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## Effective Strategies to Manage Nursing Shortages

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# Walden University

College of Management and Human Potential

This is to certify that the doctoral study by

Pamela Banks

has been found to be complete and satisfactory in all respects,  
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the review committee have been made.

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Walden University  
2024

Abstract

Effective Strategies to Manage Nursing Shortages

by

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MS, Washburn University, 2016

BS, Washburn University, 2013

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

June 2024

## Abstract

Nursing shortages present a global challenge, placing strain on nurse managers, increasing the workload, and impacting the quality of patient care. Grounded in leadership-member exchange theory, the purpose of this qualitative multiple case study was to explore and identify strategies used by nursing managers to manage nursing shortages. The participants were eight nurse managers who work for a specific healthcare organization in Midwest states and have been in their roles for 2-3 years, contributing to efforts mitigating nurse shortages. Data were collected using semistructured interviews, newsletters, and employee handbooks. Through thematic analysis, three themes were identified: (a) recruitment strategies, (b) development and training, and (c) leadership strategies. A key recommendation is for nursing managers to cultivate an environment that encourages openness and development in training. Other recommendations include nurse managers delivering timely and appropriate feedback to employees and remaining open and approachable to receiving feedback from the staff. The implications for positive social change include the potential to decrease nurse shortages and provide better patient care in the Midwest healthcare community.

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## Dedication

I dedicate this study to my brother, Roscoe Chapman Jr., who passed away. Roscoe pushed me to continue my education to set high expectations for our children. Even though he is no longer in the flesh with us in this world, I hold him with me each day. I also devote this study to my three daughters, Tasheka, Candice, and Chanel, to carry the family generation's high expectations down to their children. I also dedicate this study to Denise Durham, my editor, for her insurmountable level of support, encouragement, and perseverance to see me through.

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## Section 1: Foundation of the Study

Corporations can perform many useful roles in effective strategies that nursing managers use to manage shortages. Understanding the reasons for nursing shortages in personnel is critical because nurses can affect the quality of patient care (Twiste, 2019). Nurses play an integral part of patient care in clinics and hospitals. This qualitative case study focuses on effective strategies used by nursing managers to manage nursing shortages in clinics and hospitals.

### **Background of the Problem**

Challenges in patient care require new approaches from nurse managers to accomplish organizational strategies (Bowden & Schmus, 2021). These new approaches are conventional management methods such as not delivering challenging difficulties, not using interactive skills, and not promoting exceptional tactical agreements now considered ineffective (Fein & Tziner, 2021). Deprived of proper management strategies, clinic nursing managers will not be successful in patient care (Bowden & Schmus, 2021). The success of a clinic depends on the capability of effective management strategies.

Both the high turnover rates and overall lack of nurses continue to be issues worldwide (Bowden & Schmus, 2021). Therefore, nursing managers must implement new strategies to decrease nursing shortages. To mitigate turnover among nurses, administrators must analyze and examine nursing turnover rates and subsequently employ, apply, and assess approaches aimed at reducing shortages in nursing staff (Juraschek et al., 2019). Any single approach cannot address nursing shortages; it must be a multistrategy approach (Fein & Tziner, 2021). Drennan and Ross (2019) observed that

management should act on knowing why personnel resign from organizations and pinpoint strategies to engage their interests within the organizations. Potential recruitment strategies like pay, promotional opportunities, and manager style all can help reduce the nurse shortages (Lockhart, 2020).

### **Problem and Purpose**

For businesses, the specific problem is that some nursing managers have not acquired the necessary skills and strategies to effectively manage their employees in a nursing shortage. This qualitative multiple case study sought to identify specific and effective strategies used by nursing managers to manage nursing shortages. The sample for this study was eight nurse managers who demonstrate effective strategies to manage the nursing shortage in the Midwest, such as Illinois, Indiana, and Kansas, and who specialize in community medicine, pediatrics, gynecology, obstetrics, psychiatry, and internal medicine.

### **Population and Sampling**

This study specifically targeted nurse managers who are successful in preventing nurse shortages in the Midwest area, with specialties in community medicine, pediatrics, gynecology, obstetrics, psychiatry, and internal medicine, to reach data saturation. The participants were each required to have a minimum of 2-3 years of experience in their nurse manager positions. For this study, I asked the Ethic Review Committee (ERC) of the human resources' team of the healthcare organization site to provide contact information for nurse managers who had a minimum of 2-3 years of experience and who indicated in their position that they have chosen nursing as their lifelong career. Consent

was given by participants via a paper informed consent form (see Appendix C). The sample consisted of eight nurse managers selected from facilities in Illinois, Indiana, and Kansas.

In this qualitative study, I chose to use purposeful sampling because of the ability to select a sample population based on the specific purpose of this study as well as the knowledge of the population. Purposeful sampling in qualitative research allows the selection of participants based on certain characteristics who have firsthand experience on the phenomenon being studied (Campbell et al. 2020). The sample for this study was eight nurse managers obtained from the target population, which included all nurse managers who work for the study healthcare organization. The organization indicates it has over 10,000 employees across its departments, including healthcare providers offering direct care to patients. The eight nurse managers included in the study were those who responded first to the invitation to participate. This multiple case study employs data from semistructured interviews, as well as documents available on the company's website. The documents reviewed from the healthcare company's website were job descriptions, newsletters, and the employee handbook. These public documents provided data such as job vacancies to show nursing shortages, and the newsletter provided tips and strategies that are currently used by nurse managers throughout the company to decrease nurse shortages.

### **Nature of the Study**

The research method and design employed in this study was a qualitative multiple-case study. The qualitative research method permitted me to ask open-ended

questions to understand participants' experiences regarding the benefits of implementing strategies to decrease nurse shortages. Qualitative research is an interactive, multimethod approach that explores people in their natural setting (Chan et al., 2019) and which allows for selected methods and approaches for gathering data that are particular to disciplines, such as interviews (Natow, 2019).

According to Natow (2019), quantitative researchers normally focus on numerical data instead of subjective nuances. Most quantitative approaches rely on a researcher's highlighting of hypothesis assessment for exploring key variables' characteristics or relationships through accumulating cross-case data for each variable (Johnson et al., 2019). Quantitative research involves collecting numerical data, with the purpose of conducting analysis to identify patterns and relationships. While this approach can be valuable in many research contexts, it was not the appropriate method in a study about effective strategies to manage nursing shortages. The combination of quantitative and qualitative methods, known as mixed methods, was inappropriate for this study since no quantitative elements were employed in this study (Natow, 2019). Therefore, the qualitative method alone suited the needs for this study.

There are many ways to design a qualitative study, such as using narrative, phenomenology, ethnography, and multiple case studies. Phenomenology is used to examine lived practices (Johnson et al., 2019), which was not suitable for this research because of the importance on understanding and developing strategies for human behavior. An ethnographic study explores social behaviors (Ahlstedt et al., 2019), which was not appropriate in this context because the study was not focused on social behavior



within the culture of nursing managers. Narrative design is used to explore human understanding through the use of narrative (Hardie et al., 2020), which was also not appropriate for this research since the goal was to interview nurse managers and analyze the resulting data to identify themes that directly relate to the research questions.

### **Research Question**

What strategies do nursing managers use to effectively manage nursing shortages?

### **Interview Questions**

1. What strategies do you use to prevent nurse shortages?
2. How do you measure the effectiveness of the strategies you use to prevent nurse shortages?
3. What barriers have your nurse managers faced while formulating strategies to decrease nurse shortages?
4. In overcoming obstacles during the development of strategies to prevent nurse shortages, what approaches did your nurse managers employ?
5. What has been the outcome of implementing these strategies to prevent nurse turnover?
6. If you had to start the implementation of the strategies again, what would you do differently?
7. Could you provide additional insights or details related to the prevention of nurse shortages that you would like to share?

## **Conceptual Framework**

This research study employed leadership-motivated excellence theory (LMX-T) as its framework. Graen and Schiemann (2013) developed LMX-T, defined as managerial leadership that forms strategic alliances with instrumental individuals to address common problems within the organization. New leaders may currently take advantage of the three tactics of LMX-T, outlined by Fein and Tziner (2021) as enhancing skills, acknowledging individuals who exemplify effective behaviors, and changing rewards. LMX-T served as a foundation for underlining nurses' job fulfillment components, inspirations, and nurse shortages elements in this qualitative study. LMX-T is similar to the process of performance management, which begins with the development of a strategy to include the categories of mission, vision, objectives, and values, followed by specific action plans that are put in place to reach a particular goal. LMX-T related to this study to focus on employing effective management strategies that nurse managers can use to influence more positive behavior and increase job satisfaction.

## **Operational Definitions**

*Employee engagement:* The commitment (both emotional and intellectual) demonstrated by an employee. This commitment can be expressed toward their job efforts, in direct contact with their manager, or toward the organization. All these efforts frequently result in additional effort on the part of the employee (Bergstedt & Wei, 2020).

*Nurse manager:* A professional practitioner with management capabilities to lead and manage groups in healthcare organizations, including self-education, organizing, coordinating, leadership, and managing legal and proper issues. Prior management

capabilities include nurse implementation plans, nurse and patient care results, and team and patient satisfaction (Penconek et al., 2021).

*Performance management:* The development of a strategy, which includes defining the mission, vision, values, and strategic objective of a project, followed by a specific actions plan, which outlines the goal and steps to achieve the specific objective (Mitosis et al., 2021).

*Professional quality of life:* Managing one's responses to a high stress environment and the corresponding work demands. This relates directly to an employee's engagement, work satisfaction, and emotional well-being (Isobe et al., 2020).

*Transformational leadership:* The ability to inspire and motivate followers, encouraging them to attain elevated levels of performance and personal growth (Akdere & Egan, 2020).

### **Assumptions, Limitations, and Delimitations**

#### **Assumptions**

Johnson et al. (2019) explained that assumptions in a research concept function as both a framework and a set of vital theories of the scholar themselves. In this study, the assumptions were that the interviewees would (a) reply promptly to interview questions, (b) be ready to engage in the study when not at work, and (c) respond honestly to the interview questions.

#### **Limitations**

The design or methodology of a study also includes its limitations, which in turn impact the analysis and the interpretation of the research findings (Hennink & Kaiser,

2022). According to Anderson et al. (2019), these limitations cannot be controlled by the researcher, and there are limitations to every study. In this research study, a limitation was that access to participants may have been limited due to COVID-19 restrictions.

### **Delimitations**

Delimitations are factors or aspects of the research area that help narrow down the scope of the research and define what the researcher reviews. According to Babchuk (2019), delimitations are choices made by the researcher, which set boundaries for the resulting research. In the context of this study, a limitation was the choice of eight nurse managers with specialization in this study, a delimitation was the choice of eight nurse managers who specialized in community medicine, pediatrics, gynecology, obstetrics, internal medicine, and psychiatry. The healthcare organization employs nurse managers in these specialties and serve as the partnering organization for this study. Another delimitation was the geographic location of the Midwest areas of Illinois, Indiana, and Kansas. Because I interviewed nurse managers from the healthcare organization site, they covered this geographic area only.

### **Significance of the Study**

According to Marufu et al. (2021), implementing initiatives to decrease nursing shortages may increase patient observance to care, improve access to care, increase providers' potential to network with patients, and safeguard that patients remain in a safe atmosphere. The study is significant because of its importance in identifying and implementing more effective strategies for delivering patient satisfaction and the quality of patient care for patients who reside in the Midwest. The study findings could provide

nursing managers with valuable strategies to alleviate nurse shortages. This potential impact on social change lies in the successful reduction of nurse shortages, potentially leading to enhanced patient satisfaction, improved employer effectiveness, and an elevated quality of patient care.

### **Contribution to Business Practice**

This study adds to the existing literature on strategies that nursing managers use to effectively manage nursing shortages. The results may lead to decreased errors and lower morbidity and mortality rates. The results could bring social change by decreasing the nurse shortage rates, raising patient satisfaction rates and employer effectiveness, and improving the quality of patient care. Adopting new, improved management strategies may help to address challenging problems that can lead to a successful decrease in nursing shortages. Previously utilized management practices that could not address complex issues did not make full use of the contemporary job market, and in a post-pandemic era, traditional approaches that lack unique strategic alliances and neglect interpersonal skills are no longer effective (Fein & Tziner, 2021). To assist with the nursing shortage, nurse managers, who are an integral part of the healthcare industry, must adopt innovative strategies that directly address the nursing shortage. Nursing shortages and ineffective strategies for managing nurses are serious concerns that can result in serious outcomes for patients, including poor care and potential deaths.

### **Implications for Social Change**

Empowering individuals and communities to obtain an understanding of sources to result in a community-level change is the crux of social change (Florell, 2020).

Identifying data indicating that some nursing managers lack the strategies to effectively manage the nursing shortage was the purpose of this study. Decreasing nursing shortages is essential to global healthcare providers, as nurses influence patient care and outcomes (Kox et al., 2020). As a result, organizations need to understand the effective strategies nursing managers can use to manage nursing shortages. Nurse managers need to adopt improvement management strategies that could address nursing shortages. With insufficient nursing managers and training, there are serious implications to both the success of nurses and to patient care. If nursing managers can implement effective strategies for managing nurses, this will improve outcomes to manage the nursing shortages, which is the goal of the healthcare organization.

### **Literature Review**

In this qualitative, multiple case study, I explored the use of effective strategies by nursing managers to manage the nursing shortage. This study originated as a specific business problem defined as a lack of strategies on the part of nursing managers to effectively engage their employees and, therefore, manage the nursing shortage. To encourage improvement in nursing shortages, interviews were held with nursing managers to enhance employee performance. Kuehn (2020) noted the global nursing deficit is estimated to be at 5.9 million by the year 2030. The World Health Organization's (WHO's) statistics indicate that by the year 2030, 1 in 6 nurses will retire (Yang et al., 2021). Higher retirement rates may impact the nursing shortage. As noted in the research, nursing shortages lead to increased errors, higher morbidity, and mortality rates (Manata, 2019).

The exploration of professional and academic literature in this assessment lays the groundwork for comprehending nursing shortages. The topics covered in peer-reviewed and published literature encompass aspects like contemporary healthcare, including the COVID-19 pandemic, needs linked to the Affordable Care Act (2022), and other factors that could potentially affect nursing shortages. Nursing management strategies include progression planning, LMX-T, strategies implemented by nurse managers, nurse exhaustion, job satisfaction among nurses, nurse manager span control, transformational leadership, and emotional intelligence, which are all areas that could play a role in alleviating nurse shortages.

Review of the academic literature on nurse shortages included 152 academic sources for this study. Of these, 122 of the 152 (80%) publications were published within 5 years of start of this study. A total of 79 references were ultimately included in the literature review, incorporating materials related to the conceptual framework of LMX-T.

According to LMX-T, administrative management has the potential to form alliances and develop unique strategies among capable employees, enabling them to work on problems that affect them directly (Graen & Schiemann, 2013). For this study, LMX-T served as the framework, as it provides the intended outcome of helping management develop tools for the improved management of nurses. This literature review encompasses the following sections of LMX-T that could help in leadership development: (a) enhancing management skills, (b) modifying rewards strategies, (c) recognizing effective behavior, (d) other leadership theories (LMX, nursing turnover, job burnout), and (e) history of nursing shortages.

According to Fisher et al. (2021), nurse turnover rates during the COVID-19 pandemic were as high as 141% among registered nurses (RNs), 129% among certified nursing aides, and 114% among licensed practical nurses. As indicated by Fisher et al., there is a definite need for enhanced strategies to curb the nursing shortage in hospitals and in healthcare centers. LMX-T may help to provide effective tools that nursing managers can use to effectively manage shortages. According to Manata (2019), curtailing the nurse shortage may result in improved patient care. According to LMX-T, managers seek to form a quality relationship with their team members who have high performance as with the nurse managers to help nurse shortages.

The literature in this review includes resources accessed using Walden University's library databases, such as ABI Inform Complete, EBSCOhost, Business Source Complete, ProQuest, Google Scholar, Scholar Works, US Government, Pub Med, and private websites. The following search terms were used to conduct this literature review: *employee engagement, nursing manager, professional quality of life, performance management, corporate sustainability, leadership, and LMX-T leadership*. These terms were relevant to the framework and to the goals of this research.

