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The impact of implementing the health transformation strategy on service delivery from employee's point of view

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Abstract---The study aimed to assess the impact of the health transformation strategy on the provision of healthcare services from the perspective of employees in the Kingdom. The descriptive and analytical methodology was used, along with a questionnaire, to collect data from administrative staff in hospitals and healthcare centers. After analyzing the data, the study found that there is a high level of health transformation in the Kingdom across its three dimensions, and there is also a high level of healthcare service provision. The study also found a statistically significant positive correlation between the level of health transformation across its three dimensions and the level of healthcare service provision in the Kingdom. Important findings from the study include the need to improve the level of healthcare staff and provide a supportive and stimulating environment for their work, as well as improving communication with beneficiaries of healthcare services. The study recommended maintaining the Kingdom's excellent level of healthcare services by providing all the necessary resources and requirements to achieve the goals of Vision 2030.

Keywords---health transformation, strategy, Kingdom, perspective employees, administrative staff, healthcare service provision.

Introduction

The level of healthcare services provided by the state to the population is considered one of the key determinants of sustainable development for the Saudi Arabian economy. Improving people's health is an investment in human capital,

which directly affects their ability to engage in all economic, productive, and growth activities, thus supporting the development process. Article 31 of the Basic Law of Saudi Arabia stipulates that the state provides healthcare for all citizens, while Article 5 of the Health System Law states that the Ministry of Health is responsible for providing primary healthcare services, professional services, and therapeutic healthcare in hospitals and treatment centers (Othman, 2018).

In line with Vision 2030, the first strategic goal of the Ministry of Health's strategic plan is to "adopt an integrated and comprehensive approach to healthcare". Therefore, the Saudi Ministry of Health currently provides most healthcare services, as it provides more than 60% of healthcare through its hospitals and health centers. The rest is provided by other government agencies and the private sector (Ministry of Health Strategic Plan 2010-2020). The Ministry of Health currently manages 1,925 health centers and 218 hospitals, in addition to other government bodies and private sector hospitals. Healthcare services are primarily funded by general revenues, with healthcare spending as a percentage of total public spending increasing from 2.8% in 1970 to 8.6% in 1432 AH.

With the implementation of the Cooperative Health Insurance System for the private sector, it is expected that the private sector's share of healthcare expenditures will increase. The Cooperative Health Insurance System has been gradually implemented in Saudi Arabia, and the Cooperative Health Insurance Committee was established as an independent government entity to oversee the health insurance industry, regulate it, and provide medical care services to all non-Saudi residents and Saudi nationals working in the private sector. With the comprehensive expansion of healthcare mechanisms and financing, the system has succeeded in achieving many goals, whether in terms of insurance coverage or implementation time.

The government seeks to develop the health insurance system, support and develop the regulatory role of the Health Insurance Council to avoid any negative practices, develop the application according to high quality standards, expand information systems, and electronically link insurance companies with healthcare providers (Al-Qahtani, 2019). The research problem of this study lies in the strategy followed by the Kingdom to develop healthcare services by facing the challenges of increasing demand and structural changes in healthcare services, the heavy burden of healthcare financing, while achieving the goal of comprehensive coverage of healthcare services by designing advanced healthcare systems and providing new funding means that enable all residents to use all types of healthcare services when they need them without any financial difficulties.

Therefore, the research aims to present and analyze the strategy of transforming the provision of comprehensive healthcare services to the population, in terms of including preventive, therapeutic, and rehabilitation healthcare services, and providing them to all residents with high efficiency, without financial barriers that prevent all residents from accessing all healthcare services when they need them.

Theoretical Framework and Literature Review

The healthcare system in Saudi Arabia

The foundation and cornerstone of the healthcare system in the Kingdom

The healthcare system in Saudi Arabia has been a priority since King Abdulaziz Al Saud came to power, as he made healthcare issues a priority. He worked on importing doctors and benefiting from foreign expertise, especially Arab expertise, and establishing connections with international healthcare organizations. Later, King Abdulaziz Al Saud issued an order calling for the establishment of the General Authority for Health and Ambulance and expanding its mandate to include healthcare and environmental issues, as well as the establishment of hospitals and healthcare facilities. As a result, the Public Health Authority was established in Mecca in 1925 by royal decree, with plans to establish branches throughout the kingdom in the future, and importance was placed on training professional medical personnel, developing awareness and prevention plans, and supervising the health of pilgrims.

These goals extended beyond the borders of Mecca to include every region of Saudi Arabia and led to the establishment of the General Authority for Health. In 1926, the first nursing school and school for health and first aid were opened, and over the years, the number of healthcare facilities grew rapidly, including 87 private hospitals with about 8,485 beds, 622 private clinics, 3,202 pharmacies, 273 drug stores, 11 physical therapy centers, 785 private clinics, and 45 medical labs, and the latest statistics from 2009 show significant expansion in the sector, including 415 hospitals with a capacity of 58,126 beds, 16 public medical colleges, 5 private medical colleges, 7 private dental colleges, and 15 public and 6 private pharmacy colleges.

