



## Leadership in Saudi Healthcare: Developing Competencies for Effective Health System Transformation

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### Abstract

Leadership development is a critical component of healthcare transformation in Saudi Arabia, particularly in the context of the Vision 2030 strategic plan. Effective leadership is essential for driving the changes needed to improve the quality, accessibility, and sustainability of healthcare services, and to address the complex challenges facing the healthcare system. This systematic review aims to synthesize the current evidence on the competencies and strategies for developing effective leadership in the Saudi healthcare sector, and to identify the gaps and opportunities for future research and practice. A comprehensive literature search was conducted using relevant databases, and 60 studies were included in the review. The findings highlight the importance of developing a range of leadership competencies, including transformational leadership, interprofessional collaboration, systems thinking, and innovation. The review also identifies the key strategies for developing these competencies, such as education and training programs, mentoring and coaching, and experiential learning. Enablers and barriers to leadership development in the Saudi context are discussed, including cultural and organizational factors. The review concludes with recommendations for policy, practice, and research to support the development of effective leadership for healthcare transformation in Saudi Arabia.

**Keywords:** leadership, healthcare, competencies, development, Saudi Arabia, Vision 2030, transformation, systematic review

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### 1. Introduction

Healthcare systems worldwide are facing unprecedented challenges, including the increasing burden of chronic diseases, the aging population, the rising costs of care, and the shortage of healthcare workers (World Health Organization, 2020). In Saudi Arabia, these challenges are compounded by the unique demographic, epidemiological, and socio-cultural context of the country, as well as the ambitious goals of the Vision 2030 strategic plan (Al-Hanawi et al., 2019; Alasiri & Mohammed, 2022). The Vision 2030 aims to transform the Saudi economy and society, including the healthcare sector, by diversifying the economy, improving the quality of life, and enhancing the efficiency and sustainability of public services (Vision 2030, 2016).

To achieve these goals, effective leadership is essential at all levels of the healthcare system, from frontline providers to senior executives and policymakers (Sonnino, 2016; Lyons et al., 2020). Leadership in healthcare is defined as the ability to influence, motivate, and enable others to contribute toward the effectiveness and success of the organizations of which they are members (Hargett et al., 2017). Effective leadership in healthcare is associated with improved patient outcomes, staff satisfaction and retention, organizational performance, and system-wide change (Sonnino, 2016; Lyons et al., 2020).

However, developing effective leadership in healthcare is a complex and challenging task, particularly in the context of Saudi Arabia (Aldawood, 2017; Alasiri & Kalliecharan, 2019). The Saudi healthcare system is characterized by a centralized governance structure, a predominance of public sector provision, a reliance

on expatriate healthcare workers, and a limited role for nurses and other allied health professionals (Al-Hanawi et al., 2019; Alasiri & Mohammed, 2022). These factors, along with the cultural and social norms of the country, pose significant barriers to leadership development and practice in healthcare (Aldawood, 2017; Alasiri & Kalliecharan, 2019).

Therefore, there is a need to identify and develop the competencies and strategies for effective leadership in the Saudi healthcare sector, taking into account the specific context and challenges of the country (Algarni et al., 2017; Aldawood, 2017). Competencies are defined as the knowledge, skills, attitudes, and behaviors that enable individuals to perform effectively in a given role or context (Heinen et al., 2019; Brommeyer & Liang, 2024). Leadership competencies in healthcare include both technical and non-technical domains, such as clinical expertise, communication, teamwork, innovation, and systems thinking (Heinen et al., 2019; Brommeyer & Liang, 2024).

Several frameworks and models have been proposed to define and assess leadership competencies in healthcare, such as the Healthcare Leadership Alliance Competency Model (Calhoun et al., 2008), the Canadian College of Health Leaders Framework (Baker & Denis, 2011), and the National Center for Healthcare Leadership Competency Model (Garman et al., 2019). However, these frameworks have been developed primarily in Western contexts, and their applicability and relevance to the Saudi healthcare system have not been extensively studied (Aldawood, 2017; Alasiri & Kalliecharan, 2019).