### **Leader-Member Exchange Theory**

The study utilizes LMX-T as the framework. There are three components of LMX-T that help managers improve upon their leadership skills: (a) enhancing skills, (b) adjusting rewards, and (c) recognizing those employees who are models of effective behavior (Graen & Schiemann, 2013). In line with LMX-T, organizational leadership has the capacity to build strong partnerships and formulate strategies with proficient staff



members to address shared organizational challenges (Scandura & Gower, 2022).

Developing solid alliances among managers and subordinates can positively affect performance, resulting in increases in communication (Godsey et al., 2020). Nursing managers should seek to implement some of the LMX-T strategies, which may help to curb nurse shortages supporting this additional research.

According to Lahey and Nelson (2019), it is necessary for managers to focus on strategies that are intricately tied to the mission and overarching goals of an organization. When nursing managers combine the precepts of LMX, and LMX-T, nurse managers can employ strategies for improving communication and help fulfill job satisfaction. Laying the groundwork for effective communication can provide a foundation for when challenges arise, meaning that subordinates and managers have already set a precedent for talking through situations and spending time on problem solving (Fein & Tziner, 2021). Increases in communication may increase nurse job satisfaction, which may help to curb the nurse shortage and improve patient care.

The three tactics that comprise LMX-T can help new leaders develop and emerge, but a thorough comprehension of these strategies and other positive outcomes demands enhanced leadership abilities to inspire employees to welcome change and evaluate care practices (Manata, 2019). Therefore, LMX-T can be utilized by nursing managers to establish an essential role for the team leader and strong foundation for communication among members, which will, in turn, help to reduce the nursing shortage (Fein & Tziner, 2021). According to Hirvi et al. (2020), the relationship between nursing managers and staff may rely on job satisfaction, performance, and success within the organization. The

implementation of LMX-T may help to increase job satisfaction and decrease nurse shortages. Nursing managers building relationships with their staff was important to my study as it may help to reduce nurse shortages. This research may offer additional insights such as this study.

### **Other Leadership Theories Pertinent to Nursing**

While other leadership theories offer alternative strategies for this particular situation, they were not selected for this study. Each one outlines the effects of executing specific strategies on improving employee performance. The original LMX theory, prior to LMX-T outlined by Graen and Schienman (2013), develops differential relationships between managers and their team through role expectations, provisions, and incentives over time, culminating in associations of diverse caliber (Allen et al., 2021; Syahrani et al., 2022).

### **Leader-Member Exchange**

LMX develops from vertical dyad (supervisors and subordinate) linkage (VDL) theory. In their original article, Dansereau et al. (1975) pioneered LMX distinctive leadership theory, which reveals the vertical dyadic collaboration between leaders and members, as indicated by Fein and Tziner (2021). As previously described, LMX theory outlines differential relationships between leaders and their subordinates through relations connecting role opportunities, resources, and incentives, developing relationships of varying quality from which mutual trust and respect builds.

The LMX connections between supervisors and subordinates consist of three stages: role taking, role making, and routinization (Dansereau et al., 1975). The role-

taking process unfolds when the team leader communicates expectations to team members and assesses their abilities (Scandura & Gower, 2022). Role making is where responsibility is created for the team member. Trust building could be a key factor in the role-making stage of the LMX theory (Dansereau et al., 1975). The final stage of the LMX theory is routinization. Routinization references norms, routines, and expectations outlined, and the supervisor and subordinate relationship is maintained over a period to help understand how a team can work (Scandura & Gower, 2022). The LMX theory is related to how researchers understand which approaches can promote positive employee performance. Further research should be done to explore these management theories and their effects with regard to managing nursing shortages.

### **Transformational Leadership**

In the aftermath of the COVID-19 pandemic, it is important for a healthcare organization to have a mission and a vision and for the leaders of that organization to act in accordance with those values daily (Asif et al., 2019). As leaders of the organization, nurse managers must set an example so that employees will see the importance of practicing it themselves. If nurse managers put into practice the initial principles of transformational leadership, they would advance the organizational goals of their company and see potential improvements in patient outcomes (Asif et al., 2019). Nam and Park (2019) asserted that transformational leadership is intricately associated with enhanced patient outcomes, decreased medical errors, and lower staff turnover. This connection is attributed to leaders collaborating with subordinates to establish shared

goals. As a result, transformational leadership has been used in a post-pandemic environment to develop strategies for challenging situations.

Employing transformational leadership strategies, nurse managers have the potential to enhance employee engagement, ultimately contributing to a reduction in nursing shortages. Akdere and Egan (2020), emphasized that this type of leadership is critical in clinical settings and to an organization. This is because the characteristics of transformational leadership use a team approach, and in the case of nurse managers, patient care is all about teamwork (Wu et al., 2020). Employing transformational leadership strategies may help nurse managers establish a better working relationship with the nurse team and help to reduce nurse shortages. Additional research may provide additional insights here supporting the need for further study.

### **Healthy Work Environment and LMX-T**

In an article by Munro and Hope (2020), respect and care for others on the healthcare team is as significant as self-care and necessary for providing a healthy work environment. In fostering a healthy work environment on the healthcare team, the implementation of the LMX-T is important to ensure that nursing staff are respected by nursing managers, colleagues, and peers (Markey et al., 2020). As a result, job satisfaction, employee engagement, and less nurse turnover may occur. The employment of nursing assistants in acute care continued to grow during the past two decades (Munro & Hope, 2020). Although the demand for nursing assistants has increased in acute care settings, research shows that they are the most vulnerable members of the healthcare team. According to Munro and Hope (2020), the median annual wage for a nurse

assistant is \$25,710, and their median hourly salary is \$12.36 compared to the \$15.95 hourly wage of all U.S. employees. This wage differential is because as a group, nursing assistants receive little to no recognition for the work duties they perform, supporting the need for additional doctoral level research on this topic, which could provide information on how proper wages could help decrease nursing shortages.

Nursing assistants can and do provide added value in support of the acutely ill patients if they receive adequate training, are well-supervised and respected (Munro & Hope, 2020). It was noted in a study by Anderson et al. (2019) that because the nursing staff assistants talk to the patients and ask questions, they become invaluable in being able to convey important patient information to the RNs. The outcome may result in improvement in the quality of patient care which may help to reduce nurse shortage, supporting the need for further study.

### **Nurse Facility Shortage and LMX-T**

Within the conceptual framework of the LMX-T, nurse leadership in relationship to nurse facility shortage is a pivotal aspect and may be a key factor in nursing shortages across the United States. Predicting nurse turnover is essential for nurse managers to avoid expensive costs and an increase in staff loss which may result in a nurse manager shortage. According to Edwards-Capello and Silbert-Flagg (2021), nursing schools dismissed approximately 79,659 skilled applicants, which resulted in a reduced amount of staff, lecture hall space, clinical locations, clinical teachers, as well as cost limitations (Barteit et al., 2020). Spurlock (2020) indicated that while most hospitals are experiencing shortages, they cannot hire additional RN students, because of the lack of

clinical sites for students. Nurse faculty shortages may stem from nurse manager's leadership as treatment, leadership styles, potential bias they may show, or benefits given to some and not others may contribute to the nurse shortage. All these components relate back to the LMX-T framework of this study.

Many nursing teachers are older RNs but continue to teach because nursing schools cannot increase or meet the demand without the necessary number of faculty. Edwards-Capello and Silbert-Flagg (2021) and Spurlock (2020) revealed that contributing factors to the nurse shortage are a result of limited nurse tutors and nurse faculty shortage. When nursing faculty lack assurance, nursing students' learning could be impacted. Edwards-Capello and Silbert-Flagg noted that new nursing faculty are not confident and have assurance in what they teach nursing students. Nursing undergraduates require a nurse faculty mentor who can provide education and support to nursing undergraduates by connecting LMX-T to nursing practice (Spurlock, 2020). Edwards-Capello and Silbert-Flagg and Spurlock studies indicated that well-prepared and dedicated nursing faculty will be necessary to train nursing staff in the shifting healthcare environment, which will help to reduce nursing shortages. Additional research remains needed to confirm that the nursing faculty shortages and a lack of nursing tutors may impact nurse shortages.

### **National Shortage of Nurses**

The National Shortages of Nurses may have an impact on the Baby Boomer generation as they may require further care as they age (Gan, 2020). The care that Baby Boomers will require will impact the shortage of nurses in the United States. The Census

Bureau (2020) indicated that Baby Boomers make up approximately 23% of the population that needed care in 2020 and this number continues to increase. The shortage is ascribed to an aging population, the surge in chronic diseases, and a decline in the availability of nursing programs (Spurlock, 2020). Individuals with chronic illnesses will require additional healthcare services than those with a good bill of health and fewer chronic diseases (Yates et al., 2022). The anticipated extensive care of the Baby Boomers due to aging factors may require care that will impact nursing shortages as the demand for nurses may increase to provide the additional care needed for the Baby Boomer population. Additional research is needed to further understand how the national nursing shortage may be impacted by Baby Boomers.

The RN's workload shifts may also impact patient care. According to Drennan and Ross (2019), there is a connection between assigned shift workload and quality of care. Expanding healthcare services may boost control spans and job density for staff nurses and nurse managers (Spurlock, 2020). The quality of patient care diminishes when RNs, LPNs, and patient care techs are tasked with caring for a larger number of patients with limited resources, making it challenging to maintain the same standard of care as when staffing levels are sufficient. This further supports the need for the implementation of the LMX-T strategies (Spurlock, 2020). The conceptual framework of LMX-T conjoins with the elements of appraisal. The appraisal of nurse workload shifts may contribute to nurse shortages presents a need for nurse shortages to be explained more accurately may be similar reasons outlined by the theory of the LMX-T.

## **Turnover Among Nurses**

Workplace turnover is the rate at which an organization gains or loses staff members, and how long an employee remains in their position. According to Lee (2021), there is both voluntary and involuntary turnover, each of which generates its own repercussions (Adams et al., 2019). Some reasons for employee turnover are a lack of growth, employee dissatisfaction, lack of recognition, and lack of feedback (Labrague & Santos, 2020). Nursing managers' turnover could impact nursing shortages because of nurses leaving their jobs. The implementation of successful strategies that foster job satisfaction and commitment may help to reduce nurse turnover and improve nurse shortages.

Nursing managers should assess the reasons behind turnover in their respective departments and then create, implement, and evaluate the corresponding LMX-T strategies. In an article by Ross (2019), some of the most common reasons for nursing turnover were found to be personal factors and working conditions. Since turnover can cost anywhere from \$20,000 to \$100,000 per nurse (Labrague & Santos, 2020), healthcare corporations who experience nursing shortages and high turnover rates can suffer from a lack of quality in healthcare (Labrague & Santos, 2020). Nursing turnover disturbs hospital operations which can impact the hospital's cost and revenue. With continued nursing turnover, the issues of both nursing shortages and high turnover continue to be an issue worldwide (Drennan & Ross, 2019). As noted by Labrague and Santos (2020), nurse managers need to implement strategies that will ensure suitable



working conditions, and increased job satisfaction that will help to eliminate job burnout.

Nurse managers' burnout may increase nurse turnover.

### **Job Burnout**

According to Gable and Agueinis (2022), nurses overwork resulting in job burnout, leading to a high nurse shortages rates in the United States. As per Drennan and Ross (2019), the expense of utilizing a recruitment agency to secure an interim manager can surpass approximately \$165,000 for a 4-month contract when nurse managers resign. It is important to reduce turnover so that hospital administrators can maintain a certain standard of patient care and minimize the financial implications of staff losses. Kelly et al. (2019) suggested that identifying staff burnout before it is too late to prevent nurse shortages is important. Efforts to avoid nurse burnout are important to reducing nurse shortages as nurse staff may be more likely to remain in their positions. Burnout syndrome is a state of chronic stress accompanied by emotional exhaustion, depersonalization, and low levels of efficacy result in low levels of patient care. Hospital leaders should ensure nurse managers have the necessary staff on hand to help to reduce their workload stress (Kelly et al., 2019). Reducing workload stress may enable managers to decrease nurse shortage.

Individual flexibility can assist nurses in managing with decreasing distress. Drennan and Ross (2019) noted that there was an inverse relationship between resilience and efficiency, and emotional fatigue and skepticism. Gabriel and Aguinis (2022) noted that resilience should be a highly valuable trait among nursing staff. The findings discussed above suggest that individual flexibility toward nurse shortages mechanisms

could help curb nurse shortages among healthcare facilities in the United States supporting the need for additional research and discovery.

### ***Causes of Nurses' Burnout and LMX-T***

Long working hours could be a factor that cause nurse burnout. Job burnout results from work-related stress. According to Karakachian and Colbert (2019), working more than 45 hours a week causes mental exhaustion which may lead to burnout. The researchers surveyed 386 nurses to investigate the effects of long working hours on wellbeing, including likelihood of burnout. The study results showed that 94% of the participants stated that long working hours and added workload resulted in burnout which led to emotional exhaustion. Nurse burnout is one of the overwhelming factors that may cause a nurse manager to not only leave the organization but also leave the healthcare industry (Roth et al., 2021). These factors negatively impact not only the nurse but also the patients (Thomas et al., 2019). Nurse managers must protect nurses from working too many shifts or taking on extra-long work hours. As noted by Thomas et al. (2019), overburden workloads cause an unhealthy work-environment that can lead to exhaustion and burnout in nursing staff. Nursing burnout could result in nurses quitting their jobs supporting the need for additional research.

Handling patients with different conditions excessively can lead to exhaustion and burnout in nursing staff. Sagherian et al. (2020) found that excessive working hours handling patients with different conditions leads to exhaustion and burnout among nurses. Shen et al. (2021) highlighted that exceedingly long shifts can lead to added assignments and responsibilities, which can cause burnout among nurses, while Akkuş et al. (2021)

reported that these hours can lead to burnout because of exposure to occupational stress for a long period. Akkus et al. (2021) agrees that the causes for nurse burnout is a result of increased pressure and performance expectations. Thus far, long working hours among nurses leads to increased burnout, resulting in high turnover rates, high mortality rates, increase in mistakes, and poor-quality patient care supporting the need for more effective management solutions and strategies such as this research may discover.

Research demonstrated that sleep deprivation also leads to burnout in nursing staff. Simonetti et al. (2021) reported that chronic lack of sleep causes nurses' burnout. Fernandez et al. (2020) also examined the link between lack of sleep and nurses' burnout. Fernandez et al. found that lack of sleep leads to physical exhaustion in nurses, which is a sign of burnout. Labrague (2020) recruited 234 participants to investigate the relationship between lack of sleep and nurses' burnout. Labrague and Santos revealed that 68% of the nurses who attended patients overnight reported high levels of burnout because of a lack of sleep. Lack of sleep caused by working long hours and overnight shifts is one of the causes of nurses' burnout. Sleep deprivation experienced by nurse managers can have consequential effects not only on the nurse managers, but patient care, as the lack of sleep may impact the nurse managers ability to perform effectively in their role impacting nursing shortages.

In a qualitative study, Nie et al. (2020) highlighted that lack of sufficient sleep leads to grave mistakes that may increase infections among patients and, in extreme cases, leads to death, thus causing burnout among nurses who feel insufficient in their career. Shahrour and Dardas (2020) also evaluated the link between lack of sleep and

nurses' burnout leading to a lack of proper concentration at work. Ashley et al. (2021) investigated the link between lack of sleep and employee job burnout. Ashley et al. revealed that lack of enough breaks and rest time due to long working hours leads to employee burnout. Sleep deprivation contributes to nurses' burnout because of depression and anxiety caused by increased job performance expectations among nurses leads to nursing shortages. The lack of sleep and proper concentration impacts nurses' managers performance and increases the risk of nurse burnout. A need exists to further explore reasons why nurse shortages continue to be a factor.

Shortage of staff increases the risk of nurses' burnout. Nursing staff shortages puts pressure on the other nursing staff to perform double duty. The outcome may result in nurses working double shifts, longer extensive hours, and experiencing a lack of sleep. In a qualitative study by Ashley et al. (2021) to determine the effect of staff shortage on nurses' burnout, researchers found that an insufficient workforce means an increased workload for nurses on duty, leading to mental and physical exhaustion and burnout. Salmon and Morehead (2019) revealed that staff shortage leads to a poor nurse-patient ratio which overwhelms the nurses on duty leading to extreme tiredness at the workplace. Shah et al. (2022) sought to determine the implications of staffing shortages on burnout among nurses. In contrast, Shah et al. reported contradicting findings to Salmon and Morehead by establishing that staff shortage leads to burnout in nurses attending emergency cases because the required close monitoring leaves them with limited time to rest. To help alleviate nursing staff shortage, it is important that nurse managers

implement more effective strategies to improve job satisfaction to work towards sustainable solutions for decrease in nurse shortages supporting the need for this research.