Healthcare system transformation in Kingdom

The healthcare system in Saudi Arabia is undergoing a fundamental transformation due to the rapid advancement in technology, research, and continuous development, as well as the high demand for healthcare services resulting from population growth and an increase in the elderly population. This transformation occurred in several stages, including a political vision for citizens' health as a priority, the establishment of the Cooperative Health Insurance Committee to launch the Cooperative Health Insurance System, and the approval of the Saudi Health System Project by the Shura Council as a comprehensive framework for the Saudi healthcare system.

The rapid transformation of the healthcare sector in the Kingdom and the Kingdom's vision 2030

Saudi Arabia is experiencing rapid reforms as part of its 2030 Vision to achieve its full economic potential. One of these reforms is restructuring the healthcare system to create a comprehensive, efficient, and integrated system based on the health of individuals and communities, including citizens, residents, and visitors. The 2030 Vision also paved the way for digital transformation, such as the launch

of remote healthcare services like the Sehaty app. The strategic transformation plan focuses on three elements that need improvement: ensuring the health of the population and improving their standard of living, investing heavily in the healthcare sector, and enhancing the level of care provided and focusing on the highest level of healthcare services. The Ministry of Health has also identified a set of indicators to measure the development of the healthcare sector, such as the number of healthcare workers, the average life expectancy of citizens, and the infant mortality rate.

Health transformation strategy and its objectives

An overview of health transformation strategy in the Kingdom

The mission of the Ministry of Health is to provide a healthcare transformation strategy as part of the Saudi Vision 2030. This document addresses the second level of the strategic goal to improve healthcare standards in Saudi Arabia, and the third level of objectives to enhance access to its services, ensure higher value, and promote prevention of major health risks. The strategy also aims to provide critical support to achieve the second level of the strategic goal, which is to promote and achieve healthier lifestyles. Although the health plan is managed by the Ministry of Health, it has been developed in close collaboration with the National Transformation Program.

The health strategy identifies eight main challenges in the healthcare system that need to be addressed over the next decade, including the continued growth of the population, the increase in foreign tourists, and the persistent high rates of non-communicable and chronic diseases. Other challenges include the need to improve primary healthcare, the quality of patient care, and the distribution of secondary and specialized hospitals and resources throughout the country. The strategy also aims to enhance prevention of chronic diseases and injuries to reduce the incidence of disability and avoidable deaths. In addition, controlling infectious diseases, especially during the Hajj season or after natural and man-made disasters, remains a challenge.

Therefore, government departments and agencies in Saudi Arabia must prioritize the expected health impacts in their major policies and decisions to ensure that the Ministry of Health can engage in necessary dialogues with other ministries on critical health issues. Overall, the healthcare transformation strategy in Saudi Arabia seeks to address these challenges and improve healthcare services, access, and quality, while promoting healthier lifestyles and preventing major health risks. Understanding challenges determines the health transformation strategy in the Kingdom

The health strategy identifies eight main challenges in the healthcare system that need to be addressed during the next decade, and these challenges are:

- 1) The population of the Kingdom continues to grow. It is expected that the population of Saudi Arabia will rise to 5.39 million by mid-2030. It is also expected that the number of elderly people will grow to 4.63 million by mid-2030. Additionally, the Kingdom receives many foreign tourists, especially

during major religious events, which are expected to increase to 85.9% by 2030.

- 2) The rate of non-communicable and chronic diseases is still high according to regional and international standards. However, in recent decades, Saudi Arabia has made significant progress in public health, especially in reducing child and maternal mortality and infectious diseases. Despite all these successes, there is still greater potential to reduce deaths and preventable diseases among the working population and the elderly. Areas that require more attention include heart disease, stroke, diabetes, respiratory diseases, mental health, road traffic accidents, and genetic diseases, all of which can be reduced. There is also a need to enhance prevention of chronic diseases and injuries in order to reduce disability and avoidable deaths. The challenge of controlling infectious diseases, especially during the Hajj season or after natural and man-made disasters, remains. Therefore, government departments and agencies in the Kingdom must prioritize the expected health impacts in their major decisions and policies so that the Ministry of Health does not have difficulty engaging in the necessary dialogue between ministries on critical health issues.
- 3) Primary healthcare is still inadequate and inconsistent due to poor distribution of secondary and specialized hospitals and related resources throughout the Kingdom. In addition to the lack of adequate capacity in long-term care services such as rehabilitation, long-term care, and home care, these problems are exacerbated by low levels of productivity.
- 4) There are significant gaps in the quality of service provided to patients, much of which is due to the lack of consistent treatment protocols and pathways, incomplete measurement of patient processes and outcomes, deficiencies in critical safety measures in all types of hospitals.
- 5) In the process of delivering and investing in services, there is a discrepancy between the number of beneficiaries that need to be served and the number of patients who have already been treated, which may lead to reduced value and poor quality due to inefficiency and ineffectiveness.
- 6) The current direction of the healthcare system focuses on resources and employees rather than patients, and the system focuses on the institution rather than the people. Therefore, there is a need to make healthcare services more patient-friendly and responsive.
- 7) There are significant gaps in the capabilities and capacities of the workforce. The current healthcare systems lack strong, consistent, and integrated digital information systems for measuring and managing resources, activity levels, quality, and efficiency, and building a learning healthcare system.
- 8) Healthcare systems need to improve the efficiency of public spending and diversify national economies to facilitate addressing any challenges imposed by prolonged low crude oil prices and their impact on public revenues.

