study research, cases or units of analysis are selected based on their potential to contribute to developing a new theory (Farquhar et al., 2020).

In this study the researcher employed triangulation to ensure our findings' accuracy and validity. The researcher's primary focus was on healthcare providers, and the researcher examined various data sources, including interviews with healthcare professionals, surveys, and

literature reviews, to identify recurring themes and patterns. This approach facilitated the comparison of data from multiple sources and perspectives, thus validating the findings and ensuring that recommendations were based on sound evidence. By implementing the triangulation process, the researcher identified and successfully addressed any inconsistencies or biases in the data. For instance, the researcher discovered that while some healthcare professionals expressed reservations about the quality of telehealth services, others reported high levels of satisfaction with the same services. By examining these contrasting perspectives, the research identified potential areas for improvement in telehealth services, such as the need for more robust training and support for healthcare professionals. Furthermore, the researcher determined that the surge in telehealth use during the pandemic was instigated by several factors, including the need to maintain continuity of care and reduce the risk of infection. By analyzing these varying perspectives, we were able to develop concrete recommendations for enhancing telehealth services in the future. In conclusion, our use of triangulation proved to be an invaluable tool in our research process. It enabled the researcher to generate reliable and valid findings that could inform policy and practice in the healthcare industry.

Summary of the Nature of the Study

The specific problem to be addressed is the potential challenges health care administrators in the southern U.S. hospital industry faced during the recent pandemic in managing increased telehealth use. These challenges can result in organizations' inability to control health care management and administration, the cost of health care services, and new care management practices. Constructivism guided this study by analyzing the qualitative data gathered from health care managers. The study employed a qualitative case study methodology. A researcher must consider several factors when deciding on an appropriate research design.

Before making a final decision, the researcher must evaluate the benefits and drawbacks. The researcher needs to consider the amount of time available to carry out the research and the trade-offs between the benefits and disadvantages of each methodology. Flexible, fixed, and mixed designs collect and analyze data uniquely, but they all serve distinct purposes. As a result, the researcher needs to decide on a strategy that satisfies the study's aim and ensures that the outcomes can respond to the questions posed by the study.

Research Framework

The use of telehealth in the provision of care represents an integration of various aspects of care, influencing either the success or failure of the intervention. Leadership and management functions are tasked with providing resources and mobilizing members of the organization to pursue the objectives of telehealth (Thomas et al., 2022). Leaders and managers are responsible for creating a common goal that should be pursued. Telehealth requires an investment of resources. On the other hand, the scope of resources needed depends on the services provided through this approach. The figure below shows the relationship between telehealth and factors that may influence its success.

Figure 1

Relationships between Concepts
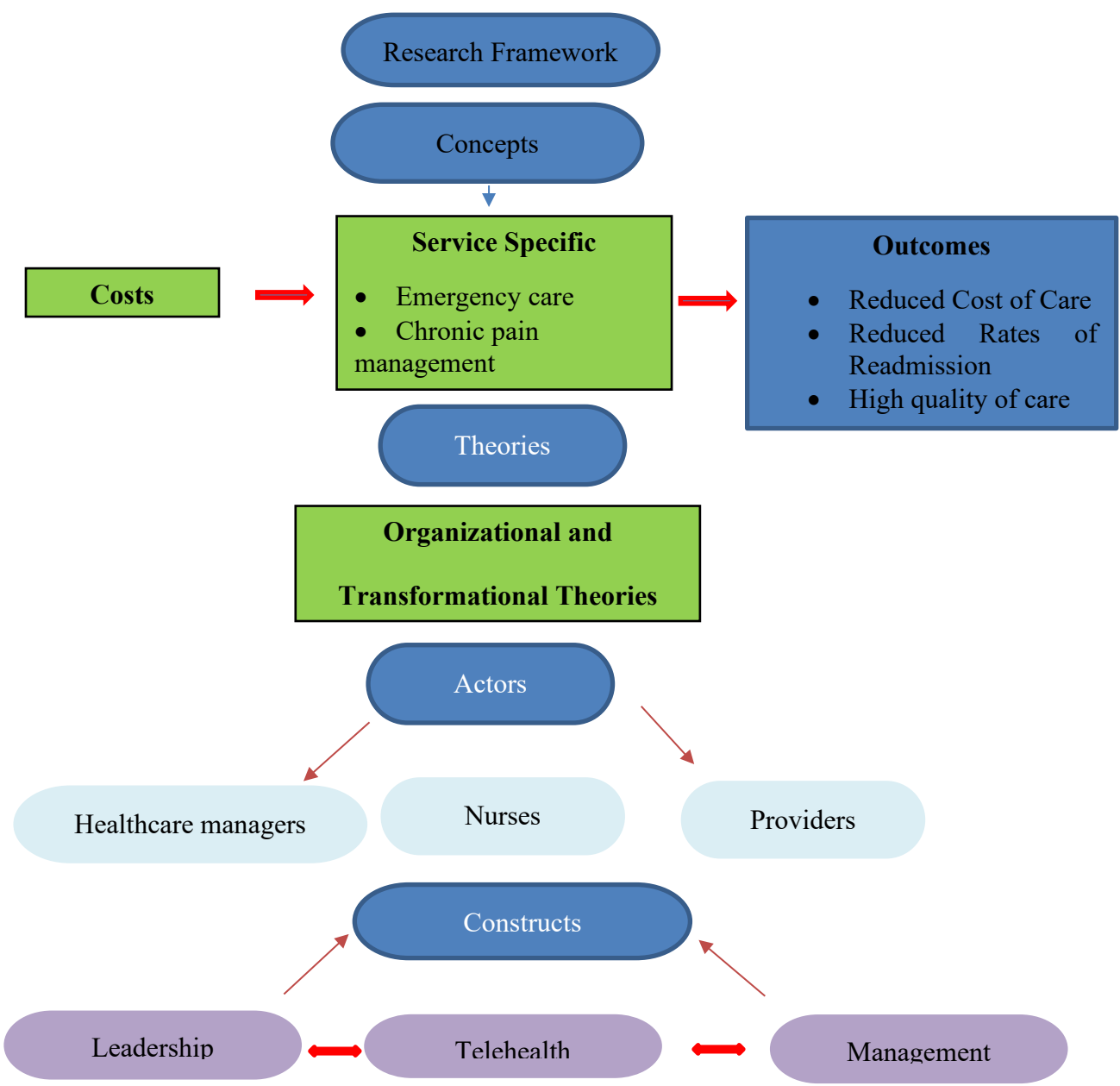
Concepts

The increased use of telehealth represents health care management and administration (Shachar et al., 2020). The increased use of telehealth is related to costs (Snoswell et al., 2020). The increased use of telehealth is related to new patient care management practices (Gaveikaite et al., 2020). Descriptors and one sentence that describes how the concept is related to the specific problem is the increased use of telehealth is related to health care management and administration (Shachar et al., 2020). The concept is related to the specific problem by examining the impact of the increased use of telehealth on health care management and administration.

The increased use of telehealth is related to costs (Snoswell et al., 2020). The concept is related to the specific problem by examining the impact of the increased use of telehealth on costs. The increased use of telehealth is related to new patient care management practices (Gaveikaite et al., 2020). The concept is related to the specific problem by examining the impact of the increased use of telehealth on new patient care management practices.

Costs. The pandemic has significantly weakened United States' health insurance coverage. Many Americans have lost employer-sponsored insurance due to a sudden increase in unemployment that surpassed 20 million workers (Blumenthal et al., 2020). According to a recent Commonwealth Fund survey, 40% of respondents, spouses, or partners who lost jobs or were furloughed had insurance through the lost job. Even though many will continue to receive coverage from their employers or become eligible for Medicaid or plans offered through the marketplace, a sizeable number most likely become uninsured (Banthin et al., 2020). Even successful employees may find that their health insurance coverage was reduced or eliminated as financially struggling employers look for ways to save money. These new developments added to

the more than 40 million people who were estimated to be underinsured and the 31 million people who did not have health insurance prior to the pandemic outbreak (Cohen et al., 2021).

For the first time since the Great Depression, catastrophic financial losses threaten the viability of many hospitals and office practices, particularly financially vulnerable rural, safety-net, and primary care practices (Barnett et al., 2020). Alterations in need for medical care were the root cause of this unprecedented monetary issue. The infectious sickness has caused numerous hospitals to become overburdened and has imposed unanticipated costs on many more. The falling demand for routine services has led to a reduction in earnings for providers. In the first few months of the crisis, office-based clinics reported 60% fewer patient visits, and it was anticipated that hospitals would lose $323 billion by the end of 2020 (American Medical Association, 2020). This demand volatility raises questions about how we pay for health care in the United States. Providers operate as fee-for-service enterprises. When well-paid services fall, so do health care providers. During more typical times, this system results in several undesirable impacts. It creates incentives to raise prices and push up volumes while shorting poorly compensated services such as emergency care and chronic pain management. In this study many cited the affordability and accessibility of telehealth visits compared to in-person visits as a driving factor in their decision to seek out care remotely. With the pandemic causing economic hardship for many, the cost savings of telehealth visits were particularly appealing for those without insurance or with high deductibles. As the healthcare landscape continues to evolve, it will be important to consider the role of cost in shaping the future of telehealth.

Emergency Care. As the COVID-19 pandemic spread across the United States and became more severe, state governments and health care systems implemented various risk reduction strategies and operational adjustments to deal with the rising number of COVID-19

infections in the general population. Initial measures for public health advocated reducing needless health care consumption to both slow the spread of the virus and guarantee that there would be sufficient resources to deal with peaks in the number of COVID-19 cases (Jeffery et al., 2020). Public health measures such as the stay-at-home order, company closures, and mandated mask-wearing were enacted to prevent and mitigate the spread of the infection.

While COVID-19-related emergency department visits increased, health systems saw a change in acute care visits. According to Harnett et al. (2020), U.S. emergency department visits declined 42% during the pandemic. Early pandemic emergency department visits in 2020 were four times greater than in 2019. Additional research conducted by Adjemian et al. (2021) compared emergency department visits during the pandemic to those during the pre-pandemic era showing that the number of people who went to the emergency department during December 2020 and January 2021 was 25% fewer than during the same months the year before. Even if previous research on the effect of COVID-19 on emergency department volume in the United States suggests a decline, there are life-threatening conditions that always require emergency care, which is true even during the pandemic. The public's fear of receiving medical care was the primary reason for the fall in the number of patients who visited emergency departments in the United States during the pandemic. As a direct consequence of this, people whose ailments were time-sensitive and urgent were denied treatment.

Chronic Pain Management. COVID-19 has directly caused thousands of deaths. Global statistics show that, as of May 2022, there have been more than 160 million confirmed COVID-19 cases and about three million deaths. Furthermore, according to national statistics, COVID-19 has caused more than 97 million cases of morbidity and more than one case of death in the U.S. (World Health Organization, 2022). In the United States, chronic diseases account for seven of

the top 10 leading causes of death (FastStats, 2022). At least one chronic disorder, such as heart

disease, stroke, cancer, or diabetes, affects the lives of six out of every 10 people in the United

States. Chronic diseases are not only the top causes of disability in the United States but also the

leading contributor to the nation's yearly health care costs of $3.8 trillion. The severe acute

respiratory syndrome coronavirus 2 is the causative agent of COVID-19, a condition that can

lead to respiratory distress. The impact has been incredibly profound for those with chronic

ailments such as coronary heart disease, diabetes, cancer, chronic obstructive pulmonary disease,

and chronic renal disease (Nicola et al., 2020). The consequences of COVID-19 on persons with

or at risk for chronic conditions and those at higher risk for severe COVID-19 sickness were a

challenge for public health professionals. This category requires a balance between protecting

people with chronic diseases from COVID-19 and ensuring they can prevent disease, manage

their symptoms, and obtain needed health care.Chronic illnesses were also greatly affected

during the COVID-19 pandemic. Many individuals with chronic conditions faced difficulty in

accessing necessary medical care due to overwhelmed healthcare facilities and a shift in

priorities towards COVID-19 treatment. Additionally, the pandemic created various barriers to

care, such as transportation issues and fear of exposure to the virus. As a result, many individuals

with chronic illnesses experienced delays in receiving treatment and managing their conditions,

leading to increased health complications and challenges. Despite these obstacles, healthcare

professionals worked tirelessly to provide care to those with chronic illnesses and adapt to the

the changing circumstances of the pandemic.

Theories

The theoretical framework for this study comprises organizational theories outlined by

Birken et al. (2017) and Bass's (1985) transformational leadership theory. Organizational

theories are used to analyze, understand, and improve health care services' organizational design and behavior. Given the increased use of telehealth, transformational leadership theory was used to frame how health care managers can manage organizational adjustment. Since this study focuses on telehealth and its impact on care management, the application of organizational theory could be beneficial in understanding how health care management could adjust to changes made by an unexpected resurgence of telehealth popularity among users and providers.

Organizational Theories. Organizations bring together people and resources to achieve desired outcomes. Organization theory as a distinct field can be traced back to the book Organizations by James March and Herbert Simon (1958). The authors sought to explain how people of different competencies can unite as an organization and accomplish a lot despite potential weaknesses among its members (Davis & DeWitt, 2021). Daft (2010) defined an organization as "(1) social entities that (2) are goal-directed, (3) are designed as deliberately structured, and coordinated activity systems, and (4) are linked to the external environment" (p. 11). Daft (2010) posited that the key elements of organizations are not the buildings nor the policies and procedures that govern them; instead, the key elements of organizations are the people and their relationships. Daft (2010) emphasized that organizations adapt and inform their rapidly changing environment and must also contend with the challenges of their external environments.

Organization theory allows us to analyze organizations acutely and deeply for patterns and regularities in organizational behavior and design. In an earlier study, Nicholson (1995) defined organization theory as a series of academic viewpoints that explain the multiplicities of organizational processes and structures. Daft (2010) stated that organizations face evolving challenges, and thus the concept of organizations and organization theory continues to evolve.

Oyibo and Gabriel (2020) stated that the social and technological changes brought on by the industrial revolution necessitated the development of organization theories, which have since evolved because of environmental changes. Organization theory provides an approach to seeing, investigating, understanding, and further developing firms considering examples of hierarchical conduct and plans (Qin, 2022). It is a macro examination of organizations because the theory focuses on the whole organization as a unit (Daft, 2010).

According to Birken et al. (2017), organization theories provide researchers with various relevant and largely unexplored explanations of the complex interactions between organizations and their environment. Birken et al. (2017) stated that organization theories could help describe, explain, and even in some cases, predict the complex interactions between organizations and their external contexts. Therefore, they can help explain and ground research on funding fluctuations, policy changes, workforce dynamics, and other such processes. Daft (2010) stated that organization theory is directly relevant to top and middle managers because they are responsible for setting the goals, strategies, and decisions regarding the organizational structure and design. Various studies have explored how certain organization theories can help explain how health care organizations implement new structures and processes (Birken et al., 2017; Dadich & Doloswala, 2018; Leeman et al., 2019; Shay, 2015); three prominent theories are outlined below.

Transaction Cost Economics. According to Birken et al. (2017), transaction cost economics (TCE) theory suggests that the necessary transactions drive costs to complete a task. Organizations transact with other organizations to enable their business function, and these inter-organizational interactions incur costs. TCE explains how the characteristics of transactions determine the organizational structures developed to facilitate cost optimization and

effectiveness (Leeman et al., 2019). Three factors influence the cost of a transaction: (1) the frequency of the transaction, (2) the uncertainty of the transaction, and (3) the organization's investment in assets specific to the transaction relationship (Birken et al., 2017; Leeman et al., 2019). TCE can help explain how outer setting determinants can affect the structures that are created to facilitate transactions between one or more organizations. TCE may be beneficial for analyzing organizations' decisions about procurement or building necessary structures.

Contingency Theories. Contingency theories posit that the design decisions of organizations are contingent upon international and external contexts (Birken et al., 2017). Contingency theories posit that the most effective way to structure a task depends on the nature and context of the task (Leeman et al., 2019). Contingency theories state that an organization that is effective and efficient under some conditions may be less successful under different conditions (Birken et al., 2017). The internal context of organizations pertains to factors that influence the organization's work activities. In contrast, the external context of organizations pertains to factors outside the organization's control, which may influence the organization's structure and development, which may help frame how technological innovations in health care implementation may be influenced by their fit with the organization's internal context and ability to adapt to its external context.

Institutional Theory. According to institutional theory, organizations are motivated to align their behaviors and structures with the norms and expectations of the institutions in their environments, including the government, accrediting bodies, and client groups (Birken et al., 2017). It provides a way of understanding how organizations adapt their processes based on political, social, and cultural demands and their desire to gain legitimacy in the eyes of stakeholders (Dadich & Doloswala, 2018). Organizational changes can result from three

institutional pressures: coercive, mimetic, and normative isomorphism (Leeman et al., 2019). Birken et al. (2017) stated that organizations adapt to strong pressures to adopt new technologies, forms, or behaviors to comply with mandates, regulations, and rules. Organizations may also adapt and align with strong professional values, norms, and expectations relayed to them through formal education, licensing accrediting bodies, and training. Institutional theory can be used to frame how institutional pressure and desire for institutional legitimacy influence organizational behavior as telehealth becomes more prevalent, considering the pandemic.

Transformational Leadership. Transformational leaders can positively influence members' behavior. Transformational leadership was initially coined by political scientist and sociologist Downton (1973). However, the concept gained credibility and worldwide acknowledgment through the work of James MacGregor Burns (1978). Transformational leaders are role models, communicating clear goals, vision, and inspiration for their staff (Belrhiti et al., 2018; Benmira & Agboola, 2020). Burns stated that transformational leaders support and encourage followers to raise their morals, beliefs, motivation, perception, and association with the organization's goals. TLT posits that effective leaders can stimulate their subordinates' awareness of their work's value, thus triggering their internal motivation and encouraging them to focus on organizational goals and not only their personal goals (Belrhiti et al., 2018). Top leaders who use transformational leadership approaches can enhance organizational innovation by creating a compelling vision and an environment that supports risk-taking, experimentation, and exploration (Daft, 2010).

According to Benmira and Agboola (2020), this leadership approach is utilized when an organization is undergoing significant change or requires a new direction. It is instrumental today as more and more technologies are being introduced and challenging the agility and flexibility of

organizations. This framework may be instrumental in framing how health care managers influence their members by setting a clear vision, inspiring them, and encouraging them to utilize telehealth technologies in alignment with company objectives. Conversely, this theory can also be used to frame how health care managers may fail to adequately relay a clear vision and thus fail to motivate members to implement new technologies in health care.

Actors

This section discusses the research actors. Actors are the study's people, groups, or organizations. It is expected to recruit 15-30 health care managers nationwide for interviews. Criteria for inclusion were the following: experience in health care management for at least 5 years, experience in telehealth management before and during the pandemic, and willingness to participate. Health care managers were recruited online using professional social media groups, websites of health care institutions, and professional forums. Health care managers (i.e., providers, practitioners, nurses, etc.) are related to the specific problem because they have trouble managing increased telehealth use (Birken et al., 2017). The organization of health care services is related to the specific problem because it is responsible for controlling the costs associated with increased health care costs, and it must adopt new management practices to deal with the innovation (Geerts et al., 2021).

Health Care Managers. Effective health care administration is necessary to develop a high-performing health care delivery system (Bradley et al., 2015). Several studies have proven the correlation between management capacity and the effectiveness of health systems. The absence of managerial competence at all levels has been recognized as a significant barrier to attaining the Millennium Development Goals and other global health objectives. The process of achieving health care objectives through human, financial, and technical resources is called

health care management (Banaszak-Holl et al., 2012). Health care management encompasses strategic and operational management activities, such as supply chain management, human resources management, performance management, improvement, financial management, and governance (Buchbinder & Shanks, 2012). These activities are necessary to deploy resources to maximize health outcomes effectively. A centralized health care leadership structure is an absolute necessity in a pandemic. By exercising foresight, necessary resources for health care organizations, important buildings, and services can be promptly prepared, reducing the likelihood that the disease will spread and the severity of its effects. The health care community faces many issues regarding the nature, rate, and management of COVID-19 viral transmission, illness progression, population vulnerabilities, treatment modalities, and possible viral variations (Anand et al., 2021).

Constructs and Variables

The constructs found in the research study were increased telehealth use, leadership, and health care management.

Increased Telehealth Use. The emergence of the COVID-19 pandemic has precipitated a rapid transition from conventional care to telehealth (Satin & Lieberman, 2021). Telehealth technologies have been utilized to their fullest extent during public health emergencies, especially in disaster management (Joshi et al., 2020). On-demand telehealth is a 21st-century strategy that enables efficient screening of patients; the care provided is patient-centered and conducive to self-quarantine. This strategy safeguards patients, clinicians, and the general populace from exposure. In addition, it provided a platform for physicians and patients to communicate at any time of day or night using webcam-equipped smartphones or computers. Respiratory symptoms, such as fever, cough, sputum production, dyspnea, fatigue, myalgia, and

nausea, were among the earliest clinical manifestations of COVID-19 (Albahri et al., 2021). Automated algorithms were implemented in the intake process, and local and global epidemiologic data were used to standardize screening and practice patterns across providers; however, these actions required considerable effort for quality care (Satin & Lieberman, 2021). The applications of various technology-related aspects were highly varied. Researchers argued that the strain on telehealth capacity by the COVID-19 pandemic caused certain limitations (Berg et al., 2020). These limitations included restricted insurance contracting, high training costs, low reimbursement, software constraints, and defective equipment (Saleem et al., 2020).

Increased telehealth use is related to the specific problem because it helps understand why health care managers fail to manage increased telehealth use. According to the report powered by McKinsey Company, during the COVID-19 pandemic, the use of telehealth services grew 78 times higher in April 2020 compared to February 2020. However, its use has stabilized 38 times since February 2021 (Bestsennyy et al., 2021).

Leadership. Leadership is the most crucial factor in determining health care companies' organizational culture, the quality of treatment provided, and the degree to which patients are safe (Alloubani et al., 2019). Leadership is the process by which an individual encourages another group of individuals to work toward a common goal (Winston & Patterson, 2006). The health care industry's executives, directors, and managers can exercise various leadership styles and influence their followers' behavior (Sfantou et al., 2017). Leaders approximate or choose their style based on their beliefs, values, and performance, with contributions from organizational culture and norms, which favor some leadership styles and discredit others. This combination of beliefs, values, and performance allows leaders to approximate or choose their style. Those leadership theories that are founded on relational components of leadership, particularly

transformational leadership, are the ones that receive the most significant attention in terms of research and application (Lo et al., 2018). Transformational leadership is the process through which a person engages with others to enhance motivation and morale in both the leader and follower (Northouse, 2021). Transformational leaders may shape and preserve an organization's culture. They infuse the values, attitudes, and perceptions they believe fit the organization. Organizational culture is the shared assumptions learned by workers that distinguish their organization from others (Tsai, 2011). A leader's contact with followers, reaction to competition, and implementation of new initiatives affect organizational culture. Organizational culture is strong when employees' values, beliefs, and perceptions are strong and cohesive. A health care organization's dominant culture promotes consistent member behavior, reduces conflict, and creates a healthy workplace, especially during a pandemic.

Health Care Management. Most hospitals worldwide have difficulty meeting the hopes and requirements of their patients. Patients tend to gravitate toward facilities where they receive higher-quality care (Bilinski et al., 2017). Health care management's aspects can be enhanced to guarantee that the provided services are of satisfactory quality. The socio-demographic factors of the patient are a significant source of concern. The level of expertise possessed by those providing medical care is yet another component that impacts the administration of medical care. During the pandemic, one of the most significant challenges was a lack of qualified health care professionals, such as physicians and nurses (Checcucci et al., 2021). Many anticipated that health professionals would work longer hours during the pandemic, which negatively impacted the health of the health professionals and the overall quality of the health care provided. When providing high-quality medical care, having doctors who have received adequate education is paramount. However, another factor in this issue is the absence of suitable referral systems

(Khatoon, 2020). Hospitals must be adaptable and responsive to the requirements of their patients. Patients, for instance, should be able to see whatever physician they choose. Every health care facility should establish connections with other hospitals, enabling them to refer patients to facilities better suited to treat their specific conditions.

Relationships Between Concepts, Theories, Actors, Constructs, and Variables

Telehealth technologies are increasingly being adopted by management and used as an efficient and cost-effective means of providing and gaining access to quality health care services and outcomes. The pandemic caused by COVID-19 triggered many difficulties for the health care system. Numerous adjustments had to be made to existing practice models to ensure the continued safety and efficacy of medical treatment for all patients. Consequently, a swift transition to telehealth models has occurred in various inpatient and outpatient settings.

Summary of the Research Framework

Telehealth is an information and communication technology domain that enables remote health care. Telehealth and telemedicine continue to be increasingly utilized due to the COVID-19 pandemic. The COVID-19 pandemic has forced health care organizations to manage capacity, financial loss, and redesign care, thus forcing health care leaders to make the critical decision to reduce the workforce or to shift their employees to remote work setups, including clinicians working with telehealth technologies to deliver care (Begun & Jiang, 2020). Since the beginning of the pandemic, telehealth has allowed for the remote triage of patients, remote care, remote diagnosis, routine follow-up care, and rapid access to information. Moreover, this care delivery approach reduced the demand for emergency services and increased health care accessibility for some patients (Breton et al., 2021; Jnr, 2020). The expanded use of telehealth has the potential to

permanently transform health care delivery systems and health care accessibility (Goldberg et al., 2022).

Health care managers must take advantage of telehealth and adequately handle the challenges of utilizing new health care technologies. Health care managers are challenged to understand the current global and local context along with informed projections. They must accordingly prepare for future emergencies, manage the backlog of paused services, maximize organizational performance, sustain innovations, and imagine future possibilities, along with many other responsibilities (Geerts et al., 2021). Although the expansion of telehealth and telemedicine has been declared a global public health response to gain control of the virus, many health care services worldwide operate differently due to the variances in the architecture of health care systems, influences of the local culture, and the nature of regulations (Benis et al., 2021). It is essential to conceptualize leadership in digital health services to enable better support for health care digitalization and improve the likelihood of successful HIT implementation (Laukka et al., 2020).

Definition of Terms

Constructivism: In constructivism, the researcher's goal is not to discover a universal truth or human experience about context and value but to understand individuals' interpretations and the constructs they interact with. People develop their understanding and knowledge of the world by going through life and reflecting on their various experiences (Vaishnavi & Kuechler, 2015).

Coronavirus Disease (COVID-19): COVID-19 is a contagious illness brought on by the severe acute respiratory syndrome coronavirus 2 (Ghebreyesus, 2020).

Health care leadership: Health care leadership is characterized by the ability to influence others in a way that is productive and compliant with ethical standards for the benefit of individual patients and entire populations (Cochrane et al., 2017).

Organization culture: Organization culture refers to the long-standing beliefs and values in an organization and the staff's expected value of their work, which influence attitudes and behavior (Wijethilake et al., 2023).

Organization theories: This researcher will explore several organization theories to analyze, understand, and improve the organization of health care services and managers regarding organizational design and behavior (Birken et al., 2017).

Research paradigm: A research paradigm is an interpretative framework guided by one's beliefs and feelings about the world and how it should be understood and studied (Kivunja & Kuyini, 2017).

Triangulation: Triangulation is using multiple methods to answer a question. Using two or more independent measures to confirm a hypothesis increases confidence in the findings. Combining findings from two or more rigorous approaches provides a complete picture of the results (Heale & Forbes, 2013).

Assumptions, Limitations, Delimitations

Assumptions inherently risk the research endeavor and should be identified and backed up by suitable research material to mitigate these dangers. In addition, a risk mitigation strategy was presented for each assumption to minimize the potential adverse outcomes associated with the risk. Limitations are considered constraining factors contributing to the study's potential shortcomings. Limitations pose a risk to the research and must be identified and supported by relevant research to mitigate the risk. In addition, a risk mitigation strategy was presented for

each restriction to reduce the risk's potential adverse effects. Delimitations are the study's boundaries or scope. A discussion regarding a description of the boundaries and how they will impact the study is included, allowing the researcher and the audience to contextualize the findings through limitations and delimitations, increasing the research's validity.

Assumptions

Most people accept assumptions as facts, but assumptions have not been proven accurate through research. The results of COVID-19 indicated that the scientific community needs to acquire the skills necessary to develop more effective strategies for coping with the irreducible uncertainty associated with global systemic risks and the scientific community's social responsibility toward advancing the public good. The history and philosophy of science and science studies can contribute to continuing transformations of the scientific endeavor by creating the epistemological foundations of new theories, experimental procedures, alternative investigative pathways, and varied voices (Vaishya et al., 2020).

In qualitative studies, assumptions include the realities of the researcher, participants, and audience. Four themes will be identified as reflecting the underlying assumptions about the purposes of research that have implications (Thomas et al., 2022). These four themes include theory generalization, representation, participation, and change. It was assumed that the participants in the case studies were honest and forthcoming with their information when describing their experiences, personal challenges during the pandemic, and leadership responses and approaches (Bunniss & Kelly, 2010). Trust is the foundation for developing relationships through interaction, influencing credibility and trustworthiness (Celestina, 2018). Researching the pandemic and the issues that health care practitioners and leaders faced during that period was challenging in specific settings. The knowledge that these individuals were limited in how

much care they could provide to patients may have an emotional impact on their health due to shame or hopelessness (Stolow et al., 2020). Research participants are guarded in conflict and post-conflict environments and may intentionally distort data (Kankam, 2019). The researcher believes that people construct and interpret their knowledge of the world through experience and reflection. This study will use a constructivist worldview to explore the participants' views of reality. The researcher made the presumption that the participants' experiences would be accurate. Participants decide what information to disclose, what specifics to include, or how to structure a narrative (Vaishnavi & Kuechler, 2015).

Limitations

The term limitations refers to the study's potential shortcomings, which can be brought about by limiting factors that affect the validity or reliability of the research study. The researcher cannot influence certain factors, which are considered limitations. In addition, limitations may influence the findings and contribute to weaknesses that negatively impact the study's outcomes or the practical application of the results. The limitations imposed on this study were due to factors such as the size of the study, the selection of participants, and the unique qualities and traits each individual possesses.

The objectives of quantitative and qualitative research are radically distinct. When conducting quantitative research projects, researchers aim to characterize existing events, establish correlations between variables, and explain causal linkages between variables. This research style focuses on definitively describing and explaining the investigated phenomenon (Creswell, 2007). A quantitative analysis follows generally accepted processes (Frankel et al., 2021).

Qualitative interview studies benefit from sampling strategies by focusing on new knowledge rather than numerical validation. Calculations are used in quantitative research to determine the appropriate sample size to demonstrate effects; the sample size guidelines recommend a sample of 20 to 30 interviews; however, there are no comparable standards for assessing sample size in qualitative interview research (Creswell, 1998; Malterud et al., 2016). Case studies can have varying sample sizes, but no well-established mathematical equivalent for qualitative research can be used consistently. Another limitation was the researcher's and participants' varying levels of comprehension regarding different aspects of leadership theory and practice. At the time of the research, the individuals only know a fixed level of information regarding leadership processes, which will contribute to a limitation since it is fixed. The development of formative feedback regarding distributed leadership tasks was an iterative process constrained by the framing of the survey and the researcher's understanding of distributed leadership practices within the health care industry.

