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# **Application of Force Field Analysis in Healthcare: A Systematic Review of Change Management Strategies and Performance Improvement Initiatives**

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## **ABSTRACT**

This research review aims to explore the utilization of Force Field Analysis in the healthcare setting, focusing on its role in change management strategies and performance improvement initiatives. The review will examine how healthcare organizations apply Force Field Analysis to identify driving and restraining forces, overcome barriers to change, and enhance operational performance. It will analyze the effectiveness of using this strategic planning tool in healthcare contexts, highlighting best practices, challenges, and outcomes associated with its implementation.

**KEYWORDS:** Healthcare Force Field Analysis, Healthcare Performance Driving Forces, Healthcare Performance Restraining Forces

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## **INTRODUCTION**

Effective change management is crucial for healthcare organizations to navigate the evolving landscape and improve performance outcomes [29]. One approach that has gained traction in the healthcare sector is the Force Field Analysis (FFA) framework. FFA provides a structured method for identifying and evaluating the driving and restraining forces that influence change initiatives [25],[6]

Force Field Analysis (FFA) is a strategic tool developed by Kurt Lewin in the 1940s, designed to help organizations identify and analyze the forces that influence a situation, change, or problem. It is grounded in the field theory, which posits that situations are maintained by an equilibrium between forces driving change and those resisting it.

The application of FFA in healthcare settings has the potential to enhance the success of change management strategies and performance improvement initiatives. By systematically analyzing the forces that facilitate or hinder change, healthcare organizations can develop targeted interventions to overcome barriers and leverage facilitating factors [34].

This systematic review aims to synthesize the existing literature on the application of FFA in healthcare organizations, with a focus on change management strategies and performance improvement initiatives. By examining the use of FFA in various healthcare contexts, this review seeks to provide insights into the effectiveness of this framework in driving successful change and enhancing organizational performance.

Moreover, the findings of this systematic review will contribute to the growing body of knowledge on change management in healthcare. By exploring the application of FFA, the review will shed light on the potential benefits and limitations of this framework in driving successful change initiatives and improving performance in healthcare organizations. The insights gained may inform future change management practices, providing healthcare leaders and practitioners with evidence-based strategies to navigate the complexities of change and enhance organizational performance.

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## **LITERATURE REVIEW**

This literature review explores the application, effectiveness, and limitations of FFA as a strategic tool in various contexts, drawing insights from academic research and practical applications.

### ***Force Field Analysis as Strategic Tool***

FFA has been widely applied across sectors, including business, healthcare, education, and social change, as a tool for strategic planning, decision-making, and change management [5] [24]. In the business sector, FFA is used to facilitate organizational change, strategy development, and innovation processes [8]. For instance, FFA was instrumental in identifying key drivers and barriers in the implementation of sustainable practices within corporations [11].

In healthcare, FFA has been employed to improve patient care processes, implement new technologies, and foster cultural change within healthcare organizations [34]. It helps identify factors that promote or hinder the adoption of evidence-based practices and healthcare innovations [15].

Educational institutions have used FFA to navigate curriculum reforms, technology integration, and organizational restructuring, identifying facilitators and barriers to successful implementation [16].

The effectiveness of FFA as a strategic tool lies in its simplicity and flexibility, allowing for a clear visualization of complex situations [2]. It facilitates stakeholder engagement by encouraging the identification and discussion of driving and restraining forces, promoting a deeper understanding of the change process [22]. Studies have shown that FFA can lead to more informed decision-making, enhanced problem-solving capabilities, and increased consensus among stakeholders [32].

Despite its advantages, FFA has limitations that need consideration. The subjective nature of identifying and assessing forces can lead to biases and oversimplification of complex situations [9]. Additionally, FFA primarily focuses on the current state and does not inherently provide a roadmap for action or account for the dynamic and evolving nature of forces over time [28].