The objectives of health transformation in the Kingdom

The objectives of the health transformation in Saudi Arabia are to improve the level and quality of healthcare services through an innovative approach, and to create more competitiveness and transparency among service providers. The aim is to improve the efficiency, effectiveness, quality, and productivity of healthcare services at all levels, and to provide citizens with more diverse options.

The transition to electronic health in health transformation strategy in Saudi Arabia

The status of electronic health in Saudi Arabia

The Ministry of Health in Saudi Arabia is implementing an ambitious plan to achieve its innovative vision for electronic health: "A secure and efficient healthcare system that focuses on patient care, and standards that guide and support electronic health." Through its strategy, which was launched in two phases, each lasting five years, starting in 2011, the Ministry of Health hopes to take real steps towards electronic health. Very few countries have been able to achieve this, but the Saudi Ministry of Health has started to make significant progress in this direction.

Despite the strong strategy and plan for a variety of integrated projects aimed at achieving this vision, managing the program, initiating the change process within the ministry, and maintaining it, mobilizing service providers and employees, and changing the program's scope within its timeframe will be difficult. The greatest and most likely challenge lies in the process of transforming employees and processes, which cannot be underestimated due to the importance of having a comprehensive management model with clear accountability, a flexible and adaptable program for managing change. As a result, electronic health will bring significant benefits to the Ministry of Health and the people of Saudi Arabia.

Vision for electronic health transformation in Saudi Arabia

The Ministry of Health worked with local and foreign consultants, as well as IBM, to develop a strategy for electronic health to achieve its vision of improving healthcare in Saudi Arabia in terms of standards, quality, and equality in the provision of medical services. To achieve this vision, the Ministry of Health has developed a work strategy to make electronic health a critical element in the development and delivery of these services.

The main objectives of electronic health in Saudi Arabia

- Patient care
- Connecting service providers at all levels of healthcare
- Measuring the performance of healthcare services
- Transforming healthcare delivery according to international standards

These objectives are crucial for the vision of electronic health, and as a result, we emphasize the importance of electronic health in the Ministry of Health when we say that it provides a secure and high-quality healthcare system that relies on intensive care and complies with international standards.

The strategic framework for electronic health

The strategic framework for electronic health in the Ministry of Health aims to guide the development of electronic health and the five-year action plan and

ensure their alignment with the strategies and operational objectives of the Ministry of Health.

The Ministry of Health has identified strategic operational objectives to improve the quality of care, access to services, and patient outcomes, and align the strategic objectives of electronic health with the objectives of the Ministry of Health, which will provide a solid foundation for achieving the highest value on both medical and commercial levels. Therefore, each strategic objective of the Ministry of Health is aligned with an objective in the field of electronic health.

Roadmap for electronic health strategy

Through its strategy launched in early 2011, the Ministry of Health hopes to take real steps towards electronic health in two phases, each lasting five years, something that only a few other countries have been able to achieve. Since more than 70 projects have been identified as the basis for the Ministry of Health's vision to achieve the electronic health program, it is clear that they cannot all be implemented at once. Some projects are necessary for tangible progress and important results for several reasons, while others depend on implementing projects as a basis for starting them. There are still projects that will take years to complete, such as the automation project for over two thousand centers. In the field of information technology in the healthcare sector, the availability of competent healthcare workers is also a major challenge in the global economy due to their scarcity. All of this indicates the need for a roadmap that can manage and prioritize the implementation of projects and investments.

Expected risks of implementing the health transformation strategy

First: Immediate Risks

- Evaluating whether all electronic health requirements based on the value listed in the electronic health plan are met to fill any gaps. The recommended approach is to start the evaluation.
- Decreased investment rates, represented in ensuring appropriate investment at the appropriate time in the strategy. For example, some aspects of the new care model are still weak, especially mental health services, and the proposed measure is to engage in dialogue with the Ministry of Finance and the Ministry of Economy and Planning through the National Transformation Plan channel.

Second: Future Risks

- There is uncertainty about the timing and nature of the introduction of other government services into the transformation strategy. The proposed solution is to push the dialogue through the Saudi Health Council.
- The institutional transformation will be costly and ineffective if the decision-making scope granted to the converted companies is very narrow and limited. The proposed solution is to assess the expected risks and effective decision-making authority.

Previous studies

Othman (2019) sheds light on the topic of "comprehensive cooperative health insurance for all" and its role in the Vision 2030 of Saudi Arabia. It highlights the current situation of healthcare in Saudi Arabia, the general trend in healthcare expenditure, and the population for the period from (2007) to (2017). The study also explains the obstacles that hinder healthcare in the country and emphasizes the importance of having a cooperative health insurance system. It notes the role of comprehensive cooperative health insurance in the Vision 2030 of Saudi Arabia and focuses on the integrated cooperative health insurance system for Saudis and residents in the country and its role in the Vision 2030. The article concludes by pointing out that despite the lack of estimated prices that take inflation into account and the increasing cost of healthcare in the Saudi insurance market year after year, cooperative health insurance has played an important role in supporting the Saudi economy.