Delimitations

Delimitations are the conditions at the study's edges established by the researcher. Delimitations allowed the researcher to decide what study aspects were included. The methods used in qualitative research should be as defensible as possible, focusing on intersubjectivity regarding why and how decisions regarding design, sampling, and analysis were made. Delimitations are under the researcher's control and narrow the focus of the study to make it relevant to what the researcher is attempting to demonstrate. This research study used parameter conditions to focus on a particular segment of health care leadership and provider population. This study did not cover the challenges posed by COVID-19 in countries other than the United States. This study focused solely on health care leadership's management difficulties during the

COVID-19 pandemic in the United States. These delimitations were established as boundary

conditions to concentrate the study, so it has the potential to offer valuable improvements for

managing future pandemic situations in the United States.

Significance of the Study

The study's significance outlined why the researcher chose to conduct the research and

the value the researcher aimed to provide with their findings. The reduction of gaps in the

literature discussed how this research would be used to add to the understanding and effective

practice of leadership and contribute to the existing body of leadership knowledge. The

implications for biblical integration offered a connection between the concepts of this research

and the biblical principles.

Reduction of Gaps in the Literature

Despite the multitude of benefits associated with telehealth, there are also numerous

challenges associated with its implementation. For instance, the lack of physical presence in

telemedicine poses various diagnostic and clinical limitations (Kichloo et al., 2020). Cheng et al.

(2022) stated that it is crucial to consider the appropriateness of virtual care as there are many

medical conditions for which care through a virtual environment is inappropriate. According to

Burroughs et al. (2020), telemedicine does not allow for the physical examination of the

operative site for postoperative patients, making it difficult to obtain important information.

Although physical distance is necessary for patients' safety and to reduce the risk of COVID-19,

the absence of in-person evaluations and focused physical exams may make it difficult to

evaluate and treat patients, further increasing the risk of misdiagnosis. Misdiagnosis can lead to

significant morbidity and mortality increases, emphasizing the need for proper patient triage. In

addition, telehealth poses concerns regarding the potential weakening of therapeutic relationships and depersonalization of practice (Breton et al., 2021).

The technological aspect of telehealth also comes with risks. Julien et al. (2020) stated that the successful transition to telemedicine requires the intersection of three key factors: an internet-capable device, broadband internet access, and the technological literacy needed to utilize the first two factors. According to Jnr (2020), the technological process of telehealth necessitates the upskilling of medical practitioners to use virtual technology and equipment. To ensure the accurate medical history of all patients, all patients and doctors must have sufficient hardware and software security in place (Haleem et al., 2021). Virtual software deployed for telemedicine must be user-friendly to ensure accessibility for patients with low technological proficiency (Jnr, 2020). According to Blandford et al. (2020), telehealth may also exacerbate the digital divide, be limited by software engineering quality, and be prone to security breaches. Telehealth platforms must thus be constantly updated to ensure security, reliability, and flexibility to adequately meet different stakeholders' regulatory, professional, and health care requirements (Blandford et al., 2020; Jnr, 2020).

Patients and providers may also have concerns regarding the security of personal health information (Kichloo et al., 2020). The increased use of telemedicine requires a nuanced approach to privacy, and the Health Insurance Portability and Accountability Act of 1996 (HIPAA) may need to be revisited, so patients can be given the responsibility and ability to share their information with practitioners (Shachar et al., 2020). Patients and practitioners must trust digital systems to secure and encrypt their data to protect patient privacy adequately (Blandford et al., 2020). Telemedicine's success is highly dependent on clinician competency training that allows practitioners to deal with issues regarding technology, such as privacy and security,

informed consent, and observation using technology (Xu et al., 2021). Patients must be aware of their privacy choices and that all policies on data-sharing are balanced in the interests of the individual and the population (Blandford et al., 2020).

While the digital divide is narrowing, the gaps in internet affordability and connectivity in rural America continue to be challenging for many (Clancy & Kirsh, 2021; Fisk et al., 2020; Lopez et al., 2021). The technological barriers of unreliable internet connections and the interoperability of various technologies may also limit the adequate implementation of telehealth (Fisk et al., 2020). Individuals in remote or rural areas may be unable to utilize telemedicine adequately due to the low penetration of smart devices and the low expansion of 3G/4G internet networks (Jnr, 2020). Julien et al. (2020) stated that the lack of affordable broadband access, access to inexpensive devices, and technology literacy could limit patients' ability to use telehealth and telemedicine.

Telehealth is not just about technology; it requires changes in working practices and data curation (Blandford et al., 2020). According to Clancy and Kirsh (2021), clinicians and health professional trainees must learn to use technology to enhance provider-patient interactions and communication rather than simply attempting to replicate in-person dynamics. They stated that there is a difference in how health professionals can best communicate and engage with patients in a virtual setting compared to face-to-face visits. Further information is needed on how patient-provider interactions within a virtual space can be optimized to improve their relationship and the overall experience. Telehealth may also increase the risk of inappropriate use and overutilization. Cheng et al. (2022) stated that doctors reimbursed via a fee-for-service scheme and providing telemedicine consultations on third-party platforms might overutilize the platform through unnecessarily repeated follow-ups. While telehealth use has rapidly increased during the

pandemic, only a few physicians and patients are adequately educated on the best practices to utilize these digital services. Further studies are needed to explore how physicians and patients can best utilize telemedicine and virtual care (Jnr, 2020).

Implications for Biblical Integration

The Bible is considered a manual for living, informing almost every aspect of life. While the Bible is not merely a manual for conducting research, it is a source of principle and foundation utilized by those who believe in it and its teachings. Christian leaders incorporate biblical principles into their daily lives. Christian researchers seek to identify the Bible's underlying principles that guide and inform research practice. "I will instruct thee and teach thee in the way which thou shalt go, and I will guide thee with my eye" (*King James Bible*, 1769/2017, Psalms 32:8). God instructs and guides His followers in the way they should live and make decisions. Researchers have their own unique perspectives of the world, which informs the theories they develop to explain their worldviews. The benefit of this research will support how Christians can become better servants of Christ.

Business research informs the decision-making process and the factors that should be considered to meet or exceed the research's goals and objectives. When determining how to maneuver through data collection and analysis, much information is available to borrow from others. The Bible includes instances of characters engaged in research-related activities and describes several elements found in various research types (Taylor, 2019).

Benefit of Business Practice and Relationship to Cognate

One of the Bible's most important lessons about conducting research is that numerous approaches are available. The case study approach, for example, is frequently employed in educational settings. The case study of various biblical characters, such as Jesus, is used

consistently in the Bible. Acts and Luke were written from a historical perspective (Melé & Fontrodona, 2016). The two books were written by Luke and addressed to Theophilus.

Similarly, the Book of Hebrews appears to be written based on accounts shared in the Old Testament. The Bible also uses a descriptive approach to research (Taylor, 2019). For example, Moses sent 12 members, representing the 12 tribes of Israel, to search the land of Canaan in Numbers 13:17-18 (*King James Bible*, 1769/2017). In every instance, different methodological forms are used for specific outcomes. The most important lesson learned is that the research methodology chosen should be appropriate for the purpose.

Conducting successful research is not an easy endeavor. Most of the time, researchers may feel overwhelmed by the process, which impacts the quality of the findings. Badley and Scott (2011) described the latter as affective research dynamics. The author also points to Galatians 5:22, where Paul describes the nine gifts of the Holy Spirit for a scriptural framework for research (*King James Bible*, 1769/2017). Feelings of anxiety, exhaustion, and the desire to give up can be overcome by actively seeking out these gifts throughout the research process. The Bible encourages constant inquiry and the pursuit of knowledge when it comes to knowledge.

The Bible teaches the importance of employing the most appropriate methods. The study fulfills this biblical perspective by deploying a descriptive approach (Melé & Fontrodona, 2016). The researcher used semi-structured questionnaires to collect qualitative data to describe how telehealth has impacted the health care practice and the provision of quality care during the pandemic. The research methods will meet the intended purpose through the spirit of inquiry.

Upholding the fruits of the Holy Spirit while conducting research is how biblical perspectives, teachings, and, ultimately, the value of Christianity characterize this study. The study was performed among health care providers. Studies that involve human participants

should strive to uphold the dignity of human beings and make the participants feel appreciated (Badley & Scott, 2011). Participants engaged with the researcher at their discretion. Participants and those contributing to the study were treated gently during the research process. Most importantly, the researcher sought to exercise self-control. Self-control entails organizing the tasks that will be done, completing the tasks promptly, and overcoming procrastination and other impediments to the scheduled completion and submission of the findings.

Summary of the Significance of the Study

The study's significance explains the value the research will provide in the future. The contribution of the work will narrow the knowledge base gaps regarding the potential difficulties that health care leadership faced during the pandemic. Qualitative research is necessary because it enables in-depth knowledge development from the perspective of those living through the changes shaped by a specific context. Local experiential knowledge can be recognized as relevant and complementary to other sources of information, according to the perspectives gleaned from qualitative research, because it enables explicitly the co-creation of findings embedded in health care professionals' day-to-day practice (Andersson, 2018). As a result, it may offer significant practical knowledge, reducing the gap between practice and theory, thus unifying the two.

The introduction of new technologies has altered the way care is delivered. Telehealth, or the provision of health services without physical contact between the care provider and the care seeker, has been made possible by technological advancements. Telehealth provided an effective alternative to traditional health care channels during the COVID-19 pandemic. However, using telehealth in care delivery is constrained by several obstacles. Consideration of telehealth adoption is contingent upon factors such as management, leadership, associated costs, and the

specific services that should be offered via telehealth. Knowledge translation promptly is essential for facilitating a speedy response to pressing challenges posed by this pandemic and for preparing for future situations of a similar nature.

A Review of the Professional and Academic Literature

The professional and academic literature review provides the reader with a comprehensive overview of the background research. This qualitative case study explored how health care managers perceive the increased use of telehealth and how it influences health care management and administration. To conduct this literature review, the researcher utilized the following databases: Google Scholar, Taylor & Francis Online, JSTOR: Journal Storage, Springer Link, National Library of Medicine, BioMed Central, and ResearchGate. The key search terms used for this review include health care, telehealth, telemedicine, technology, information technology, patient satisfaction, management, administration, cost-effectiveness, pandemic, and economics. Literature on the theoretical framework for this study was collected, comprising organization theories and transformational leadership theory. Most of the studies included in this literature review were published between 2018 and 2022 to ensure the findings still apply to the current state of telehealth and other forms of technological adoption in the health care sector. Some older studies were included as conceptual and historical references.

Business Practices

The adoption of new technology has the potential to improve health care services. Powerful new HITs are promising to enhance health care delivery, health promotion, and patient satisfaction (Ahmed et al., 2021; AlQudah et al., 2021). Worldwide, countries continue to issue legislation for telemedicine's implementation as it continues to be distinguished as one of the safest interactive means between patients and clinicians where social distancing has become a

necessity (Fisk et al., 2020; Han et al., 2020; Naik et al., 2022). The expanded use of telehealth has the potential to permanently transform health care delivery systems and health care accessibility (Goldberg et al., 2022). Health care managers are challenged to develop a clear understanding of the current global and local context along with informed projections to prepare for future emergencies, manage the backlog of paused services, maximize organizational performance, sustain innovations, and imagine future possibilities (Geerts et al., 2021).

COVID-19. The COVID-19 pandemic created many acute challenges for health care institutions worldwide. COVID-19 is a respiratory illness caused by the coronavirus severe acute respiratory syndrome coronavirus 2 and was declared a pandemic by World Health Organization on March 11, 2020, less than 3 months after the first cases were detected (Budd et al., 2020). COVID-19 was one of the biggest global humanitarian crises of the century, with its volatility, uncertainty, complexity, and ambiguity (Daaboul & Nasr, 2021). COVID-19's rapid spread and many associated deaths led to grave concerns about global health (Budd et al., 2020). According to Begun and Jiang (2020), the pandemic was a reminder of the complex and unpredictable nature of the medical industry and how surprise events with complex etiologies, rapid spread, and unpredictable scales can lead to massive challenges to the daily operations of hospitals and medical practices worldwide. Although some lessons about epidemics were available from prior encounters with severe acute respiratory syndrome and Middle East respiratory syndrome, few countries were prepared to effectively manage crises of this scale (Geerts et al., 2021). COVID-19 exposed and exacerbated gaps and vast inequities in the health care system. Health care institutions have had to contend with supply shortages, financial losses, and the need for care redesign (Begun & Jiang, 2020).

Surging patient volume, lack of adequate capacity, and workforce management were some of the critical challenges health care delivery organizations encountered during COVID-19. According to Burroughs et al. (2020), the global pandemic radically overwhelmed health care systems worldwide because most hospitals did not have adequate resources and personal protective equipment to meet the demands of surging emergency room admissions and hospitalizations. According to Sengupta et al. (2021), there was also a significant shortage of skilled human capital in health care to address the needs of the current growing population. They emphasized that the COVID-19 crisis health care personnel experienced hardships in their individual lives, families, relationships, and mental health during the COVID-19 crisis, which led to various new workplace and societal challenges for the health care personnel who were charged with the responsibility of dealing with COVID-19. Begun and Jiang (2020) stated that a related challenge was protecting frontline staff's physical and mental health as they dealt with the risk of contracting the virus and coped with tremendous mental stress.

The COVID-19 pandemic heralded a new era in health care technology adoption worldwide. COVID-19 has caused the incredible expansion of digital health and telemedicine; however, it has also meant a general global economic downturn and decreased provider revenues, making it a watershed moment for health care transformation (Zimlichman et al., 2021). According to Budd et al. (2020), the research and development of new methods and technologies to strengthen the core capacities of countries and ensure national preparedness for infectious hazards often occur during outbreaks when innovation becomes necessary. They cited Hong Kong's use of electronic data systems to identify clusters of disease during the outbreak of severe acute respiratory syndrome in 2003 and the use of mobile phone data to model travel patterns during the Ebola outbreaks in West Africa in 2014–2016 as examples of this

phenomenon. They emphasized that digital technologies have similarly been deployed as part of the worldwide public-health response to the COVID-19 pandemic, including digital epidemiological surveillance, digital contact tracing, and rapid case identification.

Big data and artificial intelligence facilitated COVID-19 preparedness worldwide, and various countries utilized mobile technology to expedite infection screening, contact tracing, and clinical management (Whitelaw et al., 2020). The pandemic forced providers to adjust how they provide health care (Burroughs et al., 2020; Calton et al., 2020). Shah et al. (2020) stated that COVID-19 accelerated trends already in place, and telehealth and telemedicine are examples of common digital domains with exponential growth during the pandemic. To manage capacity, financial loss, and care redesign, many organizations made the critical decision to reduce their workforces, and many employees were shifted to remote work, including clinicians working with telehealth technologies (Begun & Jiang, 2020).

Understanding the factors that affect technology adoption in the health care sector is essential. AlQudah et al. (2021) performed a systematic review of studies that analyzed the factors that affected the use of health care technologies across various user groups, settings, and countries through the lens of different technological acceptance theories and models. They found that trust, computer self-efficacy, anxiety, and innovativeness were the most crucial factors that affected health care technology acceptance. They also emphasized that it was essential to conduct further research on health care technology acceptance to assist decision-makers who provide health care professionals and physicians with the necessary technological resources to perform their work adequately.

U.S. Healthcare System. The United States's response, in terms of policy and technology, was said to have a highly decentralized nature. While the federal government is

responsible for significant economic stimulus packages, the states oversee many containment and health measures. In 2019, telemedicine coverage and policies were primarily determined on a state-by-state basis. Sixteen states had payment parity between telehealth and in-person services for private coverage, and 28 had coverage parity policies for their respective state Medicaid programs. Most states did not have a condition for payment that placed restrictions on the types of providers or the settings in which patients received care. Although most states allowed remote patient monitoring or provider reviews of previously recorded video/audio, 16 states restricted telehealth services to only synchronous technologies.

Health Policy. The first primary COVID-19 legislation that Congress passed, known as the Coronavirus Preparedness and Response Supplemental Appropriations Act, provided emergency funding of $8.3 billion to combat the COVID-19 epidemic (Nicola et al., 2020). The Centers for Disease Control and Prevention distributed $950 million of this funding to state and local health departments, and $300 million was designated for purchasing vaccines and treatments. The Office of the Secretary for Health and Human Services received $3.1 billion of this funding, which is available until 2024. The Families First Coronavirus Response Act was officially signed into law on March 18 (S.3548 - 116th Congress, 2020).

Technology Policy. The National Institutes of Health, the preeminent health research organization and a funding body in the United States, received $945 million due to the Coronavirus Aid, Relief, and Economic Security (CARES) Act (2020; S.3548 - 116th Congress, 2020). This came after the National Institutes of Health's call for special addenda to be attached to existing grants to address COVID-19. This program will contribute $500 million to the early-stage research and development of technologies to create COVID-19 tests that are quick and widely available (National Institutes of Health, 2020). While new testing technology is being

developed, the concept of performing pooled testing has gained traction as a potential solution for optimizing testing facilities and supplies already in existence.

The Problem

The general problem to be addressed is the failure of health care managers to manage increased telehealth use, resulting in the inability of organizations to control health care management and administration, the cost of health care services, and new care management practices. The central problem health care managers encounter is organizing and administering health care in a changing environment. The COVID-19 pandemic has not yet been eradicated, meaning that demand for remote health care services would retain its popularity. The analysis of this trend by Gajarawala and Pelkowski (2021) showed that the widespread adoption of telehealth, despite its benefits during the pandemic, has been adversely affected by regulatory, managerial, legal, and reimbursement challenges. However, it is unclear how to manage health care provisions via telehealth at a larger scale or how to overcome the barriers. Shachar et al. (2020) revealed that a rapid increase in telehealth use changed payment, privacy, and licensing practices across health care. Specifically, cross-state billing is still a significant barrier, privacy policies must be more nuanced, and the management of telehealth services is still problematic. Overall, it is unclear how new management practices could address the challenges and changes made by a rapid increase in telehealth use.

The specific problem to be addressed is the potential challenges health care administrators in the United States hospital industry faced during the recent pandemic in managing increased telehealth use, which potentially resulted in organizations' inability to control health care management and administration, the cost of health care services, and new care management practices.

Concepts

The increased use of telehealth represents health care management and administration (Shachar et al., 2020). The increased use of telehealth is related to costs and new patient care management practices (Gaveikaite et al., 2020; Snoswell et al., 2020).

Telehealth Use. Telehealth is a domain of information and communication technologies (ICT) in medicine that constitutes health information exchange without physical co-presence (Altmann et al., 2022). Telehealth is defined as synchronous or asynchronous consultation through ICT, such as telephone, secure message, or video conferencing, to overcome functional or geographical distances (Breton et al., 2021). In telehealth, individuals manage aspects of care with the remote support of health care professionals through direct communications that are digitally mediated (Blandford et al., 2020). The provision of remote health care is the hallmark of successful telehealth; however, telehealth surrounds increasing access to health care, ensuring medical care from home, and emerging ideas for remote care in chronic and acute conditions (Altmann et al., 2022). Telemedicine is a form of telehealth defined as:

> The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interest of advancing the health of individuals and their communities. (Almathami et al., 2020, p. 2)

It has many applications, including online patient consultations, telehealth nursing, remote physical and psychiatry rehabilitation, and remote control (Haleem et al., 2021). Telemedicine visits can be conducted over various non-public-facing video communication tools, free or low-

cost, such as Apple FaceTime, Facebook Messenger video chat, Google Hangouts, and Skype (Calton et al., 2020).

The pressures to adopt telehealth solutions to enable health care self-management predate the COVID-19 pandemic. According to Hyder and Razzak (2020), one of the early applications of telemedicine in the United States was established by the National Aeronautics and Space Association in 1960 to monitor astronauts in flight by medical teams and physicians during the Project Mercury mission, which allowed the health monitoring of astronauts as they studied the effects of the outer space environment on the human body. Since then, it has been increasingly used for greater ability and access to health care. From 2010 to 2017, the percentage of American hospitals that connected patients by video and other technology increased from 35% to 76%, and the American Medical Association reported that telemedicine insurance claims increased by 53% from 2016 to 2017 (Kichloo et al., 2020). Early adopters of telehealth have customarily been in remote communities with limited access to traditional care providers (Blandford et al., 2020). It was also adopted to enable specialty palliative care in seriously ill patients' homes, thereby increasing their satisfaction through the convenience and time-saving effects of video care (Calton et al., 2020). Pressures to adopt telehealth solutions grew because of the increasing number of patients with chronic diseases surviving to old age because of medical advancements (Blandford et al., 2020).

However, telehealth and telemedicine usage expanded greatly during the COVID-19 pandemic. Like other remote-based industries, the telemedicine industry saw significant growth resulting in a 154% increase in appointments compared to the same time in 2019 (Anderson et al., 2022; Goldberg et al., 2022; Koonin et al., 2020). COVID-19 necessitated the reduction of viral transmission by limiting person-to-person contact while still maintaining the capacity to

treat individuals for viral symptoms and other medical conditions (Fisk et al., 2020). The pandemic and related quarantines, confinements, and social distancing challenged health care services and concomitantly stimulated digital health expansion and telemedicine (Benis et al., 2021; Blandford et al., 2020). Benis et al. (2021) stated that telemedicine and remote health care delivery were declared as global public health responses to gain control over the virus. Telemedicine was catapulted into the role of a critically essential service to mitigate the spread of COVID-19 infections and conserve valuable personal protective equipment (Calton et al., 2020; Clancy & Kirsh, 2021). COVID-19 has inextricably changed how society thinks about health care, and the rapid evolution of virtual care has allowed humanity to redefine post-pandemic care (Clancy & Kirsh, 2021).

Telehealth and telemedicine are expected to experience increased utility even after the pandemic. Anderson et al. (2022) stated that while telemedicine was previously used when in-person health care was inaccessible to individuals, the COVID-19 pandemic provided opportunities for health care institutions to set up the necessary infrastructure for telemedicine to continue well after the pandemic ends. While the pandemic forced individuals and health care systems to explore possible and desirable models of care to adjust to the rapidly evolving situation, many of the changes introduced during the pandemic were expected to remain and even be enhanced (Blandford et al., 2020). Improved computer literacy and access to technology are increasingly removing barriers to telehealth and are necessitating new conversations on the role it will have beyond the pandemic.

Regulations in the United States regarding telehealth and telemedicine are evolving. In 2020, the United States relaxed regulatory measures to allow patients to receive telemedicine across state lines and enforce Medicare reimbursements for telemedicine visits. The Drug

Enforcement Administration allowed the prescription of controlled substances through telemedicine without prior in-person evaluation (Calton et al., 2020). State licensing requirements were relaxed to allow out-of-state physicians to practice across greater jurisdictions (Goldberg et al., 2022). The Centers for Medicare and Medicaid Services and various private health insurance payers also allowed payment parity between virtual and in-person visits. They also stated that Medicare expanded coverage for telehealth by introducing payment for remote physiologic monitoring, waiving audio-video requirements for certain telehealth services, and allowing hospitals to bill for services provided remotely by hospital-based clinicians. The Health Insurance Portability and Accountability Act violation penalties were also suspended if telehealth services were provided in good faith, allowing the use of Facetime and other non-HIPAA compliant platforms to allow greater accessibility.

       Benefits of Telehealth. Digital health supports the effective use of public hospital resources and increases the accessibility of health care services. Internet health enables the remote triaging of patients away from overcrowded public hospitals, which is especially useful for patients with health needs who can be appropriately treated in a virtual outpatient manner (Cheng et al., 2022). Breton et al. (2021) stated that this delivery care approach had reduced the demand for emergency services and improved the accessibility of health care for some patients. They also stated that telehealth has other advantages, such as cost savings, convenience, and ease of organizing multidisciplinary visits. This technology offers a new model of health care service delivery across geographical areas and can be used to facilitate and promote health care accessibility for people who do not have regular access to such services in their residential areas (Ayatollahi et al., 2015; Bradford et al., 2013; Gajarawala & Pelkowski, 2020; Haleem et al., 2021). Virtual visits also provide the opportunity to monitor chronic conditions, conduct virtual

examinations, and support the wellness of patients (Clancy & Kirsh, 2021). Virtual visits improve the quality of medical practice by allowing doctors to spend less time on rural assignments and provide more care to patients (Haleem et al., 2021). New revenue streams may also be created by allowing practitioners to expand their reach into new communities without changing locations (Kichloo et al., 2020).

Telehealth has the potential to improve patients' quality of life. Fisk et al. (2020) stated that a 2013-2014 Australian study involving nearly 300 telehealth patients showed that participants who utilized telehealth platforms improved their health literacy and health behaviors and improved their anxiety, depression, and overall quality of life. They also stated that although personal contact in the form of touch and presence is not within the scope of telehealth, telehealth services could at least affect social isolation and loneliness that often afflict older patients by allowing them to make connections that offer comfort and companionship. Bradford et al. (2013) studied telehealth as a part of home-based palliative care and found that the families of individuals with complex palliative care often experienced statistically significant reductions in anxiety, providing them with a sense of security. They stated that telehealth often influenced anxiety and quality of life positively and did not exhibit detrimental effects to individuals who use it.

Telehealth also has practical and economic benefits for patients and their families. Bradford et al. (2013) stated that significant savings could be made in travel costs and time if telehealth appointments were utilized instead of home visiting. Telemedicine allows individuals to seek care without taking time off from work or arranging childcare (Haleem et al., 2021). Telemedicine can also help reduce American health care spending by decreasing potential problems like medication misuse, prolonged hospitalizations, and unnecessary emergency

department visits (Gajarawala & Pelkowski, 2020). Telehealth can improve efficiency without higher net costs and reduces patients' travel and wait times while enabling a comparable or improved quality of care, thus improving patient satisfaction. Rising health care costs and the need for better-quality treatment also motivate health care institutions to investigate the benefits of telemedicine (Haleem et al., 2021). Telemedicine applications can potentially speed up the treatment of various medical conditions because they ensure continuous contact between patients and health care providers and expand access to health care facilities using advanced technologies.

Telehealth and telemedicine have helped in reducing the spread of COVID-19 infections. Since the beginning of the pandemic, telehealth allowed the remote triaging of patients, rapid information access, routine follow-up care, remote diagnosis, and remote care (Breton et al., 2021). Telemedicine services have thus helped to prevent the spread of the novel coronavirus in congested health care settings and removed the economic burden of health care providers having to accommodate more patients in-person (Anderson et al., 2022). In addition, telehealth and telemedicine allow individuals to seek care for their other medical conditions without worrying about being exposed to COVID-19 infection (Fisk et al., 2020). It benefits individuals with chronic medical problems or weakened immune systems (Haleem et al., 2021).

Challenges of Telehealth. Despite the various benefits associated with telehealth, numerous challenges are associated with its implementation. For instance, the lack of physical presence in telemedicine poses various diagnostic and clinical limitations (Kichloo et al., 2020). Cheng et al. (2022) stated that it is vital to consider the appropriateness of virtual care because there are many medical conditions for which care provision through a virtual environment is inappropriate. For postoperative patients, telemedicine does not allow for the physical

examination of the operative site, making it difficult to obtain important information (Burroughs et al., 2020). Although physical distance is necessary for patient safety and to reduce the risk of COVID-19, the absence of an in-person evaluation and focused physical exam may make it difficult to evaluate and treat patients, further increasing the risk of misdiagnosis. Misdiagnosis can lead to significant increases in morbidity and mortality, emphasizing the need for the proper triaging of patients. In addition, telehealth also poses concerns regarding the potential weakening of therapeutic relationships and depersonalization of practice (Breton et al., 2021).

The technological aspect of telehealth presents risks. Julien et al. (2020) stated that the successful transition to telemedicine requires the intersection of three key factors: an internet-capable device, broadband internet access, and the technology literacy needed to utilize the first two factors. According to Jnr (2020), the technological process of telehealth necessitates the upskilling of medical practitioners to utilize virtual technology and equipment. To ensure the accurate medical history of patients, all patients and doctors must have sufficient hardware and software security in place (Haleem et al., 2021). It is also crucial for virtual software deployed for telemedicine to be user-friendly to ensure accessibility for patients with low technological proficiency (Jnr, 2020). According to Blandford et al. (2020), telehealth may also exacerbate the digital divide, be limited by software engineering quality, and be prone to security breaches. Telehealth platforms must therefore be constantly updated to ensure security, reliability, and flexibility to adequately meet different stakeholders' regulatory, professional, and health care requirements (Blandford et al., 2020; Jnr, 2020).

Patients and providers may also have concerns regarding the security of personal health information (Kichloo et al., 2020). The increased use of telemedicine requires a nuanced approach to privacy, and HIPAA regulations may need to be revisited, so patients can be given

the responsibility and ability to share their information with practitioners (Shachar et al., 2020). To realize the full potential of telehealth, patients and practitioners must be able to trust digital systems to adequately secure and encrypt their data to protect patients' privacy (Blandford et al., 2020). Telemedicine's success is highly dependent on clinician competency training that allows practitioners to deal with issues with technology, such as privacy and security, informed consent, and observation using technology (Xu et al., 2021). Patients must be made aware of their privacy choices and that all policies on data-sharing are balanced on the interests of the individual and the population (Blandford et al., 2020).

While the digital divide is narrowing, the gaps in internet affordability and connectivity in rural America continue to challenge many (Clancy & Kirsh, 2021; Fisk et al., 2020; Lopez et al., 2021). The lack of affordable broadband access, access to inexpensive devices, and technology literacy can limit patients' ability to use telehealth and telemedicine. The technological barriers of unreliable internet connections and the interoperability of various technologies may limit the adequate implementation of telehealth (Fisk et al., 2020). Individuals in remote and rural areas may not be able to adequately utilize telemedicine due to the low penetration of smart devices and the low expansion of 3G/4G internet networks (Jnr, 2020). A collective failure to treat widespread internet access as the public utility that it has become could lead to reliance on expensive mobile data plans to fill the connectivity void, which may become an inequity in health care access, especially in the era of post-pandemic recovery (Julien et al., 2020).

While telehealth use has rapidly increased during the pandemic, few physicians and patients are adequately educated on the best practices for utilizing these digital services, and further studies are needed to explore how physicians and patients can best utilize telemedicine

and virtual care (Jnr, 2020). Telehealth requires changes in working practices and data curation (Blandford et al., 2020). According to Clancy and Kirsh (2021), clinicians and health professional trainees must learn to use technology to enhance provider-patient interactions and communication rather than simply attempting to replicate in-person dynamics. The authors stated that there is a difference in how health professionals can best communicate and engage with patients on a virtual setting in comparison to face-to-face visits, and further information is needed on how patient-provider interactions within a virtual space can be optimized to improve their relationship and the overall experience. Telehealth may also increase the risk of inappropriate use and overutilization. Cheng et al. (2022) stated that doctors providing telemedicine consultations on third-party platforms who are reimbursed via a fee-for-service scheme might overutilize the platform through unnecessary repeated follow-ups.

Perceptions of Telehealth. Patients' perceptions are central to the successful delivery of any health care service. Thirunavukkarasu et al. (2021) stated that the successful implementation of any health care delivery method, including telemedicine, depends highly on the patients' perception and satisfaction. The authors stated that patients are the primary source of insight on whether health care services are appropriately delivered and if the care meets their expectations. It is crucial to ensure positive patient experiences, which are positively associated with illness recovery and medication adherence; conversely, suboptimum patient experiences may lead to worsened health conditions and increased health care costs (Khairat et al., 2020). In older studies, the patient's experience is traditionally defined as patient-reported encounters and events within and across the care continuum; however, the patient's experience in the virtual world may have to be defined differently. For instance, patients in virtual care do not interact with or rely on health care professionals to complete specific tasks, such as patient registration or requesting

appointments. There continues to be limited knowledge regarding the patients' experience within a virtual care setting, and this shift provides opportunities and challenges in providing a patient experience that is at least as favorable as in-person visits.