Nursing staff who work in specialized units, such as intensive care, experience burn out due to a lack of specialized nursing staff to work in these units. Staff shortage leads to burnout among nurses in these units, such as intensive care, as there are not enough staff personnel to perform the delicate nature of the services required. Moore et al. (2021) established that a shortage of nurses in critical positions such as intensive care units and maternity wards leads to burnout among nurses on duty because of the nature of the service they offer in those units. Specialized units may require more work, due to the special care that is needed. Therefore, more research is required to provide effective strategies to retain nurses in specialized units.

According to Montgomery et al. (2021), working extra rigorous hours, agreeing to work through two shifts without a break, and providing coverage to ensure the healthcare operations are seamless without interruptions, may be factors of burnout for nursing staff. Rosa et al. (2020) revealed that inconsiderate shift scheduling might overburden other workers leading to burnout among nurses. Burnout and sleep deprivation experienced by nurse managers can cause consequential effects that not only impact the nurse managers, but patient care. The lack of sleep may impact the nurse managers' ability to perform in their role impacting the nursing shortage.

According to Wei et al. (2020) lack of support system in authoritative management of teamwork and collaboration among nurse staff may cause burnout. Nursing staff are vital to quality healthcare. Employees must be able to collaborate and

function as a team. According to Moore et al. (2021), teamwork means collaborating, working together, sharing best practices, voicing opinions, and supporting one another. Collaboration among nurse managers and their nursing staff is important to this study regarding potential help to reduce nurse shortages.

A forum for authoritative management is necessary for the well-being of nursing staff. A meta-analysis by Vogus et al. (2020) sought to determine the effect of support systems on burnout among nurses in the healthcare sector. The Vogus et al. study established that a lack of a support system, such as authoritative leadership, denies nurses an opportunity to share their opinions on the workload they handle, which causes nurses burnout at the healthcare facility. Wei et al. (2020) also evaluated the relationship between the authoritative leadership support systems and nurses' burnout in healthcare. This research focused on nurse shortages, therefore, to ensure job satisfaction for nurse managers, they may need to have a forum and voice to express their concerns. Having a form and voice may help to alleviate job stress and burnout. Nurse managers serve as a liaison between the hospital administration and the nurses they supervise. Ensuring that the nurse managers can communicate and share in management decisions may be key in helping to reduce nurse shortages meriting further research.

Shin et al. (2021) found that the inability to balance personal and work life can cause nurse burnout. In a meta-analysis by Roth et al. (2021), researchers revealed that when nurses cannot take time off to address personal emergencies, they are barely able to concentrate at work, which may lead to many errors and mistakes. These errors and mistakes can cause a patient their life and trying to rectify these errors can lead to nurse

burnout. Gribben and Semple (2021) also examined the relationship between work-life imbalance and nurses' burnout and found that nurses who have tight work schedules experience work burnout because of emotional and psychological exhaustion. In comparison, Shin et al. opined that the inability to balance personal and work life results in nurses' burnout, while Roth et al. demonstrated that limited time off and the inability to balance work-life situations, deal with personal issues, results in more errors and burnout among nurses. Based on the evidence examined in these studies, one can conclude that work-life imbalance can decrease nurse's job satisfaction which connects to the need for additional research.

### **Benefits of Decreasing Nurse Shortages in Healthcare**

Nurse shortages in the healthcare sector decrease efficiency and expertise. According to the LMX-T, the alliances that are formed between administrative leadership and model employees forms unique lines of communication. Nursing staff who remain in their positions become seasoned employees with an extra layer of learning and expertise (Ruhobel et al., 2023). Asante et al. (2019) found that nurses improve their efficiency as they gain new experience daily while on duty. The decrease of nurse shortages was important to my study, as some of the many factors that surround nursing shortages may cause for non-proficiency in job performance, decrease in job knowledge and development correlates with the LMX-T. Seasonal employees may be less efficient and effective experts in their job duties, which may have an impact on quality patient care.

In the research, differing views regarding the benefits of a decrease in nurse shortages were found. As a result, Bakhamis et al. (2019) suggested that nurses would

improve their efficiency as they gain new experience daily while on duty. Abdulai Sawaneh and Kanko Kamara (2019) indicated that nurses help to enable healthcare providers to co-exist and support one another while discharging assigned duties. A decrease in the nurse shortages may help to promote cohesiveness and togetherness among colleagues leading to increased employee efficiency warranting additional research.

Maintaining nurses in their current positions could increase employee efficiency in the healthcare sector (Drennan & Ross, 2019). In a literature review by Gandhi et al. (2021), researchers found that experienced nurses reduce errors, optimizing employee efficiency in the healthcare sector. The conclusion drawn from the need to defend effective strategies to manage nursing shortages is that there is a critical and urgent demand for well-designed and well-implemented strategies in the healthcare sector. The shortage of nurses has far-reaching implications for patient care quality, healthcare organizations, and the overall functioning of the healthcare system. Therefore, it is imperative to develop and advocate for strategies that address this issue comprehensively and proactively.

Decreasing nurse shortages may help to improve productivity in the healthcare sector. Faridah et al. (2022) evaluated the link between nurse shortages and productivity in the healthcare sector. Faridah et al. revealed that decreasing the nurse shortage may help to save on the human resource department's cost in hiring new personnel, thus diverting the resources to other services that improve productivity within the healthcare sector. Marufu et al. (2021) established that advertising for new positions is expensive for



an institution compared to hiring temporary nurse employees; a decrease in nurse turnover eliminates the cost that could have been spent on advertisement and focuses on factors of production.

Wei et al. (2020) established that less nurse turnover enables the employees to trust the company more; thus, they are always willing to strive to improve organizational productivity. Tang and Hudson (2019) also analyzed the contribution of decrease nurse shortages to productivity in the healthcare setting, highlighting that nurses in their current positions improve their confidence in what they do. Nurses having confidence may lead to more productivity in the health-care sector. Consequently, researchers agree that a decrease in nurse shortages may divert finances and other resources that could have been used in hiring new personnel to more productive areas, thus improving productivity in the healthcare sector. Based on the evidence from these studies, one can conclude that the reduction in nurse shortages is paramount for the healthcare industry as it impacts patient safety and quality care meriting further research and discovery.

Nurses in their current positions improve organizational productivity in the healthcare sector. In a cross-sectional study by Elhaddad et al. (2020), researchers reported that lower nurse turnover leads to increased productivity as a result of repeat patient visits by patients seeking medical assistance from specific nurses at the facility. Holland et al. (2019) recruited 237 participants through self-form questionnaires to evaluate the link between nurse shortages and productivity in the healthcare sector. Holland et al. highlighted that experience nurses embrace teamwork, enabling them to meet timelines and improving productivity in the healthcare sector. Elhaddad et al. and

Holland et al. both agreed that nurses' managers who stay in their jobs may help to improve productivity in healthcare institutions, however, further research is required to examine the continued rise of nursing shortages.

Patient service delivery, which ensures that the patient receives treatment and supplies needed for their care, aligns with the LMX-T framework to help reduce nursing shortages. Aminizadeh et al. (2021) recruited 364 participants through an online survey to determine the benefits nurses in patient service delivery. According to the LMX-T, the alliances that form between leaders and their employees can lead to performance increases. Karim et al. (2021) indicated that 78% of the participants revealed that a reduction in nurse shortages may significantly improve patient service delivery. Patient service delivery is important as it provides the patient with the treatment needed to improve their health. Aminizadeh et al. established that less turnover improves job satisfaction among nurses, which leads to increased service delivery to patients. Erickson et al. (2021) additionally evaluated this factor establishing that a decrease in nurse shortages may reduce time that staff would have to waste in applying for new opportunities. Instead, the focus can be placed on improving patient service care delivery. All the studies discussed agree that the decrease nurse shortages are an important factor that helps to improve patient care service delivery. However, due to the shortage of nurses in various geographic areas, this research was needed to look at improved strategies to decrease nurse shortages and how it may lead to more stable care in service delivery.

Reducing nurse shortages is also key to in-service delivery to patients in the healthcare sector. In a study utilizing qualitative methods conducted by Wei et al. (2020), researchers revealed that less turnover by nurses attracts patients because of the rapport created between the healthcare worker and the patients, building working relationships that lead to improved service delivery. Cimarolli et al. (2022) also scrutinized 28 articles to find the benefits of experienced nurses in the healthcare setting, and findings were that 24 articles revealed that a decrease in the nursing shortage improves patient care service delivery. Reducing nurse shortages may result in nurses having more availability to attend to patients. Brooks Carthon et al. (2019) also investigated how a decrease in nurse shortages may lead to improved patient service delivery in the healthcare setting supporting research such as this study.

Labrague and Santos (2020) stated that nurses in their current positions enable them to grow in their experience, in handling patients, leading to improved customer service delivery in the healthcare sector. Based on the articles reviewed thus far, one can conclude that decreasing the nursing shortage may help to improve customer service experience, leading to improved service delivery in the healthcare sector. While decreasing the nursing shortage may help to improve the customer service experience even before the outbreak of COVID 19, the rate of nurse burnout was at critical levels (Labrague & Santos, 2020). With the onset of COVID 19, nurses were on the front line of a global pandemic, this crisis leading to chronic job dissatisfaction, increased errors in work and decreased ability in patient care (Labrague & Santos, 2020). If these factors go unchecked, they can become dangerous as the nursing shortage era continues to grow.

Therefore, research from this study was needed to examine the nursing shortage and to employ strategies to continue to decrease the nursing shortages.

Job satisfaction is a factor in reducing the nurse shortages in the healthcare sector. Employees who are happy or satisfied with their jobs remain longer in their positions. Cingel and Brouwer (2021) scrutinized the benefit of reducing the nursing shortages in employee job satisfaction in the healthcare sector and revealed that when nurses are on the job for a longer period, they appreciate organizational processes and culture, leading to increased job motivation and satisfaction. In a cross-sectional study by Cimarolli et al. (2022), researchers highlighted that when employees are sure they will not be laid off job morale increases leading to job satisfaction. Based on the evidence from these studies, it can be concluded that job satisfaction is a key factor which may help to reduce the nursing shortage.

Research findings suggest a definite correlation between job satisfaction and nurse shortages and LMX-T. Speechia et al. (2021) conducted a review of job satisfaction and nurse shortages to establish that a decrease in nurse shortages of nurse's results in nurse security and job satisfaction. Although Cingel and Brouwer (2021) suggested that enhancing organizational processes and culture may also lead to increased job motivation. In summary, the articles reviewed indicate that the reduction of nurse shortages help increases job satisfaction. Lew et al. (2021) also examined the benefits of nurse shortages on employee job satisfaction in the healthcare sector. Lew et al. reported that long-term employees exhibit a positive work environment which is key to employee job satisfaction in healthcare institutions. While job satisfaction and nurses remaining in

their jobs appear to go hand-in-hand, further research remains needed to explore why the nursing shortage continues to increase.

## **Nurse Management Hiring Strategies and the LMX-T**

### ***Hiring Process***

The hiring process is the process by which a corporation ensures that its employees do not resign from their jobs. Correlates with the LMX-T framework (Tang & Hudson, 2019). The healthcare industry continues to experience growth as individuals are beginning to take more of a vested interest in their health. To support the patient care needs, nursing staff who are highly skilled are hired to provide high-quality patient care support. According to Drennan and Ross (2019), due to a shortage of nurses and the fact that nurses are in high demand, healthcare organizations continue to look for strategic ways to keep them align with the LMX-T concepts. It is important for nurse managers to employ strategies such as job satisfaction, recognition and acknowledgement, training, and development to help to decrease the nursing shortage supporting the need for additional research.

A reduction in nurse shortages is necessary to ensure that a competent nurse manager channels the correct practical motor skills (Tang & Hudson, 2019). Nursing personnel forecasts imply a shortage of nurse manager applicants. Drennan and Ross (2019) suggested that nursing managers should focus on devoting management improvement to ensure a successful reduction in nurse shortages. Once a brand-new manager has a coach, the manager may appreciate the coach helping to lead them through

actual work development which connects to the need for additional research for this study.

Each corporation and business have a shifting rate in nurse shortages. The shifting rate shows the ratio of the personnel who stayed with the corporation through a stable period (Labrague & Santos, 2020). Salim Muljana and Luo (2019) indicated that the shifting rate is a tactical process that includes classification, improvement, and assessment of academic investment, permitting management stability in the corporation. Management and curbing nursing shortages processes are compatible and applied, although they may vary in goals and approaches (Salim Muljana & Luo, 2019). As leaders, nurse managers need to be able to build effective teams through recruitment, and mentoring nurse staff. The research from this study remains needed to further examine why nursing shortages are still increasing. Nurse managers who do not have the tools required to address these challenges might struggle to reduce nurse turnover, ultimately impacting job satisfaction and patient care.

A practical, precise process method to reduce the nurse shortages builds a committed team of knowledgeable, promotable, well-organized nurse managers for potential generations (Lee & Lee, 2022). The implementation of a process to reduce the nurse shortages may likewise benefit the staffing and keeping of high managers (Labrague & Santos, 2020). There are several nursing processes models to help reduce the nurse shortages, and several should practice existing literature and top preparation to establish the safest strategy (Lee & Lee, 2022). The job embeddedness nurse model was used to promote decreasing the nurse shortages. This model proved to be the most

effective in helping to reduce the nurse shortage. The model concept is the more embedded process as the nurse manager is more likely they will stay with the healthcare organization. However, more research remains needed to further explore why the nursing shortage is still on the rise.

### ***Nurse Manager Management Training***

Nurse managers are highly skilled nurses who help to bridge the gap between patient bed side care and administrative roles (Karlsson et al., 2019). The role of the nursing manager is to help ensure a healthy and safe work environment. This environment should support the work of the healthcare team and patient quality care. Pishgooie et al. (2021) noted that nurse managers strive to communicate shared objectives of the nature of their roles within the organization that influencing people's lives and shaping attitudes toward their profession.

Proper skills and training are critical for nurse managers to perform their roles. Having adequate management training may help to ensure that nurse managers are able to provide direction and guidance to nursing staff to ensure quality patient care. As noted by Carter and Turner (2021) successful nurse managers thrive on efficient management growth. According to Labrague and Santos (2020), it was reported that around 86% of nurse managers needed proper management training when coming into the position. Tang and Hudson (2019) noted that the initial year in the role was the hardest due to the learning curve and lack of training and mentorship. Therefore, it is critical that they receive training to acquire the skills and tools to bolster their guidance and management

of nursing staff. This will, in turn, help prevent nursing shortages, and support the need for more effective strategies of the LMX-T moving forward.

### ***Flexible Work Schedules***

A healthy work-life balance is key to improving nursing staff shortages in the United States. In a systematic review, Gan (2020) investigated nurse shortages in hospitals around the United States, showing that nurses endure physically and emotionally demanding shifts. In this regard, a corporate culture that encourages time away from work becomes especially important for job satisfaction among new nurses. Labrague (2020) replicated Gan's results in a quantitative study with 240 nurses to examine the professional and organizational turnover intention among nurse managers in the United States. The findings revealed that those who consistently work overtime shifts experience more burnout, which manifests as a lack of engagement and satisfaction, and results in increased turnover (Labrague, 2020). Organizations can promote their nurses' health by limiting overtime work, instead of focusing only on the needs of the corporation. This ultimately benefits both nurses and the business in the long run (Labrague, 2020). The research shows that a strong work-life balance, characterized by a flexible work schedule, is an important to prevent burnout, which in turn, could help curb nursing shortages.

Offering a flexible working schedule among nurses may result in a lower reduction rate in nurse shortages in the United States. Yildiz et al. (2021) supported this statement by conducting 5781 nurses investigating the association between work-family conflict, flexible working schedule, and nurse turnover intention in the United States. The



researchers found a significant association between nurses' turnover intention and work-family conflict. The findings indicate that flexible working schedules promote work-life balance, improving employee stability among nurses in the United States. Long shift hours could lead to exhaustion and burnout, resulting in job dissatisfaction, which may contribute to a high turnover among nurses in the United States. Wakerman et al. (2019) investigated remote healthcare workers' turnover intention in the United States.