Amin (2020) aims to shed light on the increasing importance of comprehensive health insurance in contemporary economic transformations and its application to Saudi Arabia, and to provide a quantitative assessment of the current system's results. The study's results showed that the increase in health insurance claims is higher than the increase in Saudi insurance. In addition to improving the overall claims rate of the market, the study also recommends fair distribution of healthcare services among beneficiaries with maximum transparency, promoting health awareness, especially the concept of preventive medicine, among all members of society, and adopting insurance companies and hospitals that fully participate in the healthcare system and set high-quality standards.

Abu Zaher (2021) aims to provide a spatial analysis of private healthcare services and their extent of spread in Abha city in Saudi Arabia. The study uses a descriptive analysis method and relies on data and statistics published by the Regional Health Department in the Asir region, as well as digital maps of the municipality, in addition to field visits. The study, which includes an introduction, presentation, and review of study data and interpretation, showed that the distribution of private and government healthcare services tends towards the eastern part of Abha city, and that there is almost a match between the distribution of primary government healthcare centers and the private medical complex. The study also found that more than a third of the city lacks public and private healthcare services, but private healthcare services at all levels are capable of meeting the demand for healthcare services while implementing the Ministry of Health's strategy to involve the private sector in the healthcare sector.

Al-Qahtani (2019) aims to uncover the beneficiaries' satisfaction with the quality of healthcare services provided by primary healthcare centers through a field study conducted in Riyadh city using social survey methods. The research tool is a questionnaire that collects information and is applied to a sample of beneficiaries served by primary healthcare centers in Riyadh city, numbering (225). The study found that a sample of beneficiaries in primary healthcare centers were generally "satisfied" with the quality of services provided to them by primary healthcare centers. The study recommends the importance of focusing on raising the level of workers in primary healthcare centers, providing a supportive

and stimulating environment for their hard work to promote their access to satisfactory and high-quality services, and effective communication with beneficiaries of the centers' services.

Al Ali (2019) aimed to determine the extent of satisfaction of beneficiaries with the healthcare services provided by the Ministry of Health to government employees in Tabuk city. It focused on reviewing the research literature in the field of healthcare services, patient satisfaction data, and beneficiary satisfaction with the healthcare facility. The sample size was 200 beneficiaries of healthcare services, and the study utilized a questionnaire to collect the necessary data to answer the study's questions and hypotheses. The study's dimensions included services, procedures, devices and doctors, work environment, and trust in healthcare services. The results showed a moderate level of satisfaction with healthcare services, indicating an improvement in the quality of healthcare services in Ministry of Health hospitals. The results also highlighted the relative importance of the satisfaction dimension, with a preference for visiting Ministry of Health hospitals for treatment in the first place, followed by easy access to Ministry of Health centers and hospitals in the second place, and patient guidance signs in Ministry of Health centers and hospitals in the third place. The results also revealed statistically significant differences in satisfaction based on nationality and qualification, while there were no differences or relationships between satisfaction and variables such as age, marital status, job title, and gender.

Al-Qahtani and Qattan (2020) aimed to determine the extent of patient satisfaction in government hospitals with the role of social workers, using a descriptive methodology and field study of hospitals in the Asir region. The results showed that the majority of the sample of long-term residency patients in hospitals in the Asir region were satisfied with the high-level role of social workers, and that medical social workers had a role to play from a social work perspective for patients admitted to the hospital on a long-term basis. The study recommended efforts to clarify the role of social workers in long-term residency patients to overcome obstacles resulting from the unclear role of social workers in long-term recovery.

Al-Qahtani and Qattan (2022) aimed to determine the extent of the impact of quality management on healthcare performance at Ahad Rufaidah General Hospital, by identifying the factors of employee culture, credibility, top management support, and customer needs. The study also aimed to determine the impact of these factors on improving the level of quality management and improving the healthcare service performance at Ahad Rufaidah General Hospital. The study utilized descriptive analysis methods and applied them to a sample of 196 male and female employees at Rufaidah General Hospital. The study found that the culture of employees at Ahad Rufaidah General Hospital was high, and the level of support from top management was very high. According to hospital employees, Ahad Rufaidah General Hospital had a high level of understanding of customer needs. Based on the study's results, the study provided several recommendations, including the need for integration between governments and private healthcare institutions to assign the burden of patient care to government hospitals.

Al-Qadi (2018) aimed to investigate the impact of healthcare quality management on marketing healthcare services by surveying the opinions of employees and customers regarding the quality of services provided by Rabigh General Hospital. In addition to using a field method, a descriptive approach was used to test the study hypotheses, and 100 questionnaires were distributed to a sample of 100 employees and customers of Rabigh Hospital who completed the study. The study found that the sample units had a positive attitude towards the impact of quality management on healthcare services marketing, and concluded that the most important factors were focusing on employees' suggestions and adopting them, encouraging employee collaboration, emphasizing the importance of considering employees as important partners in the decision-making process.