Patients often report high satisfaction with telehealth in general practice. In a cross-sectional study, Thirunavukkarasu et al. (2021) assessed the patients' perceptions regarding outpatient telemedicine clinics through a questionnaire-based survey of 720 patients who attended at least one of the various outpatient telemedicine clinics. The authors found that 54.7% of the patients had high satisfaction with the health care experience. The authors also stated that while the participants encountered challenges with telehealth, including technical difficulties (53.1%) and a decrease in personal interactions (30.4%), around 75% of the participants expressed a desire to continue using telemedicine services even after the COVID-19 pandemic. A mixed-method study by Imlach et al. (2020) showed that patients reported high levels of satisfaction with telehealth during lockdown because it provided convenience and safe access to health care without having to content with fear of contracting COVID-19; however, they stated that some patients tend to have a strong preference to be seen in-person for specific conditions.

There are various notable drawbacks to telehealth from the perspective of patients. Technological barriers are the most common barrier to telehealth utility in various empirical studies across various populations (Li et al., 2020; Lopez et al., 2021; Naik et al., 2022). Telehealth use, particularly among older adults with chronic conditions, can be particularly challenging (Ladin et al., 2021; Lopez et al., 2021). Ladin et al. (2021) stated that older adults often have less access to and comfort with technology than younger adults, and consequently, they have lower telehealth willingness and satisfaction. The authors stated that further studies are needed to elucidate the barriers that need to be addressed to promote quality telehealth use

among this population. Khairat et al. (2020) conducted a cross-sectional study on a cohort of patients with COVID-19 symptoms in a virtual clinic. The authors focused on the visit volume, wait times, visit duration, diagnosis, prescriptions received, and patients' satisfaction. Out of the various factors, the authors found that long wait times were a major drawback in the patients' experience, and virtual clinics must have a way to handle high-volume call times and provide patients with approximated wait times.

Ensuring the health care workers' positive experience is essential because they deliver telehealth-based services. The imperative to provide telehealth that meets patients' needs during the pandemic raised various challenges for primary health care providers, and its rapid implementation raised various questions about implications in different clinical contexts (Breton et al., 2021). The authors stated that physicians had to adopt telehealth technologies expeditiously, but empirical studies on their perspectives are scarce; therefore, further studies are needed to explore how health care providers can be supported in their engagement with different telehealth technologies. Health care professionals using telehealth may encounter problems with ease of use, attitude, and patient-physician relationships; therefore, it is essential to provide the necessary training to address these issues (Ahmed et al., 2021). Studies indicated that a lack of skills, knowledge, and training, along with factors such as initial costs, reimbursement issues, and restrictive regulations, are common barriers to the proper use of telemedicine, and it is crucial to explore how confidence with telehealth can be improved (Ayatollahi et al., 2015; Goldberg et al., 2022).

Health care practitioners may be concerned about using telehealth as an alternative to traditional care. While telemedicine provides rapid access to medical care remotely during health emergencies, it is a disruptive process, and several physicians have concerns regarding patient

privacy policies or whether telemedicine assessment can be considered an acceptable substitute for a complete medical examination (Jnr, 2020).

While the results of empirical studies are optimistic regarding the utility and patient satisfaction surrounding telemedicine, further studies are needed to circumvent the perceived disadvantages of telemedicine. Telemedicine's indicators for health care success include convenience, reduced costs, and mitigation of the paucity of clinicians and specialists; however, as communities continue to be content with the inequities and gaps widened by the COVID-19 pandemic, policymakers and health systems must ensure that the solutions introduced do not end up exacerbating the problems (The Lancet Rheumatology, 2022). Imlach et al. (2020) stated that equitable access is fundamental to good primary care. While telehealth can potentially mitigate the expected negative impacts of COVID-19 on access to general practice, it may also result in unintended consequences for some. Thus, the authors stated that it is vital to understand telehealth's positive and negative experiences and how it can be best utilized in the future.

Impact of Telehealth on Health Care Management. The outcomes of telehealth are dependent on various design details, including individual factors, such as health literacy and digital literacy; however, it is also dependent on the quality of integration with clinical care pathways and proper collaboration between different health care organizations to improve processes and deliver cost-effective care (Blandford et al., 2020). Evidence shows that telemedicine as a technology is worthy; however, the return on investment may vary with the care pathway and the team's ability to implement it effectively. Clear leadership, staff readiness, and patients' capacity for change are crucial to ensuring positive results (Freed et al., 2018). To ensure the long-term benefits of telehealth, leaders must work with professionals to ensure digital inclusion, data security, and flexible solutions that are intuitive and tailored to the needs of their

users (Blandford et al., 2020). This tailoring will help health care workers overcome resistance to changing established work practices.

Health care leaders must contend with various challenges, such as inadequate funds, lack of experience, and the unavailability of necessary infrastructure (Jnr, 2020). The COVID-19 pandemic increased the United States population's interest in telehealth; however, the level of population interest did not correlate with the proportion of hospitals that provided telehealth services in the United States, which raised the question of whether the health care system can meet the increased demand in this service area (Hong et al., 2020). While telehealth can help improve the triage and coordination of care for patients with COVID-19, the telecommunication infrastructures in American hospitals may lack the capacity to accommodate the ongoing health care needs of patients with other health conditions. Thus, leaders must balance the telehealth service delivery between patients with COVID-19 and patients with other conditions. The role of the leader in the pandemic and post-pandemic era has also shifted drastically, as they must place increased attention on protecting the welfare of their employees while introducing effective and flexible processes (Daaboul & Nasr, 2021).

Leaders play various roles in the implementation of different HITs. Through a systematic review of the literature, Laukka et al. (2020) found that leaders take on the role of supporter, change manager, advocate, project manager, facilitator, champion, and decision-maker. All leaders are responsible for supporting the implementation of HITs within the organization, and the quality of provided support influences the success of the HIT being introduced. In addition, leaders must perform tasks related to change management by actively resolving conflicts between stakeholders based on introducing new technologies. Leaders must advocate for and display a visible commitment to the implementation process of technologies. As project

managers, leaders must feel responsible for the implementation outcomes and be aware of the impacts of the HITs introduced to the organizations. They must also serve as decision-makers, facilitators, and champions of HITs to ensure successful integration (Laukka et al., 2020). Leaders play a crucial role in digital transformation; however, little is known about what leadership in digital health services means or requires, and a robust conceptualization of leadership in digital health leadership is necessary to support health care leaders working on digitalization and for middle and senior management to be able to create better services, facilitate a continuously evolving leadership, and advance research (Laukka et al., 2020).

Leaders have a crucial role in the adoption of telemedicine. Findings show that leaders' inability to manage changes associated with telemedicine, which may be exhibited through a piecemeal approach to the change process and a lack of understanding of the planning, management, and reinforcement changes needed when implementing telemedicine services, may limit the successful adoption of telemedicine (Kho et al., 2020). Despite the importance of the leadership role in the introduction of HITs and in managing the pandemic and the post-pandemic recovery of health care institutions, little is known about health care leaders' perspectives on the effectiveness of telehealth and the challenges associated with its adoption. While various studies have been conducted on the benefits and barriers associated with telehealth, scant research has been conducted with a particular focus on health care providers' perspectives regarding the range of potential implementation, financial, technical, and interoperability hurdles that can occur during its adoption. Further studies are needed to understand how society can focus the required resources toward eliminating these potential hurdles (Lintz, 2022).

Theories

The theoretical framework for this study comprises organizational theories outlined by Birken et al. (2017) and Bass's (1985) transformational leadership theory. Organizational theories are used to analyze, understand, and improve health care services' organizational design and behavior. Given the increased use of telehealth, transformational leadership theory framed how health care managers manage organizational adjustment.

Organizational Theory. Organizations bring people and resources together to achieve desired outcomes. Organization theory as a distinct field can be traced back to the book *Organizations* by James March and Herbert Simon (1958). The authors sought to explain how people of different competencies can unite as an organization and accomplish a lot despite potential weaknesses among its members (Davis & DeWitt, 2021). Daft (2010) defined an organization as "(1) social entities that (2) are goal-directed, (3) are designed as deliberately structured and coordinated activity systems, and (4) are linked to the external environment" (p. 11). He stated that the key elements of organizations are not the buildings nor the policies and procedures that govern the organization; instead, the key elements of organizations are the people comprising it and the relationships that they have amongst themselves. Daft emphasized that organizations adapt and inform their rapidly changing environment and must contend with the challenges of their external environments.

Organizational theory gives tools to analyze organizations acutely and intensely for patterns and regularities in organizational behavior and design. Nicholson (1995) defined organizational theory as a series of academic viewpoints that explain the multiplicities of organizational processes and structures. Daft (2010) stated that organizations face evolving challenges, and thus the concept of organizations and organizational theory continues to evolve.

Oyibo and Gabriel (2020) stated that the social and technological changes brought on by the Industrial Revolution necessitated the development of organizational theories, which have since evolved because of environmental changes. Organization theory provides an approach to seeing, investigating, understanding, and further developing firms (Qin, 2022). It is a macro examination of organizations because the theory focuses on the whole organization as a unit (Daft, 2010). According to Birken et al. (2017), organizational theories provide researchers with various relevant and largely unexplored explanations of the complex interactions between organizations and their environment. The authors stated that organizational theories could help describe, explain, and predict the complex interactions between organizations and their external contexts; therefore, they can help explain and ground research on funding fluctuations, policy changes, workforce dynamics, and other such processes. Daft (2010) stated that organizational theory is directly relevant to top and middle managers because they are responsible for setting the goals, strategies, and decisions regarding the organizational structure and design. Various studies explored how specific organizational theories can explain how health care organizations implement new structures and processes (Birken et al., 2017; Dadich & Doloswala, 2018; Leeman et al., 2019; Shay, 2015). There were three recurrent theories: contingency theories, institutional theory, and transformational theory.

      Contingency Theories. Contingency theories posit that the organizations' design decisions are contingent upon international and external contexts (Birken et al., 2017). Contingency theories indicate that the most effective way to structure a task depends on the nature of both the task and the context of the task (Leeman et al., 2019). In the context of organizations, contingency theories state that an organization that is effective and efficient under some conditions may not be successful under different conditions (Birken et al., 2017). The

internal context of organizations pertains to factors that influence the organization's work activities, and the external context pertains to factors outside of the organization's control, which may influence the organization's structure and development. These concepts may help frame how the implementation of technological innovations in health care may be influenced by their fit with the organization's internal context and ability to adapt to its external context.

Institutional Theory. Institutional theory can be used to frame how institutional pressure and desire for institutional legitimacy influence organizational behavior as telehealth becomes more popular, considering the pandemic. According to the institutional theory, organizations are motivated to align their behaviors and structures with the norms and expectations of the institutions in their environments, including the government, accrediting bodies, and client groups (Birken et al., 2017). This provides a way of understanding how organizations adapt their processes based on political, social, and cultural demands and their desire to gain legitimacy in the eyes of stakeholders (Dadich & Doloswala, 2018). Organizational changes result from three types of institutional pressures: coercive, mimetic, and normative isomorphism (Leeman et al., 2019). Birken et al. (2017) stated that organizations change to adapt to strong pressures to adopt new technologies, forms, or behaviors to comply with mandates, regulations, and rules. Organizations may also adapt and align with strong professional values, norms, and expectations that are relayed to them through formal education, licensing, accrediting bodies, and training.

Transformational Theory. Transformational leaders can positively influence members' behaviors. The concept of transformational leadership was initially coined by political scientist and sociologist James V. Downton (1973); however, the concept gained credibility and worldwide acknowledgment through the work of James MacGregor Burns (1978). Transformational leaders serve as role models, communicating clear goals, vision, and

inspiration for their staff (Belrhiti et al., 2018; Benmira & Agboola, 2020). Burns stated that transformational leaders support and encourage followers to raise their morals, beliefs, motivation, perception, and association with the organization's goals. TLT posited that effective leaders could stimulate their subordinates' awareness of their work's value, trigger their internal motivation, and encourage them to focus on organizational goals and not only their personal goals (Belrhiti et al., 2018). Top leaders who use transformational leadership approaches can enhance organizational innovation by creating a compelling vision and an environment that supports risk-taking, experimentation, and exploration (Daft, 2010).

According to Benmira and Agboola (2020), this leadership approach is utilized when an organization is undergoing significant change or requires a new direction, and it is beneficial today as more technologies are being introduced and challenging the organization's agility and flexibility. This framework may be instrumental in framing how health care managers influence their members by setting a clear vision, inspiring them, and encouraging them to utilize telehealth technologies in alignment with the company's objectives. Conversely, this theory can be used to frame how health care managers may fail to adequately relay a clear vision and thus fail to motivate members to implement new technologies in health care.

Constructs and Variables

The constructs found in the research study are increased telehealth use, costs, health care management, and new patient management practices. The COVID-19 pandemic has led to the rapid growth of the telemedicine industry, which has since become a common form of care (Anderson et al., 2022). The U.S. Department of Health and Human Services liberalized HIPAA compliance guidelines for the COVID-19 pandemic, allowing medical consultations via Apple FaceTime, Facebook Messenger video chat, Google Hangouts, and Skype (Calton et al., 2020).

Costs. Telehealth can impact costs due to reduced travel, economies of scale, increased revenues, and shorter interactions; thus, the potential to reduce the cost of health care is one of the principal reasons for the increased interest in implementing telehealth (Snoswell et al., 2020). Telemedicine has been an alternative for patients in low-income countries who cannot afford good health care services not covered by their social insurance; moreover, telemedicine can be optimized for health crisis mitigation because of its cost-effectiveness (Salsabilla et al., 2021).

Impacts of Telehealth on Patients. A study found that the time a patient spent accessing health care was reduced by 56% when utilizing telemedicine compared to conventional health services; moreover, average maintenance costs could be cut by 94% (Hwei & Octavius, 2021). However, telemedicine use has potentially decreased the quality of patient-doctor relationships. Technological errors and poor communication can contribute to less efficient services.

Leadership in Health Care. Health care facilities constantly change, and all stakeholders are challenged to adapt. Sixty percent of all change projects, not just in health care, fail due to poor organization (Hospodková et al., 2021). The COVID-19 pandemic emerged as an unprecedented global humanitarian crisis. Leaders were expected to manage volatility, complexity, ambiguity, and uncertainty to make rapid and high-impact decisions in a limited-information environment (Daaboul & Nasr, 2021).

Related Studies

The concepts are relevant to the field of research because they offer several new perspectives that make it possible to respond effectively to the COVID-19 pandemic (Van Bavel et al., 2020). The increased use of telehealth relates to health care management and administration (Shachar et al., 2020). The concept is related to the specific problem by

examining the impact of the increased use of telehealth on health care management and administration.

Telehealth has the potential to become an essential service for the general population, health care providers, and patients with COVID-19, which is especially true when people are required to remain in quarantine. Telehealth puts patients in direct contact with health care providers, allowing them to receive real-time guidance on their health concerns. The mental toll that the COVID-19 pandemic has on those who work in the medical field is a separate but related aspect of the pandemic's effects.

Anticipated and Discovered Themes

In qualitative research, one of the most fundamental tasks is identifying emerging themes from the data. Identifying themes is essential because the themes are typically derived from various scholarly sources. Themes can originate from various places, including the researcher's prior theoretical understanding of the phenomenon that is the subject of the research and the data as a logically learned approach. In addition to the anticipated themes listed below, six themes were discovered during the interview process. All of those themes were interrelated and contributed to the overall goal of improving healthcare and patient outcomes. Healthcare professionals focused on various aspects such as telehealth, leadership, policies, data privacy, cost-effectiveness, and quality care to work together towards providing better care and outcomes for patients.

The Spread of Telemedicine and Its General Acceptance. Implementing a technology acceptance model is necessary for the adoption and acceptance of telemedicine because such models can explain the factors that influence patients' behaviors and help predict those behaviors. Telemedicine enables patients to receive medical attention from both the patient and

the doctor; moreover, it implies that persons do not need to take time off from work or arrange childcare to go to traditional facilities (Haleem et al., 2021). Telemedicine could reduce American health care spending by decreasing problems associated with unnecessary emergency department visits, medication misuse, and prolonged hospitalizations (Gajarawala & Pelkowski, 2020).

Operational Readiness. The level of preparedness and responsiveness possessed by health care systems is directly proportional to the degree to which hospitals and health centers are in a state of readiness (Shachar et al., 2020). One of the hospital readiness strategies that can be utilized in the event of a pandemic crisis is to increase the capacity of intensive care units by using other hospital wards.

Summary of the Literature Review

This professional and academic literature review served as the foundation for the research study. The empirical literature on telehealth from the patients' and practitioners' perspectives shows excellent promise, with patients often reporting high patient satisfaction with telehealth and practitioners acknowledging the capacity of telehealth to enable greater accessibility. However, patients and practitioners continue to experience drawbacks associated with telehealth that limit their engagement with the technology. Furthermore, while various studies have explored the patients' and practitioners' perceptions using telehealth, little is known about the leaders' and providers' perspectives. With health care leaders being pivotal to the HIT adoption of any health care institution, it is crucial to develop the empirical literature from the perspective of health care leaders responsible for supporting their employees in delivering telehealth. Telehealth is an information and communication technology domain that enables remote health care. Telehealth is a broad term that describes various telecommunication and information

technology services beyond traditional health care services (Mahoney, 2020). The COVID-19 pandemic has forced health care organizations to manage capacity, financial loss, and redesign care, consequently, compelling health care leaders to make the critical decision to reduce or release the workforce or to shift their employees to remote work setups, including clinicians working with telehealth technologies to deliver care (Begun & Jiang, 2020). Management initiatives to increase the health care workforce's information and communication technology skills are necessary to substantially benefit from adopting powerful health information technologies (Bronsoler et al., 2022). Health care managers must take advantage of telehealth and adequately handle the challenges of utilizing new health care technologies.

Summary of Section 1 and Transition

Section 1 served as an introduction to the investigation of leadership within the health care field during the COVID-19 pandemic. The background of the study defined the purpose of this research, which is to investigate how health care managers view the increased use of telehealth and how it influences health care management and administration practices in terms of service provision, quality control, and leadership in order to provide quality care to patients. Specifically, the researcher investigated how health care managers view the increased use of telehealth. This qualitative study explained the successes and failures of leadership and how the combination of distributed leadership affects changes in patient care. The purpose of the study was to determine the factors that contributed to the inability to fully capitalize on telehealth by identifying untapped potential and removing obstacles to the delivery of medical care. The latter aspect addresses the function of leaders and managers in health care systems and their perspectives on how telehealth can be utilized. This section also provided a concise overview of the four primary research paradigms and the researcher's choice to incorporate constructivism

into their worldview. Next, the researcher presented a design discussion explaining the differences between fixed, flexible, and mixed methods. At the end of the discussion, it was determined that a fixed method would be most suitable for this research. A high-level overview of narrative, phenomenology, grounded theory, and case study research methods was presented, followed by a discussion of triangulation, including an explanation of its impact on the validity and the methods used to conduct triangulation. The research framework covered various concepts, theories, actors, and constructs to provide an interaction between the flow of information and services. The professional and academic literature was analyzed to support the study's fundamental ideas. A list of uncommon terms, assumptions, limitations, delimitations, reduction of gaps in the literature, implications for biblical integration, and the benefit and relationship to leadership practices were provided to the reader as a final piece of supporting material.

Section 2 explained the researcher's responsibilities. A thorough review will be conducted on the appropriateness of the chosen research methodology, including triangulation, flexible design, and single case studies. Additionally, the researcher will describe in detail the participants, the process that will be used for selection, the population, and sampling. Finally, the section will present a data collection plan, including interview guides and surveys. The researcher will document in the data collection plan the data they plan to collect and how the data will be collected.

Section 2: The Project

In times of crisis, leadership is essential. During the initial phases of the COVID-19 pandemic, health care systems worldwide faced an unprecedented crisis. The crises caused by the pandemic unquestionably imposed a substantial burden on health care workers and leadership tasked with supporting health care workers. Telehealth has emerged as a viable alternative to the more common face-to-face consultations among primary health care providers due to the COVID-19 pandemic. Utilizing telehealth technology is a method of the 21st century that is patient-centered and protects patients, physicians, and others. Telehealth delivers health care services by professionals over a significant distance using ICT to exchange valid and accurate data (Ekeland et al., 2010). Real-time or store-and-forward methodologies may be utilized in the provision of telehealth services. Because of the rapid development and shrinking of portable electronics, most households now have at least one digital device, such as a smartphone or a webcam, capable of facilitating communication between patients and health care providers. Video conferencing and similar television systems also provide health care programs for hospitalized people or in quarantine to reduce the risk of exposure to others, including employees, to protect patients and the general public.

Providers face several challenges when attempting to provide patients with telehealth services that are adequate to meet their needs during a pandemic. Despite physicians' rapid adoption of telehealth in response to the COVID-19 pandemic, more information is needed on physicians' and leadership's perspectives regarding telehealth.

Purpose Statement

This qualitative case study explored how health care managers perceive the increased use of telehealth and how it shaped health care management and administration practices regarding

service provision, quality control, and leadership. The COVID-19 pandemic dramatically shifted health care management by affecting how care is delivered, charged, and governed (Thomas et al., 2022). One such sudden change was the increased use of telehealth by health care providers and patients due to quarantine restrictions and a shortage of personnel during the peak of virus dissemination. The effect of increased telehealth use on health care management is under-researched, requiring a more thorough analysis of this phenomenon.

The study examined leadership drivers, their impact on health care change implementation, and how leadership success or failure affects pandemic-related quality care outcomes. This qualitative study used narrative analysis to analyze individual experiences and peer-reviewed scholarly research to identify themes in the context of participants and case studies.

Role of the Researcher

According to Patton (2002), qualitative research relies on the researcher's skills, creativity, training, and intellect, making it both a strength and a weakness. Qualitative research requires a balance of critical and creative thinking. The researcher's role varies by research tradition. The role of the researcher in qualitative research is considered an instrument of data collection, which indicates that the data are mediated by human instruments instead of collected through inventories, questionnaires, or machines (Denzin & Lincoln, 2008). To successfully carry out this function, the research's consumers must understand human interest. As a qualitative researcher, it is essential to explain all the aspects of the study without bias or assumptions. The researcher conducted appropriate participant interviews, chose a suitable design method, carried out the required literary analysis, made pertinent observations, correctly handled the data, and analyzed the data per the design methodology. The researcher will be

accountable for all aspects of the research investigation, including data collection, statistical analysis, and the presentation of their findings. Researchers are crucial to the social constructs being studied. As a tool or instrument, the researcher must describe relevant aspects of self, including any biases and assumptions, expectations, and experiences, to qualify his research ability. Constructivism views reality as a human construct, making subjective meanings, social phenomena, and behaviors associated with the individuals under study within a defined social context (Bogna et al., 2020). The researcher's objective was not to unearth a universal truth or human experience concerning context and value; instead, the researcher sought to use the flow of knowledge and truth to comprehend different individuals' interpretations and personal constructions. The researcher hoped to understand the world from the individual's perspective. Additionally, constructivism examines how people think and act, including how they solve social problems, like leadership. This method allows researchers to study organizational ethics, leadership, and culture flexibly.

Even though the Bible is not a guide to conducting research in the traditional sense, it provides a foundation for conducting research. Scripture not only provides examples of people who engaged in core research activities, but it also describes critical elements that can be found in several types of research while highlighting several research principles. A Christian viewpoint will characterize how individuals experience different circumstances and the foundations upon which they base their beliefs regarding the nature of their subjective reality. For example, in this study, the researcher's and the participants' respective beliefs regarding how God operates and interacts with the world influence and shape their lives. The constructivism paradigm will describe how people's experiences of God's presence are interpreted differently, including how individuals try to comprehend His will and purpose, which are shaped by one's individual

experiences. Humanity tries to understand His will and purpose based on personal experiences. The view is that impartiality is impractical, and the framework and background must be realistic (Kankam, 2019). The researcher acknowledged that different people would have varying perspectives on the world and religious beliefs, and these different perspectives directly impact how people approach research. Qualitative researchers provide the opportunity to examine the discrepancy between formal communications on behalf of and within an organization and informal company culture. The researcher was the facilitator who allowed the distinct identification of different or nontraditional perspectives derived from the formalized approach. Due to the study's adaptable nature and the various questioning techniques utilized in qualitative research, it is a common fallacy among qualitative researchers to label their findings as subjective. For a qualitative researcher, the ability to document, describe, discuss, and extrapolate information that is not readily available to those outside the organization is one of the many advantages of this methodology. The findings of this research will be helpful because it identified themes in the responses that contribute to the academics and industries being studied.

Actions to Conduct the Study

According to O'Sullivan et al. (2007), the research design is defined as plans that guide decisions about when and how often to collect data, what data to gather from whom, how to collect data, and how to analyze data. The authors stated that the research design concept could have broad and narrow interpretations depending on the context in which it will be used. In a broader sense, the term research design can be understood to refer to the strategy that will be used to carry out the study's methodology. In the context of this more general meaning, the design will explain the plan to answer the research questions and will be consistent with the study's purpose.

Abutabenjeh and Jaradat (2018) identified the following six research methodology steps: (a) determine when and how frequently data will be collected, (b) develop or select measures for each variable for which data will be collected, (c) identify a sample or test population, (d) select a strategy for contacting subjects, (e) plan the data analysis, and (f) present the findings. Before sending the organization's volunteers email requests for participation, the researcher will obtain Institutional Review Board (IRB) approval from Liberty University. The potential participants must be 18 or older; health care professionals, including nurses, clinical staff, and executives with five years of experience in the health care industry; and have experience in telehealth management, using telehealth services before and during the COVID-19 pandemic. Participants were screened to ensure that they met the requirements, and they confirmed their willingness to participate in the study by signing a consent form.

This case study was conducted in two parts through Reckner Healthcare, a complete fieldwork solution for health and life sciences market research projects. The first part will be an anonymous survey. The online survey was sent out a week after IRB approval was obtained and closed 2 weeks later. Participant recruitment was conducted via Reckner Healthcare, which gave the researcher full access to their health care professional panel, including physicians, hospital administrators, and executives. Reckner Healthcare screened the participants to ensure they had met all the requirements for this case study. The survey was used for screening purposes only, and the average time per participant was 15 minutes.

The second part of the case study was an interview, which was between 30-45 min per participants. After expressing interest in the study, the researcher and participant scheduled a virtual interview through Teams, Microsoft's videoconferencing platform. Once the meeting was scheduled, the participant signed a consent form. The study participants were asked to join the

Teams meeting with their microphone and camera enabled, using a specific link created by the researcher for the sole purpose of the interview. During the interview, participants were instructed to use their real names, department, and specialties. In the study, the researcher changed the names to codes (i.e., P1, P2, and so on) to protect participants' identities. Microsoft Teams allowed theparticipants to see the researcher's camera. The researcher recorded and transcribed the interviews using otter's tools. The researcher kept copies of the transcripts and video recordings on her home computer and Microsoft's OneDrive cloud.

Bracketing to Avoid Bias

Bracketing is a qualitative research technique researchers use to mitigate the potential adverse effects of unacknowledged preconceptions related to the research and thereby increase the rigor of the project (Tufford & Newman, 2012). Bracketing will protect the researcher from the cumulative impacts of examining emotionally challenging material due to the sometimes-close relationship between the researcher and the research topic that may precede and develop during qualitative research. The researcher's expectations, knowledge of the topics, literature review, and subjective experiences can influence the study's results. Personal bias harms research, so bracketing should start early in the research process. The researcher will use bracketing to avoid introducing personal judgment or recognized perspectives on the social standards that exist around the world. The researcher was the sole conductor of this research, and it was necessary to examine and investigate the limits of the subject matter and their personal experiences.

The researcher will remain passionately involved from a holistic perspective by choosing hospital institutions for the study. However, there is a degree of researcher detachment because the researcher has not personally interacted with those participants and their practices. In this

case, detachment from the practices allowed the researcher to function in a flawed setting. These biased disclosures were reflected upon before beginning the research process. The researcher's constructivist interpretation of social reality took much work to overcome. In qualitative research methods, the researcher serves as the analyst during this research. Throughout the data collection and analysis processes, the researcher utilized memoranda as one of the bracketing methods. The practice of writing memoranda was considered a form of taking theoretical notes. Cognitive growth was explained by the theoretical notes taken during the interview and research processes. The researcher gained greater insight into the participants' experiences due to careful notetaking, which also increased engagement with those experiences. The research process and observational notes are in the organizational notes. The researcher was able to explore essential insights by taking notes. Among these realizations is the acknowledgment of preconceived notions. Writing down one's presumptions will free the researcher to engage with the raw data to a greater extent.

Research Methodology

The study adopted a qualitative research design conducted with a narrative approach. This method assists in exploring how healthcare managers perceive and are affected by the use of telehealth and how it shapes healthcare practices. Specifically, since many aspects of the impact of telehealth on healthcare management are not yet clear, it was critical to determine managers' opinions on this trend regarding implications for service provision, quality control, and leadership. A qualitative case study is a research design that aims to explore and understand a particular phenomenon or case in its natural context through collecting and analyzing in-depth data (Simons, 2009). Typically, this approach involves triangulating various sources of data, such as interviews, observations, documents, and artifacts, to generate a detailed and thick description of the case being investigated. The researcher specifically employed a single case

study design. Exploring the personal experiences of research participants was the optimal

method for studying leadership in the health care industry; furthermore, the effect of increased

telehealth use on health care management is under-researched, requiring a more thorough

analysis of this phenomenon. This section discusses the justification and adequacy of selecting

the qualitative approach and the single-case study design. The application of the methodology as

it relates to the research questions and the use of the triangulation method provided additional

support for the methodology of the research study.

Narrative Design

A narrative design approach is a method in which the researcher analyses and interprets a

collection of individual stories or accounts to identify key themes and patterns that inform the

research question. This approach prioritizes the voices and experiences of participants and aims

to generate an in-depth and rich understanding of a specific phenomenon or topic. According to

Riessman (2008), a narrative design approach involves "the collection and analysis of stories or

narratives of participants, which are treated as units of analysis" (p. 13). The researcher may use

various techniques to collect narratives, such as interviews, focus groups, and journaling, and

then analyze them using various methods, such as content or narrative analysis. In this approach,

the researcher seeks to identify key themes and patterns across the narratives while also attending

to individual participants' unique and specific experiences and perspectives. The resulting

findings can offer a detailed and nuanced understanding of the phenomenon under investigation.

Greenhalgh and Hurwitz (1999) emphasized the value of using a narrative approach in healthcare

research. The authors argue that narratives "can reveal experiences and insights that are not

accessible through conventional research methods" and can help to "humanize and contextualize

data." Using a qualitative narrative approach can be a powerful tool for researchers seeking to

gain a deeper understanding of complex human experiences. By valuing the stories and experiences of individual participants, researchers can uncover unique insights that might be overlooked using other methods.

This research project used a narrative qualitative approach because using that method proved to be a powerful tool for researchers seeking to gain a deeper understanding of complex human experiences. By valuing the stories and experiences of individual participants, researchers can uncover unique insights that might be overlooked using other methods.

This study was not about finding correlations, like quantitative research, but exploring and understanding personal experiences to help the researcher identify trends, similarities, consistencies, and inconsistencies in people's experiences. Personal experience data enhanced leadership research and added depth to the topic. Leadership styles and organizational culture are unquantifiable, so the study used a descriptive research design to allow the researcher to collect participant data.

A qualitative study examines historical events to generalize results that can be correlated to new possibilities. Qualitative studies examine personal experiences and use data to expand the theory and academic research. The researcher can ask open-ended questions that participants can answer fully. This method is flexible enough to evolve the research process. This methodology is adaptable and sufficient to accommodate new developments in the research process, which can be done simultaneously with conducting research.