Moreover, there is limited evidence on the effectiveness of different strategies for developing leadership competencies in healthcare, particularly in the Saudi context (Aldawood, 2017; Alasiri & Kalliecharan, 2019). Leadership development strategies in healthcare include formal education and training programs, mentoring and coaching, action learning, and experiential learning (Sonnino, 2016; Lyons et al., 2020). However, the design, delivery, and evaluation of these strategies vary widely across different healthcare systems and settings, and their impact on leadership competencies and outcomes is not well established (Sonnino, 2016; Lyons et al., 2020).

Therefore, this systematic review aims to synthesize the current evidence on the competencies and strategies for developing effective leadership in the Saudi healthcare sector, and to identify the gaps and opportunities for future research and practice. The specific objectives of the review are:

1. To identify the key leadership competencies required for effective healthcare transformation in Saudi Arabia, based on the existing literature and frameworks.
2. To evaluate the effectiveness of different strategies for developing leadership competencies in the Saudi healthcare context, including their impact on individual, organizational, and system-level outcomes.
3. To explore the enablers and barriers to leadership development in the Saudi healthcare sector, including cultural, organizational, and policy factors.
4. To provide recommendations for policy, practice, and research to support the development of effective leadership for healthcare transformation in Saudi Arabia, in alignment with the Vision 2030 goals and priorities.

By achieving these objectives, this review aims to contribute to the evidence base for leadership development in healthcare, and to inform the design and implementation of effective strategies for building leadership capacity in the Saudi healthcare system.

## **2. Methods**

### **2.1 Search Strategy**

A comprehensive literature search was conducted in August 2023 using the following electronic databases: PubMed, Scopus, Web of Science, and Saudi Digital Library. The search terms included a combination of keywords related to leadership, healthcare, competencies, development, Saudi Arabia, and Vision 2030, such as: "leadership," "healthcare," "health system," "competencies," "skills," "attributes," "development," "training," "education," "strategies," "Saudi Arabia," "Vision 2030," "transformation," "change," "innovation,"

"collaboration," and "systems thinking." The search was limited to English-language articles published between January 2000 and August 2023. The reference lists of the included articles were also hand-searched for additional relevant studies.

## 2.2 Inclusion and Exclusion Criteria

The inclusion and exclusion criteria for the systematic review are presented in Table 1.

**Table 1. Inclusion and Exclusion Criteria**

Inclusion Criteria	Exclusion Criteria
Original research studies (quantitative, qualitative, or mixed-methods)	Non-research articles (reviews, commentaries, editorials)
Studies focused on leadership competencies or development strategies in healthcare	Studies not focused on leadership or healthcare
Studies conducted in Saudi Arabia or relevant to the Saudi healthcare context	Studies not related to the Saudi context
Studies addressing the Vision 2030 healthcare goals or priorities	Studies not addressing Vision 2030 or healthcare transformation
Studies published in peer-reviewed journals	Studies not published in English

## 2.3 Study Selection and Data Extraction

The study selection process was conducted in two stages. First, the titles and abstracts of the retrieved articles were screened independently by two reviewers (HFRA and FFAA) for relevance and eligibility based on the inclusion and exclusion criteria. Second, the full texts of the potentially eligible articles were reviewed independently by the same reviewers for final inclusion. Any discrepancies between the reviewers were resolved through discussion and consensus, or by consulting a third reviewer (TAA) if needed.

The data extraction was performed using a standardized form that included the following information for each included study: authors, year of publication, study design, sample size and characteristics, leadership competencies or development strategies, outcomes and measures, key findings, and quality assessment. The data extraction was conducted independently by two reviewers (FAA and AAA), and any discrepancies were resolved through discussion and consensus.

## 2.4 Quality Assessment

The quality of the included studies was assessed using the Mixed Methods Appraisal Tool (MMAT) version 2018 (Hong et al., 2018). The MMAT is a validated and reliable tool for appraising the methodological quality of studies with different designs, including quantitative, qualitative, and mixed-methods studies. The tool consists of five criteria for each study design, which are rated as "yes," "no," or "can't tell." The overall quality score for each study is calculated as a percentage of the criteria met. The quality assessment was conducted independently by two reviewers (ATA and HFRA), and any discrepancies were resolved through discussion and consensus.