Al-Sulaimani (2018) focused on revealing the awareness of medical social workers about the role of medical social workers in achieving the Saudi Arabia Vision 2030, and applied it to a sample consisting of 130 social workers working in the government and private sectors in the Mecca region. The study found that social workers had a moderate level of knowledge in the medical field regarding the health aspects of Vision 2030. The study also emphasized the need to formally request the Ministry of Health to approve a system that provides services and support to medical social service departments in healthcare facilities to overcome the obstacles and difficulties they face in developing the profession and achieving Vision 2030 through it. The study recommended that healthcare institutions provide support to the management of social care services for medical care by providing resources and facilitating their work to enhance the profession and achieve its goals.

Bakir (2022) aimed to investigate the supported and hindered activity of the communication effects of the public in Saudi society (citizens and residents) with health applications through smart phones, and to identify the factors affecting the public's acceptance of health applications. The study also tested and interpreted the relationship between the communication effects of health applications and the factors of the public's acceptance of using them through smartphones. The study found the factors of the public's acceptance in Saudi society of citizens and residents to use health applications through smart phones, which were represented in the perceived ease of use, followed by the perceived usefulness, then behavioral intentions, and finally actual use. The study also found a significant relationship between the communication effects of health applications and the factors of the public's acceptance of using them through smartphones, except for the lack of a significant relationship between the realism effects and both behavioral intentions and perceived usefulness for public acceptance of using them, and also between the satisfaction effects and actual use of the applications.

Methodology

Research Design

The analytical descriptive method was used, as it achieves the purposes and objectives of the study.

Research Population

The population was administrative workers in hospitals and healthcare centers in the Kingdom. The simple random sampling method was used, and the sample size was 136 individuals.

Research Tool

The questionnaire consisted of characteristics of the sample and statements related to the study's axes (the axis of health transformation strategy, the axis of providing health services), comprising 29 statements. A five-point Likert scale was used.

Table 1: Response levels to phrases in the study tool

Level	Degree
Very low	1.00-1.79
Low	1.80-2.59
Moderate	2.60-3.39
High	3.40- 4.19
Very high	5.00-4.20

Data Analysis

The research used the following methods through SPSS software:

- Cronbach's alpha coefficient to calculate the reliability level of the research tool.
- Correlation coefficient to determine the validity of the research tool and to know the relationship between variables.
- Ratios and frequencies to describe the characteristics of the study sample.
- Mean and standard deviation to describe the level of response of the study sample individuals to the statements of the research tool.
- Simple regression equation to test the study hypotheses.

Validity

Table 2: Correlation coefficients for the terms of the study tool

Paragraph	Correlation coefficient	Significance	Paragraph	Correlation coefficient	Significance
Health transformation strategy					
Improving resource efficiency		utilization	Mitigating financial risks for patients.		
1	0.803**	0.000	1	0.757**	0.004
2	0.833**	0.000	2	0.745**	0.000
3	0.777**	0.000	3	0.780**	0.000
4	0.686**	0.000	4	0.829**	0.000
5	0.849**	0.000	5	0.687**	0.000

6	0.813**	0.000	----	----	----
7	0.698**	0.000	----	----	----
8	0.710**	0.000	----	----	----
Financing the health care system					
1	0.810**	0.000	4	0.721**	0.000
2	0.841**	0.000	5	0.786**	0.000
3	0.761**	0.000	-----	-----	-----
Providing health services					
1	0.823**	0.000	7	0.708**	0.000
2	0.855**	0.000	8	0.791**	0.000
3	0.857**	0.000	9	0.722**	0.000
4	0.861**	0.000	10	0.765**	0.000
5	0.725**	0.000	11	0.720	0.000
6	0.706**	0.000	-----	-----	-----

It appears that all the statements of the research tool are statistically significant at 0.01, indicating that the tool has a high level of validity and is suitable for the purposes of the study.

Reliability

Table 3: Reliability of the research tool using Cronbach's alpha method

Axis	N	Cronbach's alpha
Health transformation strategy	18	0.959
Providing health services	11	0.933
Total	29	0.968

The high reliability of the research tool is indicated by the Cronbach's alpha value being greater than 0.70.

Ethical concerns

Permission was obtained from the Ministry of Public Health and the Population, as well as the administrators of the research hospitals and respondents, wherein the author depended on presenting an inquiry for prior consent from each responder, and the survey was then provided solely to the Saudi Arabia.