Gan (2020) showed that nurses are working physically and emotionally demanding shifts and Labrague (2020) demonstrated that these shifts lead to more burnout, reducing their engagement and satisfaction, and leading to higher turnover. Yildiz et al. (2021) and Wakerman et al. (2019) reported similar findings by establishing that strategies to reduce the nursing shortage such as flexible working schedules and improved work-life balance promote a high job satisfaction level among nurses in the United States. In summary, the studies reviewed indicate that offering a flexible working schedule among nurses could promote a decrease in nurse shortages in the United States. The research was needed to further explore why nursing shortages are still on the rise and nurse shortages remains a concern.

### ***Career Development Should be a Top Priority***

Making career development a top priority may be a key factor in decreasing nursing shortages for the clinical nurses in the workplace to reduce the transition from clinical to educator roles. In a systematic review by Marufu et al. (2021), researchers investigated the factors contributing to nursing shortages among hospital nurses in the United States. According to Arslan Yürümezoğlu and Kocaman (2019), organizations

must promote learning and leadership of their clinical nurses. To avoid nurses transitioning to nursing educator roles it is important to provide career and education advancement and management support. Prioritizing career development is important to this study as it is pivotal to the learning and leadership development of nurses. Making career development a priority for nurse managers could present the opportunity for increased skills and knowledge development which could help to improve nurse shortages requiring further research for discovery.

Although Vázquez-Calatayud et al. (2021) extended earlier findings, the researchers used one geographical setting to research the relationship between career development and nurse shortage in the United States from a general perspective (Vázquez-Calatayud et al., 2021). The researchers advocated for additional research using a more diverse sample. Studies reviewed indicated differing findings regarding career development and nurse shortages in the United States. As a result, Marufu et al. (2021) opined that to support nurses on their career journey, healthcare organizations must promote learning and leadership development and include it in their company culture in order to decrease nursing shortages. However, Hoover et al. (2020) reported that professional development is an integral part of nursing and keeping their knowledge and skills current is important for promoting their goals and motivations, thereby enhancing their rate to decrease the nursing shortage. This study contributes to the research by exploring ways to reduce nursing shortages.

### ***Promote a Culture of Learning Among Nurses***

Promoting a learning culture through training and development could improve job stability among nurses in the United States. Wei et al. (2020) conducted a qualitative study investigating nurse leader strategies to enhance nurse resilience and stability. The researchers found that providing nurses with ongoing learning and training opportunities motivates them, thereby increasing their job satisfaction and improving in the reduction of nurse shortages among nurses in the United States. Comparable findings to Wei et al. (2020) were observed in a study by Razzi and Bianchi (2019) in which nurse shortages were investigated in the context of implementing improvement and rehearsal training. Agreeing with Wei et al. findings, Razzi and Bianchi established that creating a culture of learning and continuous training among nurses will likely improve their stability. Training and development promote nurse motivation and job satisfaction, enhancing nurse stability (Razzi & Bianchi, 2019). The reviewed articles demonstrated that promoting a learning culture through training and development could improve nurse shortages among nurses in the United States (Kamau et al., 2022). However, research remains needed to further explore the reason why the nursing shortages continue to rise and increase.

Enhanced learning culture among nurses could promote high rates in the reduction of nurse shortages in the United States. As an illustration, Iheduru-Anderson (2020) conducted a qualitative study with 30 nurses to explore challenges to career development and to learn among nurses in the nursing profession and the job satisfaction rate in the United States. The findings revealed that creating a culture of learning and

development bolsters their practice knowledge, while also demonstrating to nurses that their value extends beyond their unit and patients. As such, the nurses become more motivated and increase job satisfaction, thereby increasing their rate in the reduction of the nursing shortage in United States. Labrague (2020) found similar findings to Iheduru-Anderson (2020), as they investigated nurse stressors and strategies. The findings demonstrated that nurses who engage in continuous learning and training have a high level of job satisfaction in the United States. Given the findings, it is evident that enhanced learning culture among nurses could promote a high rate in the reduction of nursing shortages in the United States requiring further research to confirm.

Further research indicates that promoting a learning culture among nurses could promote higher stability rates in the United States. In this regard, Gullick et al. (2019) conducted a quantitative study in which they opined that promoting a learning culture for nurses in healthcare facilities would improve their skill levels and increase their job satisfaction, thereby enhancing the nurse shortages rate in the United States. Ensuring that nurses feel valued could be key to reduce nurse shortages in the workplace in the United States links to LMX-T. Although studies reviewed above indicate the association between enhancing the culture of learning and nurse job satisfaction in the United States, some studies provided conflicting results. Razzi and Bianchi (2019) highlighted that creating a learning culture and continuous training among nurses will likely improve nurses staying in their jobs. However, Wei et al. (2020) and Iheduru-Anderson (2020) reported that lifelong learning and training motivates nurses, thereby increasing their job

satisfaction. The findings above are more evidence that more research remains needed to understand the nursing shortage.

### ***Offering Coaching and Mentorship Programs***

Coaching and mentorship programs among RNs could promote nurse job satisfaction in health organizations in the United States. Pennington and Driscoll (2019) analyzed the improvement of home health nurse reduction in nursing shortages using mentorship programs in the United States. Coaching and mentorship programs among nurses were found to improve their job motivation and satisfaction, which correlates with the LMX-T conceptual framework. Improving job satisfaction may help to increase the rate of nursing remaining in their jobs in the United States. Comparable results to Pennington and Driscoll (2019) were replicated in a qualitative study with 20 nurse graduates by Canet-Vélez et al. (2021) to examine the efficacy of coaching and mentorship programs on nurse transition to practice in the United States. Agreeing with Pennington and Driscoll reported that nurse participation in coaching and mentorship programs enhanced their transition into practices in healthcare organizations in the United States. Participation in mentorship programs among graduate nurses helped them transition to practice and enhanced their intentions to stay with the organizations in the United States (Pennington & Driscoll, 2019). Studies reviewed indicate that mentorship programs among RNs could promote nurse stability in health organizations in the United States. Therefore, further research remains needed to confirm these factors.

Studies revealed that coaching and mentorship programs promote more nurse stability in the United States. Voss et al. (2022) investigated the need for mentorship

programs for new graduate transition to practice and the implications for nurse leaders in the United States. Voss et al. reported that collaboration and skill-sharing between mentors and mentees fosters crucial support, increased motivation resilience, and overall job satisfaction, and less job turnover. Hoover et al. (2020) advocated Voss et al.'s results by investigating mentorship and coaching among nurses and their impact on nurse shortages. The researchers established that mentorship and coaching programs bolster training and development on clinical skills acquisition among nurses, promoting motivation and job satisfaction, thus increasing nurse motivation and satisfaction in the United States. Mentorship programs promote nurse retention and develop new graduate nurses and nurse leaders in the United States (Hoover et al., 2020). It is clear from the literature that coaching, and mentorship programs promote nurse stability in the United States. However, previous research is not enough as nurses continue to leave, which proves more research remains needed.

### ***Establishing Clear Communication and Teamwork in Organizations***

Corroborative findings of Wei et al. (2020) were reported by Bergstedt and Wei (2020), who investigated the leadership strategies to enhance nursing staff engagement and shortages in the United States. The findings indicated that promoting staff engagement, clear communication, and teamwork promotes nurses' job satisfaction and motivation, resulting in increased nurse stability in the United States. Leadership strategies such as providing access to resources, enhancing autonomy, and promoting open communication and teamwork among nurses aligns with the strategies in LMX-T, results in improved nurse turnover in the United States (Bergstedt & Wei, 2020). Overall,

studies reviewed indicate that clear communication and teamwork in healthcare organizations may increase nurse job satisfaction in the United States. However, additional research remains needed to explore why these programs are not effective enough to help decrease the nursing shortages.

Effective communication and teamwork among nurses in healthcare organizations may decrease nurse shortages. Campbell et al. (2020) examined strategies to enhance teamwork, delegation, and communication among nurses and nursing assistants. The results show that teamwork and communication in an organization improve employee understanding, motivation, job satisfaction, and nurse engagement, may lead to an increase in nurse shortages in the United States (Campbell et al., 2020). Woodward and Willgerodt (2022) echoed the findings of Campbell et al., in an investigation of RN turnover intention in the United States. Researchers found that establishing clear avenues for feedback and discussion through clear communication can alleviate those feelings, enhance team effectiveness, and improve nurse shortages in the United States (Woodward & Willgerodt, 2022). Further research remains needed to explore why the nursing shortages may continue to climb.

While Campbell et al. (2020) extended earlier results, they used undiversified sample sizes to generalize them. They advanced a recommendation for further research using different settings and diversified sample sizes with unique characteristics such as gender, race, and age to generalize study results. At the same time, Wei et al. (2020) reported that open lines of communication between nurses and supervisors increase their job satisfaction relate to the LMX-T concept. As a result, which could contribute to a

decrease in the nursing shortage. Campbell et al. reported that communication improves employee understanding and increased motivation and job satisfaction, which may lead to lower nurse shortages levels in the United States.

### **Transition**

Section 1 of this qualitative multiple case study established the background of the problem, the statement of the problem, the purpose statement, the nature of the study, the specific research question, the conceptual framework, the definitions, assumptions, limitations, and delimitations, the significance of the study, and the literature review. Section 2 included the research question, role of the researcher, participants, and data collection. In Section 2, a description of the relationships associated with the problem statement and participants related to the framework for the study will also be included. Section 3 will include the purpose of the study, restatement of the research, a presentation of the findings, implications of social change, recommendations for action, and recommendations for future study.



## Section 2: The Project

In Section 2, the goal is to present a complete explanation of the methodology and design used in the study. Section 2 includes the purpose statement and encompasses the conversation of the participants, research method, research design, and the data collection process. This section concludes with details outlining the ethical basis for the research, the protection of participants' rights, and the consent guidelines.

### **Purpose Statement**

The purpose of this qualitative, multiple case study was to explore effective strategies that nursing managers use to manage nursing shortages and lead to successful nursing shortages initiatives. To complete the study, interviews occurred with eight nurse managers who successfully remained nurses in Midwest areas such as Illinois, Indiana, and Kansas who specialized in the areas of pediatrics, community medicine, gynecology, obstetrics, internal medicine, and psychiatry. The participants must have had at least 2-3 years of experience as nurse managers.

### **Role of the Researcher**

The investigator is the primary research tool in qualitative research, as their central role is to investigate a phenomenon that lacks comprehensive understanding (Beck, 2020). While collecting data, it is vital to differentiate personal perceptions, beliefs, and morals to maintain objectivity in research to mitigate bias (Dodgson, 2019). To trust research, it is important for researchers to perform data collection with integrity and reduce the influence of bias (Rose & Johnson, 2020). In this study, the objective was

to gather information with precision, aiming to mitigate bias and address the research questions.

The objective was to gather precise information and use the interview protocol to help eliminate bias (see Appendix A). I did not have any preexisting connection with the participants or any research topic concerning strategies to manage nursing shortages. The goal was to adhere to all the ethical principles outlined in the National Institutes of Health online training the researcher completed in 2021 and *The Belmont Report*. *The Belmont Report* provides a summary of the ethical principles and guidelines for research that involves human subjects. The three core principles of *The Belmont Report* are (a) respect of persons, (b) beneficence, and (c) justice. I adhered to the ethical standards set by the Walden University Institutional Review Board (IRB) prior to conducting the interviews.

The research in this qualitative study aligned with the initial main factor in the case study design. Alpi and Evans (2019) defined a case study design as the logical sequence that connects the empirical data to a study's initial research questions and, ultimately, to its conclusions. The design has five steps: (a) study questions, (b) propositions, (c) units of analysis, (d) logic linking the data to the propositions, and (e) criteria for interpreting the findings.

This examination of both professional and academic literature laid the groundwork for exploring the topic of nurse shortages. The peer-reviewed literature encompassed crucial themes, including communication and viable strategies for addressing nursing shortages. Key factors influencing the nurse shortage, such as a

shortage of nurse faculty, job satisfaction, and job burnout, play a pivotal role in mitigating the shortage of nurses (Lu et al., 2019).

Beck (2020) suggested that the qualitative researcher's responsibility involves collecting and analyzing data while gaining access to participants' work environments. During interviews, the objective was to concentrate on open-ended questions, enabling the flexibility to pose follow-up questions for clarification. The design of these open-ended questions aimed to prevent simple yes or no responses. To maintain a structured and unbiased approach, an interview protocol (Appendix A) was employed to ensure a systematic flow of pertinent questions for each participant, thereby enhancing the richness of the data collection and analysis.

### **Participants**

The participants in this study were eight nurse managers who have successfully remained nurses in the Midwest and specialize in pediatrics, community medicine, gynecology, obstetrics, internal medicine, and psychiatry. Each participant received an email explaining my research and to obtain their consent to participate in the research. I emailed the human resource team's ERC at the subject healthcare organization to furnish a list of nurse managers with a minimum of 2-3 years of successful experience. Following the provision of the list, purposeful sampling was employed to select participants for interviews. Using platforms such as LinkedIn, the internet, and organizational websites, I gathered eight eligible participants' names, emails, and phone numbers. The use of Zoom calls facilitated the visual observation of participants' responses during interviews.

According to Gill (2020), it is emphasized that participants' characteristics should align with the research question to facilitate an understanding of the qualitative study's purpose and research objectives. The aim was to establish a collaborative relationship with the participants, involving follow-ups to address any queries or obtain additional comments regarding the interview responses. Through communication via phone and email, a rapport was built as participants, and participants and I became more acquainted with each other and the study. As suggested by Alpi and Evans (2019), researchers may intentionally select participants for their studies. In this particular study, participants may share common characteristics, such as the successful implementation of strategies to address nursing shortage.

### **Research Method and Design**

A multiple case study design was selected for this qualitative research study. The multiple case study design was deemed most suitable for this research as it entails the examination of a case within a real-life context (Saunders et al., 2019). According to Alpi and Evans (2019), a multiple case study involves studying a case in real-life context through direct observation tools, such as interviews to help explain a phenomenon. To attain success, the objective was to interview healthcare industry nursing managers in the Midwest using open-ended questions. The chosen method and design yielded valuable insights into the research questions, offering additional understanding within the industry.

### **Research Method**

The aim of this qualitative multiple case study was to investigate strategies that prove effective in alleviating nurse shortages. The qualitative research method was

chosen as the most suitable approach for my study, as it serves as a means to capture information about the benefits and sentiments related to strategies aimed at implementing ways to reduce nurse shortages. The qualitative method was selected to understand the appropriate test utilization strategies employed by the nurse managers (Saunders et al., 2019). Opting for a qualitative method was the optimal decision for my research, given its capacity to enhance comprehension and elucidate interpretations of a social business problem associated with a specific group of individuals (Döringer, 2020). Unlike the tailored approach used in quantitative studies, a qualitative approach employs a diverse sampling method to develop knowledge and explanations of human behavior (Bos et al., 2019).

Quantitative research is an interactive, multimethod approach that examines people in their natural setting (Chan et al., 2019). Within quantitative research, certain techniques and strategies for collecting data are specific to disciplines: an interview or data analysis method, graphs or statistics that yield or use numerical data (Natow, 2019). According to Natow (2019), quantitative researchers normally focus on numerical data instead of subjective nuances. Most quantitative approaches rely on a researcher highlighting hypothesis assessment for examining key variables' characteristics or relationships through accumulating cross-case data for each variable (Johnson et al., 2019). The quantitative approach was not fit for this study because participants would not have the freedom to convey their real-life experiences in decreasing nurse shortages to the researcher. Mixed-method researchers combine quantitative and qualitative methods and associated analytical procedures (Natow, 2019). The mixed-method approach was

deemed unsuitable because no quantitative components were incorporated into this research. Therefore, the qualitative method suited the needs for this study.

The reason for selecting a qualitative method was to establish a methodological framework for exploring strategies aimed at managing nursing shortages. Quantitative research is an interactive, multimethod approach to people in their natural setting (Bos et al., 2019). The quantitative method is typically used to describe any data collection technique (i.e., an interview) or data analysis method (i.e., graphs or statistics) that yields or uses numerical data (Hamilton & Finley, 2019). Quantitative researchers normally focus on numerical data instead of subjective nuances (Hamilton & Finley, 2019). Most quantitative approaches rely on a researcher highlighting hypothesis assessment for examining key variables' characteristics or relationships through accumulating cross-case data for each variable (Alpi & Evans, 2019). The quantitative method was not a fit for this study because it does not offer participants the freedom to convey their real-life experiences in reducing nurse shortages. Mixed-method research combines the use of quantitative and qualitative methods and associated analytical procedures (Hamilton & Finley, 2019).