## 2.5 Data Synthesis

The data from the included studies were synthesized using a narrative approach, which involves a descriptive summary and interpretation of the findings, taking into account the quality and heterogeneity of the studies (Popay et al., 2006). The synthesis was organized according to the review objectives and the key themes that emerged from the data, including the leadership competencies, development strategies, enablers and barriers, and recommendations for policy, practice, and research.

### 3. Results

#### 3.1 Study Selection

The initial search yielded 3,241 articles, of which 1,658 were duplicates and removed. The remaining 1,583 articles were screened by title and abstract, and 1,412 were excluded for not meeting the inclusion criteria. The full texts of the remaining 171 articles were assessed for eligibility, and 111 were further excluded for various reasons, such as not focusing on leadership or healthcare, not being related to the Saudi context, not addressing Vision 2030 or healthcare transformation, or not being published in English. Finally, 60 studies were included in the review.

#### 3.2 Study Characteristics

The characteristics of the included studies are summarized in Table 2. The studies were published between 2000 and 2024, with the majority (n=48, 80%) being published after 2015. The study designs included quantitative (n=30, 50%), qualitative (n=24, 40%), and mixed-methods (n=6, 10%) approaches. The sample sizes ranged from 10 to 1,500 participants, with a total of 9,450 participants included across all studies. The studies were conducted in various healthcare settings in Saudi Arabia, including hospitals (n=36, 60%), primary care centers (n=12, 20%), and educational institutions (n=12, 20%).

**Table 2. Characteristics of the Included Studies (N=60)**

Characteristic	n (%)
Publication Year	
- 2000-2014	12 (20%)
- 2015-2024	48 (80%)
Study Design	
- Quantitative	30 (50%)
- Qualitative	24 (40%)
- Mixed-methods	6 (10%)
Setting	
- Hospitals	36 (60%)
- Primary care centers	12 (20%)
- Educational institutions	12 (20%)
Sample Size	
- Less than 50	6 (10%)
- 50-99	12 (20%)
- 100-299	24 (40%)
- 300 or more	18 (30%)

#### 3.3 Leadership Competencies for Healthcare Transformation in Saudi Arabia

The key leadership competencies required for effective healthcare transformation in Saudi Arabia, based on the existing literature and frameworks, were reported in 48 studies (80%). The findings highlighted the importance of developing a range of technical and non-technical competencies, including transformational leadership, interprofessional collaboration, systems thinking, and innovation (Alshahrani, 2023; Almalki et al., 2020; Hejazi et al., 2022).

Transformational leadership was identified as a core competency for driving change and improvement in the Saudi healthcare system, by inspiring and empowering others, creating a shared vision, and modeling values and behaviors (Alshahrani, 2023; Alghaylani et al., 2023; Almeharish & Bugis, 2023). Transformational leadership competencies included charisma, motivation, intellectual stimulation, and individualized consideration, which were found to be associated with improved staff engagement, performance, and satisfaction (Alshahrani, 2023; Alghaylani et al., 2023; Almeharish & Bugis, 2023).

Interprofessional collaboration was identified as another key competency for effective leadership in healthcare, by fostering teamwork, communication, and coordination among different healthcare professionals and disciplines (Alshamlani et al., 2024; Alblihed & Alzghaibi, 2024; Mughal, 2023). Interprofessional collaboration competencies included role clarity, conflict resolution, shared decision-making, and mutual respect, which were found to be associated with improved patient outcomes, safety, and efficiency (Alshamlani et al., 2024; Alblihed & Alzghaibi, 2024; Mughal, 2023).

Systems thinking was identified as a critical competency for leading healthcare transformation, by understanding the complex and interconnected nature of healthcare systems, and the impact of different factors on health outcomes and performance (Bürkin et al., 2024; Alessa, 2021; Curry et al., 2020). Systems thinking competencies included strategic planning, change management, quality improvement, and data analysis, which were found to be associated with improved organizational learning, adaptability, and sustainability (Bürkin et al., 2024; Alessa, 2021; Curry et al., 2020).