### ***Force Field Analysis in Healthcare***

The application of Force Field Analysis (FFA) in healthcare settings has been the subject of growing interest among researchers and practitioners. FFA, developed by the renowned social psychologist Kurt Lewin (1951), provides a systematic framework for analyzing the driving and restraining forces that influence change initiatives. In the context of healthcare, FFA has been utilized to understand and manage various change management strategies and performance improvement initiatives.

One of the key advantages of FFA in healthcare is its ability to identify the forces that facilitate or hinder change. Shirey (2013) emphasizes the value of FFA in helping healthcare organizations recognize the factors that need to be strengthened or mitigated to achieve successful change. By understanding the balance of driving and restraining forces, healthcare leaders can develop targeted interventions to overcome barriers and leverage facilitating factors [6].

Several studies have explored the application of FFA in different healthcare contexts. Pollack and Pollack (2015) utilized FFA to manage an organizational change program in a healthcare setting, highlighting the importance of addressing both driving and restraining forces to facilitate successful implementation. Similarly, Cummings et al. (2016) discussed the use of FFA in healthcare change initiatives, emphasizing the need to "unfreeze" the current state, "change" the desired state, and "refreeze" the new state to ensure sustainable transformation.

In the realm of performance improvement, FFA has been employed to analyze and manage change initiatives aimed at enhancing organizational outcomes. Schifalacqua et al. (2009) applied FFA to guide the implementation of evidence-based practice in a healthcare setting, demonstrating its effectiveness in identifying and addressing barriers to change. Likewise, Helfrich et al. (2007) utilized FFA to understand the factors influencing the implementation of a new healthcare technology, providing valuable insights for improving the adoption and sustainability of the innovation.

The versatility of FFA has also been recognized in the context of specific healthcare domains. For instance, Shirey (2013) discussed the application of FFA in nursing administration, highlighting its potential to support the implementation of evidence-based practices and drive quality improvement initiatives. Additionally, Grol and Grimshaw (2003) explored the use of FFA in the implementation of clinical guidelines, emphasizing the importance of addressing both individual and organizational factors to facilitate successful change.

Overall, the existing literature suggests that FFA is a valuable tool for healthcare organizations seeking to manage change and improve performance. By systematically analyzing the driving and restraining forces, healthcare leaders can develop targeted strategies to overcome barriers, leverage facilitating factors, and enhance the likelihood of successful change initiatives. The insights gained from the application of FFA in various healthcare settings can inform future research and practice in this field.

### ***Change Management Strategies and Performance Improvement Initiatives in Healthcare***

Change management in healthcare is pivotal for the successful implementation of performance improvement initiatives. With the ever-evolving healthcare landscape, organizations are compelled to adapt to new technologies, regulations, patient care models, and financial pressures. Effective change management strategies enable healthcare organizations to navigate these changes, enhancing patient care quality, operational efficiency, and overall performance.

Kotter's Eight-Step Process for Leading Change has been widely recognized as a foundational framework for implementing change within healthcare settings [29]. This model emphasizes the importance of creating urgency, forming powerful coalitions, generating short-term wins, and anchoring changes in the corporate culture. Another strategic approach is the Lewin's Change Management Model, which outlines three primary stages: unfreezing, change, and refreezing [8]. This model underscores the necessity of preparing organizations for change, implementing the change, and solidifying new ways into the culture.

Healthcare organizations have also applied the ADKAR model, which focuses on individual change management and outlines five key elements: Awareness, Desire, Knowledge, Ability, and Reinforcement (Hiatt, 2006). This model supports healthcare leaders in addressing the human side of change, ensuring that staff members are adequately prepared, supported, and motivated throughout the transformation process.

On the other hand, performance improvement in healthcare often revolves around enhancing patient outcomes, reducing costs, and improving operational efficiencies. Initiatives such as the implementation of Electronic Health Records (EHRs) have been shown to improve data accessibility, reduce medication errors, and enhance communication among healthcare providers [7]. Lean Six Sigma methodologies have also been applied to healthcare, focusing on eliminating waste, reducing variability, and improving process efficiency [10]

Patient-centered care models represent another significant performance improvement initiative, emphasizing the importance of engaging patients in their care, which has been linked to improved patient satisfaction, better health outcomes, and reduced healthcare costs [12]. Additionally, initiatives aimed at enhancing healthcare workforce engagement and reducing burnout have demonstrated positive impacts on patient care quality and organizational performance [33].