When applied to a single case, the qualitative method can illustrate the beginning stages of theory development (Reddy, 2020). The researcher conducted surveys and interviews and looked at scholarly evidence to further investigate the perspectives of the people who took part in the research on leadership roles. This project investigated the significance of leadership in the

health care industry and how distributed leadership can enhance organizational efficiencies to provide patients with quality care and more opportunities to benefit from telehealth services. Case studies and mixed methods research are not distinct entities; the boundary between them is permeable and fluid, allowing each to support or direct a research endeavor.

Discussion of Single Case Study

Case studies are a type of research inquiry found in various fields. In this investigation, the researcher conducts an in-depth analysis of the case, typically a program, event, activity, or process with one or more individuals. Cases are limited in time and activity, and researchers collect detailed information over an extended period using various data collection procedures (Creswell, 2014). The elements of a case study are in-depth study, boundaries, multiple viewpoints and sources of information, real-life context, and individuality compared to other cases.

The purpose of a single case study is to provide a researcher with a generalized overview that will assist them in comprehending the context in which their research was conducted by concentrating on a single group of participants. It is best to use the single-case method when investigating the meaning of a particular phenomenon, whether it be on the individual, organizational, or societal level. Case study research can also be used to identify actors, steps, conditions, and variables to develop an explanation for the phenomenon.

A single qualitative case study is a research methodology that explores a phenomenon within context through various data sources. Case study research explores various lenses to reveal several aspects of the phenomenon (Rashid et al., 2019). Descriptive mixed methods of studying leadership, such as conceptual analysis, case studies, survey research, and laboratory experiments, cannot state on their own what qualities successful leaders need to possess

(Flanigan, 2018). A single case study approach was the conclusion developed by the research aimed at synthesizing or providing a confirmable way to demonstrate the outcomes the researcher recommends. This conclusion was developed to demonstrate the reliability of the researcher's recommendations. When scientists have a small amount of information about a phenomenon, they use a single case to describe its essence (Reddy, 2020).

Utilized in the Context of Research Questions

The first research question examined health care managers' perceptions of how increased telehealth use has changed health care management and administration policy. Telehealth's use of office visits and outpatient care increased 78 times in April 2020. Telehealth adoption has increased from 11% in 2019 to 46% in 2020 (Bestsennyy et al., 2021). Dramatic policy changes during the pandemic allowed telehealth services to grow from less than 1% of Medicare services before the pandemic to more than 32% of Medicare claims in April 2020, leveling off to between 13% and 17% by July 2021. In the first year of the pandemic, 44% of continuously enrolled Medicare fee-for-service beneficiaries had telehealth visits, totaling over 45 million. Since COVID-19, HHS's Centers for Medicare and Medicaid Services has allowed audio-only telehealth services. Twenty-nine state Medicaid programs reimburse audio-only services. The pandemic-related telehealth flexibilities allowed entirely virtual providers to serve Medicare beneficiaries and be reimbursed (Hoffman, 2020). Allowing flexibility in methodology, the researcher identified and analyzed themes. Reviewing the research data revealed themes, but the researcher must choose the narrative descriptions that best answer the proposed questions (Bestsennyy et al., 2021).

The second research question examined health care managers' views on how telehealth has affected health care costs. Telehealth investment drove digital health companies' record

venture capital and private equity investments in 2021. Some stakeholders worried that Medicare

beneficiaries' access to alternative providers would fragment care and compromise patient care.

The pandemic's telehealth policy changes raised Medicare and beneficiary costs (Hoffman,

2020). Most telehealth services used to be reimbursed at a lower facility rate, similar to hospital

outpatient department providers. Telehealth was cheaper than in-person care, which explained

the disparity. The pandemic caused Medicare to reimburse all telehealth services, including

audio-only visits, at parity with in-person care, and many state Medicaid agencies and private

payers followed suit. In terms of the quality of care, preliminary evidence suggests that telehealth

services can be equivalent to care provided in person for managing and treating chronic diseases.

The purpose of this question was to investigate the effect telehealth has on health care costs;

specifically, did it lead to an increase in spending, or did it lead to a reduction in overall health

care expenditures?

Discussion of Methods for Triangulation

Triangulation improves research findings' reliability, truth, certainty, and legitimacy.

Certainty ensures that the research will be supported by high-quality evidence. Triangulation

verifies results, complementarity explains results, development informs other methods, initiation

seeks new perspectives, and expansion broadens inquiry. This study used data triangulation, a

popular qualitative research method. Data triangulation will evaluate the qualitative research case

study using multiple data sources to reach a consensus (Gibson, 2017).

Interviews and surveys were sent to several potential participants, but the researcher

expected some potential participants to decline. In qualitative research, interviews are helpful

because they enable researchers to describe, comprehend, and investigate participant thoughts,

individual behaviors, and experiences related to the phenomenon being researched (McGrath et

al., 2019). Interview questions are well-suited for qualitative research because open-ended questions enable the conversation to provide in-depth data that can be analyzed through patterns. Interviews conducted as part of qualitative research are chosen whenever a researcher is more interested in understanding a phenomenon from the participants' points of view rather than attempting to generalize those understandings.

In contrast to surveys that use a predetermined list of responses, open-ended interviews can provide an alternative method that will allow respondents to provide a unique, open-ended response (McGrath et al., 2019). This method gives participants the flexibility and freedom to express themselves freely regarding the topic. This method will provide the researcher with additional exploratory data, uncovering opportunities to identify themes, patterns, or research areas. Pattern-based triangulation confirms the quantitative data, ensuring the interview process does not fabricate results. Triangulating data classifies and organizes the various kinds of data collection into groups. During the interviews, open-ended questions were given to each participant, and their responses were collected. Through triangulation, the researchers seek to identify outcomes and patterns that the participants will acknowledge.

Summary of Research Methodology

This section justified the choices of qualitative method and single case study design. The section examined how applying the methodology to the research questions and using the triangulation method support the study. Triangulation covered data collection methods, like interviews and open-ended surveys. The researcher examined each research question to determine why it is relevant to the study and how the answers can advance industry knowledge. Data triangulation is commonly used in qualitative research to build consensus. The researcher investigated the specifics of individual and organizational experiences via a constructivist

paradigm, a flexible qualitative methodology, and a case study design. These instruments assisted the researcher in identifying themes explaining why organizations with distributed leadership successfully implement changes that enhance patient experience and quality care.

Participants

When conducting research, the researcher must choose the subjects who will participate. In qualitative research, participants are chosen because they can best answer research questions and deepen one's comprehension of the phenomenon being studied. Therefore, finding the right people to participate in the study is crucial in designing the experiment. A significant obstacle that researchers must overcome is the correct selection of participants because researchers must select participants without bias (MacKay et al., 2020). Data collection instruments are the methods researchers use to collect data for a study. In qualitative studies, multiple types of data are frequently employed, including observations; interviews; written documents; audio-visual materials; electronic documents, such as e-mail messages and websites; and anything else that will assist them in answering their research question (Leedy & Ormrod, 2016).

Fair participant selection is a criterion that combines four different principles to produce divergent obligations: (a) Fair inclusion requires participants with diverse characteristics relevant to the study. (b) Fair burden sharing requires that researchers select participants most able to shoulder risks and burdens from research. (c) Fair opportunity requires reasonable efforts to enhance participation opportunities and reasonably discriminate or exclude people from research participation. (d) Fair distribution of third-party risks requests that participants be chosen in such a way as to ensure an equal distribution of risks to bystanders (MacKay et al., 2020). Qualitative research is multimethod in focus, involving an interpretative, naturalistic approach to its subject matter, which signifies that qualitative researchers study things in their natural settings,

interpreting phenomena based on people's meanings (Denzin & Lincoln, 2008). Interviews, surveys, and focus groups are often used to collect qualitative data. The researcher must choose willing participants to be honest and open.

This qualitative case study explored how health care managers perceive the increased use of telehealth and how it influences health care management and administration practices regarding service provision, quality control, and leadership. The research determined the driving factors related to distributed leadership to see if there was a specific influence on the leadership's ability to implement changes in the health care industry that successfully affects pandemic-related quality care outcomes for patients and providers. As a result of the research topic, individuals eligible to participate in this study were those who currently work or have worked within the health care industry for at least 5 years and have experience in telehealth management before and during the pandemic. The study focused on health care leadership and telehealth used. Additionally, this researcher believed that the participants were prepared, had relevant experience with distributed leadership, and were willing to participate in the study.

Population and Sampling

Determining a relevant research population and control or reference population and identifying and ascertaining them are critical in conducting a well-designed epidemiologic study. In the research context, the term research population refers to a well-defined collection of individuals with similar characteristics (Weeks, 2021). Every person or thing in a particular population shares a single, overarching quality or trait. It is vital that the research population be representative of the population of interest and that it be large enough to achieve adequate statistical power. Both requirements must be met for the study to be valid.

A population is a group of people that share a specific set of traits, and a sample is a subset of the population that has been identified (Banerjee & Chaudhury, 2010). A researcher is interested in developing conclusions about an entire group, which they call the population. A sample represents a larger population from which the researcher seeks to collect information for the study. In general, the sample size is always smaller than the population size. Moreover, a population can refer to more than just a collection of individuals. Further, the term population can refer to more than just a collection of individuals. A population may also include a representative sampling of relevant entities, such as firms, governments, and nations. Non-response bias occurs when specific individuals are not asked to participate in the study, while selection bias occurs when specific individuals are excluded from the sample (Rehm et al., 2021).

Discussion of Population

The population of interest was physicians, nurses, and clinical staff within family medicine outpatient care and executives who have worked in private or publics clinics or hospitals for at least 5 years and have telehealth management experience before and during the pandemic; therefore, this population must serve as the study population. The population consisted of health care professionals, physicians, nurses, clinical staff, and the health care administrator employed with Reckner Healthcare. The recruitment of health care managers occurred online using Reckner's proprietary panel. A systematic review was carried out as part of the research, and it involved searching five different databases: PubMed, Scopus, Embase, Web of Science, and Science Direct. Inclusion criteria included studies that clearly defined any use of telehealth services in health care during the COVID-19 outbreak. These studies must be

published between December 31, 2019, and December 2020, written in English, and published in peer-reviewed journals.

It may be possible to generalize the results to the target population if only health care professionals participate. Selection bias occurs when study participants and nonparticipants differ in characteristics that may not be observable. The groups differ in measured or unmeasured baseline characteristics due to how participants were selected or assigned. The researcher did not utilize their work environment to avoid bias, hierarchical relationships or structures, or other job-related pressures that would negatively impact the study. Using one's coworkers or employees as experimental subjects raise ethical bias concerns regarding research results (Radun et al., 2019). The researcher designed the study so that participants would not feel compelled to answer interview questions. The researcher considered all types of individuals involved in the study and their relationships with the researcher.

Discussion of Sampling

It is doubtful that a researcher will be able to collect data from every case; as a result, the researcher must choose a representative cross-section of the population to study, which is referred to as a sample. A sample is merely a selection taken from the overall population that is being investigated. The fact that the researcher will not be able to examine every member of the population gave rise to the idea of sampling. The only way sampling can produce accurate representatives of a specific population is if the sample contains all the significant groups being investigated. The sample size for this research was carefully chosen to reflect the population from which it was drawn accurately. To the greatest extent possible, the sample size will reflect the population accurately to make a significant contribution to the body of knowledge in this area (Gentles & Vilches, 2017). A convenience sample of health care professionals or physicians was

developed using Reckner's Healthcare proprietary panel for the survey. The researcher sent emails inviting participants through Qualtrics, a web-based survey tool that is easy to use and designed for conducting survey research. Participant recruitment was used through Reckner's Healthcare, a portion of Reckner Associates, Inc. division with over 200 employees, offices in three states, and global capabilities. Reckner Healthcare is the industry's most trusted health care fieldwork company with 30 years of experience, partnering with insights agencies and health consultancies to serve their pharmaceutical, medical products, and health care clients.

The recruitment rates for each method were calculated and stratified based on the individual's socioeconomic and demographic characteristics. The researcher used triangulation to strengthen the study results and account for survey biases. The researcher estimated groups outside the sample and used new methods, like web-based computer interviews (Rehm et al., 2021). Upon completing the survey, participants could participate in online interview sessions organized in Zoom or any other similar online platform convenient for participants. All interviews were recorded and transcribed.

The sample size for qualitative studies that rely on in-depth interviews or open-ended questions is typically determined by identifying the point of thematic saturation (Weller et al., 2018)*. The Doctor of Business Administration Research Project Guide* (n.d.) for this course mandates that the researcher collect data from a minimum of 15–30 participants. Creswell (1998) recommended that the researcher sample between 20 and 30 participants. Researchers who use quantitative methods appreciate the value of analyzing small sample sizes, which is connected to the false belief that generalizability is the ultimate goal of all good research. It is the primary reason some otherwise sound published qualitative studies contain inappropriate sampling techniques.

The sample size of a qualitative study will be determined by the extent to which it can satisfactorily answer the research question. In the case of straightforward inquiries or extremely comprehensive research, this might be in the single digits; however, in the case of more complex inquiries, large samples might require various sampling strategies. The number of necessary participants in actual research usually becomes apparent as the investigation progresses when new categories, themes, or explanations stop emerging from the data (Weller et al., 2018).

Theoretical saturation occurs when the theory's constituent constructs are fully represented in the data (Saunders et al., 2018). Weller et al. (2018) explained that instead of complete saturation, one could estimate the appropriate sample size using a goal, such as a percentage of the total domain and the average prevalence of items one would like to observe. Therefore, it is significant that the researcher associates saturation with content validity.

Selecting a Sampling Method

Researchers often resort to probability and non-probability sampling techniques to learn more about a population (Scholtz, 2021). Choosing information-dense cases to sample for a study is an example of purposeful sampling, which indicates that the researcher is making the best use of the available resources. The snowball sampling technique is an example of a purposeful non-random sample. In this method, one case identifies others willing to participate in the study. Researchers can also use samples from easily accessible groups and quota sampling, allowing them to select a predetermined number of members from each group (Banerjee & Chaudhury, 2010).

Case study designs and qualitative research studies often use non-probability and convenience sampling (Scholtz, 2021). Case studies explore real-life phenomena using small samples and do not make statistical inferences about the larger population. The sample of

participants does not need to be random, but it must explain why some cases or participants were included and others were not. This study used non-probability sampling, including purposeful and convenience sampling.

Purposeful and Convenience Sampling

The researcher created a list of potential participants using purposeful sampling. The researcher then conducted convenience sampling by contacting potential participants from the participant list. Those willing to participate were included in the sample, constituting convenience sampling. Convenience sampling is when a researcher selects a sample of participants because they are readily available and convenient to participate in the study. Since sampling is a product of the methods used, descriptions of the participant sample and the sampling procedure should be treated as separate components of an investigation (Gentles & Vilches, 2017). Convenience sampling is advantageous due to its selection flexibility, and it is frequently the least expensive option available to the researcher. Other sampling methods, such as specific probability and stratified sampling, are more expensive than convenience samples (Scholtz, 2021). There is a possibility of unintentional selection bias when using convenience sampling, and the sampling results may not represent the entire population. The researcher can include statements that identify the sampling method as a limitation to mitigate the impact of bias that results from the use of convenience sampling on the study's external validity.

Summary of Population and Sampling

This section defined participants, populations, and sampling before defining target group types for each. The high-level overview described how participants were selected from a broad population and then refined based on research questions. Then, the researcher discussed why qualitative sampling is essential. The researcher compared sampling techniques and chose the

most appropriate sampling methods. Finally, the section discussed how the researcher conducted the research with sample participants.

Data Collection

Data collection is a fundamental step in the research procedure. Data collection is the fundamental process of systematically gathering, measuring, and analyzing information that enables the researcher to answer previously stated research questions, examine hypotheses from multiple perspectives, and evaluate appropriate outcomes. This section explored the data collection plan and highlighted the methods for collecting participant data. The data collection tools were further classified as interview questionnaire, surveys, and archival data. The section examined the data organization process, allowing the researcher to collect and organize data into helpful content for analysis. Before concluding, the researcher discussed data analysis and triangulation analysis to demonstrate validity.

Data Collection Plan

The data collection plan for this qualitative research study described what data were gathered and how it was utilized. Data collection methods for this study included open-ended questionnaires for interviews, surveys, and analysis of archival documents published between 2019 and 2021. These methods provided a comprehensive understanding of the factors that impact healthcare managers' perception of telehealth in healthcare practices. The purpose of creating a data collection plan was to ensure that the collected data were collected appropriately and helpful to the researcher. Quantitative and qualitative research design methods differ; therefore, researchers must be cautious when selecting data collection methods. In addition, the researcher must understand how data are collected and analyzed in qualitative research. Interviews are one of the most commonly used data collection techniques in qualitative research;

interviews are a data collection technique in which the researcher asks the participant questions (Moser & Korstjens, 2018). An interview is a conversation in which the researcher poses questions, and the participants respond in various ways, including in person, over the phone, or through written correspondence. Open-ended interview questions are the most fundamental method for collecting qualitative data. Combining multiple data collection techniques in an unstructured and adaptable manner is typical in qualitative research. Due to the flexible and unstructured nature of qualitative research, the researcher must select appropriate data collection methods and employ them to develop a comprehensive analysis. This study collected data through interviews, open-ended surveys, and archived peer-reviewed case studies from the last 5 years.

The researcher's data and response sheets was stored in their Liberty University Microsoft One Drive. The system's version control and central data repository prevented unintentional document changes. For the open-ended survey questions, the researcher entered the data into an Excel spreadsheet and ensure accuracy with a quality check. Every survey response was completely anonymous, and the questionnaire expressly prohibited participant identification. Data were exported from all involved states into Excel 2019 for Windows, cleaned up, and then transferred to NVivo. The interview questions will be transcribed using the Statistical Package for the Social Sciences for statistical analysis. The researcher completed the data analysis. For archived peer-reviewed case studies, the research searched the following databases for this systematic review: PubMed, Scopus, Embase, Web of Science, and Science Direct. Studies clearly defining any use of telehealth services in all aspects of health care during the COVID-19 pandemic, published after December 31, 2019, in peer-reviewed journals in English, were included.

Instruments

Collecting data and subsequent instruments is a crucial first step in qualitative research. The data collection instrument the researcher chose depended on the data collection type and the intended use of the data. The interview instruments are the researcher and the interview questions (Roberts, 2020). The researcher served as the primary instrument for data collection and employed a combination of multiple instruments to conduct the research. The researcher conducted interviews to collect qualitative data due to the versatility of this method. In addition, open-ended surveys gave respondents the freedom to respond without the hassle of a recorded interview. The combination of the interview and survey gave participants a choice of participation mode. Appendix A contains the interview guide, and Appendix B contains the screening and survey questions. As a data collection instrument, the researcher must be actively involved in the process, competently respond to the participants, and acknowledge their impact on the process and outcome of the interview. While the researcher planned to conduct 20 virtual interviews and distribute six copies of the survey questions, it was anticipated that some participants would not return the questionnaire, which was not the case. Consequently, it was reasonable to assume that the survey questions would not be incorporated into the study's findings.

Interview Guides. The semi-structured interview is typical in qualitative research and health care settings. Semi-structured interviews collect data from key informants with relevant experiences, attitudes, perceptions, and beliefs. A list of questions, including follow-up questions, probes, and comments, guide the most critical aspects approach to collecting data.

Semi-structured interviews can collect exploratory data, triangulate data sources, or validate findings (Roberts, 2020). One can obtain many benefits from the development and use

of an interview guide, including providing the IRB with a plan for what the researcher wants to focus on during the interviews and prompting the researcher to investigate from every angle (Roberts, 2020). The primary method used to collect data from the participants in this study was individual interviews. During the interview, participants were asked to provide their responses as they understood them and to bring up any additional topics they believed should be discussed. The researcher attempted to address all questions in the research guide and any additional topics the participants present.

Researchers' most crucial ability is actively listening to participants (Roberts, 2020). An experienced researcher needs to be able to ask the relevant guide questions, listen to the responses, and understand both verbal and nonverbal cues. The researcher must know when to ask a follow-up question, go on to the next subject, or let the participant talk freely. The interviews were conducted one-on-one using Microsoft Teams, a web browser and application-accessible online meeting platform. The participant interview sessions and transcripts were recorded using the platform software. The researcher utilized the online meeting platform's transcription service to convert the audio interview into a text-based alternative. The requirement to convert the audio file to text made it easy for the researcher to identify patterns and themes because the written words facilitated the transcriptions' codification.

After a brief introduction, each participant selected for the interview was presented with the interview guide questions. When conducting an interview, it is helpful for the researcher to use an informal and semi-structured guide, which gives the researcher more flexibility and transparency during the conversation (Roberts, 2020). A guide for conducting interviews with relevant questions is crucial for enhancing a researcher's ability to conduct such interviews. The interview guide assists the researcher in providing reliability in the interviewing process and

serves as a tool connecting the research problem being investigated to the research questions (Roberts, 2020). The interview guide utilized can be found in Appendix A.

The interviews began with a brief introduction in which the researcher asked participants to provide their names and educational background. The researcher reminded participants that their participation was voluntary, provided a summary of confidentiality, and discussed the objectives of the research study. The researcher began with a statement that compares distributed leadership to its more traditional counterpart, shared leadership. The researcher elaborated on the meaning of distributed leadership by defining it as an organization's capacity to grant individuals the authority to make decisions and the opportunity to assume positions of responsibility in leadership roles within their respective fields of expertise. Before asking questions about distributed leadership, all participants had a similar knowledge base because of this introduction. After learning about the individual's history, the researcher used their discretion regarding whether to include the statement.

Surveys. Qualitative surveys employ open-ended questions that elicit lengthy written or typed responses. Researchers use these questions to elicit opinions, experiences, accounts, or narratives. Surveys are often a valuable precursor to interviews or focus groups because they aid in identifying initial themes or issues that can be explored in greater depth (Braun et al., 2021). These surveys are entirely self-administered, and the questions will be presented in a standardized format. Participants will be asked to type in their responses instead of choosing from a list of predetermined response options. Complete qualitative surveys have the advantage of producing rich and detailed accounts of the subjective experiences, narratives, practices, positionings, and discourses of the types of participants who will be taking part in the survey.

In most cases, surveys are utilized in large-scale quantitative or mixed-methods research. Although they might appear unsuitable for the small-scale samples utilized in qualitative social research, this is untrue. Written, open-ended questions are presented to participants as part of this methodology.

The researcher provided additional commentary contextualizing the information and defining critical terms so participants can comprehend the perspective of the qualitative survey questions. This additional commentary will be helpful because that the researcher cannot directly respond to participant's questions in real-time. A disadvantage of using online surveys is the researcher's inability to clarify participant's responses, resulting in incomplete or vague data. Simple, everyday words can be misunderstood in a survey setting, making it challenging to write basic, understandable questions (Brenner, 2017).

Using an in-person interview guide and providing surveys allowed the researcher to sample more participants, thereby enhancing the study's validity. In addition, the online version of the questions will allow participants to spend more time considering their responses and crafting or modifying them with care.

Qualitative survey research is a less structured methodology used to gain insight into the reasoning and motivations of participants. Participants can provide comprehensive responses to open-ended survey questions structured as text box surveys. Appendix B contains open-ended questions that will allow participants to express their opinions. The researcher used descriptive survey data to support qualitative research by allowing for larger sample size, increasing the results' credibility and validity. With the availability of online delivery options, qualitative surveys maximize the potential of qualitative data (Braun et al., 2021). The researcher solicited the same interview questions via a survey delivered through the internet and over email to

supplement the data collected from the virtual interviews. The research questions were applied

similarly because the interview and survey questions have the same structure.

Qualitative surveys have several benefits for inclusion; however, there are drawbacks,

such as that they require literacy and the risks associated with online delivery can prevent

underprivileged and vulnerable groups from participating (Braun et al., 2021). It is presumed that

participants have essential reading and writing skills. Survey responses do not provide as much

additional detail as an interview transcript. Nevertheless, the dataset will be rich and complicated

if the research question, subject, and population are all well-suited for using surveys.

Research question one asked health care managers about their perceptions regarding how

increased telehealth use has altered health care management and administration policy. The first

questions in the interview guide asked the participants to introduce themselves. The researcher

began the interviews after all the necessary introductions and permissions were obtained.

Question two asked participants about their leadership experience. The researcher used a

list of follow-up questions to clarify the participant's responses. Specific questions helped

subjects provide more detailed answers, explore associations, and better understand their

thoughts, actions, and reactions (Roberts, 2020).

Research question three explored leadership challenges within health care today.

Question four explored formal and informal leadership and professional development. Question

five asked how COVID-19 has changed health care and how it has affected their work. Question

six asked their general thoughts on telemedicine-delivered healthcare. Question seven discussed

COVID-19 telehealth benefits and drawbacks. Question eight asked about successful COVID-19

telehealth interventions. Question nine asked about strategies for implementing the identified

interventions. Question 10 asked participants to reflect on their perceptions of leadership's

influence on the organization's culture. Question 11 asked the participants about the most challenging obstacles they had to overcome during the pandemic. Question 12 asked what they consider the most important experiences they have had in their leadership role. Question 13 requested any additional data from participants that they feel will benefit the study.

Archival Data. Archival data refers to any data or information gathered in the past and is currently present in other research or files. Those without sufficient resources can conduct a more comprehensive evaluation of the studies being explored due to the availability of archival data. In this research project, the researcher used specific archival data sources in addition to the information gleaned from the interviews and surveys.

Data Organization

Data collection and organization are essential in qualitative research. Researchers must combine, process, and analyze large data sets to support their research. A researcher must be organized and systematic when documenting data analysis steps. As a researcher, arranging, organizing, collecting, storing, retrieving, and analyzing qualitative data are essential to managing the extensive collection of words efficiently. An organized researcher can analyze data more effectively.

Researchers frequently rely on the participants' words when conducting qualitative research. The information gathered from interviews is word-for-word transcriptions based on qualitative text rather than numerical outputs for quantitative data (Pokorny et al., 2018). The creation of classification systems that use chronological locations of a code structure can be applied to the transcription text, resulting in a visualization that illustrates the interrelationships between the codes and the data. In order to determine recurring themes in the research data collection, the researcher used a coding system. The notes were categorized to align responses

with the research questions. In addition, the researcher noted any tangential ideas during the interviews. These are coded notes that will be stored separately to avoid unintentional bias.

Summary of Data Collection

This section provided an overview of the data collection plan and explained the significance of the process in obtaining data for a research study. The purpose of creating a data collection plan was described in the section's introduction to ensure that the data collected would be helpful to the researcher. The plan described the instruments that will be used for data collection. The overview described the researcher, interviews, surveys, and peer-reviewed case studies. Next, each instrument was examined in greater detail to describe how it was utilized in the research. The researcher provided a description of the interview guide and questions that were asked of participants during interviews. Then, each interview guide question was paired with an explanation of how it addressed each research question. The final section discussed the significance of data organization in assisting the researcher with data analysis.

Data Analysis

In qualitative research, data analysis systematically searches and organizes the interview transcripts, observation notes, or other non-textual materials that the researcher accumulates to increase their understanding of the phenomenon (Bodgan & Biklen, 1997). Data analysis is the aspect of qualitative research that most distinguishes it from quantitative research methodologies. Qualitative data analysis is a more dynamic, intuitive, and creative process of inductive reasoning, thinking, and theorizing than a technical exercise, such as quantitative approaches (Pope et al., 2000). Most of the work involved in qualitative data analysis is devoted to coding and categorizing the data. In its most basic form, it is extracting meaning from massive volumes of data by first paring down the amount of raw information to be analyzed, locating relevant

patterns, and deriving meaning from the data before constructing a logical chain of evidence (Patton, 2008).

Qualitative Analysis

Qualitative research primarily generates unstructured textual data. This textual data may include interview transcripts, observational notes, journal entries, or medical information. In certain instances, qualitative data may also comprise graphical displays, audio or video recordings, or other forms of multimedia content (Pope et al., 2000). Qualitative research explores the phenomenon's values, meanings, beliefs, thoughts, experiences, and feelings, unlike quantitative research, which employs statistics (Tashakkori & Teddlie, 2021). The coding process begins with selecting a method (Linneberg & Korsgaard, 2019).

Qualitative Analysis Methods. A qualitative analysis does not evaluate a subject on the quantity of data available but on the quality of that data. The variables used in qualitative research are not predetermined; the research is conducted through exploratory means, such as interviews, observations, and notes (Taguchi, 2018). An in-depth analysis of qualitative research identifies its characteristics as open, holistic, flexible, noncontrolling, and case-oriented (Chu & Ke, 2017). In pursuing scientific knowledge, a close connection must be maintained between theoretical concepts and empirical evidence (Lo et al., 2018). The researcher used qualitative interpretations and content or thematic analysis. The qualitative process includes the following steps: (a) performing an analysis of the data, (b) carrying out the steps of the coding process, (c) looking for recurring patterns in the data, (d) revisiting the themes, and (e) defining the overall themes.

Coding. Coding is the most crucial step in qualitative data analysis (Williams & Moser, 2019). Coding divides massive amounts of raw data into categories and assists qualitative

researchers in the organization of participant data. The coding process helps the researcher structure data for transparency, validity, and participant voice. Data organization, categorization, and theory development are interdependent. A theoretical framework is not utilized when using an inductive approach. Therefore, the codes will reflect the subjects of the data accurately. Applying inductive coding is appropriate when carrying out an exploratory method. The potential for complication and diversion from the primary goal caused by inductive coding must be considered.

The researcher ensured that the research study's problem was aligned with the existing literature on the subject. As a result of their lack of experience, the researcher intends to use deductive coding. Before data collection begins, deductive coding attempts to narrow the focal point by classifying a pre-defined list of codes in a manner aligned with the conceptual framework (Linneberg & Korsgaard, 2019). Deductive coding will make flexibility possible; this method will be best suited to this study because the study's goal was to gain a deeper understanding of the themes represented in the research.

Themes. Themes can originate from various sources, including the data. In qualitative research, one of the most critical tasks is developing themes to describe the data. The researcher used coding to identify patterns, similarities, uniformities, and inconsistencies in the participants' responses that further explained personal experiences. In qualitative research, coding refers to a set of processes that, when combined, allow the accumulated data to be assembled, categorized, and arranged thematically, thereby providing a structured environment in which meaning can be constructed (Williams & Moser, 2019).

Open and Axial Coding. The first level of coding is called open coding. The researcher is tasked with determining distinct concepts and themes for categorization when using open

coding. In order to organize the first level of data, initial broad thematic domains for data assemblage are created. Open coding aims to express data and phenomena in the form of concepts. Units of meaning are used to categorize expressions, so annotations and concepts can be attached (Saldafia, 2009).

The second level of coding is referred to as axial coding. Axial coding aims to determine the relationships between open codes so that core codes can be developed. The themes are further refined, aligned, and categorized using axial coding. After the open coding phase was finished and the researcher moved on to the axial coding phase, the collected data could be sorted, improved, and categorized to develop separate thematic categories to prepare for the selective coding phase. A code was developed for each of the anticipated themes of the research. This code was developed by providing a brief descriptive word used later to identify content.

The axial code will be used to determine the connections between each theme, research question, and sub-questions. The first research question investigated how health care administrators and managers perceive how the increased use of telehealth has impacted health care management and administration policy changes. The second question focused on how the increased utilization of telehealth has impacted the cost of providing medical services. The third question investigated how leadership behaviors have contributed to the increased use of telehealth on the cost of health care services.

