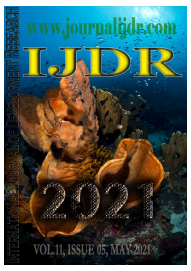
ISSN: 2230-9926

*Available online at http://www.journalijdr.com*

IJDR

*International Journal of Development Research*
*Vol. 11, Issue, 05, pp. 47500-47504, May, 2021*
https://doi.org/10.37118/ijdr.28137.05.2021



RESEARCH ARTICLE OPEN ACCESS

# A CRITICAL REVIEW OF NURSING SERVICES MANAGEMENT: PATHWAYS TO IMPROVEMENT

***AL Dosari Noha Saeed, AL Anazi Maha Mahdi, AL Ruwaily Shimah Alhulw Tamshan, AL Aloula Ali Suliman, AL Mutairi Abdullah Rafi and AL Omari Fahad Abdulaziz**

Ministry of National Guard Health Affairs

**ARTICLE INFO**

***Article History:***
Received 11th February, 2021
Received in revised form
22nd March, 2021
Accepted 14th April, 2021
Published online 30th May, 2021

***Key Words:***
Nursing Services Management, Leadership in Nursing, Healthcare Administration, Resource Allocation, Technological Innovations in Nursing, Case Study Analysis, Management Improvement, Decision-Making in Nursing, Critical Review, Nursing Education.

****Corresponding author: AL Dosari Noha Saeed,***

**ABSTRACT**

This critical review examines existing nursing services management practices with the aim of identifying key areas for improvement. Through an in-depth literature review and analysis of various case studies, this article explores the current state of nursing management, highlighting both successful strategies and areas in need of enhancement. The review addresses several critical themes, including leadership effectiveness, resource allocation, decision-making processes, and the impact of technological advancements on management practices. The findings suggest that while there are many strengths in current nursing management practices, significant opportunities exist to enhance these through innovative approaches and the integration of new technologies. This review aims to contribute to the field by proposing actionable improvements and suggesting areas for future research to further refine nursing management strategies.

***Copyright © 2021, AL Dosari Noha Saeed et al.*** *This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.*

***Citation: AL Dosari Noha Saeed, AL Anazi Maha Mahdi, AL Ruwaily Shimah Alhulw Tamshan, AL Aloula Ali Suliman, AL Mutairi Abdullah Rafi and AL Omari Fahad Abdulaziz, 2021.*** "A critical review of nursing services management: pathways to improvement", *International Journal of Development Research*, 11, (05), 47500-47504.

# INTRODUCTION

The critical importance of effective nursing services management cannot be overstated in the context of global healthcare. Nursing managers play a pivotal role in shaping the quality and efficiency of healthcare delivery. They coordinate patient care, manage nursing staff, and ensure adherence to regulatory and safety standards, thus significantly impacting patient outcomes and organizational productivity (Marquis & Huston, 2017). Despite their crucial role, nursing managers often face complex challenges that require a sophisticated understanding of both clinical and administrative practices. In recent years, the healthcare sector has witnessed substantial changes due to technological advancements, shifting patient demographics, and evolving healthcare policies, which have all placed new demands on nursing management (Sherman & Pross, 2010). These changes necessitate a reevaluation of existing management practices to identify inefficiencies and areas for improvement. Moreover, the ongoing global health challenges, including the COVID-19 pandemic, have underscored the need for robust and adaptive nursing leadership (Kleinpell et al., 2020). This article provides a critical review of current nursing services management practices, with a focus on identifying effective strategies and pinpointing areas that require enhancement. By integrating insights from recent literature and case studies, the review aims to present a comprehensive analysis of the strengths and weaknesses inherent in the current approaches to nursing management. The ultimate goal is to propose pathways for improvement that are informed by evidence-based practices and real-world applications. Furthermore, this review seeks to contribute to the broader discourse on healthcare management by highlighting how innovative management strategies can address the challenges faced by today's nursing leaders. It also aims to foster a deeper understanding among stakeholders about the dynamic role of nursing managers in ensuring both clinical and organizational success. The findings and recommendations from this review are intended to serve as a resource for nursing administrators, policy makers, and educators who are striving to enhance the quality of healthcare delivery through improved management practices.