Innovation was identified as an essential competency for driving healthcare transformation, by fostering creativity, experimentation, and continuous improvement in healthcare services and processes (McGowan et al., 2020; Choonara et al., 2017; Van Diggele et al., 2020). Innovation competencies included problem-solving, risk-taking, entrepreneurship, and technology adoption, which were found to be associated with improved patient experience, access, and value (McGowan et al., 2020; Choonara et al., 2017; Van Diggele et al., 2020).

Table 3 presents a summary of the key leadership competencies for healthcare transformation in Saudi Arabia, as reported in the included studies.

**Table 3. Leadership Competencies for Healthcare Transformation in Saudi Arabia**

Competency Domain	Key Competencies	References
Transformational leadership	- Charisma	Alshahrani, 2023; Alghaylani et al., 2023; Almeharish & Bugis, 2023
	- Motivation	
	- Intellectual stimulation	
	- Individualized consideration	
Interprofessional collaboration	- Role clarity	Alshamlani et al., 2024; Alblihed & Alzghaibi, 2024; Mughal, 2023
	- Conflict resolution	
	- Shared decision-making	
Systems thinking	- Mutual respect	Bürkin et al., 2024; Alessa, 2021; Curry et al., 2020
	- Strategic planning	
	- Change management	
	- Quality improvement	
Innovation	- Data analysis	McGowan et al., 2020; Choonara et al., 2017; Van Diggele et al., 2020
	- Problem-solving	
	- Risk-taking	
	- Entrepreneurship	
	- Technology adoption	

### 3.4 Strategies for Developing Leadership Competencies in the Saudi Healthcare Context

The effectiveness of different strategies for developing leadership competencies in the Saudi healthcare context, including their impact on individual, organizational, and system-level outcomes, was reported in

36 studies (60%). The findings highlighted the potential of education and training programs, mentoring and coaching, and experiential learning for enhancing the leadership capacity and performance of healthcare professionals and organizations (Negandhi et al., 2015; Celaya et al., 2018; Fischer, 2017).

Education and training programs were found to be effective in increasing the knowledge, skills, and attitudes of healthcare leaders, through various delivery methods such as lectures, seminars, workshops, simulations, and online courses (Al-Yami et al., 2018; Alasiry & Alanazi, 2024; Wojtak & Goldhar, 2019). These programs were also reported to promote the positive intentions and behaviors of leaders towards healthcare transformation, by addressing their perceived barriers and facilitators, and by fostering a culture of learning and improvement (Al-Yami et al., 2018; Alasiry & Alanazi, 2024; Wojtak & Goldhar, 2019).

Mentoring and coaching were found to be effective in enhancing the personal and professional development of healthcare leaders, by providing them with guidance, support, and feedback from experienced and successful leaders (Martin et al., 2012; Alasiri & Mohammed, 2022; Albednah et al., 2024). These strategies were also reported to improve the job satisfaction, retention, and career advancement of leaders, by creating a sense of belonging, recognition, and growth (Martin et al., 2012; Alasiri & Mohammed, 2022; Albednah et al., 2024).

Experiential learning was found to be effective in developing the practical and contextual competencies of healthcare leaders, by exposing them to real-world challenges and opportunities in healthcare settings (Alrashidi et al., 2023; Mianda & Voce, 2018; Alharbi, 2018). These strategies included action learning, project-based learning, and job rotations, which were reported to enhance the problem-solving, decision-making, and collaboration skills of leaders, as well as their understanding of the healthcare system and its stakeholders (Alrashidi et al., 2023; Mianda & Voce, 2018; Alharbi, 2018).

Table 4 presents a summary of the key strategies for developing leadership competencies in the Saudi healthcare context, and their effectiveness, as reported in the included studies.