Quantitative Analysis

Quantitative data analysis requires critical thinking, variables, frequency, and data set differences to interpret numbers. Quantitative data requires statistical analysis software for larger data sets. Quantitative researchers use descriptive and inferential statistics to analyze numerical data. Information about the data distribution can be obtained from descriptive statistics through

terms like frequency, mean, and standard deviation (Taguchi, 2018). Inferential statistics are a group of statistical methods that researchers generalize. Some inferential statistics examples include t-tests, correlation, ANOVA, regression, and structural equation modeling. The quantitative analysis will determine what will occur by employing research methods, such as sampling, statistical analysis, large data sets, and analytical comparisons, to produce numerical or measurable data. This analysis will be used to determine what will take place. Quantitative research aims to test a theory and either confirm or refute its conclusion. A study designed prior to data collection produces quantitative data; therefore, these experiments do not occur in a natural setting. Furthermore, large data sets are required for accurate analysis. Quantitative data are comprehended through statistical analysis, and statistics are based on mathematics, so the quantitative approach is regarded as more scientifically objective than qualitative methods.

Analysis for Triangulation

Triangulation aims to increase the credibility and reliability of the researcher's findings. Researchers can employ multiple data collection processes and analyses to achieve research objectives, which will benefit from triangulation (Alam, 2021). Data or source triangulation was used in this case study. Data triangulation from multiple informers at different times can boost the study's confidence. Case study research triangulates text, survey, and interview data over time (Kern, 2018). Case studies triangulate with surveys and interviews. This study used interviews and surveys to compare data from participants with different experience levels and expertise. The researcher expected triangulation by determining what outcomes all group members agreed on. The interview evidence across departments suggested that the research is more likely to be validated if every group explores an issue from different perspectives.

The researcher triangulated theoretically. Case study quality depends on access to raw data, explanation of cases, multiple data sources, and theory-evidence linkage to provide data triangulation (Farquhar et al., 2020). In theoretical triangulation, new insights are gained by examining data sets from various theoretical perspectives, conducting data analysis by applying theoretical lenses, and developing theories to account for the various competing explanations.

Summary of Data Analysis

Qualitative research studies produce written data that the researcher must carefully analyze and sort. This study's data analysis and triangulation were qualitative. Qualitative research distinguishes itself from quantitative research through data analysis. This study does not use quantitative methods.

Qualitative research uses data analysis to organize better and search for materials to understand the phenomenon. Qualitative research studies examine intangible concepts like morals, beliefs, opinions, and thoughts. Qualitative data analysis requires the researcher to methodically examine and organize participant interview transcripts, researcher observation notes, or other materials to understand better the phenomenon being studied (Wong, 2008).

Reliability and Validity

Researchers often use the concepts of reliability and validity as evaluation tools within a study to determine the overall quality of the research being conducted. Validity refers to a measure's ability to produce accurate results, while reliability refers to a measure's ability to produce consistent results. In every subfield of scientific inquiry, the concepts of reliability and validity are indispensable. According to researchers, the rigor and trustworthiness of qualitative research are parallel to the concepts, reliability, and validity of all necessary components of high-quality research (Cypress, 2017). Case study research often follows the recommended practice of

utilizing multiple sources of data triangulation. Validity can be determined in the case studies through a triangulation of data sources, including interviews, surveys, and observations. This study used interviews and surveys and compared the data collected from various settings and individuals with varying degrees of experience and expertise.

Reliability

In quantitative research, reliability refers to the exact replicability of the processes and the results. In qualitative research, which uses a variety of paradigms, such a definition of reliability is difficult to achieve and epistemologically incongruous (Grossoehme, 2014). Therefore, consistency is an essential factor in determining the reliability of qualitative research. If the methodology and epistemological logistics consistently yield ontologically similar data but may differ in richness and ambiance within similar dimensions, then a margin of variability for the results can be tolerated in qualitative research. Silverman (2021) proposed five approaches to enhancing the reliability of process and results: refutational analysis, constant data comparison, comprehensive data use, inclusive of the deviant case, and use of tables. As data are extracted from the original sources, researchers must verify their accuracy in terms of form and context with constant comparison alone or with peers, which is a form of triangulation (Patton, 1999). The scope and analysis of data included should be as comprehensive and inclusive regarding quantitative aspects if possible.

Credibility, transferability, dependability, and confirmability define trustworthiness. Researchers define trustworthiness as accurate reconstructions. According to Stewart et al. (2017), credibility and trustworthiness have replaced validity and reliability. Indicated by credibility, the trustworthiness of the findings is reflected in the population's representation, with many feasible perceptions reconstructed in the data, which indicates that the findings are reliable.

Continuous incorporation, reflection, and interaction by the qualitative researcher with the data collection, analysis, and interpretation processes build trustworthiness, which is established by constant comparison and a chain of evidence.

The findings are reliable because this chain of evidence establishes transferability, dependability, and confirmability. The researcher documented the research process in as much detail as possible to ensure the reliability of the steps' replication. The researcher ensured the study's credibility by confirming that the research process can be applied to other scenarios, making it possible for additional research studies.

Acceptability, transferability, reliability, and verifiability can determine this study's qualitative data's validity, accuracy, and reliability. Reliability is typically applied when testing or assessing quantitative research; however, reliability can be applied to all kinds of research. It is essential to investigate trustworthiness when conducting qualitative research to validate its reliability in qualitative research. In order to ensure the validity and reliability of their interviews and surveys, the researcher must choose a sample size that is representative of the population (Hayashi et al., 2019). Researchers who use reliable qualitative methods and conduct their analyses with skill produce results that enhance the understanding of the meanings that people attach to phenomena (Collingridge & Gantt, 2019).

Validity

Qualitative research requires appropriate methods, tools, and data. The research question, methodology, design, sampling, data analysis, results, and conclusions must all be valid for the sample and context. Qualitative researchers' ontology and epistemology can make validity assessment difficult. The descriptive validity approach was utilized in this study. The researcher confirmed the personal information provided by each participant, such as their name, institution

attended, and employment history. This step confirmed that the participants would be truthful during the initial engagement to support their personal experiences.

Descriptive validity occurs when the researcher does not alter or embellish the data. According to Hayashi et al. (2019), the concepts of reporting and primary understanding are somehow connected to this category. The interdependence of the author's observations and descriptions with the theory utilized in the research is another significant issue that the author brings to the reader's attention.

Validity will also be accomplished by reaching saturation. In qualitative research, the term saturation refers to the point at which the researcher calls an end to further data collection to conduct the analysis required to understand the phenomena being investigated. The inability to reach saturation has a detrimental effect on the quality of the research that was carried out and reduces the validity of the content. Saturation is the primary concern for researchers concerned with increasing the rigor and validity of qualitative research studies. The data triangulation methods will provide triangulation from various individuals at various times, and the variation will attempt to contribute to the reliability and validity of the findings. Triangulation is the process of establishing an interrelationship between the information obtained from the data collected from various sources in order to improve one's understanding of the research in question and, as a result, one's confidence in the reliability and validity of the results (Hayashi et al., 2019).

Member checking, also called participant or respondent validation, is a method for assessing the veracity of results (Candela, 2019). Participants are provided with data or results to verify accuracy and congruence with their experiences. Member verification is frequently included in lists of validation techniques. As qualitative researchers gain a better understanding

of the people who are participating in their study, they need to take into account the context of their investigation while also considering how the participant checking process might influence the people who are taking part in the study.

Bracketing

Qualitative research uses bracketing to mitigate preconceptions that may taint the research process (Tufford & Newman, 2012). Qualitative researchers must decide which bracketing method is best for them and their research. Bracketing methods can be used together. Project conceptualization begins with identifying how unacknowledged preconceptions can negatively impact the process.

The researcher used bracketing to document data collection and analysis in personal memos. The researcher wrote memos to analyze and reflect on participant engagement and data in theoretical notes. Bracketing helped the researcher manage emotional reactions and notice subtle differences in questions and the participant's body language. The researcher used a checklist to ensure participants were asked the same questions. The theoretical notes described the researcher's cognitive development during the interview and research processes. Note-taking helped the researcher identify themes that improved clarity and engagement with participants' experiences.

Bracketing will aid qualitative research's iterative process of asking new questions as data are collected. The researcher will use experience and new interpretations to add questions for further data collection (Tufford & Newman, 2012). Taking notes will help the researcher uncover crucial insights to evaluate the research critically. Acknowledging preconceptions is part of these insights. Writing down assumptions allowed the researcher to engage with the raw data fully. Bracketing helped the researcher understand the phenomena experienced through

reflections of people, communities, social formations, and artistic work, which can be

investigated (Soule & Freeman, 2019).

Summary of Reliability and Validity

A study must incorporate reliability and validity to determine its quality. Only reliable

and valid research can contribute to advancing a field of study. The rigor and credibility of

qualitative research are incredibly similar to the concepts of reliability and validity, and they are

all essential components of qualitative research. This case study utilized the triangulation method

to analyze data from multiple informants at different times, contributing to the reliability and

validity of this study. Triangulation will establish the interrelationship between the information

obtained from the data collected from various sources to enhance the comprehension of the

study, thereby enhancing the reliability and validity of the results (Hayashi et al., 2019).

Summary of Section 2 and Transition

The procedures utilized in this investigation were outlined in the second section of the

project. The purpose statement was restated, and a brief research study summary was provided.

The researcher's actions in the study were described, and bracketing was discussed to prevent

personal bias from affecting the research outcomes or data collection. This project's research

methodology section provided an overview of the suitability of flexible design and a single case

study. Triangulation and data triangulation were explored to ensure the research's reliability and

validity. The types of individuals eligible to participate in the study were outlined in the

discussion of participants. The population and sampling section subdivided the health care

professionals into subgroups, determining that the target population was those who have worked

in the health care industry for at least three years in the public sector. The data collection plan

provided an overview of the data was collected and how virtual interviews and surveys were

conducted. The interview guides and surveys provided the questions list and how they related to the study's foundational research questions. The organization of the data focused on coding and how the researcher identified trends and themes within the data. The section on data analysis explained how to use coding in a case study and how triangulation can be used to confirm that the data are not biased. Finally, the sections on reliability, validity, and bracketing discussed how the researcher intends to guarantee that the data are accurate, representative of the population, and free of bias.

Section 3 can be applied to professional practice. This section began with an introduction and a detailed study description. The section will discuss leadership behaviors and distributed leadership's potential impact on many industries, particularly health care. This section discussed how this study could improve health care leadership. The researcher explained how leaders can use this study's findings to implement change initiatives. Section Three included recommendations for further research with specific examples. The reflection section discussed personal and professional growth throughout the program. The section concluded with biblical perspectives before summarizing the project.

Section 3: Application to Professional Practice and Implications for Change

This chapter presents the results of the in-depth interviews conducted with healthcare professionals to gain insights into their experiences and perceptions of telehealth, particularly during the heightened circumstances brought about by the COVID-19 pandemic. The findings from these qualitative interviews illuminate the realities, challenges, and triumphs the healthcare sector faced as it navigated a rapid shift to virtual care in response to unprecedented demands.

Overview of the Study

The COVID-19 pandemic has posed unprecedented challenges to the healthcare industry, which has resulted in rapidly increased use of telehealth as an alternative to in-person care. As a result, it was necessary to investigate how this shift in care delivery has impacted the perceptions and practices of healthcare managers and administrators. This qualitative single case study occurred over a 2-month period to understand how telehealth was used during the pandemic and how its adoption changed over time. Specifically, it aimed to clarify how telehealth has shaped service provision, quality control, and leadership in healthcare organizations amid the pandemic. The research was conducted in the healthcare sector. The data utilized in this research were collected via recorded interview sessions conducted using phone calls, and MS teams with the survey being used solely for screening purposes. The primary data source was 20 recorded interviews from health care professionals from various specialties located in West Virginia with 5 years of experience in the healthcare industry and have experience in telehealth management, having used telehealth services before and during the coronavirus disease 2019 (COVID-19) pandemic. The researcher conducted personal interviews with each of the 20 participants individually. The participants were asked open-ended questions following the interview questionnaire in a sequential manner to maintain consistency across all participants. The

interview protocol included obtaining consent, reminding participants of the recording, ensuring their privacy, and posing the interview questions. The data collected were transcribed from the audio form into text form. After the transcription process, the data were cleaned to eliminate incomplete data, personal data such as names of respondents, and any other identifying details. The data analysis was conducted using the NVivo software; this facilitated the identification and organization of the main themes. Before the themes were identified, various codes were utilized and linked together to form the themes. The findings revealed six overarching themes: (1) rapid implementation of telehealth; (2) challenges and limitations of telehealth, such as technological issues, reimbursement policies, and patient engagement; (3) role of telehealth in shaping healthcare practices, such as reorganizing care delivery, improving care coordination, and monitoring patients remotely; (4) leadership and innovation in telehealth; (5) future of telehealth in healthcare management; and (6) interdepartmental collaboration and communication.

The generated themes provided valuable insight into implementing telehealth and its effects on patients' perspectives, healthcare provider experience, quality control, and future implications. There were notable differences in perceptions and experiences among the providers and healthcare executives from various regions. For instance, some healthcare professionals in less developed regions faced more significant challenges in using telehealth due to limited resources, such as poor internet connectivity or lack of access to the necessary technology. Meanwhile, healthcare in well-developed regions had better access to the latest telehealth technologies and more robust support systems to implement telehealth services. Despite these differences in perception and experiences, telehealth during the COVID-19 pandemic was crucial for maintaining access to care, particularly for patients with limited in-person visits.

Presentation of the Findings

The qualitative approach, as defined by Creswell (2014), methodically collects, analyzes, and interprets data to interpret and understand complex social phenomena. According to Creswell (2014), this approach emphasizes the importance of deeply understanding the context and the participants' perspectives to generate insights and theories that can contribute to new knowledge in a particular field. In terms of data collection, the qualitative approach typically involves methods such as interviews, observations, and document analysis, focusing on obtaining rich and detailed descriptions of the phenomenon being studied. In this research, the researcher sought to gain insights into how the adoption of telehealth has affected patient outcomes, access to care, and patient satisfaction. Furthermore, the researcher was interested in examining whether telehealth has helped to increase cost-efficiency in the healthcare industry by reducing overhead and expenses associated with in-person visits, or whether it has introduced new costs such as technological infrastructure and maintenance. The COVID-19 pandemic has drastically affected the healthcare industry, prompting a rapid increase in the use of telehealth services. The strategic niche sector in this study was health care professionals within family and emergency medicine. The surroundings showed that healthcare providers had widely adopted telehealth services to ensure continuous patient care while minimizing the risk of exposure to the virus. Most respondents reported using telehealth services for initial patient consultations, follow-up appointments, and medication management. The findings also identified a few challenges that need to be addressed to leverage the potential of telehealth fully. Some key challenges include limited access to patient technology infrastructure, limited reimbursement policies from insurance providers, and additional training to ensure that healthcare providers can effectively

deliver telehealth services. The two qualitative research questions and sub-questions in this study were:

RQ1. What are healthcare managers' perceptions regarding telehealth use and their health care management and administration service provision, quality control, and leadership practices during and after the COVID-19 pandemic?

RQ1a. What leadership actions contribute to telehealth use's impact on health care management and administration policy?

RQ2. How do healthcare manager's leadership practices shape telehealth implementation in terms of service provision and quality control during and after the COVID-19 pandemic?

RQ2a. How has telehealth changed healthcare managers' practices in terms of service provision, quality control, and leadership?

The specific questions interview questionnaire noted in the appendix were constructed and aligned with the research questions and provide insightful answers to the research questions regarding the increased use and impact of telehealth during the COVID-19 crisis. The study aimed to explore their experiences and perspectives on how healthcare managers perceived the use of telehealth and how it shaped healthcare management and administration practices regarding service provision, quality control, and leadership during and after the COVID-19 pandemic. The interview was conducted with 20 healthcare professionals in different roles and specialties within a hospital setting. The interviews were audio-recorded and lasted between 30 and 45 minutes. The researcher asked the participants open-ended questions regarding their experiences and views on telehealth use and its impact during COVID-19. These questions were developed based on review of relevant literature and consultation with industry experts. Before the interviews, participants were provided with a consent form and an explanation of the study's

aims and procedures. They were also informed that the interviews would be audio-recorded for transcription purposes. The sampling size in this single case study design was 20 participants: four healthcare administrators, six nurses, three independent physicians, and seven employed physicians. The questions included topics such as their perceptions regarding the benefits of telehealth, challenges of widespread adoption, legal and regulatory considerations, and best practices for telehealth implementation. These questions aimed to encourage participants to share their personal experiences and perspectives in depth. The interviewer used a conversational style to build rapport with participants and probe deeper into their answers. The interviewer also ensured that all responses were recorded accurately and that participants had the opportunity to expand on any ideas or points they made during the interview.

In this qualitative study, a group of experienced healthcare professionals with a collective total of over 100 years of practice participated in the interview. The participants, all over the age of 18, represented a diverse age range spanning from 34 to 62 years old. The demographics pools comprised of seven females and 13 males of different ethnic groups. This diverse group of healthcare professionals brought a wealth of knowledge, insights, and perspectives to this study. Their experiences spanned across different specialties, such as nursing, medicine, psychology, and allied health professions, allowing for a comprehensive understanding of how telehealth has evolved and influenced patient care during the pandemic. Through their perspectives, the study gained a deeper understanding of the implications of telehealth on healthcare delivery, patient satisfaction, and the potential for its continued use in the future.

Figure 2

Gender Distribution of Participants
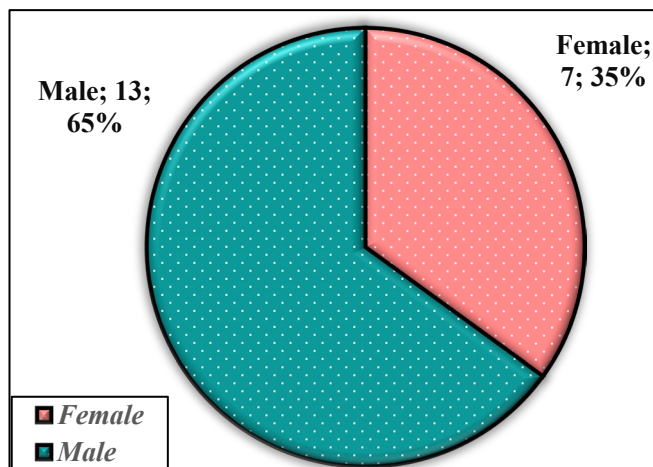
Figure 3

Distribution of Participants by Positions
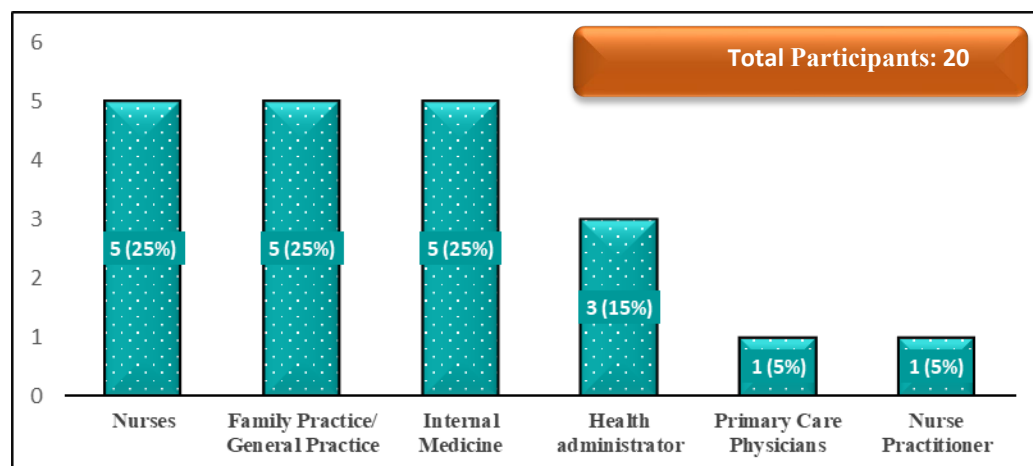
The process of purpose sampling occurred. The selection of participants was predicated on their voluntary inclination to partake in the study. Coding was employed as a research method to analyze and categorize the data collected, which was very beneficial. The researcher could identify and extract meaningful themes, patterns, and insights from the interviews and other qualitative data sources through coding. This coding process allowed for a systematic and

rigorous analysis, uncovering key findings related to the increased utilization of telehealth during the pandemic. By organizing the data into meaningful codes, the researcher could explore the different aspects of telehealth implementation, such as its impact on healthcare access, patient satisfaction, and healthcare provider experiences. A comprehensive coding framework facilitated a deeper understanding of the complexities and nuances of telehealth's role in transforming healthcare delivery during the pandemic.

Furthermore, the coding process was conducted in accordance with the specific statements provided by the interviewees while maintaining their anonymity. The study's sample consisted of four distinct groups of healthcare professionals: employed physicians (designated E), independent physicians (designated I), administrators (designated A), and nurses (designated N). In the endeavor to uphold stringent confidentiality assurances given to the participants, the researcher employed a systematic approach and used pseudonyms, replacing real names with aliases, to disguise the participants' identities, hence preserving their anonymity. A unique, non-identifiable numeric system was also employed to further ensure this confidentiality. Each participant was assigned a distinct identifier, ranging from P1 to P20. This system ensured that any information which emerged during the study could not be directly traced back to the individual participants, thus upholding the promised confidentiality agreement and providing a secure environment for participants to share information. The coding details are presented in the data visualization and appendix segments.

Figure 4

Participants Distribution by Positions with Years of Experience
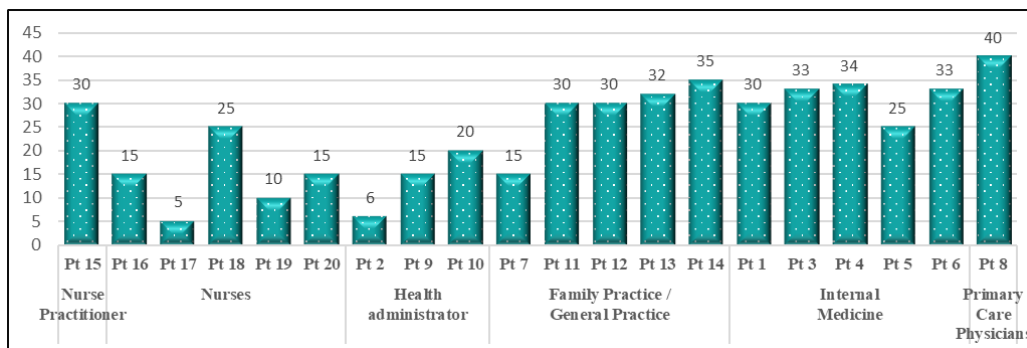
Figure 5

Participants Distribution by Category with Years of Experience
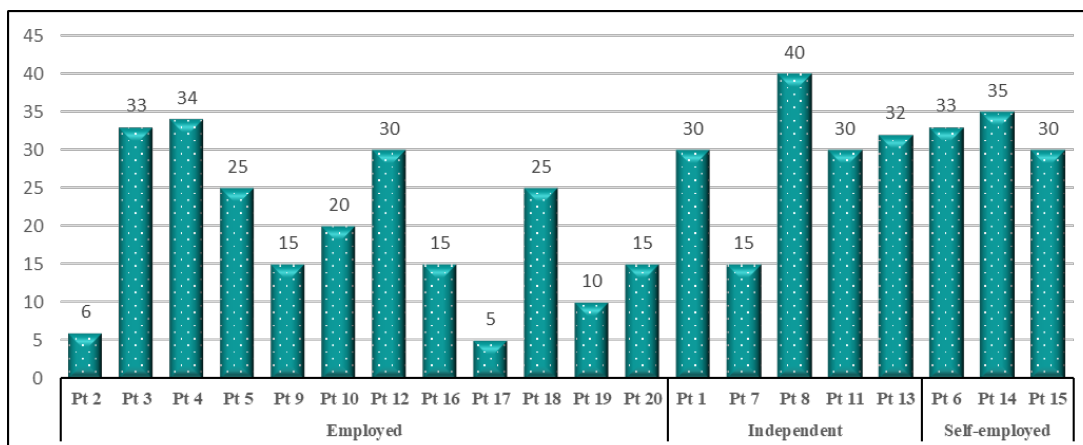
Figure 6

Distribution of Participants by Category
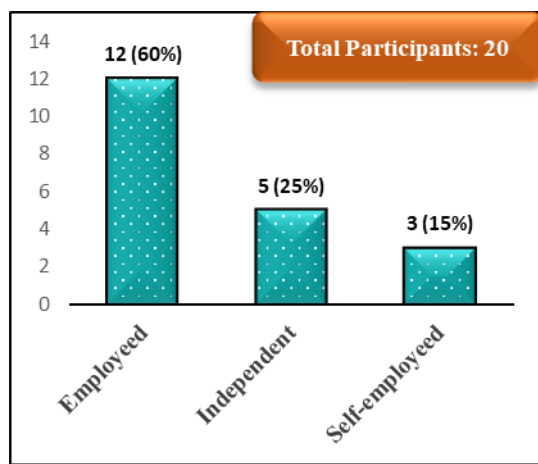
Figure 7

Category wise Distribution of Participants Positions
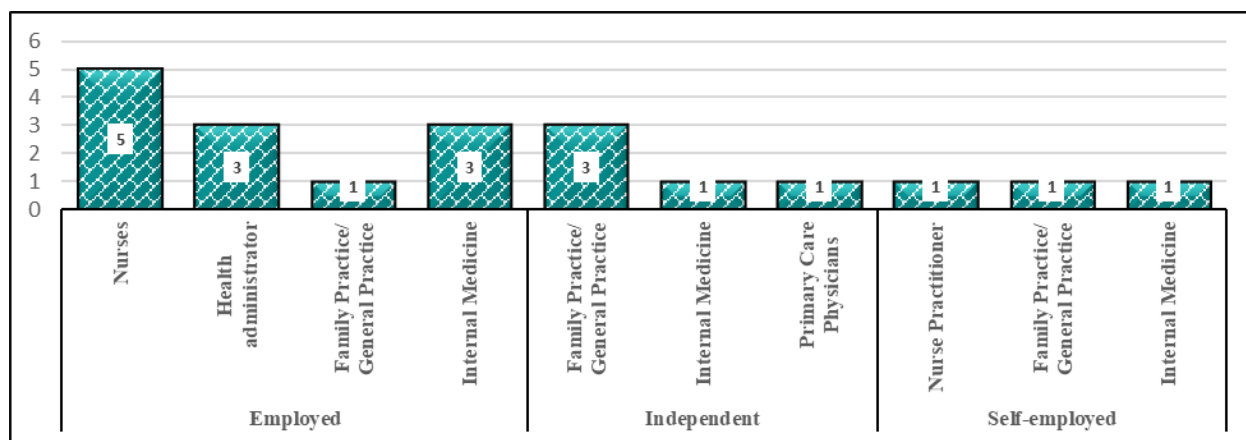
Research Location and Duration

In this telehealth study, the researcher collaborated with healthcare providers from multiple locations in Northern Virginia, targeting locations with varying levels of access to healthcare resources. The strategy for choosing Northern Virginia as the location centered not only on where the researcher resided at the time of this study but also Northern Virginia is known for its diverse and highly educated population, making it an excellent choice for studying

the adoption and impact of telehealth services. It is home to various demographics, including urban, suburban, and rural communities, allowing for a more comprehensive understanding of how telehealth is utilized across different settings. Furthermore, the region has a well-established healthcare infrastructure and is renowned for its numerous healthcare providers, including hospitals, clinics, and specialist practices. This abundance of healthcare resources allowed the researcher to access a wide range of telehealth providers and study the implementation and effectiveness of their services. Another crucial aspect is the presence of technology companies and startups in Northern Virginia, which fosters innovation and can provide valuable insights into the development and adoption of telehealth platforms. Finally, Northern Virginia's proximity to Washington, D.C., allowed the researcher to tap into government initiatives, policies, and regulations shaping telehealth's growth, making it an ideal location for conducting a qualitative study on this rapidly growing field. The screening process and interview occurred over one month, starting in April 2023, when the Institutional Review Board (IRB) approved the study after ensuring the safety and ethical considerations of the research participants were considered. During this process, the researcher collected data on the usage and effectiveness of telehealth services among providers within various specialties. To maximize the effectiveness of the sessions, the researcher designed the research framework to be flexible and to accommodate varying duration times. Our sessions ranged from 30 to 60 minutes, depending on the participant's preferences and availability. By selecting diverse locations, the research understood the barriers and opportunities for implementing telehealth in different healthcare settings and the potential impact on patient outcomes. The results of these observations are presented in the sections that follow.

Emergent Themes Discovered

The ongoing COVID-19 pandemic has undeniably reshaped the healthcare landscape, catalyzing the rapid adoption of telehealth services. "A qualitative theme is a significant or recurring concept, aspect, or idea that emerges from the data analysis process" (Braun & Clarke, 2006, p. 78). One notable shift has been the rapid adoption and increased use of telehealth, which refers to the remote provision of healthcare services through digital communication technologies. This section aimed to delve into the themes discovered in the increased use of telehealth during the pandemic, using a combination of in-depth interviews with healthcare professionals and a comprehensive review of relevant literature. By drawing on both primary and secondary sources, this study offered nuanced insights into the impact and potential implications of widespread telehealth adoption. The researcher's examination of existing literature involved a comprehensive review of scholarly articles, and reports from reputable sources. Key areas of focus included telehealth's impact on patient outcomes, the acceptance and satisfaction of both patients and healthcare providers and the effect on healthcare delivery systems. Some secondary sources consulted include studies published in esteemed journals such as the Journal of Medical Internet Research, the New England Journal of Medicine, the Telemedicine Journal, and e-Health. By critically engaging with established research, the research uncovered underlying themes that can inform the analysis and discussion. In addition to the literature analysis, the researcher conducted in-depth interviews with healthcare professionals with first-hand experience in telehealth implementation during the COVID-19 pandemic. These interviews provided valuable insights into the practical aspects of telehealth delivery, including challenges faced, unique patient experiences, and the potential long-term impact on healthcare practices. By engaging with

healthcare providers at the frontline of telehealth adoption, the researcher captured diverse perspectives and anecdotal evidence that complement the analysis of existing literature.

The transcriptions of the interviews were generated through the utilization of Otter's artificial intelligence software system, while the data coding was conducted through the implementation of the qualitative data analysis system NVIVO. The following is a list of themes from this qualitative case study depicting the perceptions of telehealth use during the pandemic for 20 healthcare professionals, including physicians, health administrators, nurses, and other staff members who participated in this study.

1. Rapid Implementation of Telehealth

2. Role and Responsibilities of Healthcare Managers Challenges and limitations of telehealth

3. Use of Telehealth in Healthcare Services

4. Challenges and Limitations of Telehealth

5. Leadership and Innovation in Telehealth

6. Future of Telehealth in Healthcare Management

7. Interdepartmental Collaboration and Communication

Interpretation of the Themes

Emergent Theme 1: Rapid implementation of Telehealth

During the COVID-19 pandemic, the rapid implementation of telehealth services presented interpretable data that showcased the increasing utilization and effectiveness of remote healthcare. As lockdown measures and social distancing protocols were implemented to slow the virus's progression, many healthcare providers swiftly transitioned to telehealth platforms to

continue providing essential care to patients. This expedited implementation revolutionized how healthcare was delivered and received, offering a range of benefits for providers and patients.