### **Research Design**

In the qualitative multiple-case study research design, I explored a methodological framework on how to reduce nurse shortages. In contemplating the research framework for my qualitative study, I examined designs such as phenomenological, narrative, ethnographic, and multiple case study approaches. Scholars utilize phenomenology to delve into the lived experiences of individuals (Haven & van

Grootel, 2019), but this was not suitable for this research, which was focused on methods of human behavior and developmental strategies. Ethnographic studies, designed to explore social behaviors within a society (Ahlstedt et al., 2019), were not fitting for this study, as the emphasis was not on the social behavior within the culture of nursing managers. Narrative design, employed by researchers to investigate human understanding through storytelling (Ke & Stocker, 2019), was also unsuitable for my research, which involved interviewing nurse managers to identify recurring themes. Multiple case study design, which involves studying real-life cases through direct observations, interviews, and archival documents to comprehend a phenomenon (Hamilton & Finley, 2019), aligned with the aim of gathering data on the research problem and understanding the phenomenon through participants' experiences and perspectives.

Data saturation occurs in the qualitative research method at which the integration of new participants does not produce new findings (Braun & Clarke, 2019). To achieve data saturation in this qualitative study, I interviewed participants until no new data appeared. Data saturation occurs when there is enough information gathered to replicate the study, and coding is no longer needed (Braun & Clarke, 2019). In addition to carrying out interviews, I used documents such as job descriptions, newsletters, and employee handbooks. These public documents provided data such as job vacancies to show nurse shortages, and the newsletter provided tips and strategies that nurse managers use throughout the company to decrease nurse shortages. The inability to achieve data saturation influences the quality of the conducted research and compromises its validity (Sebele-Mpofu, 2020). Alpi and Evans (2019) proposed that researchers should attain

data saturation in their studies to guarantee the reliability and validity of the provided information.

### **Population and Sampling**

This study comprised a sample of 8 nurse managers who had successfully remained nurses in the Midwest and specialized in six different areas: pediatrics, community medicine, gynecology, obstetrics, internal medicine, and psychiatry. To select the participants, I employed purposeful sampling to choose participants from the list provided by the ERC of the human resources' team of the subject healthcare organization. Purposeful sampling is a method employed to select a group of individuals possessing exceptional knowledge about a particular subject (Mweshi & Sakyi, 2020). The optimal method for this study was purposeful sampling, concentrating on subject matter experts within the healthcare industry.

The selected sample population was suitable for the study, as the defined parameters should facilitate the occurrence of data saturation. According to Hennink and Kaiser (2022), data saturation is met when no new information would be obtained by interviewing more people. According to Dyar (2021), to achieve saturation, a study can include a minimum of two participants to a maximum of 50 participants.

Data collection involved conducting interviews with eight nurse managers in the Midwest. These interviews were conducted via Zoom and telephone. Every participant was provided with information explaining the purpose of this study. I explained in an email and followed up with a phone call their roles as participants, how their input would be used in the study results, the benefits of their input on the study, and how the



information that they share regarding successful strategies that affect reducing the nurse shortage would be used in the research. Participants were provided with the interview protocol to allow them to be well-informed of their roles as participants.

The informed consent form is an essential part of interview endeavors that involve human participants (Wexler et al., 2021). To mitigate bias, no incentives were used in this research. The participants received a copy of the informed consent form to obtain participants' voluntary consent (see Appendix C). According to Xu et al. (2020), consent involves disclosing potential risks to individuals to gain scientific knowledge. Once the participants indicated that they understood the guidelines to participate in the interviews, they were invited to sign the informed consent form as an indication of their willingness to participate in the study. Participants were apprised of the confidentiality measures and secure data storage procedures to mitigate potential harm to the data. Additionally, participants were assured that they could withdraw from the study at any time, either verbally or in writing, without facing any penalties, thereby alleviating any biases stemming from a sense of obligation to participate. Enhancing the reliability and validity of the study findings involved the utilization of member checking, reviewing interview notes, and examining transcripts.

### **Ethical Research**

Ethical principles were preserved throughout this study by adhering to the rules outlined in *The Belmont Report* regarding the guidelines to ensure the safeguarding of human subjects for research (Miller & Kimmelman, 2020). The Belmont Report focuses on three ethical values for researchers: (a) valuing individual self-sufficiency, which

divides into two moral requirements which is to acknowledge autonomy and provide protection for those with diminished autonomy; (b) beneficence, which includes the Hippocratic maxim to do no harm, which means minimizing harm and maximizing benefits for the research participants, society, and has long been a benefit of medical ethics, and (c) justice protecting individual rights/welfare which means ensuring fair and equitable distribution of the risks and benefits of the research (U.S. National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979).

According to Xu et al. (2020), ethics considerations go beyond the consent form, ensuring the ongoing protection of participants' privacy and confidentiality throughout the study. To keep participants' identity confidential, eight participants were assigned a number: Participant 1, Participant 2, Participant 3, etc.

To uphold data confidentiality, participants' contact details and organization names were excluded from the study. Physical records were securely stored in a locked cabinet, and electronic data were password-protected on my personal computer (Xu et al., 2020). The study's data will be securely retained for 5 years to safeguard participant confidentiality. Post this period, all documents will be shredded and disposed of, and electronic data will be permanently deleted.

### **Data Collection Instruments**

In a qualitative study, the primary data collection instrument was the researcher. Semistructured interviews were conducted, and the interview protocol was adhered to in gathering data from each participant. To protect confidentiality, each participant was assigned a number: Participant 1, Participant 2, Participant 3, etc. Interviews were

scheduled via email and informed consent forms were scanned and emailed to participants prior to their participation in the study. Conducting semistructured interviews involved employing open-ended questions to collect high-quality data from participants, as per the interview protocol (see Appendix A).

Before interviewing all partakers via Zoom I asked for their permission to record the session. In addition to the Zoom recording, an audio recorder will be used to help ensure the precision of the transcription of the interview. According to Busetto et al. (2020), member checking occurs after each participant is validated and verified via the transcription. Member checking was employed to reinforce the credibility of the data collection process. This involved using member checking to refine data transcripts, encompassing handwritten notes, and presenting a summary to participants to seek their input on the validity of the analysis, ensuring both the accuracy of transcript verbiage and the conveyed meaning.

To reinforce the dependability and authenticity of the data, I adhered to the four principles throughout the data collection process. According to Alpi and Evans (2019), the four data collection principles of keeping the data collection as simple as possible, are (a) planning the entire process of (b) data selection, (c) collection of the data, and (d) analysis of the data which can help to alleviate reliability and validity concerns. Multiple sources of evidence were used in the data collection process. Apart from conducting semistructured interviews, examination also included company documents such as job descriptions, newsletters, and employee handbooks. Job descriptions from the company website were used to address Questions 1 and 3. Newsletters from the company website

were used to address Questions 2, 4, and 5. The employee handbook from the company website was used to address Question 6.

### **Data Collection Technique**

The initiation of the data collection process occurred with interviewing eight nursing practitioners in the Midwest areas of Illinois, Indiana, and Kansas. An email was sent to each participant outlining the nature of the research. The interview questions were sent prior to the consent form (see Appendix C), which was disseminated to each participant via email. The participants acknowledged their willingness to participate in the study by signing the consent form with their electronic signature. No incentive was offered prior to the study to avoid biased information, or make the participants feel obligated to take part in the study. After receiving the authorized informed consent form, the participants received an interview date and time. The interviews were held to accommodate the participants' schedules to allow more flexibility in scheduling.

Once the interviews were held, I gathered the data from each interview. The data consisted of the interview protocol (see Appendix A), the interview questions (see Appendix B), and consent forms (see Appendix C). With the participants' approval, I also audio-recorded the interviews to ensure accuracy in reporting. If a participant did not want to be recorded this decision would have been respected, and the interview would have been held without being recorded. Data saturation occurs once the interview data becomes repetitive and the following interviewee did not provide any additional information (Hennink & Kaiser, 2022).

Interviews also have the potential for bias, as the researcher's comments or non-verbal cues might influence how participants respond to a question. The interview protocol (see Appendix A) served as a guide to conduct interviews, ensuring consistency in the questions posed to each participant. Employing member checking techniques contributed to the reliability of the data collection process. Member checking enhanced the data transcripts, encompassing the researcher's notes. It involved presenting a summary of the interview to participants to gather feedback on the validity of the analysis, covering both the accuracy of transcription and the interpretation of meaning (Busetto et al., 2020). The Nurse Managers selected for the interviews were allowed 1 week to examine their transcripts and answer with their approval. In receiving the transcripts back, if any of the nurse managers had indicated that they would like to share additional insightful information to the semistructured interviews questions they would have been allowed to do so.

Coding was established to safeguard the identity and privacy of participants and ensure confidentiality. A coding system was instituted, employing distinct numerical codes for each participant. Each of the participants was assigned numbers for confidentiality purposes: Participant 1, Participant 2, Participant 3, etc. I utilized an electronic journal to document my reflections, observations, and notes during the interviews. Member checking allowed the ability to validate the responses from the participants and authenticate the data collection technique (Northall et al., 2020). Member checking was employed to further strengthen the credibility of the data collected by verifying that information received during the interviews was interpreted correctly. Locke

et al. (2020) suggested that employing a data organization technique was crucial for analyzing, reviewing, and ensuring interview accuracy.

### **Data Organization Technique**

To monitor, manage data, and guarantee the security and safeguarding of all documents and electronic correspondence, each interview document was labeled, securely stored, and password protected. All records obtained from the organizational websites were also secured, password protected, and placed in individual folders on a personal laptop, which was only accessible by facial recognition. Locke et al. (2020) indicated that utilizing a data organization technique is essential for analyzing, reviewing, and ensuring interview correctness. I used a transcript from the Zoom recording and coding template in which each participant had a unique identifier number.

The data were loaded into NVivo Version 12 which is a qualitative research software, facilitating the generation of various themes crucial for employing thematic analysis techniques. Each of the participants were assigned numbers for confidentiality purposes: Participant 1, Participant 2, Participant 3, etc. I used an electronic journal to record my perceptions, observations, and notes during the interviews, and ensured that they accurately represented the participants responses to the questions. Data was saved following the Walden University IRB requirements to uphold participant privacy. The interview questions, responses, and recordings will be stored for a period of 5 years. Researchers are responsible for the collection of data and participant confidentiality (Pietilä et al., 2019).

After 5 years, all paper documents will be destroyed, and recordings erased as recommended by the Walden University IRB's requirements. The data reviewed from the company websites included public reports such as job descriptions, newsletters, and employee handbook. The documents helped to corroborate the data and support the interview findings as job descriptions from the company website were used to address Questions 1 and 3. Newsletters from the company website were used to address Questions 2, 4, and 5. The employee handbook from the company website was used to address Question 6.

### **Data Analysis**

In this qualitative multiple case study, I explored the strategies employed by nursing managers to effectively address nursing shortages. Following participant interviews, I employed methodological triangulation and member checking to thematically analyze and interpret the findings derived from the interview data, transcripts, and my journal notes. Qualitative data analysis is to make sense of relative data gathered from interviews, and documentation. According to Alpi and Evans (2019), have the option to organize interview data sequentially, categorically, or pattern-wise to identify recurring themes. Data were analyzed using Braun and Clarke's (2019) data analysis method, which includes familiarizing oneself with the data, generating initial codes, searching for themes, reviewing themes, and defining themes.

The central focus of the analysis was to uncover key themes related to the communication and strategies nurse managers use to effectively manage the nursing shortages by integrating the LMX-T used as the conceptual framework of this research to

examine the data and formulate codes and themes in accordance with Alpi and Evans' (2019) data analysis methods. The compiling the data, disassembling the data, reassembling the data, interpreting the data, and concluding the data. The process of identifying common themes consisted of using thematic analysis and uploading the recordings to NVivo for interpretation of data received from the open-ended questions, reviewing, and sending transcripts to participants for verification, journal notes, and secondary data.

Following data collection, each participant's data was coded using a transcript. The NVivo version 12 software facilitated the matching and identification of emerging themes through thematic analysis, coding, and grouping of the developed themes in alignment with LMX-T, the conceptual framework of this literature review. In summary, a presentation on the interpretations of themes related to successful strategies employed by nursing managers in reducing nursing shortages was delivered. Each of the participants was assigned numbers for confidentiality purposes.

Researchers bear the responsibility for data collection and ensuring participant confidentiality (Pietilä et al., 2019). An electronic journal was employed to document perceptions, observations, and notes throughout the interviews. I ensured that the recordings accurately represented the participants' verbal responses to the questions as well as the correct interpretation. I maintained the participants' data in compliance with the confidentiality requirements specified by Walden University IRB, ensuring participant confidentiality. The interview questions, responses and recordings are encrypted and stored electronically on a personal computer for a period of 5 years. After



5 years, all documents will be destroyed, and recordings erased as recommended by the Walden University IRB's requirements.

### **Reliability and Validity**

#### **Reliability**

Assessing the trustworthiness of the research results requires judgements about the soundness of the data regarding the application, the appropriateness of the methods taken, and the integrity of the final conclusions (Northall et al., 2020). According to Daniel (2019), reliability occurs when the same results are found in the study and the study has been conducted a second time. In this study, reliability was obtained by following the initial information gathered, analyzing the data to attain a related conclusion, and ensuring reliability of the questions inquired during the interview method. Kyngäs (2019) indicated that researchers should safeguard reliability within their study by developing their results reliability. I ensured dependability by confirming that my interpretations of participant response were correct via transcript review via member checking.

#### **Validity**

According to FitzPatrick (2019), informants' feedback will help add to the validity of the observer's interpretation during qualitative research observations. Validity is obtained through credibility. Ensuring the accurate recording of participant responses involves employing triangulation or peer debriefing, contributing to credibility (Noble & Heale, 2019). For triangulation data collection, the objective was to conduct interviews with participants, posing open-ended questions in accordance with the interview protocol

(refer to Appendix A). I observed the partakers characteristics during the Zoom call. The duration of the interviews was scheduled for 45–60 minutes. To establish credibility, expressions, idioms, and experiences from participants that seemed similar were categorized together. Triangulation was also achieved by using multiple sources of data, including interviews, observation of the participants during the Zoom call, and the documents from the company websites. The documents from the company websites consisted of job descriptions, benefit information, and salary information. Employing multiple external analysis methods on the same events, the validity of the process can be augmented through triangulation (Natow, 2019). Member checking was also utilized for precise data interpretation. The incorporation of methodological triangulation to affirm the consistency of interview responses further bolstered the credibility of the study.

### ***Dependability***

Dependability is one of the four criteria of trustworthiness in qualitative research. According to Nassaji, (2020), dependability in qualitative research indicates that the study may be reported in such a way that others who review the data will arrive at similar interpretations. Conducting member checking involved having participants review the analysis of their responses, reinforcing the validity and reliability of the data. This process supports the dependability of this study.

### ***Credibility***

In qualitative research, credibility affirms confidence in the truth of research findings (Lockett et al., 2020). Emphasizing credibility, I took measures to ensure the accurate interpretation of the collected data results in qualitative research. As noted by

Noble and Heale (2019), credibility involves the use of triangulation to ensure that the data are interpreted accurately. Member checking was also conducted to help increase the accuracy of the data recorded. According to Natow (2019), triangulation is the method used by qualitative researchers to combine several research methods to check and establish the validity and reliability of data which may contribute to expanding the credibility of this study.

### ***Transferability***

Transferability refers to a researcher's capacity to apply obtained results to aid other researchers with similar interests (Hennink & Kaiser, 2022). In this qualitative research study, ensuring transferability involved offering details about the case organization, sample method, and participants. Harley and Cornelissen (2020) suggested that qualitative researchers, by applying rigor to the data collection and analysis process, utilizing interview protocols, and employing the semistructured interview process, may enhance transferability.