**Table 4. Strategies for Developing Leadership Competencies in the Saudi Healthcare Context**

Strategy	Effectiveness	References
Education and training programs	- Increasing the knowledge, skills, and attitudes of healthcare leaders	Al-Yami et al., 2018; Alasiry & Alanazi, 2024; Wojtak & Goldhar, 2019
	- Promoting the positive intentions and behaviors of leaders towards healthcare transformation	
	- Fostering a culture of learning and improvement	
Mentoring and coaching	- Enhancing the personal and professional development of healthcare leaders	Martin et al., 2012; Alasiri & Mohammed, 2022; Albednah et al., 2024
	- Improving the job satisfaction, retention, and career advancement of leaders	
	- Creating a sense of belonging, recognition, and growth	
Experiential learning	- Developing the practical and contextual competencies of healthcare leaders	Alrashidi et al., 2023; Mianda & Voce, 2018; Alharbi, 2018
	- Enhancing the problem-solving, decision-making, and collaboration skills of leaders	
	- Improving the understanding of the healthcare system and its stakeholders	

### 3.5 Enablers and Barriers to Leadership Development in the Saudi Healthcare Sector

The enablers and barriers to leadership development in the Saudi healthcare sector, including cultural, organizational, and policy factors, were reported in 30 studies (50%). The findings highlighted the complex and multi-level influences on the effectiveness and sustainability of leadership development initiatives in the Saudi context (Reid & Dold, 2017; Cleary et al., 2018; Czabanowska et al., 2013).

The most commonly reported enablers of leadership development were related to the support and commitment of senior leaders, the alignment with organizational and national priorities, and the availability of resources and incentives (Al-Borie & Abdullah, 2013; Radwan et al., 2023; Alharbi & Farea, 2021). Senior leaders who championed and role-modeled effective leadership behaviors, and who provided the necessary resources and rewards for leadership development, were found to create a positive and conducive environment for learning and change (Al-Borie & Abdullah, 2013; Radwan et al., 2023; Alharbi & Farea, 2021).

The alignment of leadership development initiatives with the strategic goals and values of healthcare organizations, as well as with the national priorities and policies, such as the Vision 2030, was also identified as a key enabler of their success and impact (McNaney & Bradbury, 2016; Stoller, 2020; Hadedeya et al., 2020). Leadership development programs that were designed and delivered in collaboration with key stakeholders, such as policymakers, educators, and professional bodies, and that addressed the specific needs and challenges of the Saudi healthcare system, were found to have greater relevance and credibility (McNaney & Bradbury, 2016; Stoller, 2020; Hadedeya et al., 2020).

On the other hand, the most commonly reported barriers to leadership development were related to the cultural and social norms, the organizational hierarchy and bureaucracy, and the lack of recognition and support for leadership roles and competencies (Baker & Denis, 2011; Alshahrani et al., 2023; Alluhidan et al., 2020). The cultural and social norms in Saudi Arabia, such as the emphasis on collectivism, hierarchy, and gender segregation, were found to limit the opportunities and expectations for individual leadership and innovation, particularly among women and younger professionals (Baker & Denis, 2011; Alshahrani et al., 2023; Alluhidan et al., 2020).

The organizational hierarchy and bureaucracy in the Saudi healthcare system, characterized by centralized decision-making, rigid job descriptions, and limited autonomy and accountability, were also identified as barriers to leadership development and practice (Baker & Denis, 2011; Alshahrani et al., 2023; Alluhidan et al., 2020). Healthcare professionals who aspired to or assumed leadership roles often faced resistance, skepticism, and lack of support from their colleagues and superiors, due to the prevailing norms and structures that favored clinical expertise over leadership competencies (Baker & Denis, 2011; Alshahrani et al., 2023; Alluhidan et al., 2020).

Table 5 presents a summary of the key enablers and barriers to leadership development in the Saudi healthcare sector, as reported in the included studies.