Interpretative data collected during the pandemic reflected a steep rise in the adoption of Telehealth. Virtual consultations and remote monitoring became the new norm, reducing the need for in-person visits and minimizing the risk of virus transmission. This data indicated that Telehealth offered an efficient approach to healthcare delivery, allowing providers to reach a larger patient population and deliver care across geographical boundaries. While the transition to Telehealth was sudden, many healthcare providers expressed mixed feelings about the rapid implementation. P6 expressed her thoughts on the rapid adaptation of Telehealth, stating, at first, they were apprehensive about transitioning to Telehealth. It seemed impersonal, and they were worried about missing important diagnostic cues. As they started using the technology, they realized its potential to connect with patients in a meaningful way when physical proximity is not possible.

Despite initial skepticism, healthcare providers have recognized how Telehealth has enhanced access to care, particularly for vulnerable populations. A survey by the American Medical Association (AMA) found that 87% of physicians reported being satisfied with their telehealth experience during the crisis (AMA, 2020). P3 remarked,

> Telehealth has been a game-changer for our patients in remote areas. They no longer had to travel long distances or endure lengthy waiting times; instead, they can conveniently receive care from the comfort of their homes. It is truly empowering.

Telehealth implementation has paved the way for innovative healthcare delivery models. In the past, many patients struggled to seek mental health support due to concerns about stigma or lack of availability. Telehealth has enabled more individuals to access therapy from the privacy of

their own homes, reducing barriers to seeking help. This perspective emphasizes the transformative effect of telehealth in mental health care, as it provides a confidential and convenient platform for patients to receive crucial support. However, it is essential to acknowledge that the rapid implementation of Telehealth has been challenging. P5 expressed his concerns, stating:

> While Telehealth has proven invaluable during the pandemic, there are inherent limitations when it comes to physical examinations and certain procedures. As a specialist, they missed the ability to interact with their patients in person and perform necessary diagnostic tests.

The rapid implementation of telehealth can be aligned with several theories. One theory is the diffusion of innovation theory, which suggests that the adoption of new technologies is influenced by factors such as the perceived benefits, compatibility with existing practices, and ease of use (Rogers, 2003). The rapid implementation of telehealth indicates that was perceived as beneficial and compatible with healthcare practices, leading to its widespread use. However, it is crucial to maintain a nuanced approach and strike a balance between telehealth adoption and the irreplaceable aspects of in-person care. Additionally, the Technology Acceptance Model (TAM) could also apply, as it focuses on factors like perceived usefulness and ease of use to explain the adoption of new technologies (Davis, 1989). The rapid implementation of telehealth suggests that healthcare providers and patients find it useful and easy to integrate into their existing healthcare processes.

Emergent Theme 2: Role and Responsibilities of Healthcare Managers

In the fast-paced world of healthcare management, adaptability and strategic thinking are the mainstays of efficient administration. The advent of the COVID-19 pandemic necessitated a

swift transformation in the responsibilities of healthcare managers, creating new challenges and fostering novel strategies. P1 echoed,

> Humm, as a healthcare manager, he was required to quickly adjust his practices to meet the increased demand for telehealth services caused by the pandemic. The difficulty he faced was in ensuring that patients received care in an uninterrupted manner while also preserving their level of contentment."

Indeed, this rapid pivot to telehealth not only put the technological capacities of healthcare services to test but also compelled managers to strategize effectively for seamless patient care and satisfaction.

> The incorporation of telehealth into mainstream healthcare also significantly broadened the scope of responsibilities for healthcare administrators. P3 articulated,

> The introduction of telehealth resulted in a significant expansion of the responsibilities of healthcare administrators. "To effectively manage remote teams, guarantee operational efficiency, and keep the level of care we provide at a high standard, we were required to devise new management strategies."

This encompassed the efficient orchestration of remote teams, maintaining optimal operational efficacy, and safeguarding the high standards of care delivery. The impact of COVID-19 extended to the leadership practices within healthcare management. According to P15,

> Because of COVID-19, we were forced to examine and reevaluate our leadership practices. It was imperative that we cultivate a culture of resilience among our staff, make mental health support a priority, and implemented innovative technologies in order to improve telehealth services.

These insights underlined the critical need for cultivating resilience, prioritizing mental health, and embracing innovation in leadership roles during challenging times.

Another important challenge that emerged is that of ensuring equitable access to telehealth services across diverse patient demographics. P11 mentioned,

> One of the most difficult challenges we faced was making certain that patients from a variety of different backgrounds had equal access to the telehealth services that we provided. In order to address this issue, we implemented language translation services and provided support for technology to communities that were not being adequately served.

The direct quotation emphasized the importance of inclusivity in telehealth services, underscoring the implementation of accessible solutions such as language translation services.

Lastly, telehealth also offers opportunities to enhance patient engagement. As per P5 observation, "Healthcare administrators saw an opportunity to improve patient engagement when they implemented telehealth services. Our team focused on improving the user experience for patients, as well as expanding the capabilities of telemedicine infrastructure, and providing training to medical professionals."

Emergent Theme 3: Challenges and Limitations of Telehealth

As the healthcare industry moved rapidly towards telehealth during the COVID-19 pandemic, many challenges and limitations unexpectedly surfaced. From maintaining patient-provider communication and assuring equitable access to ensuring data security and dealing with telehealth's inherent limitations, healthcare administrators had to navigate a complex web of issues. One of the critical challenges, as highlighted by P4, was "keeping open and productive lines of communication between patients and their healthcare providers." The lack of nonverbal

cues and physical presence posed a significant barrier in establishing familiarity and trust. This hurdle was tackled through regular check-ins, comprehensive patient education, and augmenting communication channels like phone calls and encrypted messaging platforms.

Telehealth services, despite their numerous benefits, faced difficulty in catering to vulnerable populations such as individuals with limited English proficiency or older adults struggling with virtual platforms. As P6 remarked, "telehealth presented some challenges and had some limitations" in providing healthcare to these groups. The provision of language interpretation services and partnering with local senior centers for technical support were implemented as countermeasures, improving access for these vulnerable groups. Ensuring patient privacy and data safety was another challenge noted during telehealth consultations." P12 explained,

> The transmission of private medical information through digital platforms was fraught with danger. Investing in secure, regulatory-compliant telehealth platforms, staff training on patient data protection, and encouraging private settings for consultations were among the measures adopted to address this issue.

Furthermore, the inability to perform physical examinations remotely was identified as a significant limitation of telehealth. According to P13, "Telehealth visits were only able to treat certain kinds of medical conditions because they did not involve a physical examination in any way." Formulating detailed guidelines for patient triage and arranging in-person consultations for cases requiring physical examinations were some of the strategies employed to circumvent this issue. Finally, ensuring equal access to telehealth services emerged as a challenge, especially for patients lacking the required technological infrastructure or digital literacy. P19 stated, "Patients did not all have the necessary technological infrastructure or the digital literacy to make the most

of the telehealth services available to them." To counteract this, collaboration with local

organizations was initiated to distribute medical equipment and offer necessary training.

Overall, these insights underscore the multifaceted challenges of telehealth

implementation during a pandemic and illuminate how healthcare administrators navigated these

challenges, ensuring continued care provision during these difficult times.

Emergent Theme 4: Leadership and Innovation in Telehealth

The integration of telehealth into the healthcare system has triggered substantial changes

in leadership approaches and at the same time, it also sparked innovation, as captured by our

fourth emergent theme which is the leadership and innovation in telehealth. Healthcare leaders

have had to navigate uncharted territory, adapting to new modes of patient care delivery while

fostering innovative solutions to streamline processes and improve patient care quality.

One of the healthcare administrators who participated in the study, P9, found that

"Telehealth completely altered the way in which medical care was administered." Consequently,

it was necessary to explore unconventional solutions and advanced options, driven by goals of

care quality enhancement, process streamlining, and leveraging data analytics for evidence-based

decisions. This participant response embodies the mindset shift required from leaders in the era

of telehealth – moving away from conventional thinking, embracing innovative solutions, and

using technology as an enabler of superior healthcare delivery. On the other hand, leadership in a

telehealth environment also demanded a shift towards a more empathetic and communicative

style. As P19 observed,

> His company placed a high priority on encouraging open communication, trust, and
>
> empathy among members of teams who are frequently located in different parts of the
>
> country. This shows how the dynamics of leadership needed to adapt to remote teams,

focusing more on soft skills like empathy and communication to foster a cohesive and efficient virtual team environment.

However, the journey of integrating telehealth was not without its shortcomings. Some participants voiced dissatisfaction over the perceived lack of leadership and innovation in telehealth implementation during the pandemic. P2 lamented, "I've become increasingly dissatisfied with the absence of leadership and innovation with regard to the implementation of telehealth." This participant response underscores the frustration some healthcare professionals felt, highlighting the need for clear guidance and strategic direction from industry pioneers. Innovation also manifested in the form of centralized telehealth platforms integrated with electronic health record systems. As P3 stated, "This integration enables the exchange of patient data in a seamless manner and allows for coordinated care across all medical specialties."

This remark not only elucidates the power of technological innovation in facilitating efficient care delivery but also spotlights the critical role of leaders in implementing such advancements. Collectively, these insights underline the significant role of leadership and innovation in driving telehealth's success. The pandemic prompted healthcare leaders to adapt their practices and embrace innovation, revealing both the accomplishments and the areas for improvement in this transformative journey.

Emergent Theme 5: Future of Telehealth in Healthcare Management

The theme Future of Telehealth in Healthcare Management showcases the potential evolution and continuous integration of telehealth in the post-pandemic environment. It explores how these changes might further alter healthcare delivery, management, and administration, as reflected in the experiences and expectations of various interviewees. Telehealth's considerable impact on mental health care delivery during the pandemic for example was clearly highlighted

by P5 in his response, where he anticipates an increased integration of telehealth into this domain. "In the future, he anticipates that telehealth will be integrated more extensively into mental health care." This participant response showcases how telehealth can eliminate geographical barriers and stigma attached to mental health, thus improving access to much-needed therapy and counseling services.

Collaborative opportunities for healthcare professionals were emphasized by P15. They noted, "Telehealth has given healthcare professionals unprecedented opportunities to collaborate and share expertise. He believes telehealth will enable even more professionals from various fields to collaborate in the future, driving innovation and advances in healthcare management." This response underlines the power of telehealth as a tool for global collaboration, offering a platform for cross-cultural learning and fostering innovation in healthcare management. However, as healthcare management prepares for a future heavily reliant on telehealth, there is recognition of the need for a blended model of care. To further support this point, P6 suggested, "In the future, he thinks they'll see a shift toward a blended model, where in-person visits will still be necessary for certain cases, but telehealth will offer convenience and accessibility for routine check-ups and follow-ups." This reflects a consensus on the need for a balance, maintaining the advantages of telehealth while preserving the critical aspects of in-person care. This theme was further elaborated by P2 in the context of pediatric care, stating that "Telehealth has fundamentally altered how we provide medical care to children. A hybrid model that combines the benefits of telehealth with the personalized attention only achievable in in-person consultations is the future of healthcare facility management." This perspective emphasizes the need for a model that merges the convenience of telehealth with the personal touch inherent in traditional healthcare delivery, creating a healthcare system that is versatile, accessible, and

patient-centric. These observations indicate an optimistic outlook for telehealth in healthcare management. The future is expected to involve more collaboration, innovation, and a blend of traditional and virtual care delivery models, all in pursuit of improved patient outcomes and more efficient healthcare administration.

Emergent Theme 6: Interdepartmental Collaboration and Communication

The sixth and last theme on my listed was the Interdepartmental Collaboration and Communication. This theme encompasses the shift in intra-organizational dynamics spurred by the incorporation of telehealth into the health care system. It clarified how this digital innovation had influenced the way different departments within healthcare institutions communicated and collaborated, enhancing patient cared and overall healthcare service. In the words of P3, "The introduction of telehealth services into our organization had cultivated a mindset that valued teamwork. Now, medical professionals, nurses, and administrative staff all collaborate closely with one another." This participant response exemplifies how telehealth had reoriented traditionally compartmentalized healthcare organizations into a more integrated, team-based approach. Departments once isolated in their distinct operations was then unified in their common goal of enhancing patient outcomes. Telehealth has prompted a more integrated view of patient cared, encouraged cooperation among various disciplines to ensure a smoothed and effective healthcare journey for the patient. P17 commented on this idea of interdepartmental cooperation in the context of rehabilitation services by stated, "Telehealth improved interdisciplinary collaboration. We aligned treatment goals and adjusted therapies based on the input from physical therapists, speech therapists, and other specialists. As a result, patients received care that was better coordinated and more comprehensive." This response highlights how telehealth facilitated real-timed collaboration among healthcare professionals from diverse

specialties. By streamlining communication and the exchange of information, telehealth had enriched the quality of rehabilitation services, offered patients a more coordinated and comprehensive cared regimen.

However, as telehealth promotes a more integrative approach to patient care, it also emphasizes the importance of effective communication strategies among different departments. In the words of one interviewee who wished to remain anonymous,

> Telehealth has made it clear that communication among different departments was a key element to ensure the best patient outcomes. If there was a communication breakdown, even with advanced telehealth solutions, it could lead to errors or delayed in care.

This participant response revealed that while telehealth provided a platform for integration, the success of this approach heavily relies on robust communication strategies. P20 pointed out the interplay between technology and human elements in collaboration, stating, "Telehealth did not eliminate the needed for human touched in communication. It enhances our capabilities, but it also requires us to adapt our interpersonal skills for this digital era. The human element was still essential." This participant response demonstrates that while telehealth facilitates collaboration, it also requires adaptation in communication styles and emphasizes the need for maintaining the human connection in healthcare provision.

These perspectives reflected the idea that while telehealth has significantly enhanced interdepartmental collaboration and communication, the success of this collaborative model depended upon well-defined communication strategies and maintained the 'human touch' in digital interactions. The fusion of technology and human elements is, therefore, a crucial component in this new era of healthcare service.

Financial Challenges:
The healthcare industry struggled during the COVID-19 pandemic due to canceled procedures and lower patient volumes. The industry also paid more for PPE, testing supplies, and safety protocols. These constraints forced budget and financial planning changes in the healthcare system..

Increased Adoption:
During the COVID-19 pandemic, healthcare practices and technologies increased. Telehealth, remote patient monitoring, and digital communication are examples. These changes were necessary to maintain care continuity while minimizing in-person contact and virus transmission.

Regulatory Changes:
COVID-19 changed healthcare regulations. Infection control, testing, and treatment were updated by governments and regulators. These changes required healthcare providers to adapt their practices and workflows to comply with changing regulations and ensure patient safety.

Expanded Services:
Healthcare providers and organizations expanded to meet pandemic needs. This involved converting existing facilities into COVID-19 treatment centers, establishing drive-through testing sites, and creating specialized units to handle the patient influx. Healthcare providers expanded their services to support vaccination and public health initiatives..

Acceptance and Satisfaction:
Despite the pandemic's challenges, people accepted the changes and were satisfied with the healthcare industry's response. Patients and healthcare professionals recognized the measures' importance in preventing virus spread and ensuring continuity of care. This acceptance and satisfaction show that the healthcare industry can adapt to unprecedented circumstances.

Change in Leadership Priorities:
The pandemic changed healthcare leadership priorities. To handle the crisis, managers had to prioritize infection control, patient safety, and resource allocation. COVID-19-related needs and challenges were addressed through strategic planning and decision-making.

Increased Workload and Stress:
Pandemic workload and stress increased for healthcare workers. COVID-19 cases overwhelmed healthcare systems, causing long hours, limited resources, and high patient volumes. Healthcare workers suffered mental and physical stress from this situation.

Rapid Adoption of Technology and Supply Chain Disruption in Healthcare
Healthcare providers adopted remote consultation and patient monitoring technology during the COVID-19 pandemic. Supply chain disruptions caused medical supply shortages. Healthcare organizations had to find alternatives, conserve resources, and strengthen supply chains.

Covid-19 Impact: Changes Faced by Healthcare Industry and Staff

Figure 8

COVID-19 Impact

Relationship of the Findings

In this section, the correlation between the research questions and the findings are discussed. These research questions were designed to understand the perceptions of healthcare managers regarding telehealth usage, particularly during and after the COVID-19 pandemic, and how leadership practices have shaped telehealth's implementation and eventual outcomes. To start, RQ1 sought to discern healthcare managers' perceptions on the use of telehealth in their management and administrative service provision, quality control, and leadership practices. RQ1a delved into the aspect of leadership actions that have contributed to the enhanced impact of telehealth on healthcare management and policy. Findings related to these questions are embodied in themes one, two, and four. It was evident that the healthcare managers found telehealth to be instrumental in improving patient accessibility, quality of care, and organizational efficiency. Telehealth was perceived as a lever for organizational change, requiring dynamic leadership to navigate its challenges and potentialities.

Meanwhile, RQ2 focused on how leadership practices shaped telehealth implementation concerning service provision and quality control. RQ2a and RQ2b questioned how telehealth has altered healthcare managers' practices and what leadership behaviors contributed to telehealth's impact on healthcare management and policy. Findings tied to these questions are found in themes three, five, and six. Themes three and five underscored the importance of forward-thinking leadership and policy formulation in leveraging telehealth to its full potential. Theme six highlighted how telehealth had fostered interdepartmental collaboration, indicating a significant shift in organizational dynamics driven by leadership practices. These findings generally show how leadership practices have driven the implementation of telehealth and its

subsequent influence on healthcare management, service provision, and quality control during and after the COVID-19 pandemic.

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healthcare management, service provision, and quality control during and after the COVID-19 pandemic.

Relationship of Findings to the Research Framework

The research framework served as a roadmap that assisted the researcher in establishing the direction of the study's implementation. In it, the researcher covered variables that are related to the impact of the increased use of telehealth on health care such as leadership and management, costs, emergency care, chronic pain management, and the application of organizational and transformational leadership theories, in the context of telehealth utilization. The study's findings have so far been directly in line with the structure set in this framework which the research first introduced in Section 1. As for the findings, the participants' responses reinforced the critical role of leadership in deploying telehealth services. For instance, this one was covered under Emergent Theme 5, "The transition to telehealth required strong, supportive leadership... our leaders paved the way for seamless integration." Costs also emerged as one of the themes in the findings. For instance, this one was covered under Emergent Theme 5 as well under the efficient resource allocation and reduced healthcare costs. Moreover, participants' experiences with emergency care and chronic pain management align with the established framework. The reduced demand for emergency services and the necessity for chronic disease management in telehealth's context were confirmed in the discussions of the findings. To support this, P2 mentioned how

> Telehealth has fundamentally altered the way in which we provide medical care for children. "Through the use of remote consultations, it is now possible for parents to more easily connect with specialists and obtain timely advice. However, we need to find a way

to strike a balance between in-person visits and virtual care, particularly when it comes to conducting hands-on examinations. "

These findings show how the implementation fits the constructs of the research framework, providing a comprehensive understanding of the increased use of telehealth, particularly in times of a global health crisis.

Relationship of Findings to Anticipated Themes

In Section 1, the researcher enumerated a short list of Anticipated Themes. Having completed the implementation of the research, it would be interesting how those anticipated themes compared to the actual emergent themes from the findings. These Anticipated Themes were "The Spread of Telemedicine and Its General Acceptance" and "Operational Readiness". For the first anticipated theme which was the Spread of Telemedicine and Its General Acceptance, it would be safe to say that the primary findings were consistently aligned with this theme. Healthcare managers and professionals noted a significant shift in the general acceptance of telemedicine, especially during the COVID-19 pandemic. Patients and healthcare providers alike embraced telemedicine due to its convenience and efficiency, as highlighted in Emergent Theme 2 (Use of Telehealth in Healthcare Services). This acceptance extended beyond the expected convenience factors to include increased accessibility and engagement, which complemented the understanding of the technology acceptance model (TAM). For the next anticipated theme, which was Operational Readiness, it could be observed that as the study progressed, participants frequently emphasized the unprecedented challenges posed by the pandemic and the need for agility and responsiveness in healthcare settings. This theme correlated closely with Emergent Theme ("Role and Responsibilities of Healthcare Managers") and Emergent Theme 3 ("Challenges and Limitations of Telehealth"). There was a universal

agreement that readiness to adapt to new technologies, specifically telehealth, was instrumental in ensuring the continuity of healthcare services during the crisis. These findings presented a clear relationship between the anticipated themes and the emergent themes from the data. The widespread acceptance of telemedicine and the readiness of healthcare systems were indeed pivotal factors in the successful integration of telehealth into healthcare practices during the pandemic.

Relationship of Findings to the Problem

As indicated in Section 1, this qualitative case study explored how health care managers perceive the increased use of telehealth and how it shapes health care management and administration practices regarding service provision, quality control, and leadership. Based on the researcher's analysis, it is clear that the findings derived from participant interviews and emergent themes provide real-world insights into the concerns raised in the problem statement from Section 1. The struggle of healthcare managers to handle the surge in telehealth usage was indeed mirrored in the experiences of the study's participants. Emergent Theme 2, Role and Responsibilities of Healthcare Managers, is a good example as it directly links to the administrative challenges stated in the problem. Participants acknowledged these struggles, noting that the drastic increase in telehealth use brought significant complexity to their roles and required swift adaptation. The aspect of cost control, a major element in our problem statement, can be directly related with Emergent Theme 4—which focused on the Cost-effectiveness and Efficiency of Telehealth. Participants under this theme reported a shared experience of grappling with cost management, emphasizing how telehealth's expanding use created difficulties in maintaining control over the cost of healthcare services. The problem statement's emphasis on new care management practices was addressed in Emergent Theme 5 (Change Management and

Adaptation). Under this theme, the research participants revealed the challenges they confronted in adapting to and managing new care practices. The sudden expansion of telehealth usage, especially during the pandemic, necessitated rapid changes in care management strategies, presenting significant challenges to participants. In summary, the findings illustrate the clear connection between the themes and the problem statement by providing a ground-level perspective. The shared experiences of participants and the emergent themes indeed reflect the multifaceted challenges associated with managing the increased use of telehealth.

Relationship of Findings to the Literature

The results of this research corroborated several key themes within the academic and professional literature. Similar to the findings by Gajarawala and Pelkowski (2021) and Shachar et al. (2020, this study found that health care managers were indeed grappling with the quickened pace of telehealth adoption brought on by the COVID-19 pandemic. This had created a new set of challenges in the areas of administration, privacy, and cost management, and echoed the difficulty in transitioning traditional in-person health services to a virtual environment. Furthermore, the issue of cross-state billing, a central focus in Shachar et al.'s (2020) work, had also been identified as a significant hurdle for health care managers in this study.

The present study's findings also led to discoveries related to the concept of telehealth as a domain of ICT which were also covered by Altmann et al. (2022) and Breton et al. (2021). Both asynchronous and synchronous consultation methods had been acknowledged as instrumental to efficient health care delivery during the pandemic. To further support this, the present study's findings also confirmed the observation by Blandford et al. (2020) that telehealth enabled individuals to manage aspects of their care with the remote support of health care professionals. The historical context provided by Hyder and Razzak (2020), citing telemedicine's

roots in the 1960s space program could also be related to the current findings about the role of necessity in driving telehealth adoption. Similar to the present pandemic-driven necessity, the space program also necessitated innovative remote health monitoring techniques. In the current scenario, this need for innovation was propelled by an urgent requirement to reduce person-to-person contact to mitigate virus spread. Anderson et al.'s (2022) projection about the continued usage of telemedicine post-pandemic also emerged as one of the secondary themes in the study. The findings indicated that the infrastructure built during this period would likely persist even after the crisis ended. This was in line with Blandford et al.'s (2020) suggestion that the changes introduced during the pandemic were expected to persist and even enhance in the future.

Another important point of relationship here would be how the current study's findings highlighted the evolving regulatory landscape in the United States, mirroring Goldberg et al. (2022) who noted that the relaxation of certain regulations to facilitate the provision of telemedicine. This included the relaxation of state licensing requirements and the expansion of Medicare coverage for telehealth. Finally, the present study reiterated the challenges of telehealth adaptation pointed out by Cheng et al. (2022) and Kichloo et al. (2020), particularly the potential clinical and diagnostic limitations due to lack of physical presence. However, this research also underscored that these obstacles did not undermine the immense potential of telehealth in transforming health care delivery. As the findings of this study were closely linked to the literature, it suggested the need for further investigation to explore innovative solutions to these challenges.

Summary of the Findings

To summarize, this study's findings support what other researchers have already uncovered and said about telehealth use during COVID-19. It shows the upsides and downsides,

such as the struggle with rules, privacy, and cost. The study talks about the challenge of billing across different states. It proves that telehealth, which includes real-time and delayed consultations, is a key part of tech use in health care. The research findings also support the idea that telehealth use will continue even after the pandemic. It also highlights the ever-changing rules about telemedicine in the United States. Lastly, the study touches on some limits of telehealth, but it also shows how it can change health care for the better.

Overview of the Study

The COVID-19 pandemic has posed unprecedented challenges to the healthcare industry, which has resulted in rapidly increased use of telehealth as an alternative to in-person care. As a result, it was necessary to investigate how this shift in care delivery has impacted the perceptions and practices of healthcare managers and administrators. This qualitative single case study occurred over a 2-month period to understand how telehealth was used during the pandemic and how its adoption changed over time. Specifically, it aimed to clarify how telehealth has shaped service provision, quality control, and leadership in healthcare organizations amid the pandemic. The research was conducted in the healthcare sector. The data utilized in this research was collected via recorded interview sessions conducted using phone calls, and MS teams with the survey being used solely for screening purposes. The primary data source was 20 recorded interviews from health care professionals from various specialties located in West Virginia with 5 years of experience in the healthcare industry and have experience in telehealth management, having used telehealth services before and during the coronavirus disease 2019 (COVID-19) pandemic. The researcher conducted personal interviews with each of the 20 participants individually. The participants were asked open-ended questions following the interview questionnaire in a sequential manner to maintain consistency across all participants. The

interview protocol included obtaining consent, reminding participants of the recording, ensuring their privacy, and posing the interview questions. The data collected were transcribed from the audio form into text form. After the transcription process, the data were cleaned to eliminate incomplete data, personal data such as names of respondents, and any other identifying details. The data analysis was conducted using the NVIVO software; this facilitated the identification and organization of the main themes. Before the themes were identified, various codes were utilized and linked together to form the themes. The findings revealed six overarching themes: (1) rapid implementation of telehealth; (2) challenges and limitations of telehealth, such as technological issues, reimbursement policies, and patient engagement; (3) role of telehealth in shaping healthcare practices, such as reorganizing care delivery, improving care coordination, and monitoring patients remotely; (4) leadership and innovation in telehealth; (5) future of telehealth in healthcare management; and (6) interdepartmental collaboration and communication.

The generated themes provided valuable insight into implementing telehealth and its effects on patients' perspectives, healthcare provider experience, quality control, and future implications. There were notable differences in perceptions and experiences among the providers and healthcare executives from various regions. For instance, some healthcare professionals in less developed regions faced more significant challenges in using telehealth due to limited resources, such as poor internet connectivity or lack of access to the necessary technology. Meanwhile, healthcare in well-developed regions had better access to the latest telehealth technologies and more robust support systems to implement telehealth services. Despite these differences in perception and experiences, telehealth during the COVID-19 pandemic was crucial for maintaining access to care, particularly for patients with limited in-person visits.

Application to Professional Practice

The healthcare landscape underwent a profound transformation due to the global COVID-19 pandemic. Social distancing measures became imperative to curb the spread of the virus, posing unprecedented challenges to traditional healthcare delivery methods. In response, the utilization of telehealth, an innovative practice involving remote delivery of healthcare services, experienced a remarkable surge. This shift enabled the continuation of medical care for millions worldwide and highlighted the potential benefits and limitations of telehealth. It examined the impact on patient care, health outcomes, and healthcare professional roles and responsibilities in rapidly evolving virtual care delivery. Additionally, it delved into the ethical considerations, legal frameworks, and technological advancements that facilitated the widespread adoption of telehealth. By assessing telehealth's strengths, limitations, and future challenges, this research aimed to provide healthcare professionals with valuable insights to optimize their telehealth application within their professional practice.

Improving General Business Practice

Improving general enterprise exercise within the context of telehealth involved imposing strategies that optimized telehealth generation, decorated operational performance, and enhanced affected person outcomes. Here were some key areas where healthcare corporations could focus their efforts:

Technology Integration. Healthcare organizations had to invest in sturdy telehealth systems that seamlessly integrated with their existing electronic healthcare record (EHR) systems. This integration allowed for the efficient sharing of affected person facts, streamlined scheduling and appointment management, and seamless documentation (Zhang & Saltman,

2021). Additionally, companies had to ensure that their telehealth technology was user-friendly and available to healthcare providers and patients, promoting ease of use and adoption.

Staff Training and Support. To maximize the benefits of telehealth, healthcare businesses needed to provide comprehensive training to their team of workers members on telehealth workflows, satisfactory practices, and privacy protocols. Training had to cover technical aspects of telehealth systems, effective communication techniques in a virtual setting, and maintaining patient confidentiality (Zhang & Saltman, 2021). Ongoing assistance and guidance had to be provided to address any challenges or questions during telehealth implementation.

Patient Education and Engagement. Effective telehealth implementation required active patient participation and engagement. Healthcare businesses had to develop educational materials and resources to assist patients in understanding the benefits and processes of telehealth services (Rajkumar et al., 2023). Clear communication about appointment scheduling, technical requirements, and expectations for telehealth visits could help patients feel more comfortable and prepared. Regular communication channels, including email or patient portals, could provide patients with updates, reminders, and feedback.

Quality Assurance and Performance Monitoring. Healthcare teams had to establish mechanisms to monitor and verify the quality of telehealth services. This could include regular assessment of patient satisfaction, medical outcomes, and adherence to quality practices. Data analytics and reporting tools could be applied to identify areas of improvement and track performance indicators (Rajkumar et al., 2023). Organizations also had to establish protocols for addressing technical problems or disruptions during telehealth visits to ensure continuity of care.

Regulatory and Legal Considerations. Compliance with regulatory and legal requirements was critical in telehealth practice. Healthcare companies had to stay updated with local, national, and federal regulations related to telehealth, including privacy and security laws. Regular assessments and audits could help identify and address any compliance gaps (Fields, 2020). Legal consultations could be necessary to navigate the complex legal landscape and ensure adherence to relevant telehealth guidelines.

Potential Implementation Strategies

Telehealth Infrastructure. Developing a sturdy telehealth infrastructure is critical for successful implementation. This entails investing in reliable net connectivity, steady communication platforms, and hardware and software programs (Fields, 2020). A nicely-installed infrastructure guarantees uninterrupted telehealth operations and enhances the user level for healthcare vendors and patients. Organizations need to prioritize constructing a solid technological basis to aid telehealth services, ensuring that all individuals have to get entry to the vital gear and resources for effective digital care delivery.

Workflow Integration. Seamless integration of telehealth into existing workflows is essential for green provider delivery. Healthcare companies must become aware of precise areas of care wherein telehealth may be successfully utilized and contain virtual appointments in their scheduling systems (Fields, 2020). This may also require adapting tactics and protocols to accommodate telehealth visits, including implementing digitally ready rooms and streamlining documentation approaches. Healthcare vendors can optimize their time and sources by seamlessly integrating telehealth into recurring workflows, ensuring an easy transition between in-person and digital care.

Patient Engagement and Education. Active affected person engagement and schooling are essential in promoting telehealth adoption. Healthcare companies must provide clear and accessible facts about telehealth services and instructions for accessing and using telehealth platforms. Communicating the blessings of digital care and addressing any issues or misconceptions patients may have been critical. Educational substances, including brochures, motion pictures, and online resources, can help teach patients about telehealth, its advantages, and how to make the maximum virtual appointments. Healthcare vendors can inspire acceptance and utilization of telehealth offerings by attracting and empowering patients.