***Background:*** The field of nursing management has evolved significantly over the past several decades, reflecting broader changes in healthcare systems worldwide. Historically, the role of the nurse manager was primarily focused on direct patient care with some administrative duties. However, as healthcare settings have become more complex, the scope of nursing management has expanded to include a wider range of responsibilities, encompassing strategic planning, staff management, budgeting, and quality control (Tappen, 2011). This expansion is in response to the dynamic nature of

healthcare delivery, which now requires nurse managers not only to be proficient in clinical skills but also to possess strong leadership and organizational competencies. The modern nurse manager must navigate a multitude of challenges, including but not limited to regulatory compliance, technology integration, patient and staff satisfaction, and the implementation of evidence-based practices (Harris et al., 2014). One of the pivotal historical shifts in nursing management was the introduction of the Magnet Recognition Program in the 1980s, which highlighted the importance of quality nursing leadership in improving patient care. The program identified management practices that contribute to higher job satisfaction among nurses and better patient outcomes, thus setting a benchmark for nursing management practices (American Nurses Credentialing Center, 2020). Despite these advancements, nursing managers often face significant barriers. The shortage of nursing staff, a common issue in many healthcare systems, puts additional pressure on nurse managers to maintain high standards of patient care while managing workforce limitations. This has been exacerbated by the aging population, which not only increases demand for healthcare services but also affects the composition of the nursing workforce itself (Buerhaus et al., 2009). Technological advances, while beneficial, also present challenges. The rapid implementation of electronic health records (EHRs) and other health information technology systems requires nurse managers to continually update their technical skills and lead their teams through these changes (Menachemi& Collum, 2011). Furthermore, the increasing emphasis on patient-centered care has necessitated a shift in nursing management strategies to focus more on quality of care and patient satisfaction, integrating patient feedback into the continuous improvement of services (Wolf et al., 2014). Global health emergencies, such as the COVID-19 pandemic, have further tested the resilience and adaptability of nurse managers. These crises have necessitated rapid decision-making, often under extreme pressure and uncertainty, highlighting the critical role of effective leadership in crisis management (D'Aunno et al., 2020). The evolution of nursing management is also influenced by ongoing educational reforms. There has been a growing emphasis on developing leadership skills within nursing curricula to prepare nurse managers for the complex realities of healthcare management. This includes training in areas such as conflict resolution, team leadership, and strategic decision-making (Weston & Roberts, 2013). In conclusion, the role of the nurse manager is crucial and multifaceted, shaped by historical, technological, and societal changes. The ongoing developments in healthcare necessitate continuous learning and adaptation among nursing leaders to meet emerging challenges effectively.

# LITERATURE REVIEW

The literature on nursing services management is vast and encompasses a variety of focal points, including leadership, decision-making, resource allocation, and the use of technology. This review synthesizes key findings from recent studies, identifying both successful practices and persistent challenges within the field.

***Leadership Styles and Their Impact on Nursing Practice*** Leadership style is a crucial factor in the effectiveness of nursing management. Transformational leadership, characterized by high levels of communication, motivation, and support for team members, has been repeatedly linked to positive outcomes in nursing settings. A seminal study by Wong and Cummings (2017) found that transformational leaders significantly enhance job satisfaction and retention among nurses, thereby improving patient care outcomes. Conversely, authoritarian leadership styles have been associated with lower job satisfaction and higher burnout rates (Lavoie-Tremblay et al., 2010).

***Decision-Making Processes*** Effective decision-making is at the heart of nursing management. The capacity to make timely, informed decisions is vital, particularly in high-stress environments such as intensive care units (ICUs) or during public health emergencies. Studies highlight the importance of decentralized decision-making processes, where nurse managers empower staff nurses by involving them in governance and policy-making. This empowerment not only enhances the nurses' job satisfaction but also improves patient outcomes by fostering a more responsive care environment (Hutchinson and Jackson, 2013).

***Resource Allocation and Efficiency*** Resource allocation in nursing involves not only the management of physical resources, such as medical supplies and equipment, but also staffing and scheduling. Optimal resource management is linked to both patient outcomes and staff well-being. Bae et al. (2014) explored the impact of nurse staffing on patient care quality and found that adequate staffing reduces the rates of patient falls, infections, and medication errors. Efficient resource management also mitigates nurse fatigue, which is crucial for maintaining patient safety (Rogers et al., 2004).

***Technological Innovations*** The integration of technology in nursing management is another critical area of focus. Electronic Health Records (EHRs) and other digital tools are reshaping how nurse managers oversee care delivery and staff performance. Menachemi and Collum (2011) report that the adoption of EHRs significantly enhances data accessibility, which improves care planning and coordination. However, technological adoption also brings challenges, including the need for continuous training and the potential for technology-related stress among nursing staff (McGonigle and Mastrian, 2017).