Analysis and Results

Sample Characteristics

Table 4: Distribution of Study Sample by Gender

Categories	N	Percentage (%)
Male	100	73.5
Female	36	26.5
Total	136	100

Table 5: Distribution of Study Sample by Age

Categories	N	Percentage (%)
Less than 30 years	18	13.2
From 30 to less than 40 years	72	52.9
From 40 to less than 50	34	25.0
≥ 50 years	12	8.8
Total	136	100

Table 6: Distribution of Study Sample by Educational Qualifications

Categories	N	Percentage (%)
Middle	2	1.5
Bachelor's	80	58.8
Postgraduate studies (Masters - PhD)	54	39.7
Total	136	100

Table 7: Characteristics by Job Title

Categories	N	Percentage (%)
Doctor	40	29.4
Nursing	34	25.0
Non-medical specialist	48	35.3
Administrative	14	10.3
Total	136	100

Table 8: Characteristics according to years of experience

Categories	N	Percentage (%)
Less than 5 years	11	8.1
From 5 to less than 10 years	44	32.4
From 10 to less than 15	34	25.0
≥ 15 years	47	34.6
Total	120	100

Health transformation strategy
Improving resource utilization efficiency

Table 9: Improving resource utilization efficiency Statements

Phrase	Mean	Deviation	Arrangement	Agreement
The health transformation strategy works on achieving optimal utilization of available resources	4.029	0.910	5	High

The health transformation strategy focuses on improving the outputs of resource utilization	4.096	0.893	3	High
The health transformation strategy utilizes modern technology in the field of healthcare services to enhance the efficiency of resource utilization	4.142	0.975	2	High
The health transformation strategy focuses on using electronic medical records and information technology to improve the utilization of available resources	4.206	0.761	1	Very High
The health transformation strategy aims to improve the healthcare infrastructure to provide all healthcare services efficiently and effectively	4.068	0.875	4	High
The health transformation strategy works towards providing many of the used resources	3.750	0.987	6	High
The health transformation strategy works towards reducing working hours	3.213	1.250	8	Moderate
The health transformation strategy works towards saving a lot of effort currently being exerted	3.596	1.111	7	High
Average	0.970	3.887	High	

It was found that the statement "The health transformation strategy focuses on using electronic medical records" is the most important with a value of 4.206, while the statement "The health transformation strategy works towards reducing working hours" is the least important with a value of 3.213. It was also found that one statement had very high agreement, six statements had high agreement, and one statement had moderate agreement, indicating a high level of improving resource utilization efficiency with a value of 3.887 and a standard deviation of 0.970.

Exclusion of financial risks for patients

Table 10: Exclusion of financial risks for patients Statements

Phrase	Mean	Deviation	Arrangement	Agreement
The healthcare transformation strategy works on linking incentives and compensation for healthcare specialists to provide value-based care	3.669	0.911	4	High
The healthcare transformation strategy focuses on encouraging innovation that contributes to reducing the cost of	3.794	1.034	3	High

healthcare services				
The healthcare transformation strategy aims to reduce the cost that patients bear to access healthcare services	3.699	1.124	5	High
The healthcare transformation strategy works on providing all healthcare services that align with international standards at the lowest possible cost	3.794	0.982	2	High
The healthcare transformation strategy works on providing free healthcare to patients	3.853	1.065	1	High
	Mean	1.023	3.762	High

It is shown that the statement "The healthcare transformation strategy works on providing free healthcare to patients" has the highest value of 3.853, while the statement "The healthcare transformation strategy focuses on reducing the cost that patients bear to access healthcare services" has the lowest value of 3.699. It is also evident that all statements have a high level of agreement, indicating a high level of exclusion of financial risks for patients with a value of 3.762 and a standard deviation of 1.023.

Healthcare system financing

Table 11: Healthcare system financing Statements

Phrase	Mean	Deviation	Arrangement	Agreement
The healthcare transformation strategy focuses on providing financing that aligns with the required healthcare needs	3.772	0.877	4	High
The healthcare transformation strategy works on providing financing sources to ensure beneficiaries receive cost-effective care	3.816	0.896	3	High
The healthcare transformation strategy works on diversifying financing sources for healthcare service centers	3.757	0.962	5	High
The healthcare transformation strategy works on attracting investments in the healthcare service sector	3.882	0.835	2	High
The healthcare transformation strategy works on increasing private sector participation in healthcare services provided	4.191	0.803	1	High
Mean	0.875	3.884	High	

It is shown that the statement "The healthcare transformation strategy works on increasing private sector participation in healthcare services provided" has the

highest value of 4.191, while the statement "The healthcare transformation strategy works on diversifying financing sources for healthcare service centers" has the lowest value of 3.757. It is also evident that all statements have a high level of agreement, indicating a high level of healthcare system financing with a value of 3.884 and a standard deviation of 0.875. Furthermore, there is a high level of healthcare transformation in hospitals and healthcare centers in the Kingdom with a value of 3.852 and a standard deviation of 0.958.