Remote Monitoring and Home Healthcare. Another potential application method is the implementation of far-flung tracking and home healthcare offerings through telehealth. This entails equipping patients with devices and gear, enabling far-off monitoring of essential symptoms and medication adherence. By collecting and analyzing this information in real-time, healthcare providers can proactively identify any adjustments in an affected person's circumstance and intrude as essential. Remote monitoring is beneficial for individuals with continual conditions or those requiring publish-operative care, as it allows for ongoing monitoring and well-timed intervention without frequent in-man or woman visits. By incorporating faraway tracking into telehealth offerings, healthcare companies can enhance patient consequences, lessen clinic readmissions, and decorate overall care satisfaction.

Teleconsultation and Second Opinions. Telehealth offers healthcare carriers opportunities to seek expert critiques and collaborate with professionals from diverse locations. Organizations can leverage teleconsultation offerings to allow healthcare specialists to connect to experts in real-time. This allows for well-timed and accurate diagnosis, remedy planning, and control of complex cases (Gajarawala & Pelkowski, 2021). This approach expands the

understanding of healthcare providers, mainly in far-off or underserved areas where specialist care may be constrained. Teleconsultation also facilitates second reviews, giving patients admission to a wider variety of professional views without needing extra journeys or appointments. By using teleconsultation offerings, healthcare organizations can decorate their diagnostic abilities, improve remedy results, and provide complete patient care.

Telehealth Outreach and Health Promotion. Telehealth can be applied for community outreach and health-promoting tasks, extending healthcare offerings past conventional scientific settings. Organizations can increase telehealth packages to supply preventive care, healthcare training, and lifestyle control help to people in far-off or underserved areas. This method can assist in addressing disparities in healthcare, getting admission, and empowering people to manage their healthcare (Haleem et al., 2021). Telehealth outreach packages also can target unique populations, including aged individuals or those with confined mobility, who may face demanding situations having access to healthcare offerings. By utilizing telehealth for outreach and healthcare promotion, healthcare organizations can enhance population healthcare outcomes, boom health literacy, and foster a proactive technique to well-being.

Summary of Application to Professional Practice

The telehealth application in professional exercise has considerable implications for healthcare groups and carriers. By embracing telehealth as a possible care delivery model, healthcare specialists can decorate patients to get entry to care, improve efficiency, and triumph over diverse obstacles to traditional in-person services (Haleem et al., 2021). Firstly, telehealth enables healthcare organizations to attain patients in far-off or underserved regions, decreasing geographical obstacles and increasing healthcare admission for folks with restricted mobility or lack of transportation options. This accelerated entry to care can enhance healthcare effects and

reduce healthcare disparities using ensuring that patients get hold of well-timed and appropriate care, no matter their region. Secondly, telehealth allows healthcare providers to optimize their exercise workflows and growth performance. Virtual visits can reduce wait instances, cast off the want for bodily areas, and streamline administrative obligations (Figueroa et al., 2019). By integrating telehealth into their practice, healthcare vendors can offer more bendy scheduling alternatives, accommodate more patients, and correctly manipulate their time. This can result in progressed patient pleasure, multiplied issuer productiveness, and more suitable universal practice overall performance.

Furthermore, telehealth offers an avenue for healthcare companies to embody fee-powerful practices. By lowering the want for in-man or woman visits, telehealth can lower overhead fees related to bodily infrastructure, staffing, and other resources. Virtual care can doubtlessly lessen hospital readmissions and emergency department visits, providing valuable financial savings for each sufferer and healthcare structure. Corporations can reap monetary sustainability by leveraging telehealth technology and enforcing efficient workflows while maintaining remarkable care. Additionally, the utility of telehealth in professional exercise can improve affected person engagement and satisfaction. Patients can receive timely care through virtual visits without requiring lengthy tours or ready instances. This comfort aspect is especially beneficial for people with busy schedules, mobility limitations, or conditions requiring joint follow-up appointments. By imparting telehealth services, healthcare companies can foster more potent affected person-company relationships and enhance patient pride through presenting customized, accessible, and convenient care alternatives.

Telehealth also opens avenues for collaborative care and multidisciplinary consultations. With the potential to connect healthcare specialists from exclusive specialties and locations,

telehealth facilitates interdepartmental collaboration and allows teams to paint together seamlessly in real time. This collaboration can cause better coordination of care, improved patient consequences, and extra holistic techniques for treatment (Figueroa et al., 2019). By leveraging telehealth structures, healthcare vendors can effortlessly discuss with specialists, proportion scientific information and test results, and increase comprehensive care plans for their patients. Furthermore, the application of telehealth in professional exercise can force innovation in healthcare shipping (Figueroa et al., 2019). As healthcare agencies adopt telehealth technologies, they are encouraged to discover new fashions of care, put in force remote monitoring answers, and combine synthetic intelligence and gadget-gaining knowledge of tools to beautify analysis and remedy choice-making. These innovations no longer most effectively enhance affected person care but also contribute to advancements in healthcare practices and methodologies.

Recommendations for Further Study

This case study on the perceptions and practices of healthcare professionals regarding telehealth offers valuable insights. However, several areas require further investigation to expand upon current research and fill gaps in knowledge. Ultimately, this will contribute to the improvement and advancement of telehealth practices.

Long-term Effects of Telehealth. Conducting longitudinal studies to look at the long-term effects of telehealth on affected person outcomes, healthcare issuer stories, and healthcare structures would be helpful (Kichloo et al., 2020). Tracking patients over a prolonged duration can provide insights into the sustainability and effectiveness of telehealth interventions. Additionally, exploring the lengthy-term impact on healthcare charges, patient delight, and

general healthcare transport fashions would provide treasured data for selection-makers and policymakers.

Telehealth in Specialized Care Settings. Further research is needed to discover the telehealth software in specialized care settings, along with mental healthcare, oncology, and pediatrics. Investigating the challenges, advantages, and boundaries of telehealth in these precise regions can help tailor telehealth interventions to satisfy the specific needs of patients and vendors (Kichloo et al., 2020). Additionally, reading the effect of telehealth on patient engagement, remedy adherence, and outcomes in these specialized settings would contribute to the proof base for telehealth growth.

Telehealth Equity and Access. Examining fairness and getting admission to the implications of telehealth is critical, specifically in underserved populations and marginalized communities. Researchers awareness of knowledge of the boundaries of telehealth get admission, which include socioeconomic elements, technological literacy, and internet connectivity (Kuziemsky et al., 2022). Identifying strategies to bridge the virtual divide and make sure equitable get right of entry to telehealth services is crucial for addressing healthcare disparities and promoting healthcare fairness.

Telehealth Integration in Healthcare Policies and Regulations. Investigating the policy and regulatory panorama surrounding telehealth is vital to inform evidence-based decision-making and form future healthcare guidelines. Research has to discover the impact of present rules on telehealth adoption, compensation models, licensure necessities, and facts about privacy and security (Kuziemsky et al., 2022). Assessing the effectiveness of policy adjustments and determining areas for improvement can facilitate the improvement of a supportive and allowing environment for telehealth implementation.

Telehealth Provider Training and Education. Further studies are needed to look at healthcare vendors' training and education needs regarding telehealth. Assessing the effect of schooling applications on issuer confidence, competence, and adoption of telehealth can guide the improvement of complete schooling curricula (Shawwa, 2023). Additionally, investigating the combination of telehealth training in healthcare professional programs can ensure that Destiny carriers are appropriately organized to leverage telehealth technologies.

Reflections

Several reflections were brought to light during this qualitative case study on telehealth. One key observation was the rapid transformation of healthcare delivery amid the COVID-19 pandemic, with telehealth playing a vital role in ensuring patient access to care. The study also highlighted the challenges and hurdles of telehealth, such as technological barriers and the need for clear policies and guidelines. It also sheds light on the opportunities and advantages of telehealth, including enhanced patient comfort, improved healthcare access, and potential cost savings.

Personal & Professional Growth

Participating in this research on telehealth has significantly impacted the researcher's personal and professional growth. On a personal level, it has deepened the researcher's understanding of the impact of technology on healthcare delivery and the potential of telehealth to improve patient outcomes. It has also emphasized the importance of adaptability and resilience in the ever-changing healthcare landscape. Professionally, it has provided an opportunity to apply research methodologies and qualitative evaluation techniques to real-world healthcare scenarios. The researcher's data analysis, transcription, coding, and thematic analysis skills have been sharpened.

Additionally, it has expanded the researcher's knowledge of the challenges and opportunities of implementing telehealth and the importance of management and collaboration in successful telehealth projects. Moreover, interacting with healthcare professionals and gaining insights from their experiences and perspectives has enriched their understanding of the complexities and nuances of telehealth in practice. This has fostered a sense of empathy and appreciation for the efforts and dedication of healthcare providers in adapting to new care models and meeting their patients' needs.

Biblical Perspective

In terms of connecting Biblical principles to the increased use of telehealth, one key principle that comes to mind is the call to love our neighbor as ourselves. The concept of telehealth, which involves the use of technology to deliver healthcare services remotely, has become increasingly popular in recent years. This trend can be seen as an extension of the Christian principle of caring for the sick and vulnerable members of society, even when physical distance may separate them. Some examples of telehealth being rooted in Biblical principles is the concept of "healing at a distance." The concept of healing at a distance has been around for centuries. This is seen in several instances in the Bible, such as when the apostle Paul care for the sick when physical visits were not possible. He would send cloths that had been touched to his body as a means of healing. Furthermore, Jesus healed the centurion's servant from a distance (Matthew 8:5-13 NIV) and when Elisha healed Naaman of leprosy through his servant (2 Kings 5:1-19 NIV). These instances demonstrate that physical proximity is not a requirement for healing, and that technology can be used to achieve similar results. Another connection can be drawn between telehealth and the principle of stewardship. In the Book of Genesis, God commands Adam to "work the earth and take care of it" (Genesis 2:15 NIV). Stewardship

involves responsible management and care of resources. By using telehealth, healthcare

providers can be more efficient with their time and resources, including reducing the need for

travel and streamlining appointment scheduling. This is a form of telehealth that we can still use

today to promote healing and care for ourselves physically, mentally, and spiritually. Let us

follow in Paul's footsteps and embrace the power of telehealth to promote stewardship and well-

being.

Scholarly sources from within the last five years offer further support for the

effectiveness and practicality of telehealth. One study published in the Journal of Medical

Internet Research found that telehealth interventions were effective in improving health

outcomes for patients with chronic diseases (Li et al., 2019). Another systematic review

published in the Journal of Telemedicine and Telecare found that telehealth was a feasible and

effective method for delivering mental health care to rural communities (Waugh et al., 2019). In

conclusion, the researcher believe telehealth relates closest with the values of kindness,

righteousness, and care. Telehealth can be used as a tool to deliver health care to at risk

populations, and to increase the level of equity in health care delivery, through resource

utilization and allocation optimization. Nevertheless, the use of one's moral judgment is essential

to guarantee the privacy of patients, as well as to preserve the personal bond among healthcare

practitioners and patients. To maintain these values, medical practitioners should thoughtfully

evaluate the possible consequences resulting from their deeds and determine choices that give

importance to the welfare and independence of the patients under their respective care.

Summary of Reflections

Undertaking a comprehensive study on the perceptions and practices of telehealth in

healthcare management has been an enlightening and thought-provoking experience. Through

diligent data collection, analysis, and interpretation, the researcher has gained invaluable insights into the use of telehealth services in the healthcare industry. One of the key observations from their investigation was the significant role telehealth has played in addressing the challenges posed by the COVID-19 pandemic. Healthcare providers have been able to deliver critical care while minimizing the risk of exposure for both patients and providers through the rapid adoption of telehealth services. This shift has highlighted the importance of embracing technological advancements and adapting to new modes of healthcare delivery to ensure continuity of care.

Furthermore, this research has revealed the importance of effective management and innovation in implementing telehealth. Clear communication, strategic planning, and resource allocation have been instrumental in successfully integrating telehealth into healthcare practices. Innovative processes, the development of telehealth infrastructure, and the seamless integration of telehealth into existing workflows have been critical elements in maximizing the benefits of digital care. However, this study has also shed light on some challenges and obstacles to the widespread adoption of telehealth. Limited access to technology and internet connectivity, reimbursement regulations, and training requirements have emerged as significant barriers to telehealth adoption. Addressing these challenges will be necessary to ensure equitable access to care and optimize the use of telehealth services.

Additionally, interdepartmental collaboration and communication have emerged as critical factors in the robust implementation of telehealth. Breaking down silos and fostering collaboration among different healthcare departments is essential to create a more patient-focused approach to telehealth. From a professional development perspective, this study has provided valuable insights into the evolving landscape of healthcare management. It has underscored that healthcare leaders must be adaptable, innovative, and forward-thinking in

navigating the changing healthcare landscape. It has also emphasized the importance of continuous learning and staying abreast of technological innovations to harness the full potential of telehealth in improving patient outcomes and healthcare delivery. Overall, this experience studying telehealth in healthcare management has been enriching and highlighted the need for ongoing research and development in this field.

Summary of Section 3

In summary, this study thoroughly examined the utilization and perception of telehealth in healthcare management amidst the COVID-19 pandemic. By interviewing experts and evaluating records, key themes were identified, including the responsibilities of healthcare managers, the use of telehealth in healthcare services, challenges and limitations of telehealth, leadership, and innovation in telehealth, the future of telehealth in healthcare management, and collaboration and communication between departments. The findings unequivocally demonstrate that telehealth has become essential for healthcare providers to ensure seamless patient care while minimizing the risk of contracting the virus. It has allowed for remote initial consultations, follow-up appointments, and medication management, providing patients and healthcare providers with convenience and accessibility. Nonetheless, obstacles such as limited access to technology, reimbursement policies, and education requirements must be addressed to unleash the potential of telehealth fully.

Summary and Study Conclusions

The success of telehealth implementation relies heavily on the leadership and innovation of the healthcare organization. A strategic and resourceful leader can drive up adoption rates and optimize the benefits of telehealth. Establishing innovative approaches and a robust telehealth infrastructure that effortlessly integrates into existing workflows are fundamental to ensuring

success. Collaboration and communication between departments are crucial in breaking down silos and fostering teamwork among healthcare departments. Sharing knowledge and resources can significantly improve patient outcomes and healthcare delivery, resulting in a more comprehensive and patient-focused approach.

References

Abkhezr, P., McMahon, M., Campbell, M., & Glasheen, K. (2020). Exploring the boundary between narrative research and narrative intervention: Implications of participating in narrative inquiry for young people with refugee backgrounds. *Narrative Inquiry*, *30*(2), 316–342. https://doi.org/10.1075/ni.18031.abk

Abutabenjeh, S., & Jaradat, R. (2018). Clarification of research design, research methods, and research methodology: A guide for public administration researchers and practitioners. *Teaching Public Administration*, *36*(3), 237–258. https://doi.org/10.1177/0144739418775787

Adjemian, J., Hartnett, K. P., Kite-Powell, A., DeVies, J., Azondekon, R., Radhakrishnan, L., van Santen, K. L., & Rodgers, L. (2021). Update: COVID-19 pandemic–associated changes in emergency department visits—United States, December 2020–January 2021. *Morbidity and Mortality Weekly Report*, *70*(15), 552–556. https://doi.org/10.15585/mmwr.mm7015a3

Ahmed, M. H., Awol, S. M., Kanfe, S. G., Hailegebreal, S., Debele, G. R., Dube, G. N., Guadie, H. A., Ngusie, H. S., & Klein, J. (2021). Willingness to use telemedicine during COVID-19 among health professionals in a low income country. *Informatics in Medicine Unlocked*, *27*, Article 100783. https://doi.org/10.1016/j.imu.2021.100783

Alam, M. K. (2021). A systematic qualitative case study: questions, data collection, NVivo analysis and saturation. *Qualitative Research in Organizations and Management: An International Journal*, *16*(1), 1–31. https://doi.org/10.1108/QROM-09-2019-1825

Albahri, A. S., Hamid, R. A., Albahri, O. S., & Zaidan, A. A. (2021). Detection-based prioritisation: Framework of multi-laboratory characteristics for asymptomatic COVID-

19 carriers based on integrated Entropy–TOPSIS methods. *Artificial Intelligence in Medicine*, *111*, 101983. https://doi.org/10.3389/fpubh.2021.614499

Alloubani, A., Akhu-Zaheya, L., Abdelhafiz, I. M., & Almatari, M. (2019). Leadership styles' influence on the quality of nursing care. *International Journal Of Health Care Quality Assurance*, *32*(6), 1022–1033. https://doi.org/10.1108/IJHCQA-06-2018-0138

Almathami, H. K. Y., Win, K. T., & Vlahu-Gjorgievska, E. (2020). Barriers and facilitators that influence telemedicine-based, real-time, online consultation at patients' homes: Systematic literature review. *Journal of Medical Internet Research*, *22*(2), e16407. https://doi.org/10.2196/16407

AlQudah, A. A., Al-Emran, M., & Shaalan, K. (2021). Technology acceptance in healthcare: A systematic review. *Applied Sciences*, *11*(22), 10537. https://doi.org/10.3390/app112210537

Altmann, P., Leutmezer, F., Ponleitner, M., Ivkic, D., Krajnc, N., Roomer, P. S., Berger, T., & Bsteh, G. (2022). Remote visits for people with multiple sclerosis during the COVID-19 pandemic in Austria: The TELE MS randomized controlled trial. *Journal of Digital Health*, *8*, 20552076221112154. https://doi.org/10.1177/20552076221112154

American Medical Association. (2020). *Telehealth implementation playbook*. AMA. https://www.ama-assn.org/system/files/2020-04/ama-telehealth-implementation-playbook.pdf

Anand, U., Cabreros, C., Mal, J., Ballesteros, F., Jr., Sillanpää, M., Tripathi, V., & Bontempi, E. (2021). Novel coronavirus disease 2019 (COVID-19) pandemic: From transmission to control with an interdisciplinary vision. *Environmental Research*, *197*, Article 111126. https://doi.org/10.1016/j.envres.2021.111126

Anderson, J. T., Bouchacourt, L. M., Sussman, K. L., Bright, L. F., & Wilcox, G. B. (2022). Telehealth adoption during the COVID-19 pandemic: A social media textual and network analysis. *Digital Health*, *8*, 20552076221090041. https://doi.org/10.1177/20552076221090041

Andersson, N. (2018). Participatory research—A modernizing science for primary health care. *Journal of General and Family Medicine*, *19*(5), 154–159. https://doi.org/10.1002/jgf2.187

Ayatollahi, H., Sarabi, F. Z. P., & Langarizadeh, M. (2015). Clinicians' knowledge and perception of telemedicine technology. *Perspectives in Health Information Management*, *12*(Fall). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4632872/

Badley, K., & Scott, J. (2011). Fruitful research: A biblical perspective on the affective dimension of research. *The Christin Librarian*, *54*(2), Article 3. https://doi.org/10.55221/2572-7478.1486

Banaszak-Holl, J., Nembhard, I., Taylor, L., & Bradley, E. H. (2012). Leadership and management: A framework for action. In Burns, L. R., Bradley, E. H., & Weiner, B. J. *Shortell and Kaluzny's health care management: Organization design & behavior* (pp. 33–63). DELMAR Cengage Learning.

Banerjee, A., & Chaudhury, S. (2010). Statistics without tears: Populations and samples. *Industrial Psychiatry Journal*, *19*(1), 60–65. https://doi.org/10.4103/0972-6748.77642

Banthin, J., Simpson, M., Buettgens, M., Blumberg, L. J., & Wang, R. (2020). *Changes in health insurance coverage due to the COVID-19 recession: Preliminary estimates using microsimulation.* Washington, DC: Urban Institute, 1–9.

Bao, Y., Pöppel, E., & Zaytseva, Y. (2017). Single case studies as a prime example for exploratory research. *PsyCh Journal*, *6*(2), 107–109. https://doi.org/10.1002/pchj.176

Barnett, M. L., Mehrotra, A., & Landon, B. E. (2020). COVID-19 and the upcoming financial crisis in health care. *NEJM Catalyst*, *1*(2), 1–6. https://doi.org/10.1056/CAT.20.0153

Bass, B. M. (1985). *Leadership and performance beyond expectations* (1st ed.). Free Press.

Begun, J. W., & Jiang, H. J. (2020). Health care management during COVID-19: Insights from complexity science. *NEJM Catalyst*, *1*(5). https://doi.org/10.1056/CAT.20.0541

Belrhiti, Z., Nebot Geralt, A., & Marchal, B. (2018). Complex leadership in healthcare: A scoping review. *International Journal of Health Policy and Management*, *7*(12), 1073–1084. https://doi.org/10.15171/ijhpm.2018.75

Benis, A., Banker, M., Pinkasovich, D., Kirin, M., Yoshai, B., Benchoam-Ravid, R., Ashkenazi, S., & Seidmann, A. (2021). Reasons for utilizing telemedicine during and after the COVID-19 pandemic: An internet-based international study. *Journal of Clinical Medicine*, *10*(23), 5519. https://doi.org/10.3390/jcm10235519

Benmira, S., & Agboola, M. (2020). The learning zone: Evolution of leadership theory. *BMJ Leader*, *5*, 3–5. https://doi.org/10.1136/leader-2020-000296

Berg, E. A., Picoraro, J. A., Miller, S. D., Srinath, A., Franciosi, J. P., Hayes, C. E., Farrell, P. R., Cole, C. R., & LeLeiko, N. S. (2020). COVID-19—A guide to rapid implementation of telehealth services: a playbook for the pediatric gastroenterologist. *Journal of Pediatric Gastroenterology and Nutrition*, *70*(6), 734–740. https://doi.org/10.1097/MPG.0000000000002749

Bernard, H. R. (2013). *Social research methods: Qualitative and quantitative approaches* (2nd ed.). Sage.

Bestsennyy, O., Gilbert, G., Harris, A., & Rost, J. (2021). *Telehealth: A quarter-trillion-dollar post-COVID-19 reality?* McKinsey. https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality

Bilinski, A., Neumann, P., Cohen, J., Thorat, T., McDaniel, K., & Salomon, J. A. (2017). When cost-effective interventions are unaffordable: Integrating cost-effectiveness and budget impact in priority setting for global health programs. *PLoS Medicine*, *14*(10), e1002397. https://doi.org/10.1371/journal.pmed.1002397

Birken, S. A., Bunger, A. C., Powell, B. J., Turner, K., Clary, A. S., Klaman, S. L., Yu, Y., Whitaker, D. J., Self, S. R., Rostad, W. L., Chatham, J. R. S., Kirk, M. A., Shea, C. M., Haines, E., & Weiner, B. J. (2017). Organizational theory for dissemination and implementation research. *Implementation Science*, *12*, Article 62. https://doi.org/10.1186/s13012-017-0592-x

Blandford, A., Wesson, J., Amalberti, R., AlHazme, R., & Allwihan, R. (2020). Opportunities and challenges for telehealth within, and beyond, a pandemic. *The Lancet Global Health*, *8*(11), e1364–e1365. https://doi.org/10.1016/S2214-109X(20)30362-4

Blumberg, B. F., Cooper, D. R., & Schindler, P. S. (2014). *Business research methods* (4th ed.). McGraw-Hill.

Blumenthal, D., Fowler, E. J., Abrams, M., & Collins, S. R. (2020). COVID-19—Implications for the health care system. *New England Journal of Medicine*, *383*(15), 1483–1488. https://doi.org/10.1056/NEJMsb2021088

Bogdan, R., & Biklen, S. K. (1997). *Qualitative research for education*. Allyn & Bacon.

Bogna, F., Raineri, A., & Dell, G. (2020). Critical realism and constructivism: Merging research paradigms for a deeper qualitative study. *Qualitative Research in Organizations and Management*, *15*(4), 461–484. https://doi.org/10.1108/QROM-06-2019-1778

Bradford, D. W., Cunningham, N. T., Slubicki, M. N., McDuffie, J. R., Kilbourne, A. M., Nagi, A., & Williams, J. W., Jr. (2013). An evidence synthesis of care models to improve general medical outcomes for individuals with serious mental illness: a systematic review. *The Journal of Clinical Psychiatry*, *74*(8), 6824. https://doi.org/10.4088/JCP.12r07666

Bradley, E. H., Taylor, L. A., & Cuellar, C. J. (2015). Management matters: A leverage point for health systems strengthening in global health. *International Journal of Health Policy and Management*, *4*(7), 411–415. https://doi.org/10.15171/ijhpm.2015.101

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706QP063OA

Braun, V., Clarke, V., Boulton, E., Davey, L., & McEvoy, C. (2021). The online survey as a qualitative research tool. *International Journal of Social Research Methodology*, *24*(6), 641–654. https://doi.org/10.1080/13645579.2020.1805550

Brenner, P. S. (2017). Narratives of response error from cognitive interviews of survey questions about normative behavior. *Sociological Methods & Research*, *46*(3), 540–564. https://doi.org/10.1177/0049124115605331

Breton, M., Sullivan, E. E., Deville-Stoetzel, N., McKinstry, D., DePuccio, M., Sriharan, A., Deslauriers, V., Dong, A., & McAlearney, A. S. (2021). Telehealth challenges during COVID-19 as reported by primary healthcare physicians in Quebec and Massachusetts. *BMC Family Practice*, *22*, Article 192. https://doi.org/10.1186/s12875-021-01543-4

Bronsoler, A., Doyle, J., & Van Reenen, J. (2022). The impact of health information and communication technology on clinical quality, productivity, and workers. *Annual Review of Economics*, *14*, 23–46. https://doi.org/10.1146/annurev-economics-080921-101909

Buchbinder, S. B., & Shanks, N. H. (2012). *Introduction to health care management* (2nd ed.). Jones & Bartlett Learning.

Budd, J., Miller, B. S., Manning, E. M., Lampos, V., Zhuang, M., Edelstein, M., Rees, G., Emery, V. C., Stevens, M. M., Keegan, N., Short, M. J., Pillay, D., Manley, E., Cox, I J., Heymann, D., Johnson, A. M., & McKendry, R. A. (2020). Digital technologies in the public-health response to COVID-19. *Nature Medicine*, 26(8), 1183-1192. https://doi.org/10.1038/s41591-020-1011-4

Bunniss, S., & Kelly, D. R. (2010). Research paradigms in medical education research. *Medical Education*, *44*(4), 358–366. https://doi.org/10.1111/j.1365-2923.2009.03611.x

Burns, J. M. (1978). *Leadership*. Harper & Row.

Burroughs, M., Urits, I., Viswanath, O., Simopoulos, T., & Hasoon, J. (2020). Benefits and shortcomings of utilizing telemedicine during the COVID-19 pandemic. *Baylor University Medical Center Proceedings*, *33*(4), 699–700. https://doi.org/10.1080/08998280.2020.1792728

Calton, B., Abedini, N., & Fratkin, M. (2020). Telemedicine in the time of coronavirus. *Journal of Pain and Symptom Management*, *60*(1), e12–e14. https://doi.org/10.1016/j.jpainsymman.2020.03.019

Candela, A. G. (2019). Exploring the function of member checking. *The Qualitative Report*, *24*(3), 619–628. https://core.ac.uk/download/pdf/215371472.pdf

Carless, D., & Douglas, K. (2017). Narrative research. *The Journal of Positive Psychology: Dedicated to Furthering Research and Promoting Good Practice*, *12*(3), 307–308. https://doi.org/10.1080/17439760.2016.1262611

Celestina, M. (2018). Between trust and distrust in research with participants in conflict context. *International Journal of Social Research Methodology*, *21*(3), 373–383. https://doi.org/10.1080/13645579.2018.1427603

Checcucci, E., De Luca, S., Alessio, P., Verri, P., Granato, S., De Cillis, S., Amparore, D., Sica, M., Piramide, F., Paiana, A., Volpi, G., Manfredi, M., Balestra, G., Autorino, R., Fiori, C., & Porpiglia, F. (2021). Implementing telemedicine for the management of benign urologic conditions: A single centre experience in Italy. *World Journal of Urology*, *39*(8), 3109–3115. https://doi.org/10.1007/s00345-020-03536-x

Cheng, T. C., Fu, H., Xu, D., & Yip, W. (2022). Technology platforms are revolutionizing health care service delivery in China. *NEJM Catalyst Innovations in Care Delivery*, *3*(1). https://doi.org/10.1056/CAT.21.0414

Chu, H., & Ke, Q. (2017). Research methods: What's in the name? *Library & Information Science Research*, *39*(4), 284–294. https://doi.org/10.1016/j.lisr.2017.11.001

Clancy, C. M., & Kirsh, S. (2021). Virtual care and the pandemic: Are we reaching all patients? *Annals of Internal Medicine*, *174*(1), 116–117. https://doi.org/10.7326/M20-5593

Cochrane, B. S., Hagins Jr, M., Picciano, G., King, J. A., Marshall, D. A., Nelson, B., & Deao, C. (2017, March). High reliability in healthcare: creating the culture and mindset for patient safety. In *Healthcare management forum* (Vol. 30, No. 2, pp. 61–68). Sage CA: Los Angeles, CA: SAGE Publications. https://doi.org/10.1177/0840470416689314

Cohen, R. A., Terlizzi, E. P., Cha, A. E., & Martinez, M. E. (2021). *Health insurance coverage: Early release of estimates from the National Health Interview Survey, January–June 2020*. https://doi.org/10.15620/cdc:100469

Collingridge, D. S., & Gantt, E. E. (2019). Republished: The quality of qualitative research. *American Journal of Medical Quality*, *34*(5), 439–445. https://doi.org/10.1177/1062860619873187

Corry, M., Porter, S., & McKenna, H. (2019). The redundancy of positivism as a paradigm for nursing research. *Nursing Philosophy*, *20*(1), e12230. https://doi.org/10.1111/nup.12230

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Sage.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five traditions* (4th ed.). Sage.

Creswell, J. W. (2014). *A concise introduction to mixed methods research.* Sage.

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage.

Creswell, J. W., & Poth, C. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.

Cypress, B. S. (2017). Rigor or reliability and validity in qualitative research: Perspectives, strategies, reconceptualization, and recommendations. *Dimensions of Critical Care Nursing*, *36*(4), 253–263. https://doi.org/10.1097/DCC.0000000000000253

Daaboul, D. G., & Nasr, V. G. (2021). Thoracotomy versus sternotomy: Is it a matter of scar?. *Journal of Cardiothoracic and Vascular Anesthesia*, *35*(1), 128–129. https://doi.org/10.1053/j.jvca.2020.08.024

Dadich, A., & Doloswala, N. (2018). What can organisational theory offer knowledge translation in healthcare? A thematic and lexical analysis. *BMC Health Services Research*, *18*, Article 351. https://doi.org/10.1186/s12913-018-3121-y

Daft, R. L. (2010). *Organization theory and design* (10th ed.). South-Western, Cengage Learning.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 219–340. https://doi.org/10.2307/249008

Davis, G. F., & DeWitt, T. (2021). Organization theory and the resource-based view of the firm: The great divide. *Journal of Management*, *47*(7), 1684–1697. https://doi.org/10.1177/0149206320982650

Denzin, N. K., & Lincoln, Y. S. (2008). *Strategies of qualitative inquiry* (3rd ed.). Sage.

Downton, J. V. (1973). *Rebel leadership: Commitment and charisma in the revolutionary process.* Free Press.