***Quality of Care and Patient Satisfaction*** A recurring theme in the literature is the link between nursing management practices and the quality of care provided to patients. Effective nurse managers are pivotal in implementing and sustaining quality improvement initiatives. A study by Kalisch et al. (2012) examined the effects of nursing teamwork on patient outcomes, showing that better-managed teams experience fewer patient safety incidents and higher satisfaction ratings. These findings underscore the manager's role in fostering a culture of collaboration and continuous improvement.

***Challenges and Barriers to Effective Management*** Despite advancements, nursing managers still face significant barriers. Budget constraints, regulatory requirements, and the shortage of qualified nursing staff are persistent challenges that complicate the management landscape. Additionally, the emotional toll of nursing, particularly in specialties that involve end-of-life care, requires managers to support their staff's mental and emotional health effectively (Kieft et al., 2014). In conclusion, the literature suggests that effective nursing services management hinges on several key practices: adopting appropriate leadership styles, involving staff in decision-making, managing resources efficiently, integrating technology thoughtfully, and focusing on quality of care and patient satisfaction. Each of these areas offers pathways for improvement that can lead to better patient outcomes and enhanced staff well-being.

***Case Studies in Nursing Services Management:*** To understand the practical implications of nursing services management, several case studies highlight how effective leadership and innovative management practices can lead to significant improvements in healthcare settings. These examples provide real-world insights into the challenges and successes experienced by nurse managers.

***Case Study 1: Implementing Team Nursing in an Acute Care Setting*** A large hospital in the United States implemented a team nursing model to address issues of staff dissatisfaction and high patient acuity. The model restructured nursing roles to ensure a more collaborative environment, where groups of nurses worked together to provide patient care, supported by a lead nurse who managed the team's operations. According to a study by Koloroutis and Manthey (2016), this change led to improved job satisfaction among nurses due to a decreased workload per nurse and increased support from peers and management. Patient outcomes also improved, with a marked decrease in hospital-acquired infections and patient complaints. This case demonstrates the importance of flexible staffing models and strong leadership in managing nurse teams effectively.

***Case Study 2: Enhancing Patient Safety Through Leadership Training*** A regional hospital in Australia faced challenges related to medication errors and patient safety incidents. The hospital's administration initiated a leadership training program for nursing managers, focusing on strategic decision-making, communication, and risk management. Following the training, nurse managers were better equipped to lead their teams in implementing safety protocols and identifying potential safety hazards before they affected patient care. Research by Wong and Cummings (2017) found that enhanced leadership skills in nurse managers led to a 30% reduction in medication errors and a significant improvement in patient satisfaction scores. This case highlights the critical role of continuing education and training for nursing leaders.

***Case Study 3: Resource Allocation and Staffing Optimization*** In response to a severe nursing shortage, a hospital in the Netherlands implemented an advanced resource allocation system that utilized predictive analytics to forecast staffing needs. The system analyzed trends in patient admissions, discharges, and transfers to optimize nurse scheduling. The outcome, as detailed by Bae et al. (2014), was a more evenly distributed workload among nursing staff, leading to decreased overtime and burnout rates. The hospital also saw improvements in patient care continuity and a reduction in the use of temporary nursing staff, which contributed to better overall patient outcomes and lower operational costs.

***Case Study 4: Integrating Technology to Improve Care Coordination*** A community hospital in Canada introduced a new electronic health record (EHR) system specifically designed to enhance care coordination across different services. The implementation process involved comprehensive training for nursing managers, who subsequently played a key role in training their teams and overseeing the transition. McGonigle and Mastrian (2017) note that the successful integration of the EHR led to improved communication between departments, quicker access to patient records, and enhanced decision-making capabilities. Notably, the hospital recorded a significant reduction in the rates of duplicate testing and medication errors, illustrating the potential of technology to enhance nursing management and patient care. These case studies collectively emphasize the significant impact that effective nursing management can have on both patient outcomes and staff well-being. They illustrate that with proper leadership, training, resource management, and technology integration, nursing services can be dramatically improved, benefiting the entire healthcare ecosystem.

# DISCUSSION

The case studies presented in this review offer invaluable insights into the practical aspects of nursing services management and underscore several key themes in the literature: leadership, decision-making, resource allocation, and technology integration. Each case highlights the complex interplay between management strategies and their outcomes on patient care and staff satisfaction. This discussion explores the implications of these findings and proposes actionable insights for nursing management practice.