Another means to ensure transferability is to compare the characteristics of the participants to the demographic information available for the group that is being studied. In other words, a qualitative study is considered transferable when findings of the study will have meaning to other individuals who are not involved in the study, or the readers of the study can resonate the findings with their own personal experiences (Drennan & Ross, 2019). According to Johnson et al. (2019), qualitative researchers should use thick descriptions of real-life settings and understandings of participants' views not only to achieve transferability, but to help bridge the gap between practitioners and researchers.

Therefore, I highlighted the study's population, geographic location, and demographics to generate a comprehensive description of the literature and encourage possible replication of the research, thereby promoting transferability.

### ***Confirmability***

Confirmability serves as a pivotal criterion for evaluating the trustworthiness of qualitative research. To attain confirmability, researchers must showcase that the findings originate from the data and not their own biases. As per Alpi and Evans (2019), confirmability entails ensuring that research findings and interpretations align with the data for a more precise understanding by other researchers. Campbell et al. (2020) noted that if the study were replicated with the same data, the results would be similar, and the original researcher should secure confirmability by maintaining detailed notes throughout the study analysis phase. In this study, I implemented member checking, methodological triangulation, and documented procedures consistently. Confirmability in this qualitative study was substantiated by demonstrating self-sufficiency in interpreting the data, establishing consistency, and enhancing study objectivity (Dyar, 2021). Confirmability manifests when a clear link or relationship between the data and the findings is evident.

### ***Data Saturation***

Data saturation marks the stage in the qualitative research process where the inclusion of new participants no longer yields novel findings (Hennink & Kaiser, 2022). Data saturation is achieved when there is enough information gathered to replicate the study, and coding is no longer needed (Braun & Clarke, 2019). The inability to achieve data saturation influences the quality of the conducted research and has implications for

the validity of the study (Sebele-Mpofu, 2020). Alpi and Evans (2019) suggested that a researcher should reach data saturation in their study to ensure the information provided is both reliable and valid. To achieve data saturation in this qualitative study, I asked questions until no new data were needed.

### **Transition and Summary**

In this section of the multiple case qualitative study, I explore the background of the problem, articulate the problem statement, clarify the purpose, outline the nature of the study, pose research questions, elucidate the conceptual framework, underscore the significance of the study, and delve into the literature review. Section 2 included the researcher's role and provides an in-depth portrayal of the chosen methodology and design for the study. Initiating with the purpose statement, this section encompasses a comprehensive discussion on participants, research method, research design, and the data collection process.

In Section 2, a description of the relationships linked to the problem statement, elucidating how participants connect with the study's framework. The segment culminates with a comprehensive overview of the ethical foundation for the research, ensuring the protection of participants' rights and adherence to consent guidelines. Moving on to Section 3, I present the findings derived from my qualitative study, specifically addressing LMX-T, its application in professional practice, implications for social change, actionable recommendations, and suggestions for future research into leadership strategies aimed at mitigating nurse shortages in the healthcare industry.

### Section 3: Application to Professional Practice and Implications for Change

#### **Introduction**

The purpose of this qualitative multiple-case study was to investigate the leadership strategies employed by nurse managers to address nurse shortages. The selected sample population comprised eight nurse managers, collectively affiliated with six distinct hospitals situated in the Midwest and known for implementing effective leadership strategies for nurse retention. Eight nurses from Illinois, Indiana, and Kansas and who specialized in pediatrics, community medicine, gynecology, obstetrics, internal medicine, and psychiatry—took part in the semistructured interviews. An interview protocol acted as a guide for the interview questions used in the semistructured interviews. The audio recorded interviews were later transcribed. Data analysis followed Yin's (2018) data analysis method. Yin outlined a five-level information analysis procedure that included (a) compilation, (b) deconstruction, (c) reconstruction, (d) interpretation, and (e) conclusion. NVivo qualitative facts evaluation device changed into employed to carry out those levels.

Through data analysis of interview responses, three key themes surfaced: (a) recruitment strategies, (b) development and training, and (c) leadership strategies. Under the theme of recruitment strategies, the participants responded that to function well in managerial positions within the healthcare sector, nurse managers must make efficient use of their recruitment strategies. The strategies involve putting important ideas into practice, such as (a) putting together a skilled recruiting team, (b) offering new RNs mentorship for direction and support, and (c) providing growth possibilities within the

organizational hierarchy. For the theme of development and training, participants indicated that training and development strategy included comprehensive training programs, skill enhancement initiatives, mentorship programs, collaborative learning platforms, and strategic considerations for training duration. These programs focus on providing educational opportunities, fostering continuous learning, cultivating a culture of skill acquisition, and ensuring professional growth. The theme of leadership strategies included the strategies to involve establishing through creation and development of a skilled leadership team, offering mentorship to new RNs, and providing growth opportunities through additional training, skills, and promotion within the organizational hierarchy.

### **Presentation of the Findings**

The main research question for this study was: What strategies do nursing managers use to effectively manage nursing shortages? Nursing shortages remain a persistent challenge, potentially detrimental to patient care quality, nurse satisfaction, and overall healthcare outcomes. Penconek et al. (2021) noted that understanding the strategies utilized by nursing managers to address this issue is crucial for developing evidence-based interventions and policies that mitigate the impact of nursing shortages. Participants provided responses to interview questions grounded in their experiences of formulating and implementing strategies to mitigate nurse shortages and retain RNs in the Midwest. I assigned codes to each participant to ensure their privacy and maintain confidentiality. For instance, Participant 1 was coded as P01, Participant 2 as P02, etc.

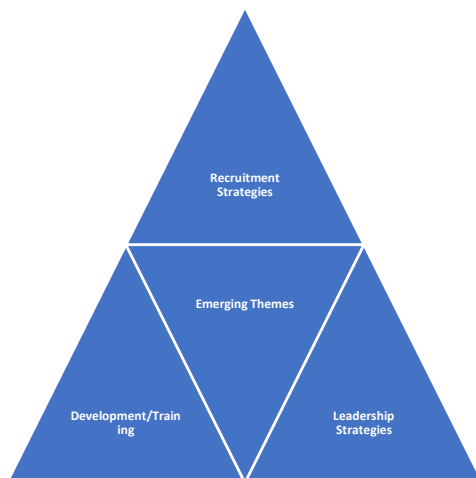
I conducted semistructured interviews comprising seven open-ended questions (see Appendix B) to gather data from 8 nurse managers with 2-3 years of experience as nurse managers. The typical interview duration was approximately 30 minutes. Data saturation occurred after eight interviews, suggesting that no new information emerged by the eighth interview, indicating a saturation point in the data collection process. By the eighth interview, the study reached a state of redundancy, where additional interviews did not offer novel insights. Nevertheless, I opted to include a ninth and 10th participant to confirm the attainment of data saturation.

After each interview, I compiled the transcriptions of the Zoom interview, along with my transcribed and recorded notes, into a Word document. Each participant received an emailed copy of the Zoom interview summary and was requested to assess and give any necessary revisions within a timeframe of 1-2 weeks. Member checking is a process wherein a researcher interviews the participants and subsequently has them review the collected information for accuracy (Northall et al., 2020). Upon receiving all the participants' feedback, notes were entered into NVivo12 to pinpoint the most frequently utilized words. The compilation of keywords from NVivo12 aided in the formation of three themes (see Figure 1).



**Figure 1**

*Reflection of Emerging Themes*

**Theme 1: Recruitment Strategies**

Hiring practices and strategies play a role in addressing nursing shortages and supporting effective nurse management. P01 stated that effective recruitment strategies not only ensure the acquisition of qualified individuals but also contribute to building a skilled and diverse workforce. Faridah et al. (2022) revealed that decreasing the nurse shortage may help to save on the human resources department's cost in hiring new personnel, thus diverting the resources to other services that improve productivity within the healthcare sector. P02 and P03 stated that it is important to emphasize the importance of recruitment strategies in addressing the nurse shortage and saving costs associated with hiring new personnel. In the context of offering growth opportunities within the organizational hierarchy through skill sets or promotions, nurse managers should adopt hiring practices that align with their long-term staffing goals and foster a culture of professional advancement.

Hiring new employees remains costly to an organization in different ways.

Marufu et al. (2021) established that advertising for new positions is expensive for an institution compared to hiring temporary nurse employees; a decrease in nurse turnover eliminates the cost that could have been spent on advertisement and focuses on factors of production. P04 and P05 emphasized the importance of advertising for hiring; overusing temporary agencies for several reasons were cost efficiency and direct access to candidates. Conversely, Spurlock (2020) indicated that while most hospitals are experiencing shortages, they cannot hire additional RN students because of the lack of clinical sites for students. To attract and retain qualified candidates, nurse managers can implement targeted recruitment strategies, as these efforts can help identify individuals motivated to pursue growth within the nursing profession and to seek opportunities for career progression. However, nurses do not necessarily have to seek promotions or career progression if they do not want to. Nursing is a diverse profession that offers various career paths and opportunities for advancement, but not all nurses have the desire or ambition to pursue higher positions or take on additional responsibilities. Many nurses find fulfillment and satisfaction in their current roles and choose to stay where they are. They may prefer the clinical aspects of nursing and enjoy providing direct patient care, focusing on building expertise in a specific specialty or maintaining a work–life balance that suits their personal needs.

Successful performance in managerial roles within the healthcare industry requires nurse managers to effectively utilize their recruitment skills. The strategies entail the implementation of key strategies, including (a) assembling a competent recruitment

team as stated by P2 who highlighted the importance of interviewing and selecting the right employees as another crucial recruitment strategy, (b) providing mentorship to new RNs for guidance and support, and (c) offering growth opportunities within the organizational hierarchy (Carter & Turner, 2021). As noted by Carter and Turner (2021) successful nurse managers thrive on efficient management growth, affirming the findings of this study.

A shortage of qualified nurses has emerged as a global healthcare predicament, posing threats to the quality of care and patient safety. According to Ahlstedt et al. (2019), nurse managers must not neglect retention efforts in their quest to alleviate the nursing shortage. Under talent acquisition, nurse managers develop strategic partnerships with academic institutions to create pipelines of emerging talent, while also focusing on programs that target passive candidates (Elhaddad et al., 2020). P02 said, “Interviewing people and choosing the right employees from the interviews is also an important strategy.” Attracting high potential candidates, recruitment of nurses focuses on the immediate need to end nurse shortage. According to Scandura and Gower (2022), organizational leadership exercised in line with LMX-T has the capacity to build strong partnerships and formulate strategies with proficient staff members to address shared organizational challenges. Finding and hiring nurses to address the nursing shortage, nursing hiring managers have to recognize talent to hire competent candidates. Considering the quality of leader–member relationships, nurse managers can tailor their recruitment strategies to attract nurses who are likely to thrive within a positive work environment (Bowden & Schmus, 2021). During the recruitment process, nurse managers

can assess candidates' compatibility with the organizational culture and their potential to form productive relationships with the existing nursing team (Gunawan et al., 2019).

Finding skilled nurses through recruitment can be an important step to mitigate nurse shortages. P6 said, "Nurse managers have to use multiple techniques to attract qualified nurses." Nurse managers can appeal to a broader pool of candidates by showing the organization's dedication to professional development and offering competitive pay. To resolve the challenge of a nurse shortage, nurse managers could try presenting more excellent flexible work schedules, like element-time or brief jobs, to satisfy the needs of capable nurses. Nurse managers can also use new approaches to prepare the workforce, such as ensuring a suitable variety of nurses for every affected person, having teams of nurses work together, and giving more duties to nurses with more experience. According to Drennan and Ross (2019), due to a shortage of nurses and because nurses are in high demand, healthcare organizations continue to look for strategic ways to mitigate nurse shortage. According to P04, "It was important to hire the right managers that can manage employees." Nurse managers can fill staffing gaps using staffing solutions that shape the nurses' needs and how the nursing workforce operates.

Carter and Turner (2021) highlighted that nurses' perceptions of growth opportunities within their organization significantly boosts their job satisfaction, motivation, and dedication to their profession. These opportunities not only show appreciation for nurses' contributions but also play a role in reducing turnover rates and developing a strong, resilient nursing team. The effective implementation of recruitment strategies is essential for creating a workplace where nurses feel valued and recognized.

Without these strategies, there is a risk of increased dissatisfaction and turnover among staff as they look for better prospects elsewhere.

Employees need to feel appreciated at the workplace through enhancing their sense of value by leaders. P4 emphasized the importance of showing staff that they are invested in and heard, fostering a sense of value and commitment. Abdulai Sawaneh and Kanko Kamara (2019) affirmed the findings of this study as their study indicated that nurses help to enable healthcare providers to coexist and support one another while discharging assigned duties. Fein and Tziner further indicated that subordinates and managers have already set a precedent for talking through situations and spending time on problem solving. P06 stated that demonstrating staff investment and ensuring their voices are heard is crucial for building a cohesive and motivated team. Wei et al. (2020) confirmed the findings as the researchers evaluated the relationship between the authoritative leadership support systems and nurses who may need to have a forum and voice to express their concerns.

Fein and Tziner (2021) confirmed the findings of this study as the researchers opined that laying the groundwork for effective communication could provide a foundation for when challenges arise. P07 affirmed the leadership approach of conveying to staff that they are valued individuals, not just employees, and addressing their concerns. Both P01 and P03 underscored the significance of active rounding on employees as an optimal approach to staying well informed about the organization. This practice includes regularly engaging with various nursing floors, visiting different departments, actively seeking feedback, and fostering open conversations with fellow

nursing employees. By actively engaging nursing staff in decision making processes and their input on matters that affect their work, nurse managers not only empower nurses but also tap into their valuable insights and experiences, which can contribute to more effective problem-solving and reducing nurse shortage.

The success of recruitment strategies, as evidenced by positive outcomes in patient care, nurse retention, and management retention, was a common achievement among all participants. Lee and Lee (2022) confirmed the findings of this study as a practical method is proposed to reduce the nurse shortages which builds a committed team of knowledgeable, promotable, well-organized nurse managers for potential generations. Confirming the findings is the study by Labrague and Santos (2020), the implementation of a process to reduce the nurse shortages may likewise benefit the staffing and keeping of high managers. The results from theme one aligns with Scandura and Gower's (2022) understanding of leadership strategies in healthcare settings, which underscores the critical role that effective leadership plays in addressing nursing shortages.

Successful recruitment strategies are mechanisms for attracting, retaining, and nurturing a qualified nursing workforce. Studies, including those by Fein and Tziner (2021), consistently highlight the positive impact of well-executed recruitment strategies on nurse satisfaction and retention. Engaging in effective recruitment practices contributes significantly to creating a positive work environment, fostering job satisfaction, and ultimately retaining valuable nursing staff (Labrague & Santos, 2020). The recruitment theme accentuates the role of recruitment strategies in establishing a

positive work environment. Salim Muljana and Luo (2019) noted that, techniques such as inspiring and motivating recruitment teams, fostering a shared vision, and promoting open communication are identified as critical components in attracting and retaining qualified nursing professionals. To further validate Salam Muljana and Lou's findings, P05 and P07 stated they have open communication with staff through weekly huddle that inspire and motivate recruitment as well.

To effectively implement these strategies, nurse managers emphasized the importance of maintaining an achievable employee span of control. Spurlock (2020) confirmed these findings which proved that expanding healthcare services may boost control spans and job density for staff nurses and nurse managers. The finding was confirmed more when 3 of the participants (P02, P05, and P07) stated the span of control includes several advantages such as faster decision-making, reduced cost, and improved communication with higher -level nurse managers. However, P01 and P04 shared insights into the significance of a manageable span of control in their recruitment strategies. P01 mentioned that reducing their span of control allowed them to build a successful management team, contributing to overall success. On the other hand, P04 highlighted the importance of hiring the right managers who could effectively oversee employees. All three participants (P01, P03, and P04) collectively agreed that selecting the right individuals for managerial roles was crucial in achieving and maintaining a manageable span of control, ultimately contributing to the success of their recruitment efforts. Lahey and Nelson (2019) confirmed the findings of this study which indicated that it was necessary for managers to focus on strategies that are intricately tied to the

mission and overarching goals of an organization. Nurse managers should implement comprehensive onboarding programs for new hires.

### **Theme 2: Development/Training**

In the interview discussions involving all eight participants, the theme of training and development emerged prominently, highlighting its pivotal role in healthcare management. Our approach to training and development centers on (a) Comprehensive Training Programs, where we prioritize providing educational opportunities that align with the skills and dedication of our healthcare professionals, recognizing the value of continuous learning in fostering career growth. In conjunction with this, (b) skill enhancement initiatives play a vital role, cultivating a culture that values the acquisition and honing of new skills, ultimately contributing to professional development and adaptability in the dynamic healthcare landscape. Additionally, (c) Mentorship Programs, Collaborative Learning Platforms, and strategic considerations for Training Duration collectively underscore our commitment to training and development, ensuring the ongoing growth and success of our healthcare professionals.