Ekeland, A. G., Bowes, A., & Flottorp, S. (2010). Effectiveness of telemedicine: A systematic review of reviews. *International Journal of Medical Informatics*, *79*(11), 736–771. https://doi.org/10.1016/j.ijmedinf.2010.08.006

Farquhar, J., Michels, N., & Robson, J. (2020). Triangulation in industrial qualitative case study research: Widening the scope. *Industrial Marketing Management*, *87*, 160–170. https://doi.org/10.1016/j.indmarman.2020.02.001

FastStats. (2022). *Leading causes of death*. National Center for Health Statistics. CDC. https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm

Fields, B. G. (2020). Regulatory, legal, and ethical considerations of telemedicine. *Sleep Medicine Clinics*, *15*(3), 409–416. https://doi.org/10.1016/j.jsmc.2020.06.004

Figueroa, C. A., Harrison, R., Chauhan, A., & Meyer, L. (2019). Priorities and challenges for health leadership and workforce management globally: a rapid review. *BMC Health Services Research*, *19*(1), 1–11. https://doi.org/10.1186/s12913-019-4080-7

Fisk, M., Livingstone, A., & Pit, S. W. (2020). Telehealth in the context of COVID-19: Changing perspectives in Australia, the United Kingdom, and the United States. *Journal of Medical Internet Research*, *22*(6), e19264. https://doi.org/10.2196/19264

Flanigan, J. (2018). Philosophical methodology and leadership ethics. *Leadership*, *14*(6), 707–730. https://doi.org/10.1177/1742715017711823

Frankel, K. K., Deanna Brooks, M., & Learned, J. E. (2021). A meta-synthesis of qualitative research on reading intervention classes in secondary schools. *Teachers College Record*, *123*(8), 31–58. https://doi.org/10.1177/01614681211048624

Freed, J., Lowe, C., Flodgren, G. M., Binks, R., Doughty, K., & Kolsi, J. (2018). Telemedicine: is it really worth it? A perspective from evidence and experience. *Journal of Innovation in Health Informatics*, *25*(1), 014–018. https://doi.org/10.14236/jhi.v25i1.95

Gajarawala, S. N., & Pelkowski, J. N. (2021). Telehealth benefits and barriers. *The Journal for Nurse Practitioners*, *17*(2), 218–221. https://doi.org/10.1016/j.nurpra.2020.09.013

Gaveikaite, V., Grundstrom, C., Lourida, K., Winter, S., Priori, R., Chouvarda, I., & Maglaveras, N. (2020). Developing a strategic understanding of telehealth service adoption for COPD care management: A causal loop analysis of healthcare professionals. *PLoS ONE*, *15*(3), e0229619. https://doi.org/10.1371/journal.pone.0229619

Geerts, J. M., Kinnair, D., Taheri, P., Abraham, A., Ahn, J., Atun, R., Barberia, L., Best, N. J., Dandona, R., Dhahri, A. A., Emilsson, L., Free, J. R., Gardam, M., Geerts, W. H., Ihekweazu, C., Johnson, S., Lidstone-Jones, C., Loh, E., Lyons, O., ... Bilodeau, M.

(2021). Guidance for health care leaders during the recovery stage of the COVID-19 pandemic: A consensus statement. *JAMA Network Open*, *4*(7), Article e2120295. https://doi.org/10.1001/jamanetworkopen.2021.20295

Gentles, S. J., & Vilches, S. L. (2017). Calling for a shared understanding of sampling terminology in qualitative research: Proposed clarifications derived from critical analysis of a methods overview by McCrae and Purssell. *International Journal of Qualitative Methods*, *16*(1), 1609406917725678. https://doi.org/10.1177/1609406917725678

Ghebreyesus, T. A. (2020). Addressing mental health needs: An integral part of COVID-19 response. *World Psychiatry*, *19*(2), 129–130. https://doi.org/10.1002/wps.20768

Gibson, C. B. (2017). Elaboration, generalization, triangulation, and interpretation: On enhancing the value of mixed method research. *Organizational Research Methods*, *20*(2), 193–223. https://doi.org/10.1177/1094428116639133

Goldberg, E. M., Lin, M. P., Burke, L. G., Jiménez, F. N., Davoodi, N. M., & Merchant, R. C. (2022). Perspectives on telehealth for older adults during the COVID-19 pandemic using the quadruple aim: Interviews with 48 physicians. *BMC Geriatrics*, *22*, Article 188. https://doi.org/10.1186/s12877-022-02860-8

Grossoehme, D. H. (2014). Overview of qualitative research. *Journal of Health Care Chaplaincy*, *20*(3), 109–122. https://doi.org/10.1080/08854726.2014.925660

Grbich, C. (1999). *Qualitative research in health: An introduction*. Sage.

Greenhalgh, T., & Hurwitz, B. (1999). Why study narrative?. *BMJ*, *318*(7175), 48–50. https://doi.org/10.1136/bmj.318.7175.48

Haleem, A., Javaid, M., Singh, R. P., & Suman, R. (2021). Telemedicine for healthcare: Capabilities, features, barriers, and applications. *Sensors International*, *2*, Article 100117. https://doi.org/10.1016/j.sintl.2021.100117

Han, Y., Lie, R. K., & Guo, R. (2020). The internet hospital as a telehealth model in China: Systematic search and content analysis. *Journal of Medical Internet Research*, *22*(7), e17995. https://doi.org/10.2196/17995

Hartnett, K. P., Kite-Powell, A., DeVies, J., Coletta, M. A., Boehmer, T. K., Adjemian, J., & Gundlapalli, A. V. (2020). Impact of the COVID-19 pandemic on emergency department visits—United States, January 1, 2019–May 30, 2020. *Morbidity and Mortality Weekly Report*, *69*(23), 699–704. https://doi.org/10.15585/mmwr.mm6923e1

Hayashi, P., Jr., Abib, G., & Hoppen, N. (2019). Validity in qualitative research: A processual approach. *Qualitative Report*, *24*(1), 98–112. https://doi.org/10.46743/2160-3715/2019.3443

Heale, R., & Forbes, D. (2013). Understanding triangulation in research. *Evidence Based Nursing*, *16*(4), 98–98. https://doi.org/10.1136/eb-2013-101494

Hoffman, D. A. (2020). Increasing access to care: Telehealth during COVID-19. *Journal of Law and the Biosciences*, *7*(1), lsaa043. https://doi.org/10.1093/jlb/lsaa043

Hong, Y. R., Lawrence, J., Williams Jr, D., & Mainous III, A. (2020). Population-level interest and telehealth capacity of US hospitals in response to COVID-19: cross-sectional analysis of Google search and national hospital survey data. *JMIR Public Health and Surveillance*, *6*(2), e18961. https://doi.org/10.2196/18961

Hospodková, P., Berežná, J., Barták, M., Rogalewicz, V., Severová, L., & Svoboda, R. (2021, November). Change management and digital innovations in hospitals of five European

countries. In *Healthcare* (Vol. 9, No. 11, p. 1508). MDPI.

https://doi.org/10.3390/healthcare9111508

Hwei, L. R. Y., & Octavius, G. S. (2021). Potential advantages and disadvantages of

telemedicine: A literature review from the perspectives of patients, medical personnel,

and hospitals. *Journal of Community Empowerment for Health*, *4*(3), 180–186.

https://doi.org/10.22146/jcoemph.64247

Hyder, M. A., & Razzak, J. (2020). Telemedicine in the United States: an introduction for

students and residents. *Journal of Medical Internet Research*, *22*(11), e20839.

https://doi.org/10.2196/20839

Imlach, F., McKinlay, E., Middleton, L., Kennedy, J., Pledger, M., Russell, L., Churchward, M.,

Cumming, J., & McBride-Henry, K. (2020). Telehealth consultations in general practice

during a pandemic lockdown: survey and interviews on patient experiences and

preferences. *BMC Family Practice*, *21*, 1–14. https://doi.org/10.1186/s12875-020-01336-

1

Jeffery, M. M., D'Onofrio, G., Paek, H., Platts-Mills, T. F., Soares, W. E., III, Hoppe, J. A.,

Genes, N., Nath, B., & Melnick, E. R. (2020). Trends in emergency department visits and

hospital admissions in health care systems in 5 states in the first months of the COVID-

19 pandemic in the US. *JAMA Internal Medicine*, *180*(10), 1328–1333.

https://doi.org/10.1001/jamainternmed.2020.3288

Jnr, B. A. (2020). Use of telemedicine and virtual care for remote treatment in response to

COVID-19 pandemic. *Journal of Medical Systems*, *44*, Article 132.

https://doi.org/10.1007/s10916-020- 01596-5

Joshi, A. U., Randolph, F. T., Chang, A. M., Slovis, B. H., Rising, K. L., Sabonjian, M., Sites, F. D., & Hollander, J. E. (2020). Impact of emergency department tele-intake on left without being seen and throughput metrics. *Academic Emergency Medicine*, *27*(2), 139–147. https://doi.org/10.1111/acem.13890

Julien, H. M., Eberly, L. A., & Adusumalli, S. (2020). Telemedicine and the forgotten America. *Circulation*, *142*, 312–314. https://doi.org/10.1161/circulationaha.120.048535

Kankam, P. K. (2019). The use of paradigms in information research. *Library & Information Science Research*, *41*(2), 85–92. https://doi.org/10.1016/j.lisr.2019.04.003

Kern, F. G. (2018). The trials and tribulations of applied triangulation: Weighing different data sources. *Journal of Mixed Methods Research*, *12*(2), 166–181. https://doi.org/10.1177/1558689816651032

Khairat, S., Meng, C., Xu, Y., Edson, B., & Gianforcaro, R. (2020). Interpreting COVID-19 and virtual care trends: Cohort study. *JMIR Public Health and Surveillance*, *6*(2), e18811. https://doi.org/10.2196/18811

Khatoon, A. (2020). A blockchain-based smart contract system for healthcare management. *Electronics*, *9*(1), 94. https://doi.org/10.3390/electronics9010094

Kho, J., Gillespie, N., & Martin-Khan, M. (2020). A systematic scoping review of change management practices used for telemedicine service implementations. *BMC Health Services Research*, *20*, 1–16. https://doi.org/10.1186/s12913-020-05657-w

Kichloo, A., Albosta, M., Dettloff, K., Wani, F., El-Amir, Z., Singh, J., Aljadah, M., Chakinala, R. C., Kanugula, A. K., Solanki, S., & Chugh, S. (2020). Telemedicine, the current COVID-19 pandemic and the future: A narrative review and perspectives moving

forward in the USA. *Family Medicine and Community Health*, *8*(3), e000530.

https://doi.org/10.1136/fmch-2020-000530

King James Bible. (2017). King James Bible Online. https://www.kingjamesbibleonline.org/

(Original work published 1769).

Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in

educational contexts. *International Journal of Higher Education*, *6*(5), 26–41.

https://files.eric.ed.gov/fulltext/EJ1154775.pdf

Koonin, L. M., Hoots, B., Tsang, C. A., Leroy, Z., Farris, K., Jolly, B., Antall, P., McCabe, B.,

Zelis, C., Tong, I., & Harris, A. M. (2020). Trends in the use of telehealth during the

emergence of the COVID-19 pandemic—United States, January–March 2020. *Morbidity*

and Mortality Weekly Report, *69*(43), 1595–1599.

https://doi.org/10.15585/mmwr.mm6943a3

Kuziemsky, C., Hunter, I., Udayasankaran, J. G., Ranatunga, P., Kulatunga, G., John, S., John,

O., F. FlÓrez-Arango, J., Ito, M., Ho, K., Gogia, S. B., Araujo, K., Rajput, V. K., Meijer,

W. J., & Basu, A. (2022). Telehealth as a means of enabling health equity. *Yearbook of*

Medical Informatics, *31*(1), 060–066. https://doi.org/10.1055/s-0042-1742500

Ladin, K., Porteny, T., Perugini, J. M., Gonzales, K. M., Aufort, K. E., Levine, S. K., Wong, J.

B., Isakova, T., Rifkin, D., Gordon, E. J., Rossi, A., Koch-Weser, S., & Weiner, D. E.

(2021). Perceptions of telehealth vs in-person visits among older adults with advanced

kidney disease, care partners, and clinicians. *JAMA Network Open*, *4*(12), e2137193–

e2137193. https://doi.org/10.1001/jamanetworkopen.2021.37193

Laukka, E., Huhtakangas, M., Heponiemi, T., & Kanste, O. (2020). Identifying the roles of

healthcare leaders in HIT implementation: A scoping review of the quantitative and

qualitative evidence. *International Journal of Environmental Research and Public Health*, *17*(8), 2865. https://doi.org/10.3390/ijerph17082865

Leedy, P. D., & Ormrod, J. E. (2016). *Practical research: Planning and design*. Pearson.

Leeman, J., Baquero, B., Bender, M., Choy-Brown, M., Ko, L. K., Nilsen, P., Wangen, M., & Birken, S. A. (2019). Advancing the use of organization theory in implementation science. *Preventive Medicine*, *129*, 105832. https://doi.org/10.1016/j.ypmed.2019.105832

Li, P., Liu, X., Mason, E., Hu, G., Zhou, Y., Li, W., & Jalali, M. S. (2020). How telemedicine integrated into China's anti-COVID-19 strategies: Case from a National Referral Center. *BMJ Health & Care Informatics*, *27*(3), e100164. https://doi.org/10.1136%2Fbmjhci-2020-100164

Linneberg, M. S., & Korsgaard, S. (2019). Coding qualitative data: A synthesis guiding the novice. *Qualitative Research Journal*, *19*(3), 259–270. https://doi.org/10.1108/QRJ-12-2018-0012

Lintz, J. (2022). Adoption of telemedicine during the COVID-19 pandemic: Perspectives of primary healthcare providers. *European Journal of Environment and Public Health*, *6*(1), 1–7. https://doi.org/10.21601/ejeph/11804

Lo, D., McKimm, J., & Till, A. (2018). Transformational leadership: Is this still relevant to clinical leaders? *British Journal of Hospital Medicine*, *79*(6), 344–347. https://doi.org/10.12968/hmed.2018.79.6.344

Lopez, A. M., Lam, K., & Thota, R. (2021). Barriers and facilitators to telemedicine: can you hear me now?. *American Society of Clinical Oncology Educational Book*, *41*, 25–36. https://doi.org/10.1200/EDBK_320827

MacKay, D., Jecker, N. S., Pitisuttithum, P., & Saylor, K. W. (2020). Selecting participants fairly for controlled human infection studies. *Bioethics*, *34*(8), 771–784. https://doi.org/10.1111/bioe.12778

Mahoney, M. F. (2020). Telehealth, telemedicine, and related technologic platforms current practice and response to the COVID-19 pandemic. *Journal of Wound, Ostomy, and Continence Nurses Society*, *47*(5), 439–444. https://doi.org/10.1097/WON.0000000000000694

Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, *26*(13), 1753–1760. https://doi.org/10.1177/1049732315617444

March, J. G., & Simon, H. A. (1958). *Organizations*. John Wiley and Sons, Inc.

McGrath, C., Palmgren, P. J., & Liljedahl, M. (2019). Twelve tips for conducting qualitative research interviews. *Medical Teacher*, *41*(9), 1002–1006. https://doi.org/10.1080/0142159X.2018.1497149

Melé, D., & Fontrodona, J. (2016). Christian ethics and spirituality in leading business organizations: Editorial introduction. *Journal of Business Ethics*, *26*(10), 671–679. https://doi.org/10.1007/s10551-016-3323-3

Merriam, S. (2009). *Qualitative research and case study applications in education*. Jossey-Bass.

Meyer, J. (2000). Using qualitative methods in health related active research. *BMJ*, *320*, 178–181. https://doi.org/10.1136/bmj.320.7228.178

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice*, *24*(1), 9–18. https://doi.org/10.1080/13814788.2017.1375091

Mullick, A. R., Rayhan, N., Koly, K. N., Nahar, K., & Hossain, I. (2020). Telemedicine and telehealth: A virtual care platform with prospects and importance during COVID-19 outbreak. *European Journal of Pharmaceutical and Medical Research*, *7*(8), 39–45. https://www.researchgate.net/publication/344321247_TELEMEDICINE_AND_TELEHE ALTH_A_VIRTUAL_CARE_PLATFORM_WITH_PROSPECTS_IMPORTANCE_DU RING_COVID-19_OUTBREAK

Naik, N., Ibrahim, S., Sircar, S., Patil, V., Hameed, B. M. Z., Rai, B. P., Chlosta, P., & Somani, B. K. (2022). Attitudes and perceptions of outpatients towards adoption of telemedicine in healthcare during COVID-19 pandemic. *Irish Journal of Medical Science*, *191*, 1505– 1512. https://doi.org/10.1007/s11845-021- 02729-6

National Institutes of Health. (2020). *National command and operation centre*. NIH. https://www.nih.org.pk/novel-coranavirus-2019-ncov

Nicholson, N. (1995). *Blackwell encyclopaedic dictionary of organizational behaviour*. Oxford.

Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020, April 17). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, *78*, 185–193. https://doi.org/10.1016/j.ijsu.2020.04.018

Northouse, P. G. (2021). *Leadership: Theory and practice*. Sage.

O'Sullivan, E., Rassel, G. R., & Berner, M. (2007). *Research methods for public administrators*. Routledge.

Oyibo, C. O., & Gabriel, J. M. O. (2020). Evolution of organisation theory: A snapshot. *International Journal of Innovative Research and Development*, *9*(9), 221–227. https://doi.org/10.24940/ijird/2020/v9/i9/SEP20075

Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*, *34*(5 Pt 2), 1189–1208. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1089059/

Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative Social Work*, *1*(3), 261–283. https://doi.org/10.1177/1473325002001003636

Patton, M. Q. (2008). *Qualitative research and evaluation methods*. Sage.

Piccioli, M. (2019). Educational research and mixed methods. Research designs, application perspectives, and food for thought. *Studi Sulla Formazione/Open Journal of Education*, *22*(2), 439–450. https://doi.org/10.13128/ssf-10815

Pokorny, J. J., Norman, A., Zanesco, A. P., Bauer-Wu, S., Sahdra, B. K., & Saron, C. D. (2018). Network analysis for the visualization and analysis of qualitative data. *Psychological Methods*, *23*(1), 169–183. https://doi.org/10.1037/met0000129

Pope, C., Ziebland, S., & Mays, N. (2000). Qualitative research in health care: Analyzing qualitative data. *BMJ*, *320*(7227), 114–116. https://doi.org/10.1136/bmj.320.7227.114

Qin, P. (2022). Organizational theory in health care management. *Internal Medicine and Medical Investigation Journal*, *19*(2), 167–176. https://doi.org/10.1108/IJOTB-19-02-2016-B002

Radun, I., Nilsonne, G., Radun, J., Helgesson, G., & Kecklund, G. (2019). Company employees as experimental participants in traffic safety research: Prevalence and implications. *Transportation Research. Part F: Traffic Psychology and Behavior*, *60*, 81–92. https://doi.org/10.1016/j.trf.2018.10.008

Rajkumar, E., Gopi, A., Joshi, A., Thomas, A. E., Arunima, N. M., Ramya, G. S., Kulkarni, P., Rahul, P., George, A. J., Romate, J., & Abraham, J. (2023). Applications, benefits and

challenges of telehealth in India during COVID-19 pandemic and beyond: a systematic review. *BMC Health Services Research*, *23*(1), 1–15. https://doi.org/10.1186/s12913-022-08970-8

Rashid, Y., Rashid, A., Warraich, M. A., Sabir, S. S., & Waseem, A. (2019). Case study method: A step-by-step guide for business researchers. *International Journal of Qualitative Methods*, *18*, 1609406919862424. https://doi.org/10.1177/1609406919862424

Reddy, C. D. (2020). Teaching research methodology: Everything's a case. *Electronic Journal of Business Research Methods*, *18*(2), 178–188. https://doi.org/10.34190/JBRM.18.2.009

Renz, S. M., Carrington, J. M., & Badger, T. A. (2018). Two strategies for qualitative content analysis: An intramethod approach to triangulation. *Qualitative Health Research*, *28*(5), 824–831. https://doi.org/10.1177/1049732317753586

Rehm, J., Kilian, C., Rovira, P., Shield, K. D., & Manthey, J. (2021). The elusiveness of representativeness in general population surveys for alcohol. *Drug and Alcohol Review*, *40*(2), 161–165. https://doi.org/10.1111/dar.13148

Riessman, C. K. (2008). *Narrative methods for the human sciences*. Sage.

Roberts, R. E. (2020). Qualitative interview questions: Guidance for novice researchers. *Qualitative Report*, *25*(9), 3185–3203. https://doi.org/10.46743/2160-3715/2020.4640

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

S.3548 - 116th Congress. (2020). CARES Act. S.3548 Mar 19, 2020. https://www.congress.gov/bill/116th-congress/senate-bill/3548/text

Saldafia, J. (2009). *The coding manual for qualitative researchers*. Sage.

Saleem, S. M., Pasquale, L. R., Sidoti, P. A., & Tsai, J. C. (2020). Virtual ophthalmology: Telemedicine in a COVID-19 era. *American Journal of Ophthalmology*, *216*, 237–242. https://doi.org/10.1016/j.ajo.2020.04.029

Salsabilla, A., Azzahra, A. B., Syafitri, R. I., Supadmi, W., & Suwantika, A. A. (2021). Cost-Effectiveness of telemedicine in Asia: a scoping review. *Journal of Multidisciplinary Healthcare*, 3587–3596. https://doi.org/10.2147/JMDH.S332579

Satin, A. M., & Lieberman, I. H. (2021). The virtual spine examination: Telemedicine in the era of COVID-19 and beyond. *Global Spine Journal*, *11*(6), 966–974. https://doi.org/10.1177/2192568220947744

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity*, *52*, 1893–1907. https://doi.org/10.1007/s11135-017-0574-8

Scholtz, S. E. (2021). Sacrifice is a step beyond convenience: A review of convenience sampling in psychological research in Africa. *SA Journal of Industrial Psychology*, *47*(1), 1–12. https://doi.org/10.4102/sajip.v47i0.1837

Sengupta, M., Roy, A., Ganguly, A., Baishya, K., Chakrabarti, S., & Mukhopadhyay, I. (2021). Challenges encountered by healthcare providers in COVID-19 times: an exploratory study. *Journal of Health Management*, *23*(2), 339–356. https://doi.org/10.1177/09720634211011695

Sfantou, D. F., Laliotis, A., Patelarou, A. E., Sifaki-Pistolla, D., Matalliotakis, M., & Patelarou, E. (2017). Importance of leadership style towards quality of care measures in healthcare

settings: A systematic review. *Healthcare*, *5*(4), 73.

https://doi.org/10.3390/healthcare5040073

Shachar, C., Engel, J., & Elwyn, G. (2020). Implications for telehealth in a postpandemic future: Regulatory and privacy issues. *JAMA*, *323*(23), 2375–2376.

https://doi.org/10.1001/jama.2020.7943

Shah, A. S., Wood, R., Gribben, C., Caldwell, D., Bishop, J., Weir, A., Kennedy, S., Reid, M., Smith-Palmer, A., Goldberg, D., McMenamin, J., Fischbacher, C., Robertson, C., Hutchinson, S., McKeigue, P., Cohoun, H., & McAllister, D. A. (2020). Risk of hospital admission with coronavirus disease 2019 in healthcare workers and their households: nationwide linkage cohort study. *BMJ*, 371. https://doi.org/10.1136/bmj.m3582

Shawwa, L. (2023). The use of telemedicine in medical education and patient care. *Cureus*, *15*(4), 1–8. https://doi.org/10.7759/cureus.37766

Shay, P. D. (2015). Onward and upward: The importance of organization theory in health administration education. *Journal of Health Administration Education*, *32*(2), 245–252. https://www.ingentaconnect.com/content/aupha/jhae/2015/00000032/00000002/art00007

Silverman, D. (2021). *Doing qualitative research.* Sage.

Simons, H. (2009). *Case study research in practice.* Sage.

Snoswell, C. L., Taylor, M. L., Comans, T. A., Smith, A. C., Gray, L. C., & Caffery, L. J. (2020). Determining if telehealth can reduce health system costs: Scoping review. *Journal of Medical Internet Research*, *22*(10), 172–198. https://doi.org/10.2196/17298

Soule, K. E., & Freeman, M. (2019). So you want to do post-intentional phenomenological research? *Qualitative Report*, *24*(4), 857–872.

https://core.ac.uk/download/pdf/215372108.pdf

Stewart, H., Gapp, R., & Harwood, I. (2017). Exploring the alchemy of qualitative management research: Seeking trustworthiness, credibility and rigor through crystallization. *The Qualitative Report*, *22*(1), 1–19. https://doi.org/10.46743/2160-3715/2017.2604

Stilwell, P., & Harman, K. (2021). Phenomenological research needs to be renewed: Time to integrate enactivism as a flexible resource. *The International Journal of Qualitative Methods*, *20*, 1609406921995299. https://doi.org/10.1177/1609406921995299

Stolow, J. A., Moses, L. M., Lederer, A. M., & Carter, R. (2020). How fear appeal approaches in COVID-19 health communication may be harming the global community. *Health Education & Behavior*, *47*(4), 531–535. https://doi.org/10.1177/10901981209350

Taguchi, N. (2018). Description and explanation of pragmatic development: Quantitative, qualitative, and mixed methods research. *System*, *75*, 23–32. https://doi.org/10.1016/j.system.2018.03.010

Tashakkori, A., & Teddlie, C. (2021). *Sage handbook of mixed methods in social & behavioral research*. Sage.

Taylor, J. W. (2019). A biblical perspective of research. *The Journal of Adventist Education*, *81*(3), 4–8. https://www.journalofadventisteducation.org/2019.81.3.2

The Lancet Rheumatology. (2022). A wake-up call for sleep in rheumatic diseases. *The Lancet Rheumatology*, *4*(11), e739. https://doi.org/10.1016/S2665-9913(22)00311-3

Thirunavukkarasu, A., Alotaibi, N. H., Al-Hazmi, A. H., Alenzi, M. J., Alshaalan, Z. M., Alruwaili, M. G., Alruwaili, T. A. M., Alanzai, H., & Alosaimi, T. H. (2021, December). Patients' perceptions and satisfaction with the outpatient telemedicine clinics during COVID-19 era in Saudi Arabia: a cross-sectional study. In *Healthcare* (Vol. 9, No. 12, p. 1739). MDPI.

Thomas, E. E., Haydon, H. M., Mehrotra, A., Caffery, L. J., Snoswell, C. L., Banbury, A., & Smith, A. C. (2022). Building on the momentum: Sustaining telehealth beyond COVID-19. *Journal of Telemedicine and Telecare*, *28*(4), 301–308. https://doi.org/10.1177/1357633X20960638

Toledano, N., & Anderson, A. R. (2020). Theoretical reflections on narrative in action research. *Action Research*, *18*(3), 302–318. https://doi.org/10.1177/1476750317748439

Townsend, R. C., & Cushion, C. J. (2021). 'Put that in your fucking research': Reflexivity, ethnography, and disability sport coaching. *Qualitative Research*, *21*(2), 251–267. https://doi.org/10.1177/1468794120931349

Tsai, Y. (2011). Relationship between organizational culture, leadership behavior and job satisfaction. *BMC Health Services Research*, *11*, Article 98. https://doi.org/10.1186/1472-6963-11-98

Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative Social Work*, *11*(1), 80–96. https://doi.org/10.1177/1473325010368316

Turner, C., & Astin, F. (2021). Grounded theory: what makes a grounded theory study?. *European Journal of Cardiovascular Nursing*, *20*(3), 285–289. https://doi.org/10.1093/eurjcn/zvaa034

Vaishnavi, V. K., & Kuechler, W., Jr. (2015). *Design science research methods and patterns: Innovating information and communication technology* (2nd ed.). Auerbach.

Vaishya, R., Javaid, M., Khan, I. H., & Haleem, A. (2020). Artificial intelligence (AI) applications for COVID-19 pandemic. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, *14*(4), 337–339. https://doi.org/10.1016/j.dsx.2020.04.012

Van Bavel, J. J. V., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., Crockett, M. J., Crum, A. J., Douglas, K. M., Druckman, J. N., Drury, J., Dube, O., Ellemer, N., Finkle, E. J., Fowler, J. H., Gelfand, M., Han, S., Haslam, S. A., Jetten, J., … Willer, R. (2020). Using social and behavioural science to support COVID-19 pandemic response. *Nature Human Behaviour*, *4*, 460–471. https://doi.org/10.1038/s41562-020-0884-z

Waugh, M., Calderone, J., Brown Levey, S., Lyon, C., Thomas, M., DeGruy, F., & Shore, J. H. (2019). Using telepsychiatry to enrich existing integrated primary care. *Telemedicine and e-Health*, *25*(8), 762–768. https://doi.org/10.1089/tmj.2018.0132

Weeks, J. R. (2021). *Population: An introduction to concepts and issues*. Cengage Learning.

Weller, S. C., Vickers, B., Bernard, H. R., Blackburn, A. M., Borgatti, S., Gravlee, C. C., & Johnson, J. C. (2018). Open-ended interview questions and saturation. *PloS One*, *13*(6), e0198606. https://doi.org/10.1371/journal.pone.0198606

Whitelaw, S., Mamas, M. A., Topol, E., & Van Spall, H. G. (2020). Applications of digital technology in COVID-19 pandemic planning and response. *The Lancet Digital Health*, *2*(8), e435–e440. https://doi.org/10.1016/S2589-7500(20)30142-4

Wijethilake, C., Upadhaya, B., & Lama, T. (2023). The role of organizational culture in organizational change towards sustainability: Evidence from the garment manufacturing industry. *Production Planning & Control*, *34*(3), 275–294. https://doi.org/10.1080/09537287.2021.1913524

Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review*, *15*(1), 45–55. http://www.imrjournal.org/uploads/1/4/2/8/14286482/imr-v15n1art4.pdf

Winit-Watjana, W. (2016). Research philosophy in pharmacy practice: Necessity and relevance. *International Journal of Pharmacy Practice*, *24*(6), 428–436. https://doi.org/10.1111/ijpp.12281

Winston, B. E., & Patterson, K. (2006). An integrative definition of leadership. *International Journal of Leadership Studies*, *1*(2), 6–66. http://www.rodrigoselback.com.br/wp-content/uploads/2020/08/An-Integrative-Definition-of-Leadership.pdf

Wong, L. P. (2008). Data analysis in qualitative research: A brief guide to using NVivo. *Malaysian Family Physician: The Official Journal of the Academy of Family Physicians of Malaysia*, *3*(1), 14–20. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4267019/

World Health Organization. (2022). *Coronavirus disease (COVID-19)*. WHO. https://www.who.int/emergencies/diseases/novel-coronavirus-2019?adgroupsurvey={adgroupsurvey}&gclid=Cj0KCQjwib2mBhDWARIsAPZUn_nIDdXwvxJDAw5IIOz52iQra9vAWtfNoabttkOF_ei11o2hmOVTOtoaAjebEALw_wcB

Xu, J., Hamadi, H. Y., Hicks-Roof, K. K., Zeglin, R. J., Bailey, C. E., & Zhao, M. (2021). Healthcare professionals and telehealth usability during COVID-19. *Telehealth and Medicine Today*, *6*(3). https://doi.org/10.30953/tmt.v6.270

Yin, R. K. (2009). *Case study research. Design and methods* (4th ed.). Sage.

Yin, R. K. (2014). *Case study research*. Sage.

Zhang, X., & Saltman, R. (2021). Impact of electronic health records interoperability on telehealth service outcomes (Preprint). *JMIR Medical Informatics*, *10*(1), e31837. https://doi.org/10.2196/31837

Zimlichman, E., Nicklin, W., Aggarwal, R., & Bates, D. W. (2021). Health care 2030: The

coming transformation. *NEJM Catalyst Innovations in Care Delivery*, *2*(2).

https://doi.org/10.1056/CAT.20.0569