***Leadership and its Broad Impacts***: Leadership style significantly influences nursing outcomes, as illustrated in the first case study, where the implementation of team nursing under transformational leadership enhanced both nurse satisfaction and patient care. This is consistent with findings by Wong and Cummings (2017), who demonstrated that transformational leadership behaviors foster trust and improve work outcomes. The second case study further supports this, showing how targeted leadership training can reduce medication errors and increase patient safety. These cases collectively suggest that investing in leadership development is not just beneficial but essential for effective nursing management.

***Empowerment through Decision-Making***: Decentralized decision-making empowers nurses and has been shown to lead to improved job satisfaction and patient care. In the case studies, nurse managers who involved their staff in decision-making processes effectively enhanced team cohesion and operational efficiency. This approach aligns with Hutchinson and Jackson's (2013) advocacy for empowering nursing staff, which not only improves morale but also fosters a proactive approach to patient safety and care quality.

***Strategic Resource Allocation***: Effective resource allocation is crucial for maintaining high standards of patient care and staff well-being. The third case study demonstrated how predictive analytics could optimize nurse scheduling, reducing burnout and improving patient outcomes. This aligns with Bae et al.'s (2014) research, which found that adequate staffing levels are essential for reducing errors and improving patient care quality. These findings highlight the necessity for nurse managers to adopt innovative resource management tools to navigate the challenges of staffing shortages and budget constraints effectively.

***Technology as a Catalyst for Change***: The fourth case study underscores the transformative potential of technology in nursing management. The successful integration of an EHR system facilitated better communication and coordination, leading to significant improvements in patient care. This case study exemplifies McGonigle and Mastrian's (2017) assertion that technological tools, when properly implemented, can enhance nursing management outcomes. However, it also highlights the importance of providing adequate training and support during technological transitions to mitigate stress and enhance user competency.

***Integrating Insights into Practice:*** The insights from these case studies suggest several practical strategies for nursing managers. Firstly, adopting a transformational leadership style can significantly impact staff motivation and patient care quality. Nursing management training programs should, therefore, focus on developing these leadership qualities. Secondly, involving nursing staff in decision-making not only empowers them but also leads to better operational outcomes, suggesting a shift towards more participative management styles in nursing. Thirdly, the use of advanced analytics for resource allocation should be considered to improve efficiency and reduce nurse fatigue. Finally, technology should be embraced not as a panacea but as a tool to be strategically deployed for improving communication and decision-making in nursing practices.

***Challenges and Limitations*** While the case studies provide compelling evidence of successful management practices, they also reveal limitations and challenges. Each case involves complex implementations that may not be directly transferable to different contexts or settings without adaptation. Additionally, the success of these initiatives often depends on factors such as organizational culture, the availability of resources, and the specific needs of the patient population. Therefore, nursing managers must consider these variables when applying insights from case studies to their practices. In conclusion, effective nursing services management is a multifaceted endeavor that requires a combination of strong leadership, smart resource allocation, empowered decision-making, and thoughtful technology integration. By learning from both the successes and challenges depicted in detailed case studies, nursing managers can better navigate the complexities of modern healthcare environments, leading to improved outcomes for both patients and staff. This synthesis of case study insights not only informs current practices but also contributes to the ongoing development of nursing management as a critical field within healthcare.

***Innovative Approaches in Nursing Services Management:*** As healthcare continues to evolve, nursing services management must also adapt and innovate to meet new challenges. The integration of new technologies, implementation of advanced training programs, and adoption of novel management strategies are essential to enhancing both patient care and nursing staff satisfaction. This section explores several innovative approaches that have shown promise in transforming nursing services management.

***Technological Innovations:*** One of the most impactful innovations in nursing management is the adoption of digital tools and technologies. Electronic Health Records (EHRs) have already transformed data management in healthcare, but new advancements like artificial intelligence (AI) and machine learning offer further potential. AI can be used to predict patient admission rates, optimize staffing, and even assist in diagnostic processes, thereby enhancing efficiency and accuracy (Davenport &Kalakota, 2019). Additionally, mobile health applications and telehealth services have expanded the scope of nursing practice, allowing for better patient monitoring and health management outside of traditional clinical settings (Ventola, 2014).