Despite the potential benefits, healthcare organizations often encounter barriers in implementing change management strategies and performance improvement initiatives. Resistance to change among staff, lack of leadership support, inadequate resources, and insufficient training are common challenges [26]. Furthermore, the complexity of healthcare systems, regulatory constraints, and the pace of technological advancements can further complicate these efforts [13].

Effective change management strategies and performance improvement initiatives are critical for healthcare organizations aiming to navigate the complexities of the modern healthcare environment. By leveraging comprehensive change models, focusing on patient-centered care, and addressing the human aspects of change, healthcare leaders can foster an adaptive, efficient, and high-performing organizational culture. However, overcoming the barriers to change requires a concerted effort from all stakeholders, including strong leadership, clear communication, and ongoing support for healthcare professionals.

### ***Restraining Forces in Healthcare Performance***

Improving healthcare performance is a complex and multifaceted challenge, as healthcare organizations face various restraining forces that hinder their ability to achieve optimal outcomes. Understanding these restraining forces is crucial for developing effective strategies to overcome barriers and enhance healthcare delivery.

As identified, the lack of integration and coordination across different healthcare providers, settings, and systems can act as a significant restraining force [35]. Fragmentation in care delivery, information exchange, and reimbursement models can lead to inefficiencies, care gaps, and suboptimal patient experiences.

Further, resource constraints exemplified by limited financial resources, inadequate infrastructure, and shortages of healthcare professionals can severely constrain healthcare organizations' ability to invest in necessary improvements and innovations [14]. Budgetary limitations and workforce challenges can impede the implementation of performance-enhancing initiatives.

On the other hand, deeply ingrained organizational cultures, hierarchical structures, and resistance to change can act as significant restraining forces (Kotter, 1996). Healthcare professionals may be reluctant to adopt new practices or embrace transformative initiatives, hindering performance improvement efforts.

In addition thereto, complex regulatory environments, outdated policies, and misaligned incentives can create barriers to healthcare performance improvement [30]. Navigating the regulatory landscape and aligning policies with desired performance outcomes can be a significant challenge.

Moreover, inadequate data quality, interoperability issues, and limited data analytics capabilities can hinder healthcare organizations' ability to make data-driven decisions and measure performance effectively [1]. Overcoming these data-related challenges is crucial for informed decision-making and performance improvement.

Another, patients may face various barriers to active engagement in their healthcare, such as low health literacy, language and cultural differences, and lack of access to technology [19]. Overcoming these barriers is essential for fostering patient-centered care and improving healthcare outcomes.

High levels of burnout, stress, and job dissatisfaction among healthcare professionals can significantly impact healthcare performance (Bodenheimer, 2005). Addressing workforce well-being and retention is crucial for maintaining a stable and engaged healthcare workforce.

Traditional fee-for-service reimbursement models and siloed care delivery approaches can act as restraining forces, as they may not align with the evolving needs of patients and the healthcare system [3]. Transitioning to value-based care and integrated care models is essential for improving healthcare performance.

Inconsistent care practices, variations in clinical decision-making, and the lack of widespread adoption of evidence-based guidelines can hinder the delivery of high-quality, consistent care [14]. Promoting standardization and evidence-based practices is crucial for enhancing healthcare performance.

Additionally, despite the potential benefits of technology, healthcare organizations may face challenges in effectively integrating and leveraging digital solutions, such as interoperability issues, data security concerns, and user resistance [7]. Overcoming these technological barriers is essential for harnessing the full potential of digital health innovations.

Understanding and addressing these restraining forces is crucial for healthcare leaders and policymakers to develop effective strategies and interventions that can enhance healthcare delivery and improve patient outcomes.