The recruitment strategies employed by all participants highlighted their commitment to guiding, coaching, and mentoring RNs, even in the face of the national nursing shortage. According to Pennington and Driscoll (2019), their study affirms the findings of this research as participation in mentorship programs among graduate nurses helped them transition to practice and enhance their intentions to stay with the organizations in the United States. Voss et al. (2022) affirmed the findings of this study which explored the need for mentorship programs for new graduate transition to practice



and the implications for nurse leaders in the United States. By incorporating mentorship programs as part of their recruitment strategies, nurse managers demonstrate their commitment to fostering professional growth, enhancing nurse retention, and addressing the challenges posed by the nursing shortage.

All participants (P01-P08) emphasized that these strategies empower professionals in planning their career trajectories, provide a voice in decision-making processes, and prioritize work-life balance, fostering a dynamic and supportive environment for sustained engagement and success. The study by Arslan Yürümezoğlu and Kocaman (2019) confirmed the findings of this study as organizations must promote learning and leadership of their clinical nurses. The findings further affirmed by Marufu et al. (2021) opined that to support nurses on their career journey, healthcare organizations must promote learning and leadership development and include it in their company culture in order to decrease nursing shortages. The united agreement among study participants stresses the importance of an effective nurse manager and a robust development program. P01 and P02 specifically highlighted the success of a “Nurse of the Month” initiative. Expanding on this, P02 and P08 offered additional insights, recommending the incorporation of programs like Quarterly Excellence Awards. P03, P06, and P05 also expressed the necessity for an Annual Leadership Development program. The combination of these diverse development efforts seems to foster a culture that consistently celebrates and acknowledges the invaluable contributions of nurses at different levels throughout the year. The collaborative approach aims to enhance the

overall development and recognition within the nursing community, contributing to a positive and supportive work environment.

An additional essential strategy includes career mapping and engaging in discussions about individual goals and aspirations with each nurse. According to Labrague and Santos (2020), nurse managers needed proper management training when coming into the position. The focus of this career mapping program is to make sure nurses are developing their skills and are satisfied with their professional growth, reducing the likelihood of them seeking opportunities elsewhere. P7 stated, “You have to be responsive to nurses that want to transfer to another department.” Improving one’s career within the organization makes them an asset to the company through career progression.

The findings were further supported by Razzi and Bianchi (2019) who established that creating a culture of learning and continuous training among nurses will likely improve their stability. Training and development promote nurse motivation and job satisfaction, enhancing nurse stability (Razzi & Bianchi, 2019). Training initiatives encompass structured programs or courses designed to enhance specific skills or competencies. Nurse managers should identify areas where additional training is needed and implement targeted training initiatives accordingly. Theme 2 findings concur with Mandal and Phillips (2022) on understanding retaining nursing staff as a multifaceted challenge addressed in the literature through various retention strategies. Really long paragraphs.

Nurses might seek transfers to other departments for career growth or skill acquisition. As mentioned by P01, “It is essential to address toxic or low-performing employees promptly, as failing to do so can impede the progress of high-performing staff.” In affirmation of the findings, Wei et al. (2020) noted that the lack of support system in authoritative management of teamwork and collaboration among nurse staff may cause burnout. The inability to be effective due to burnout negatively impacts the nurses’ performance. Nurse managers need to identify low-performing employees and provide coaching to either improve their performance or facilitate their transition out of the department. This approach ensures the overall development and success of the team. To foster nurses’ performance, LMX connections between supervisors and subordinates should be supported through role-taking, role-making, and routinization (Dansereau et al., 1975).

In affirming the findings and the theoretical framework, Liesveld et al. (2023) emphasized the importance of empowering nurses to actively engage in decision-making processes associated with their professional development and the improvement of patient care practices. The theme indicated that professional development programs are a recurrent point of discussion, aligning with WHO (2021), with findings suggesting that offering opportunities for skill enhancement and career advancement positively influences nurse satisfaction and commitment to an organization. Mentorship programs also emerge as effective tools for retaining nursing professionals. Furthermore, work-life balance is recognized as a critical aspect of retention. Leaders can allocate resources and

can identify relevant training opportunities that align with nurses' career goals and provide them with the necessary support to participate in these activities.

### **Theme 3: Leadership Strategies**

The third theme focused on leadership strategies, a critical element in organizational dynamics. Throughout the interviews, I closely observed participants' behaviors, movements, and facial expressions in response to various questions, thereby gaining valuable insights into their perspectives on incentives, transparency improvement, and team-building facilitation. The notes from the observations assisted in knowing how engaged the participants were, as non-verbal cues can indicate the level of engagement or interest of the participants. Different forms of leadership strategies were underscored as crucial for managers to create environments where employees feel open, empowered to voice their opinions, and foster a sense of commitment, loyalty, and trust within the organization (Kuuyelleh, 2021). All participants expressed unanimous support for the significance of interacting with and engaging employees as crucial elements in motivation and effective leadership strategies. This theme then underscores the pivotal role that leadership plays in shaping the organizational culture, emphasizing the importance of creating an environment where employees feel heard, valued, and inspired to actively contribute to the organization's success.

To be successful in their managerial role within the healthcare industry, nurse managers must leverage their leadership skills effectively. This involves implementing crucial strategies such as (a) building a skilled leadership team, (b) providing guidance and support to new RNs through mentorship, and (c) offering growth and leadership

opportunities to individuals within their organizational hierarchy. The adept application of these leadership strategies is vital, as it helps create an environment where frontline staff feel acknowledged. Failing to employ effective leadership strategies may result in staff dissatisfaction and the potential departure of employees seeking opportunities elsewhere. The findings were affirmed by Holland et al. (2019) who highlighted that experienced nurses embrace teamwork, enabling them to meet timelines and improving productivity in the healthcare sector. Also, the study by Elhaddad et al. (2020) and Holland et al. both agreed that nurses' managers who stay in their jobs may help to improve productivity in healthcare institutions which confirmed the study's findings. Hence, the success of nurse managers is essential in cultivating a positive and engaging workplace, ultimately contributing to staff satisfaction and retention.

All eight participants (P01-P08) collectively supported the theme under leadership strategies. P06 stated, "Demonstrating our staff's investment and ensuring their voices are heard is crucial for building a cohesive and motivated team." According to Scandura and Gower (2022), leadership aligned with the LMX-T theory emphasizes the importance of forging strong relationships and collaborative strategies with skilled employees to tackle organizational challenges together. Both P01 and P03 stressed the significance of actively rounding on employees as the optimal approach to staying well-informed about the organization. Furthermore, the need for adaptive leadership in the dynamic healthcare environment is undeniable. Leaders who are flexible, promote innovation, and support ongoing improvement are crucial in addressing nursing shortages, thereby enhancing the organization's resilience, and improving patient care.

P01 and P08 emphasized the importance of their employees knowing that “I have their back as their leader by advocating for their well-being, fostering a supportive work environment, and ensuring that their concerns and contributions are valued in the nursing profession.” The study by Cimarolli et al. (2022) confirmed the findings of this study and indicated that researchers highlighted that when employees are sure they will not be laid off, job morale increases leading to job satisfaction. In support of the findings, Drennan and Ross (2019) suggested that nursing managers should focus on devoting management improvement to ensure a successful reduction in nurse shortages. P02 said that interviewing people and choosing the right employees from the interviews is also an important strategy. Connecting to the literature, this point confirms that hospital leaders should ensure nurse managers have the necessary staff on hand to help to reduce their workload stress (Kelly et. al., 2019). All participants showcased a persistent commitment to guide, coach, and mentor RNs through the implementation of various leadership strategies, regardless of the national nursing shortage.

A common approach from the participants was to have mentoring, internship, and leadership development for frontline RNs as well as nurse managers. The study by Voss et al. (2022) confirmed the findings of this study as it investigated the need for mentorship programs for new graduate transition to practice and the implications for nurse leaders in the United States. In affirmation, Hoover et al. (2020) advocated Voss et al.’s results by investigating mentorship and coaching among nurses and their impact on nurse shortages. Hoover et al. (2020) established that mentorship and coaching programs bolster training and development on clinical skills acquisition among nurses, promoting

motivation and job satisfaction, thus increasing nurse motivation and satisfaction in the United States.

P04 emphasized, “We have to show our staff that they are invested in and heard, fostering a sense of value and commitment.” P06 stated, “Demonstrating our staff’s investment and ensuring their voices are heard is crucial for building a cohesive and motivated team.” P07 affirmed, “In our leadership approach, it’s essential to convey to our staff that they are not just employees but valued individuals, ensuring their concerns are acknowledged and addressed.” The findings were affirmed by the study of Drennan and Ross (2019) suggesting that nursing managers should focus on devoting management improvement to ensure a successful reduction in nurse shortages. The study by Pennington and Driscoll (2019) confirmed the findings as it analyzed the improvement of home health nurse reduction in nursing shortages using mentorship programs in the United States. As per Bowden and Schmus (2021), leadership-motivated excellence theory emphasized inspirational leadership practices that have been shown to enhance nurse satisfaction, retention, and overall organizational effectiveness. Based on leadership-motivated excellence theory, nurse managers are motivated to lead effectively.

In affirmation of the leadership strategy’s theme, both P01 and P03 supported the theme. Both P01 and P03 stressed the significance of actively rounding on employees as the optimal approach to staying well-informed about the organization. This practice includes regularly engaging with various nursing floors, visiting different departments within the organization, actively seeking feedback, and fostering open conversations with fellow nursing employees.

Nurse managers unanimously agreed that organizations must employ creative and multifaceted leadership strategies, recognizing the need for an approach that is not one-size-fits-all. The study by Kuuyelleh (2021) confirmed the findings of this study as communication is a pivotal factor in addressing the challenges associated with nursing shortages. Open communication is crucial for effective leadership. Nurse managers should create an environment where open and honest communication is encouraged. This involves actively listening to nurses' concerns, providing regular updates and feedback, and promoting a culture of transparency. This perspective aligns with the findings of Anwar and Abdullah (2021). Their research concluded that effective communication, rather than just compensation, is critical to strategies to overcome nursing shortages. Studies consistently identify competitive salary structures and comprehensive benefits packages as essential elements in communication strategies for retaining nursing professionals. Nurses are more likely to remain committed to an organization that communicates recognition and rewards for their contributions through competitive pay and attractive benefits.

This collective perspective emphasizes the need for a dynamic and innovative strategy encompassing various methods to address the complexities and challenges of healthcare management. All eight participants supported the theme of leadership strategies based on the outcomes or results of patient care, nurse retention, and management retention. To fully implement leadership strategies, managers must have a manageable span of control with employees. Both P01 said, "My span of control was lessened so I was able to build my management team and together we were successful."



P07 acknowledged developing in-house training resources, including manuals, videos, and simulation exercises, to provide accessible and cost-effective training opportunities for nursing staff. P04 said that “It was important to hire the right managers that can manage employees.” Participants concurred that the key to maintaining a manageable span of control is the careful selection of individuals to serve as part of the managerial team.

The results related to the identified themes are consistent with the principles outlined in the Leadership-motivated excellence theory (LMX-T). For P06, develop a culture of adaptability and continuous improvement. Involve staff in decision-making processes, provide training on new practices, and communicate the benefits of change for both staff and patient outcomes. Identifying and exploring strategies could enhance the quality of leader-member relationships, fostering increased trust, communication, and collaboration, ultimately improving team cohesion, job satisfaction, and overall nursing staff performance and retention (Graen and Schiemann, 2013). The three identified themes were consistent with Bowden and Schmus (2021) suggestion of using the Leadership-motivated excellence theory to provide insight for nurse managers to implement effective strategies that nursing managers use to manage nursing shortages.

### **Finding Related to Conceptual Framework**

The study’s findings, centered around the conceptual framework of the Leader-Member Exchange Theory (LMX-T), provide insightful contributions to understanding and addressing the nursing shortage through three pivotal themes: recruitment strategies, development/training, and leadership strategies. The research underscores the critical role

of effective recruitment strategies in mitigating the nursing shortage (Fisher et al., 2021). By attracting and retaining skilled nurses, organizations can bolster their workforce and ensure a stable nursing team. This involves not only promoting the profession and the organization but also offering competitive benefits, creating a supportive work environment, and highlighting opportunities for professional growth and advancement (Manata, 2019). Development and training emerged as essential for retaining and preparing current staff for leadership roles. Continuous professional development opportunities, including mentorship programs, workshops, and further education, are vital for enhancing nurses' competencies, satisfaction, and engagement (Graen & Schiemann, 2013). Continuous professional development not only contributes to personal and professional growth but also ensures that the nursing staff is well-equipped to meet the evolving demands of healthcare.

Leadership strategies based on the LMX-T framework emphasize the importance of strong, supportive, and effective leadership in nursing (Scandura & Gower, 2022). By fostering high-quality relationships between managers and their staff, organizations can improve job satisfaction, reduce turnover, and enhance team performance. Leadership strategies that include clear communication, recognition, and the provision of feedback are crucial for creating a positive work environment and promoting a culture of excellence and resilience among nursing teams (Fein & Tziner, 2021). P03 noted the need for developed tailored training programs that considered the individual needs, skills, and career aspirations of nurses. Integrating these three themes within the LMX-T framework illustrates a comprehensive approach to tackling nursing shortage. By

focusing on recruitment, development, and leadership, nursing managers can build a more stable, competent, and satisfied nursing workforce, ultimately contributing to improved patient care and organizational success.

### **Applications to Professional Practice**

The primary aim of this study was to explore the leadership strategies employed by eight nurse managers in hospitals to address nursing shortages. The findings challenge prevailing thoughts and industry norms of nurse managers by proposing a comprehensive approach to alleviating nurse shortages. The insights derived from this research have the potential to enhance effective communication, incentives, transparency, and team building in nurse management offer actionable strategies that, when implemented, can enhance nurse retention, fortifying hospitals' competitive advantage in the healthcare industry practices by fostering nurse retention, thereby strengthening hospitals' competitive advantage. The findings of this study will contribute to industry practices by providing valuable insights into enhancing nurse retention, which is a factor in strengthening hospitals' competitive advantage.

In the field of nursing, there are valuable recruitment tactics that can also be utilized in a business setting. To mitigate turnover among nurses, administrators must analyze and examine nursing turnover rates, and subsequently employ, apply, and assess approaches aimed at reducing shortages in nursing staff (Juraschek et al., 2019). P01 and P03 emphasized the importance of using technology to enhance recruitment and decrease nurse shortages. By incorporating targeted recruitment methods such as establishing partnerships with academic institutions and engaging in specialized job fairs, businesses

can capture the attention of capable individuals who are driven to excel and possess the necessary skills. Also, potential recruitment strategies like pay, promotional opportunities, and manager style are all strategies to help reduce the nurse shortages that organizations ought to include (Lockhart, 2020). P05 and P06 talked about offering sign on bonuses after 90-day evaluations. Moreover, implementing effective recruitment approaches that highlight the organization's dedication to fostering employee growth and advancement can elevate the employer's reputation and attract quality candidates. The findings of this current study identified recruitment strategies as a theme which showcased the relevance of effective recruitment and hiring practices to reduce nurse shortage.

Leadership plays a critical role in achieving success within an organization. The research shows that effective leadership practices, such as mentorship, coaching, and open communication, significantly impact positive outcomes. Voss et al. (2022) investigated the need for mentorship programs for new graduate transition to practice and the implications for nurse leaders in the United States. Through the exploration of effective communication, incentives, transparency, and team building in nurse management are practical strategies. The findings of this study include practical strategies that healthcare institutions can implement Leadership strategies such as providing access to resources, enhancing autonomy, and promoting open communication and teamwork among nurses aligns with the strategies in LMX-T, result in improved nurse turnover in the United States (Bergstedt & Wei, 2020). By implementing mentorship programs and offering leadership training, companies can cultivate a group of future leaders and elevate

employee engagement and retention. In addition, creating a culture of open communication promotes innovation and collaboration and empowers employees.