Provision of healthcare services

Table 12: Provision of healthcare services phrases

Phrase	Mean	Deviation	Arrangement	Agreement
Healthcare centers work on providing all required healthcare specialties	3.654	1.219	4	High
Healthcare centers care about patients' suggestions and feedback	3.625	1.180	7	High
Healthcare centers aim to provide all their services with a high degree of accuracy and reliability	3.647	1.037	5	High
Healthcare centers provide all healthcare services at all times	3.434	1.178	10	High
Healthcare center workers care about helping patients	3.941	0.884	1	High
Healthcare centers have a good reputation in the community	3.625	1.039	6	High
Hospital workers have complete knowledge of patients' needs	3.662	0.990	3	High
Healthcare centers provide individual attention to each patient's condition	3.581	1.086	8	High
Healthcare centers have the latest technological devices and equipment	3.191	1.274	11	Moderate
Healthcare centers are located in easily accessible locations	3.801	1.002	2	High
The design of healthcare centers is suitable for providing all healthcare services	3.507	1.205	9	High
Mean	1.100	3.606	High	

It is shown that the statement "Healthcare center workers care about helping patients" has the highest value of 3.941, while the statement "Healthcare centers have the latest technological devices and equipment" has the lowest value of 3.191. Ten statements have a high level of agreement, and one statement has a moderate level of agreement, indicating a high level of healthcare service provision in hospitals and healthcare centers in the Kingdom with a value of 3.606 and a standard deviation of 1.100.

Study assignment test

Table 13: Study assignments test

Assignment	B-value	t- value	F- value	R2-value	R value	Significance
Main	0.550	14.460**	209.100**	0.609	0.781	0.000
Subgroup 1	1.042	11.447**	131.027**	0.494	0.703	0.000
Subgroup 2	1.763	15.664**	245.372**	0.647	0.804	0.000
Subgroup 3	1.678	10.428**	108.737**	0.448	0.669	0.000

- There is a statistically significant positive effect of the level of healthcare transformation strategy in hospitals and healthcare centers in the Kingdom on the level of healthcare services provided in these institutions at a significance level of 0.01. The relationship was positive with a value of 0.781, indicating that as the application of the healthcare transformation strategy in these institutions increases by 1%, the level of healthcare services provided in these institutions increases by 0.550%.
- There is a statistically significant positive effect of the level of improving resource utilization efficiency on the level of healthcare services provided in hospitals and healthcare centers in the Kingdom at a significance level of 0.01. The relationship was positive with a value of 0.703, indicating that as the application of improving resource utilization efficiency increases by 1%, the level of healthcare services provided in these institutions increases by 1.042%.
- There is a statistically significant positive effect of the level of mitigating financial risks for patients on the level of healthcare services provided in hospitals and healthcare centers in the Kingdom at a significance level of 0.01. The relationship was positive with a value of 0.804, indicating that as the application of mitigating financial risks for patients increases by 1%, the level of healthcare services provided in these institutions increases by 1.763%.
- There is a statistically significant positive effect of the level of financing the healthcare system on the level of healthcare services provided in hospitals and healthcare centers in the Kingdom at a significance level of 0.01. The relationship was positive with a value of 0.669, indicating that as the application of financing the healthcare system increases by 1%, the level of healthcare services provided in these institutions increases by 1.768%.

Discussion

- There is a high level of healthcare transformation in its three dimensions (improving resource utilization efficiency, mitigating financial risks for patients, and financing the healthcare system) in hospitals and healthcare centers in the Kingdom, as well as a high level of healthcare services provided in these institutions. This is consistent with the results of several studies, including (Othman, 2019), (Amin, 2020), (Abu Zaher, 2021), (Al-Qahtani, 2019), (Al-Ali, 2019), (Al-Qahtani and Qattan, 2022), and (Al-Qudah, 2018).

- There is a statistically significant positive effect of the level of healthcare transformation in its three dimensions (improving resource utilization efficiency, mitigating financial risks for patients, and financing the healthcare system) on the level of healthcare services provided in hospitals and healthcare centers in the Kingdom at a significance level of 0.01. This is consistent with the results of studies by (Abu Zaher, 2021) and (Al-Qahtani and Qattan, 2022).

Conclusions

Based on the available evidence, it can be concluded that the impact of implementing a healthcare transformation strategy on service delivery from the employee's point of view can vary depending on the specific details of the strategy and the context in which it is implemented. However, in general, a well-planned and effectively executed healthcare transformation strategy can have positive impacts on employees' perceptions of service delivery. For example, such a strategy can lead to improvements in working conditions, staff development and training, and job satisfaction, which can, in turn, lead to better quality services and more satisfied patients.

On the other hand, a poorly implemented healthcare transformation strategy can have negative impacts on service delivery from the employee's perspective. For instance, it can lead to increased workload, decreased morale, and burnout among staff, which can result in lower quality services and decreased patient satisfaction. Therefore, it is crucial to carefully plan and implement any healthcare transformation strategy, taking into account the perspectives and needs of employees, to ensure that it is effective and sustainable.

In conclusion, while implementing a healthcare transformation strategy can have both positive and negative impacts on employees' perceptions of service delivery, it is essential to prioritize their needs and perspectives to ensure the success and sustainability of such strategies. This can be achieved through effective communication, staff development and training, and a supportive work environment, among other measures. Ultimately, a well-implemented healthcare transformation strategy can lead to better service delivery and improved outcomes for patients, while also benefiting the well-being and job satisfaction of employees.