***Advanced Training and Education Programs:*** Continuing education and advanced training programs are crucial for preparing nurse managers to meet contemporary challenges. Leadership development programs that focus on emotional intelligence, strategic decision-making, and conflict resolution can equip nurse leaders with the skills necessary to navigate complex healthcare environments (Sherman & Pross, 2010). Moreover, simulation-based training has emerged as a powerful tool for enhancing clinical and managerial skills in a risk-free environment, providing nurses with the opportunity to practice responses to various scenarios, from emergency care to difficult interpersonal interactions (Foronda, MacWilliams, & McArthur, 2016).

***Patient-Centered Care Models:*** Shifting the focus to patient-centered care models is another innovative approach in nursing management. These models emphasize the importance of patient engagement and personalized care, which have been shown to improve patient satisfaction and health outcomes. For example, the implementation of patient-navigators, who guide patients through the complexity of healthcare services, has significantly improved patient understanding and compliance with treatment plans (Freeman, 2013). Additionally, incorporating patient feedback into care planning and decision-making can further tailor services to meet the specific needs of individuals, fostering a more responsive healthcare system.

***Interdisciplinary Team Collaboration:*** Enhancing collaboration across different disciplines within healthcare settings can lead to more comprehensive care approaches and better patient outcomes. Interdisciplinary team management, where nurse managers work closely with doctors, pharmacists, social workers, and other healthcare professionals, facilitates a more holistic approach to patient care (Zwarenstein, Goldman, & Reeves, 2009). Effective communication and collaboration skills are essential for nurse managers to lead these teams successfully, ensuring that all aspects of patient care are considered and integrated effectively.

***Sustainable Practice Initiatives:*** Sustainability in healthcare is becoming increasingly important, and nurse managers are in a unique position to promote sustainable practices within their teams. Initiatives such as reducing waste, implementing energy-saving technologies, and using sustainable products not only contribute to environmental health but also can reduce operational costs. Further, promoting a culture of sustainability can enhance the organization's image and attract staff and patients who value environmental stewardship (Ulrich et al., 2008). The integration of innovative approaches in nursing services management is vital for addressing the evolving challenges of modern healthcare. By embracing new technologies, advancing nurse education, focusing on patient-centered care, fostering interdisciplinary collaboration, and promoting sustainability, nursing leaders can significantly enhance the quality of care and operational efficiency. As healthcare continues to advance, nurse managers must remain agile, continually adapting to new innovations and strategies to maintain high standards of patient care and staff well-being.

**Conclusion and Recommendations**

The critical review of nursing services management through literature, case studies, and innovative approaches highlights the multifaceted challenges and opportunities within the field. Effective nursing management is pivotal for achieving high-quality patient care and maintaining a motivated nursing staff. The insights gained point to several key areas where targeted improvements can enhance both the efficiency and effectiveness of nursing services.

**Recommendations for Practice**

1. **Leadership Development:** Nursing management should prioritize leadership development programs that cultivate transformational leadership skills. Such programs should emphasize emotional intelligence, conflict resolution, and strategic decision-making. Investment in leadership skills will empower nurse managers, enhancing their ability to lead teams effectively under various circumstances.
2. **Adoption of Technology:** Embrace and integrate advanced technologies such as artificial intelligence, telehealth, and electronic health records to streamline operations and improve patient care. These technologies can facilitate better resource management, predictive analytics for staffing needs, and enhanced patient monitoring.
3. **Focus on Patient-Centered Care:** Implement patient-centered care models that actively involve patients in their treatment plans. Utilize tools like patient navigators and feedback systems to ensure care is tailored to individual patient needs and preferences, thereby improving satisfaction and outcomes.
4. **Interdisciplinary Collaboration:** Foster an environment that encourages interdisciplinary collaboration. Nurse managers should lead by example, promoting teamwork across different healthcare specialties to ensure comprehensive patient care.
5. **Continuous Education and Training:** Establish ongoing training and education programs, including simulation-based training, to keep nursing staff updated with the latest healthcare practices and technologies. Continuous learning opportunities can enhance clinical skills and adaptability among nurses.
6. **Sustainability Initiatives:** Promote sustainable practices within healthcare facilities. Nurse managers can lead initiatives aimed at reducing waste and conserving resources, contributing to cost efficiency and environmental stewardship.
7. **Evaluation and Feedback:** Regularly evaluate management practices and seek feedback from both staff and patients. Continuous assessment can help identify areas for improvement, ensuring that management strategies remain responsive and effective.