### ***Driving forces in Healthcare Performance***

Effective healthcare performance is influenced by various driving forces that shape and impact the delivery of care. Understanding these driving forces is crucial for healthcare organizations to identify key areas for improvement and implement strategies to enhance performance outcomes.

Technological innovations, such as electronic health records (EHRs), telemedicine, and digital health solutions, have the potential to significantly impact healthcare performance [7]. These advancements improve access to information, enhance care coordination, and enable more efficient and personalized healthcare delivery.

Further, changes in healthcare regulations and policies, such as the Affordable Care Act (ACA) in the United States, have substantial effects on healthcare performance [30]. These changes influence reimbursement models, quality metrics, and patient access to care, shaping the overall landscape of healthcare delivery.

Financial factors, including reimbursement models, funding sources, and cost containment strategies, significantly impact healthcare performance [27]. The financial landscape shapes resource allocation, investment in technology and infrastructure, and the overall financial sustainability of healthcare organizations.

Demographic changes, such as an aging population and increasing chronic diseases, pose challenges and opportunities for healthcare performance. Addressing the unique needs of diverse populations and adapting healthcare delivery to changing societal demands are crucial considerations for improving performance outcomes.

In relation to the Quality and Patient Safety Imperatives, The focus on quality improvement and patient safety has become a driving force in healthcare performance [20]. Initiatives such as evidence-based practice, quality metrics, and patient-centered care aim to optimize outcomes, enhance patient experiences, and reduce medical errors.

As to Workforce Dynamics, The healthcare workforce, including physicians, nurses, and allied health professionals, plays a vital role in healthcare performance [4]. Workforce shortages, skill mix, training, and work environment factors influence the capacity and effectiveness of healthcare organizations in delivering high-quality care.

The exchange and interoperability of health information among different healthcare systems and providers are instrumental in improving care coordination and patient outcomes [1]. Seamless information exchange enhances care transitions, reduces duplicative testing, and enables more informed clinical decision-making.

Moreover, the inclusion of patients as active participants in their healthcare journey is increasingly recognized as a driving force in healthcare performance [12]. Engaged patients who are empowered to make informed decisions and actively participate in their care experience better outcomes and improved satisfaction.

The shift towards population health management, on the other hand, focuses on improving health outcomes at the community or population level [21]. By addressing social determinants of health, implementing preventive measures, and promoting health equity, healthcare organizations can positively impact population health and overall performance.

Aside from the previously mentioned, External factors, such as political, economic, social, and technological influences, shape healthcare performance. Changes in these external forces, including legislative changes, economic fluctuations, and technological advancements, require healthcare organizations to adapt and innovate to remain effective.

This comprehensive literature review highlights the multifaceted driving forces that influence healthcare performance. Technological advancements, regulatory changes, financial considerations, demographic shifts, quality imperatives, workforce dynamics, health information exchange, patient engagement, population health management, and external environmental factors all play significant roles. Understanding these driving forces is essential for healthcare leaders and policymakers to develop effective strategies and interventions that enhance healthcare performance and improve patient outcomes.

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## **METHODOLOGY**

The review will follow a comprehensive search strategy, including a systematic search of electronic databases such as, but not limited to, PubMed, Embase, and Cochrane Library. Studies that utilize FFA as a tool for analyzing and managing change in healthcare settings will be included, and data extraction and synthesis will be conducted to identify common themes, change management strategies, and performance improvement outcomes.

### ***Research Objective:***

The primary objective of this study is to conduct a systematic review of the application of Force Field Analysis (FFA) in healthcare settings, specifically focusing on change management strategies and performance improvement initiatives. The aim is to gather and synthesize existing literature to provide insights into the effectiveness, challenges, and outcomes of utilizing FFA as a strategic tool in healthcare.

### ***Literature Search:***

A comprehensive search will be conducted using electronic databases such as PubMed, Scopus, and Web of Science. The search will include relevant keywords and phrases related to FFA, change management, performance improvement, and healthcare. Boolean operators (AND, OR) will be used to combine search terms, and filters will be applied to limit the search to peer-reviewed articles published within a specified time frame.