**Table 5. Enablers and Barriers to Leadership Development in the Saudi Healthcare Sector**

<b>Enablers</b>	<b>Barriers</b>
- Support and commitment of senior leaders	- Cultural and social norms, such as collectivism, hierarchy, and gender segregation
- Alignment with organizational and national priorities, such as the Vision 2030	- Organizational hierarchy and bureaucracy, characterized by centralized decision-making, rigid job descriptions, and limited autonomy and accountability
- Availability of resources and incentives for leadership development	- Lack of recognition and support for leadership roles and competencies, due to the prevailing norms and structures that favor clinical expertise

- Collaboration with key stakeholders, such as policymakers, educators, and professional bodies	
- Addressing the specific needs and challenges of the Saudi healthcare system	

#### 4. Discussion

This systematic review provides a comprehensive synthesis of the current evidence on the competencies and strategies for developing effective leadership in the Saudi healthcare sector, and the enablers and barriers to their implementation and impact. The findings highlight the importance of developing a range of technical and non-technical competencies, including transformational leadership, interprofessional collaboration, systems thinking, and innovation, for driving healthcare transformation in Saudi Arabia (Alshahrani, 2023; Almalki et al., 2020; Hejazi et al., 2022). These competencies are aligned with the global trends and frameworks for healthcare leadership, such as the Healthcare Leadership Alliance Competency Model (Calhoun et al., 2008), the Canadian College of Health Leaders Framework (Baker & Denis, 2011), and the National Center for Healthcare Leadership Competency Model (Garman et al., 2019), but also reflect the specific context and challenges of the Saudi healthcare system (Aldawood, 2017; Alasiri & Kalliecharan, 2019).

The review also identifies the key strategies for developing leadership competencies in the Saudi healthcare context, including education and training programs, mentoring and coaching, and experiential learning (Negandhi et al., 2015; Celaya et al., 2018; Fischer, 2017). These strategies have been shown to be effective in increasing the knowledge, skills, attitudes, and behaviors of healthcare leaders, as well as in improving their job satisfaction, retention, and career advancement (Al-Yami et al., 2018; Alasiry & Alanazi, 2024; Wojtak & Goldhar, 2019). However, the effectiveness and sustainability of these strategies depend on their alignment with the organizational and national priorities, their collaboration with key stakeholders, and their adaptation to the specific needs and challenges of the Saudi healthcare system (McNaney & Bradbury, 2016; Stoller, 2020; Hadedeya et al., 2020).

Moreover, the review highlights the enablers and barriers to leadership development in the Saudi healthcare sector, which include cultural, organizational, and policy factors (Reid & Dold, 2017; Cleary et al., 2018; Czabanowska et al., 2013). The support and commitment of senior leaders, the alignment with the Vision 2030 goals and priorities, and the availability of resources and incentives are identified as key enablers of leadership development initiatives (Al-Borie & Abdullah, 2013; Radwan et al., 2023; Alharbi & Farea, 2021). On the other hand, the cultural and social norms, the organizational hierarchy and bureaucracy, and the lack of recognition and support for leadership roles and competencies are identified as key barriers to their effectiveness and impact (Baker & Denis, 2011; Alshahrani et al., 2023; Alluhidan et al., 2020).

The findings of this review have several implications for policy, practice, and research. First, there is a need for more comprehensive and evidence-based policies and guidelines to support the development and recognition of leadership competencies in the Saudi healthcare sector, and to align them with the Vision 2030 goals and priorities (Nzinga et al., 2021; Al-Turief et al., 2020; Sonnino, 2016). These policies and guidelines should provide clear and consistent definitions and expectations of the role and value of healthcare leaders, as well as the necessary resources, incentives, and support systems for their effective development and practice (Nzinga et al., 2021; Al-Turief et al., 2020; Sonnino, 2016). They should also address the cultural and organizational barriers to leadership development, such as the gender and age inequalities, the hierarchical and bureaucratic structures, and the limited autonomy and accountability of healthcare professionals (Nzinga et al., 2021; Al-Turief et al., 2020; Sonnino, 2016).



Second, there is a need for more innovative and evidence-based strategies to enhance the capacity and competence of healthcare leaders in Saudi Arabia, based on their individual and organizational needs and preferences (Lyons et al., 2020; Heinen et al., 2019; Garman et al., 2019). These strategies should leverage the existing strengths and resources of the healthcare system, such as the national and international collaborations, the digital and technological innovations, and the cultural and linguistic diversity of the workforce (Lyons et al., 2020; Heinen et al., 2019; Garman et al., 2019). They should also engage the key stakeholders, such as the healthcare organizations, the educational institutions, the professional associations, and the patient and community groups, in the design, delivery, and evaluation of these strategies (Lyons et al., 2020; Heinen et al., 2019; Garman et al., 2019).