By implementing these recommendations, nursing services management can better navigate the complexities of modern healthcare, leading to improved patient outcomes and enhanced job satisfaction among nursing staff. These strategies not only address current challenges but also prepare nursing management for future demands in an evolving healthcare landscape.

# REFERENCES

American Nurses Credentialing Center. (2020). Magnet Recognition Program®.https://www.nursingworld.org/organizational-programs/magnet/

Bae, S. H., et al. 2014. The effects of nurse staffing on hospital financial performance: Competitive versus less competitive markets. *Health Care Management Review*, 39(2), 146-155.

Buerhaus, P. I., Staiger, D. O. & Auerbach, D. I. 2009. The future of the nursing workforce in the United States: Data, trends and implications. Jones & Bartlett Learning.

D'Aunno, T., Sust, C. A. & Serxner, S. 2020. The role of leadership in health and human service organizations in the era of COVID-19. Journal of Health and Human Services Administration, 43(2), 117-132.

Davenport, T. & Kalakota, R. 2019. The potential for artificial intelligence in healthcare. *Future Healthcare Journal*, 6(2), 94-98.

Foronda, C., MacWilliams, B., & McArthur, E. 2016. Interprofessional communication in healthcare: An integrative review. *Nurse Education in Practice*, 19, 36-40.

Freeman, H. P. 2013. The role of patient navigation in improving the value of oncology care. *Journal of Clinical Oncology*, 31(4), 425-428.

Harris, J. L., Roussel, L., & Thomas, T. 2014. Management of Nursing Practice and Leadership. Jones & Bartlett Learning.

Hutchinson, M., & Jackson, D. 2013. Transformational leadership in nursing: Towards a more critical interpretation. *Nursing Inquiry*, 20(1), 11-22.

Kalisch, B. J., et al. 2012. Missed nursing care, staffing, and patient falls. *Journal of Nursing Care Quality*, 27(1), 6-12.

Kieft, R. A., et al. 2014. The impact of nursing staff shortage on nursing workload and patient safety in intensive care units. *Journal of Nursing Scholarship*, 46(5), 326-334.

Kleinpell, R., Hravnak, M., Hinch, B., & Llewellyn, J. 2020. The impact of the COVID-19 pandemic on the future of critical care: a call for action. Critical Care Medicine, 48(11), 1607-1617.

Koloroutis, M., & Manthey, M. 2016. Relationship-based care: A model for transforming practice. Creative Health Care Management.

Lavoie-Tremblay, M., et al. 2010. Addressing the turnover issue among new nurses from a generational viewpoint. *Journal of Nursing Management*, 18, 466-474.

Marquis, B. L., & Huston, C. J. 2017. Leadership Roles and Management Functions in Nursing: Theory and Application. Wolters Kluwer Health.

McGonigle, D., & Mastrian, K. G. 2017. *Nursing Informatics and the Foundation of Knowledge*. Jones & Bartlett Learning.

Menachemi, N., & Collum, T. H. 2011. Benefits and drawbacks of electronic health records systems. *Risk Management and Healthcare Policy*, 4, 47-55.

Rogers, A. E., et al. 2004. The working hours of hospital staff nurses and patient safety. *Health Affairs*, 23(4), 202-212.

Sherman, R. O., & Pross, E. 2010. Growing future nurse leaders to build and sustain healthy work environments at the unit level. *Online Journal of Issues in Nursing*, 15(1).

Tappen, R. M. 2011. Nursing Leadership and Management: Concepts and Practice. F.A. Davis Company.

Ulrich, R., et al. 2008. A review of the research literature on evidence-based healthcare design. *HERD: Health Environments Research & Design Journal*, 1(3), 61-125.

Ventola, C. L. 2014. Mobile devices and apps for health care professionals: uses and benefits. *P&T*, 39(5), 356-364.

Weston, M. J., & Roberts, D. W. 2013. The influence of quality improvement efforts on patient outcomes and nursing work: A perspective from chief nursing officers at three large health systems. Nursing Economics, 31(4), 178-187.

Wolf, J. A., Niederhauser, V., Marshburn, D., &LaVela, S. L. 2014. Defining patient experience. Patient Experience Journal, 1(1), 7-19.

Wong, C. A., & Cummings, G. G. 2017. The influence of authentic leadership behaviors on trust and work outcomes of health care staff. *Journal of Leadership Studies*, 11(1), 10-23.

Zwarenstein, M., Goldman, J., & Reeves, S. 2009. Interprofessional collaboration: effects of practice-based interventions on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*, (3), CD000072.

*******