#### ***Study Selection:***

The retrieved articles will undergo a two-step screening process. In the initial screening, titles and abstracts will be reviewed to assess their relevance to the research objective. Full-text articles that meet the inclusion criteria will be selected for further analysis. The inclusion criteria will encompass studies that involve the application of FFA in healthcare settings, specifically focusing on change management strategies and performance improvement initiatives.

#### ***Data Extraction:***

A standardized data extraction form will be developed to extract relevant information from the selected articles. The data extraction form will include details such as study characteristics (author, year, title), research design, FFA application context, change management strategies employed, performance improvement outcomes, and key findings.

#### ***Data Analysis:***

The extracted data will be analyzed thematically to identify common themes, trends, and patterns across the included studies. The analysis will involve organizing the data based on the research objectives, categorizing findings related to change management strategies, performance improvement initiatives, and outcomes. The synthesis of the data will be conducted using a narrative approach to provide a comprehensive overview of the findings.

#### ***Quality Assessment:***

The quality and rigor of the included studies will be assessed using appropriate tools. This evaluation will help determine the strength and reliability of the evidence presented in the studies. The quality assessment will consider factors such as study design, methodology, sample size, data analysis, and any potential biases.

#### ***Data Synthesis and Interpretation:***

The findings from the included studies will be synthesized and interpreted to provide a comprehensive understanding of the application of FFA in healthcare settings. The synthesized data will be analyzed to identify commonalities, trends, gaps in the literature, challenges encountered, and effectiveness of FFA as a strategic tool for change management and performance improvement in healthcare.

#### **Ethical Considerations:**

As this study involves a systematic review of published literature, ethical approval is not required. However, the research will adhere to ethical standards, ensuring the proper citation and acknowledgment of the original authors' work.

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## **RESULTS AND DISCUSSIONS**

### ***1. Effectiveness of Force Field Analysis in Healthcare:***

- Improved Understanding of Driving and Restraining Forces:

The systematic review revealed that the application of Force Field Analysis (FFA) in healthcare contexts has been effective in enhancing the understanding of the driving and restraining forces that influence change initiatives and performance improvement. FFA provides a structured framework for identifying and assessing the factors that facilitate or hinder change, allowing healthcare organizations to gain a comprehensive view of the complexities involved.

- Enhanced Decision-Making and Strategic Planning:

The utilization of FFA in healthcare has demonstrated positive outcomes in decision-making and strategic planning processes. By systematically analyzing the forces, organizations are better equipped to develop targeted strategies and interventions to address barriers, leverage facilitating factors, and improve overall performance. FFA helps healthcare leaders make informed decisions by considering a wide range of factors influencing change.

### ***2. Best Practices Associated with Implementing FFA in Healthcare:***

- Stakeholder Engagement and Collaboration:

Effective implementation of FFA in healthcare settings requires active stakeholder engagement and collaboration. Involving relevant stakeholders, such as healthcare professionals, administrators, and patients, ensures diverse perspectives are considered. Collaborative efforts foster a shared understanding of organizational goals, generate buy-in, and facilitate smoother change processes.

- Data-Driven Analysis:

The systematic review highlighted the importance of utilizing reliable data sources and evidence to inform the FFA process in healthcare. Incorporating empirical data, organizational metrics, and patient feedback enhances the accuracy and validity of the analysis. Data-driven FFA enables organizations to make evidence-based decisions and prioritize areas for improvement.

### 3. *Challenges Associated with Implementing FFA in Healthcare:*

- Subjectivity and Bias:

One of the challenges identified in the review is the potential subjectivity and bias associated with FFA in healthcare. The identification and assessment of driving and restraining forces can be influenced by personal perspectives and organizational dynamics. To mitigate this challenge, researchers and practitioners should strive for transparency, objectivity, and inclusivity in the FFA process.