Just as nurses require ongoing training to stay updated with best practices and advancements in healthcare, employees in businesses also benefit from continuous learning and development opportunities. Offering structured development programs, mentorship initiatives, and leadership training can enhance employee skills, boost job satisfaction, and contribute to talent retention. Drennan and Ross (2019) observed that management should act on knowing why the staff resigned from organizations and pinpoint strategies to engage their interests within the organizations. By investing in nurses' professional development, healthcare organizations as businesses can cultivate a skilled and adaptable workforce that is equipped to address evolving challenges and drive organizational growth. This improvement in nurse shortages may positively impact patient satisfaction scores and overall patient care. Recognizing the root causes of nursing shortages is crucial, as nurses play a pivotal role in influencing patient care and access to healthcare (Yates et al., 2022). This development could lead to heightened hospital reimbursements and a heightened commitment among employees to enhance patient outcomes. The identified themes from participant responses underscored the critical impact that effective leadership and recruitment strategies can have on addressing the nursing shortage.

### **Implications for Social Change**

The findings of this study can offer valuable insights to nurse managers seeking ways to address nurse shortages. The primary objective of this current study is to equip

nursing managers with effective strategies that can enhance outcomes and effectively manage nursing shortages. The overarching goal for healthcare organizations is to provide access to resources that contribute to increased retention rates among nurses. Providing access to resources, in turn, can bolster the competitive advantage of hospitals by elevating patient satisfaction scores and improving overall patient care. Given the pivotal role nurses play in influencing patient care and healthcare access (Kox et al., 2020), addressing nurse shortages holds significant importance in the broader context of healthcare. Insufficient leadership training for hospital nurse managers can hinder their success, potentially leading to a decline in patient care quality and access, consequently impacting social change. P08 stated “Social change regarding nurse shortages can include advocating for policy changes, promoting educational initiatives, and addressing workplace factors that contribute to the shortage”. The implementation of proper leadership strategies has the potential to positively influence patient care outcomes. Using data gathered from eight nurse managers, key themes emerged offering valuable insights into recommended approaches for reducing nursing shortages. P07’s insights focused on the development of in-house training resources like manuals, videos, and simulation exercises. These resources aimed to offer accessible and cost-effective training opportunities for nursing staff. As for P02, addressing workforce challenges and enhancing access to high-quality care for patients within the community is a priority connected to social change.

The emphasis on development and training has implications for social change by promoting lifelong learning and fostering a culture of continuous improvement. For P03,

by employing development and training approaches, nurse managers successfully navigated obstacles and created a resilient nursing workforce, contributing to the prevention of nurse shortages in their healthcare organizations. By investing in employee development, businesses contribute to the growth and advancement of individuals, empowering them with the skills and knowledge needed to contribute meaningfully to society (Vázquez-Calatayud et al., 2021). P06 stated, by addressing barriers through effective leadership strategies, nurse managers can create an environment that supports the well-being and professional growth of the nursing staff, ultimately contributing to the prevention of nurse shortages. This commitment to ongoing learning can have a ripple effect, as employees become equipped to address emerging challenges, adapt to changing technological landscapes, and contribute positively to their communities (WHO, 2020). By providing development opportunities for historically marginalized groups, businesses can help bridge the opportunity gap and promote social mobility, ultimately leading to broader societal benefits.

The implementation of effective recruitment strategies can promote social change by addressing issues of diversity, equity, and inclusion within organizations (Bowden & Schmus, 2021). P08 noted that effective leadership can serve as a catalyst for promoting social change within the nursing profession, particularly within the context of the Midwest community, where collaborative efforts are pivotal in addressing regional healthcare challenges and fostering equitable access to quality care. By actively seeking out a diverse pool of candidates and creating equitable opportunities for individuals from underrepresented groups, businesses can enhance representation and foster inclusive

work environments. P06 noted a diverse pool of social change initiatives, demonstrating the multifaceted approaches needed to address nurse shortages and enact positive transformations in healthcare. This sentiment was echoed by P04, emphasizing the importance of grassroots advocacy and community engagement in fostering sustainable solutions within the nursing profession. According to Carter Turner (2021), this not only promotes social justice but also harnesses the benefits of diverse perspectives, experiences, and ideas, leading to innovation and better decision-making. Embracing inclusive recruitment practices contributes to dismantling systemic barriers and promoting social change by providing equal opportunities for individuals from all backgrounds.

### **Recommendations for Action**

The purpose of this qualitative multiple-case study was to explore what strategies nursing managers use to manage nursing shortages and lead to successful nursing shortages initiatives in Midwest areas of Illinois, Indiana, and Kansas. The interviews with participants produced the following three themes: (a) recruitment strategies, (b) development / training, and (c) leadership strategies. Based on the emerging themes, three recommendations surfaced for nurse managers: cultivate an environment that encourages openness and development in training, deliver timely and pertinent feedback to employees, and remain open and approachable to receiving feedback from the staff.

#### **Embrace Technology and Automation**

Nurse managers should embrace technological advancements and explore automation solutions to streamline administrative tasks, optimize workflows, and reduce



the burden on nursing staff. Implementing electronic health records, nurse call systems, and other digital tools can help nurses focus more on direct patient care, mitigating the impact of staffing shortages. In order to reduce nursing shortage, technology will be used to widen the candidate pool. Technology allows nurse managers to reach a larger audience of potential candidates (Gill et al., 2021). For P03, there is a need to eliminate the use of outdated or inefficient recruitment technologies. Online job boards, social media platforms, and professional networking sites can be utilized to advertise nursing positions and attract a diverse pool of applicants. This broader reach increases the chances of finding qualified candidates, especially those who may not have been reached through traditional recruitment methods. P07, also talked about incorporating technology for efficient candidate engagement, advancing collaborations with educational institutions to expand the talent pool, and highlighting a positive work culture. Also, data-driven decision-making provides access to valuable data and analytics that can inform recruitment strategies (Drennan & Ross, 2019). Nurse managers can analyze recruitment metrics, such as the source of successful hires, time-to-fill positions, and candidate conversion rates, to identify patterns and make data-driven decisions.

### **Cultivate Leadership Development**

Nurse managers should invest in leadership development programs to equip existing staff with the necessary skills to assume leadership roles. This approach not only ensures a pipeline of competent leaders but also motivates nurses by providing them with opportunities for professional growth and career advancement. According to Syahrani et al. (2022), career advancement is a motivating factor for individuals seeking

employment. P06 said “By addressing barriers through effective leadership strategies, nurse managers can create an environment that supports the well-being and professional growth of the nursing staff, ultimately contributing to the prevention of nurse shortages.” Addressing barriers may entail creating an environment where information flows freely between managers and frontline staff. Effective leadership ensures that tasks, activities, roles, and responsibilities are clearly conveyed (Specchia et al., 2021). By creating an atmosphere of transparent and open development or training, nurse managers can strengthen their connection with the nursing staff, foster trust, and authentically demonstrate concern for their concerns. P04 noted the need to improve leadership development plans. P08 noted effective leadership can serve as a cornerstone in navigating challenges within nursing, fostering a supportive work environment, and inspiring team members to achieve their fullest potential. This recommendation aligns with the broader goal of enhancing overall team cohesion and ensuring that every team member feels heard and valued. Effective leadership can contribute to improved job satisfaction, employee engagement, and retention of nursing staff, addressing one facet of the larger challenge of nursing shortages.

### **Collaborating and Outsourcing**

Forming partnerships with nearby nursing schools offers numerous advantages. Primarily, partnerships enable nurse supervisors to form bonds with faculty and students, fostering a cooperative atmosphere between education and practical experience. P06 noted the need to develop more comprehensive collaboration agreements, including the creation of specialized training programs, internships, and incentives to attract emerging

talent from nursing schools. According to Wei et al. (2020) emphasized the role of collaboration in addressing nurse shortages and enhancing patient care outcomes. Collaboration can facilitate the sharing of knowledge, increase exposure to employment opportunities, and offer valuable insights into the changing demands of the nursing field (Moore et al., 2021). P08 noted the indispensable role of effective leadership in fostering collaboration among nursing staff, recognizing it as a key factor in mitigating nurse shortages and improving patient care outcomes. Through actively connecting with nursing schools, nurse managers can cultivate a pool of potential candidates, establishing a direct pathway for recruiting and ensuring a consistent influx of capable nurses.

The study's discoveries and recommendations were appropriate for nurse managers dedicated to preventing nursing shortages and retaining nursing staff, particularly within Midwest areas. The study findings could serve as a practical guide for nurse managers seeking effective strategies to address nursing shortages and strengthen nurse retention in Midwest areas. P04 provided insight on evaluation through tracing the ratio of vacant nursing positions over a period. The effectiveness of these strategies can be enhanced through ongoing evaluation and adaptation (Ciulla, 2020). Regular assessment of recruitment outcomes, such as the number of hires and the retention rates of newly recruited nurses, allows nurse managers to gauge the success of their partnerships and adjust their approach as needed. The study's outcomes hold the potential to equip nurse managers with valuable tools for implementing targeted interventions, contributing to the primary goal of reducing shortages and enhancing staff retention in the Midwest area.

### **Recommendations for Further Research**

The qualitative multiple case study aimed to explore strategies employed by certain nurse managers to address nurse shortages and retain nurses in the Midwest region. Eight nurse managers, each with 2-3 years of experience in developing or implementing strategies to alleviate nurse shortages in Midwest areas such as Illinois, Indiana, and Kansas, were interviewed. However, it is important to note that the study's findings may not be universally applicable to all hospitals or situations, serving as a limitation.

The current study may have been limited by a small sample size, which could impact the generalizability of findings. Future research could consider expanding the sample size to include a more diverse range of nurse managers from various healthcare settings in the Midwest region. A larger sample would provide a broader perspective on the strategies employed and enhance the transferability of the findings to a wider population (Rahman, 2017). Suggestions include that future researchers consider expanding the participant pool for future studies, as my research was limited to eight participants. This recommendation arises from the limitations identified, emphasizing the importance of conducting more extensive studies with a larger number of participants (Lakens, 2022). With only eight participants in this study, expanding the sample size and employing varied research methods could unveil additional strategies that nurse managers may employ to address nurse shortages in the Midwest.

Another recommendation would be conducting a qualitative study with participants from diverse regions within the United States or even internationally.

Conducting a comparative analysis between different regions or healthcare organizations within the Midwest region would provide valuable insights into the contextual factors that influence nurse retention strategies. According to Thomann (2020), comparing strategies employed in rural versus urban settings, or exploring variations between different healthcare sectors, such as hospitals, long-term care facilities, and outpatient clinics, could shed light on the effectiveness of different approaches in addressing nurse shortages.

The current study likely provided a snapshot of the strategies employed by nurse managers at a specific point in time. Longitudinal studies that follow nurse managers and their strategies over an extended period would allow for a deeper understanding of the long-term outcomes and sustainability of these strategies. Such studies would provide insights into the evolving challenges of nurse shortages and the adaptability of retention strategies over time. While the current study focused on qualitative data, future research could benefit from employing a mixed-methods approach. By combining qualitative and quantitative data collection and analysis methods, researchers can gain a more comprehensive understanding of the strategies employed by nurse managers. This approach could provide quantitative data on the effectiveness and impact of specific strategies, complementing the qualitative insights gained from interviews or observations.

Therefore, future research in the area of nurse shortages and retention strategies in the Midwest region should consider larger sample sizes, comparative analyses, longitudinal studies, mixed methods approach, exploration of barriers and facilitators, and evaluation of outcomes. By addressing these recommendations, researchers can

contribute to a more comprehensive understanding of the strategies employed by nurse managers and ultimately inform evidence-based interventions to address nurse shortages and improve nurse retention in the Midwest region.

### **Reflections**

In this qualitative multiple-case study, exploration included the strategies utilized by nurse managers to address nurse shortages in the Midwest regions. To comply with the research ethics during this study, I completed the CITI Program and secured IRB approval before engaging with participants, improving my collaboration, networking, analytical, and communication skills. Utilizing telephone calls and emails to connect with participants improved my interpersonal communication and networking abilities. Undertaking this research, engaging in interviews to investigate strategies for preventing nurse shortages in the Midwest areas, and striving toward the objective of fostering positive social change has proven to be a gratifying experience. Engaging in this study has strengthened some of my initial beliefs and values on the topic, while also challenging others.

This research reinforced my dedication to contributing meaningfully to the discourse surrounding healthcare workforce challenges, inspiring a renewed passion for creating positive social change within the nursing profession. The process has affirmed the complicated nature of nurse shortages, prompting ongoing reflection and a commitment to evolving strategies that can have a lasting impact on the healthcare landscape. The process of coding transcripts and reviewing data brought my personal biases to the forefront. However, upon closer examination and self-analysis, I found that

some of my preconceived biases were unfounded. Acknowledging this, I set aside these biases and embraced the findings, leading to a more nuanced comprehension of the strategies implemented by nurse managers to tackle nurse shortages in the Midwest environment.

### **Conclusion**

The objective of this qualitative multiple case study was to delve into the strategies employed by nurse managers in addressing nursing shortages in the Midwest regions. The issue of nurse shortages is a global concern, with the Midwest areas experiencing a more pronounced impact. Contributing factors to the nursing shortage in these areas include the aging nursing workforce, job burnout, and heightened demand for healthcare services due to population growth. Additional challenges involve the absence of effective measurement tools for recruitment and development/training strategies, inadequate open communication from nurse managers, and a reluctance to receive feedback from employees. It is crucial for nurse managers to reassess and enhance existing staffing and retention strategies, addressing both the physical and mental well-being of nursing staff. Semi-structured interviews were conducted with eight managers from two organizations in Midwest areas (Illinois, Kansas, and Indiana) using Zoom video conferencing. Seven open-ended questions were posed to explore the strategies employed by nurse managers in averting nurse shortages in the Midwest. The data for this study was collected through a comprehensive review of interview transcripts, job descriptions, newsletters, and employee handbooks.

The outcomes of the study were consistent with the Leadership-Member Exchange (LMX) theory, the conceptual framework that directed the research. The three identified themes encompassed recruitment, development/training, and leadership strategies. These findings can potentially offer valuable insights to nurse managers in formulating and executing strategies aimed at averting nursing shortages in the Midwest, thereby contributing to the effective delivery of healthcare services to patients in the region.



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## Appendix A: Interview Protocol

1. Verify receipt of Consent Form from participants
2. I will give details of the interview process and what will happen during our time together.
3. I will inform the participants that I will be using my cell phone and Zoom as a recording device for the entire interview.
4. I will respond to any questions that the participants may have.
5. Explain voluntary nature to the participants to participate in the research and the flexibility to withdraw from the interview at any time.
6. I will ask each participant to review the interview questions prior to starting the interviews.
7. I will take observation notes during the Zoom call while interviewing the participants.
8. I will turn off my recording device on Zoom and my phone. I will thank each participant for their participation.

## Appendix B: Interview Questions

1. What strategies do you use to prevent nurse shortages?
2. How do you measure the effectiveness of the strategies you use to prevent nurse shortages?
3. What barriers have your nurse managers faced in developing strategies to decrease nurse shortages?
4. How did your nurse managers overcome barriers when developing strategies to prevent nurse shortages?
5. What has been the outcome of implementing these strategies to prevent nurse turnover?
6. If you had to start the implementation of the strategies again, what would you do differently?
7. What other information would you like to share regarding preventing nurse shortages?

## Appendix C: Consent Form

## Consent to Participate in Research

My name is Pamela Banks, and I am a doctoral candidate at Walden University pursuing a Doctor of Business Administration with a concentration in healthcare. I am conducting a qualitative research study as part of my doctoral study titled, Effective Strategies to Manage Nursing Shortages. If you are a nurse manager with at least 2-3 years of experience as a nurse manager with hiring responsibilities, I am asking for your participation. Your participation will include a confidential 30 – 60-minute discussion of your experiences using effective strategies to manage nursing shortage. This study supervised by committee chair, Dr. Inez Black, will aid in fulfilling my academic requirements for this degree. Participants are asked to share their lived experiences through their own objectivity and insights of the strategy initiatives that have helped them to be successful. The confidential meetings will be conducted using a standardized open-ended interview approach to understand the problem and seek clarification regarding the phenomena. Based on your acceptance and agreement to participate in this study, please sign and return the Consent Form enclosed.

Signature of participant \_\_\_\_\_

Date \_\_\_\_\_

Signature of researcher \_\_\_\_\_ Date \_\_\_\_\_