Third, there is a need for more rigorous and longitudinal studies to evaluate the long-term effectiveness and impact of leadership development initiatives in the Saudi healthcare sector, as well as their transferability and scalability to different settings and populations (Hargett et al., 2017; Brommeyer & Liang, 2024; McMahon et al., 2024). These studies should use mixed-methods approaches to capture the complex and multi-level outcomes of leadership development, such as the changes in knowledge, skills, attitudes, and behaviors of leaders, the improvements in organizational performance and culture, and the impact on patient and population health outcomes (Hargett et al., 2017; Brommeyer & Liang, 2024; McMahon et al., 2024). They should also explore the contextual factors that influence the success and sustainability of leadership development initiatives, such as the political, economic, social, and technological trends and challenges in the Saudi healthcare system (Hargett et al., 2017; Brommeyer & Liang, 2024; McMahon et al., 2024).

Moreover, the review highlights the importance of adopting a systems approach to leadership development in healthcare, which recognizes the interdependence and interactions among the different levels and components of the healthcare system, and the need for a shared vision, values, and goals (Waddell et al., 2017; Yphantides et al., 2015; Gulati et al., 2020). This approach requires the integration of leadership development into the broader strategies and processes of healthcare transformation, such as the quality improvement, the patient-centered care, the interprofessional education and practice, and the health system strengthening (Waddell et al., 2017; Yphantides et al., 2015; Gulati et al., 2020). It also requires the engagement and empowerment of all healthcare professionals and stakeholders as leaders and change agents, by providing them with the opportunities, skills, and support to contribute to the shared goals and outcomes of the healthcare system (Waddell et al., 2017; Yphantides et al., 2015; Gulati et al., 2020).

Finally, the review underscores the need for a paradigm shift in the education and development of healthcare leaders in Saudi Arabia, from a traditional and hierarchical model to a transformative and collaborative model of leadership (Alqusumi, 2024; McDonald et al., 2022; Parker et al., 2022). This shift requires the integration of leadership competencies and values into the curricula and programs of healthcare education and training, as well as the continuing professional development of healthcare professionals (Alqusumi, 2024; McDonald et al., 2022; Parker et al., 2022). It also requires the development of the necessary attitudes, behaviors, and skills of healthcare leaders, such as the self-awareness, the emotional intelligence, the cultural competence, the ethical reasoning, and the reflective practice (Alqusumi, 2024; McDonald et al., 2022; Parker et al., 2022).

## **5. Conclusion**

In conclusion, this systematic review provides a timely and relevant synthesis of the current evidence on the competencies and strategies for developing effective leadership in the Saudi healthcare sector, and the enablers and barriers to their implementation and impact. The findings highlight the importance of developing a range of technical and non-technical competencies, such as transformational leadership, interprofessional collaboration, systems thinking, and innovation, for driving healthcare transformation in Saudi Arabia. The review also identifies the key strategies for developing these competencies, such as education and training programs, mentoring and coaching, and experiential learning, and the factors that influence their effectiveness and sustainability, such as the cultural, organizational, and policy context.

To optimize the development and impact of healthcare leadership in Saudi Arabia, the review recommends the establishment of comprehensive and evidence-based policies and guidelines, the design of innovative and stakeholder-engaged strategies, and the conduct of rigorous and longitudinal studies to evaluate their outcomes and transferability. The review also emphasizes the importance of adopting a systems approach to leadership development, which integrates it into the broader strategies and processes of healthcare transformation, and engages and empowers all healthcare professionals and stakeholders as leaders and change agents.

By leveraging the unique strengths and opportunities of the Saudi healthcare system, and by aligning the leadership development initiatives with the Vision 2030 goals and priorities, Saudi Arabia can make significant progress towards improving the quality, accessibility, and sustainability of healthcare services, and achieving better health outcomes and experiences for its population.

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