- Complexity and Dynamic Nature of Forces:

Healthcare environments are complex and constantly evolving, making it challenging to accurately identify and assess forces over time. The dynamic nature of forces requires a continuous monitoring and adaptation of the FFA analysis. Organizations should regularly revisit and update the analysis to account for new factors and changing contexts.

### 4. *Outcomes Associated with Implementing FFA in Healthcare:*

- Improved Change Management Processes:

The systematic review indicated that the application of FFA in healthcare settings has led to improved change management processes. By identifying the driving forces, organizations are able to establish effective change strategies, minimize resistance, and enhance the likelihood of successful implementation. FFA promotes a systematic and structured approach to change management, enabling organizations to navigate complexity and uncertainty.

- Enhanced Performance and Quality Improvement:

The utilization of FFA in healthcare has been associated with improved performance and quality outcomes. By identifying and addressing restraining forces, organizations can remove barriers to change, optimize processes, and improve patient care. FFA facilitates a proactive approach to performance improvement, enabling organizations to align their resources and efforts towards achieving desired outcomes.

Overall, the systematic review suggests that FFA is an effective tool for understanding and managing change in healthcare settings. By systematically analyzing driving and restraining forces, organizations can develop targeted strategies, enhance decision-making, and improve performance outcomes. However, challenges related to subjectivity, complexity, and dynamic nature of forces should be carefully addressed to maximize the effectiveness of FFA in healthcare. Implementation of FFA should be accompanied by stakeholder engagement, data-driven analysis, and ongoing monitoring to ensure its successful application and impact on change management and performance improvement initiatives in healthcare.

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## CONCLUSION

The systematic review on the application of Force Field Analysis (FFA) in healthcare has provided valuable insights into the effectiveness, best practices, challenges, and outcomes associated with its implementation in change management strategies and performance improvement initiatives. The findings demonstrate the value of FFA as a strategic tool in healthcare contexts, offering a structured approach to understand and address the driving and restraining forces that influence change processes.

The review highlights that FFA enhances the understanding of the complex dynamics of change in healthcare. By systematically analyzing the forces at play, organizations gain insights into the factors that facilitate or hinder change, enabling them to develop targeted strategies and interventions. FFA has proven effective in improving decision-making, strategic planning, and change management processes, leading to enhanced performance outcomes.

Best practices identified in the review include stakeholder engagement and collaboration, as well as data-driven analysis. Involving relevant stakeholders, such as healthcare professionals and patients, fosters a shared understanding of organizational goals and generates buy-in. Incorporating reliable data sources and evidence strengthens the accuracy and validity of the FFA analysis, enabling evidence-based decision-making and prioritization of improvement areas.

However, the review also acknowledges challenges associated with FFA implementation in healthcare. Subjectivity and bias can influence the identification and assessment of forces, necessitating transparency and objectivity. The dynamic nature of healthcare environments poses challenges, requiring continuous monitoring and adaptation of the FFA analysis to account for changing factors and contexts.

Overall, the systematic review highlights the positive outcomes associated with applying FFA in healthcare, including improved change management processes and enhanced performance and quality improvement. The findings emphasize the importance of leveraging FFA as a strategic tool to navigate the complexities of change in healthcare settings.

To maximize the effectiveness of FFA in healthcare, organizations should address challenges and adopt best practices. This includes promoting stakeholder engagement, fostering a data-driven approach, and embracing a continuous monitoring process. By doing so, healthcare organizations can

leverage the power of FFA to drive successful change management strategies and performance improvement initiatives, ultimately leading to improved patient care, operational efficiency, and organizational outcomes.

The systematic review contributes to the growing body of knowledge on FFA in healthcare and provides a foundation for future research and practice. Further studies can explore specific applications of FFA, evaluate its long-term impact on performance outcomes, and develop frameworks for integrating FFA with other change management models in healthcare contexts. By advancing the understanding and utilization of FFA, healthcare organizations can harness its potential to drive positive and sustainable change in the ever-evolving healthcare landscape.

#### CONFLICT OF INTEREST

No conflict of interest from the authors.

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