Recommendations

- Working on raising the level of healthcare workers in healthcare centers and providing a supportive work environment to enhance their ability to provide satisfactory and high-quality services and effective communication with beneficiaries of healthcare services.
- Working on maintaining the excellent level of healthcare services in the Kingdom by providing all the necessary resources and requirements that contribute to achieving the goals of Vision 2030.
- Working on implementing the healthcare transformation strategy in all healthcare institutions that participate fully in the healthcare insurance system, while paying attention to high-quality standards.

- The necessity of integration between governments and private healthcare institutions to share the burden of patient care in government hospitals.

Suggestions

- Analysing the factors affecting the success of the healthcare transformation strategy in the Kingdom of Saudi Arabia: An exploratory study.
- Analysing the impact of the healthcare transformation strategy on the healthcare system in the Kingdom of Saudi Arabia: A comparative study with other countries.
- Evaluating the impact of demographic changes on the healthcare transformation strategy in the Kingdom of Saudi Arabia.
- Analytical study of the challenges related to the implementation of the healthcare transformation strategy in the Kingdom of Saudi Arabia.
- Studying the impact of supervision and regulation on the implementation of the healthcare transformation strategy in the Kingdom of Saudi Arabia.
- Studying the impact of the healthcare transformation strategy on the health status of the Kingdom of Saudi Arabia.
- Studying the impact of the healthcare transformation strategy on patients' satisfaction level in the Kingdom of Saudi Arabia.

References

1. Al-Dheneibat, Ma'ath Youssef. (2014). The extent to which Saudi hospitals adopt effective electronic business technologies: An empirical study of hospitals operating in the Mecca region. *Jordan Journal of Business Administration*, 10(4), 533-568.
2. Al-Sudairy, Mohammed Ahmed bin Turki. (2014). The extent of electronic business usage in Saudi hospitals: An analytical study of hospitals in Jeddah and Riyadh in the Kingdom of Saudi Arabia. *Journal of King Abdulaziz University - Economics and Administration*, 28(1), 177-260.
3. Al-Sultan, Abdulrahman bin Mohammed. (2011). Health service financing options in the Kingdom of Saudi Arabia. *Journal of Commerce and Finance*, 1, 385-418.
4. Al-Sulaimani, Amani. (2018). The role of medical social services in achieving the Kingdom's Vision 2030: An applied field study on social specialists working in the healthcare sector in Mecca. *Journal of Childhood Studies*, 21(79), 63-73.
5. Al-Ali, Fahd bin Muayqil. (2019). Beneficiaries' satisfaction with the healthcare services provided by the Ministry of Health in Tabuk city. *Journal of the Humanities and Social Sciences*, 6, 65-96.
6. Al-Olayani, Mohamed Awadh Mohamed. (2020). The extent of satisfaction of long-term residents in government hospitals with the role of social specialists: A field study on hospitals in the Asir region. *Journal of Social Services*, 66, 160-188.
7. Al-Fayyad, Fahd Abdullah Fayyad, & Abu Housa, Moussa Mahmoud. (2001). Efficiency of the health services system provided to children in the Kingdom of Saudi Arabia - Al-Jouf region: A case study (Unpublished master's thesis). The University of Jordan, Amman.

8. Al-Qahtani, Saud Abdullah Mohammed, & Qattan, Amira Mohammed Nour Abdulrahman. (2022). The impact of quality management on the performance of healthcare services at Ahad Rufaidah General Hospital. *Journal of King Abdulaziz University - Economics and Administration*, 36(1), 63-82.
9. Al-Qahtani, Saeed bin Hussein. (2019). Beneficiaries' satisfaction with the quality of healthcare services provided by primary care centers: A field study in Riyadh city. *Journal of Social Services*, 61(3), 469-489.
10. Al-Qudah, Hassan Saleh Sulaiman. (2018). The impact of healthcare quality management on the marketing of healthcare services: A field study on Rabigh General Hospital. *Scientific Journal of Business and Management Studies*, 32(2), 1-43.
11. Abu Zahair, Hamoud Mubarak Saeed. (2021). The geographic distribution of healthcare services in Abha city in light of the Kingdom of Saudi Arabia's Vision 2030. *Al-Adab Journal*, 21, 658-686.
12. Amin, Rajab Abu Hamad. (2020). The growing importance of comprehensive health insurance in light of contemporary economic transformations applied to the Kingdom of Saudi Arabia. *Journal of Financial and Commercial Research*, 3, 229-261.
13. Badeesi, Wahida Boufaddah. (2015). Efforts by the Kingdom of Saudi Arabia to ensure the health and safety of pilgrims. *Voice of the Nation*, 47(12), 9-23.
14. Baraei, Hussein bin Mohammed. (2012). Requirements for achieving comprehensive healthcare in the Kingdom of Saudi Arabia. *Journal of Commercial Research*, 34(1), 302-349.
15. Bukair, Mohammed Abdu. (2022). Public acceptance of health applications through smartphone technologies in the Kingdom of Saudi Arabia and their communicative effects: A study within the framework of the technology acceptance model and its effects. *Journal of Media Research*, 60(2), 625-680.
16. Laqwaq, Abdulrazzaq, & Ibn Dhafra, Faiyaz Awad Saad. (2020). Improving the quality of health services using the mystery shopper program: An applied study on a sample of health centers in the Kingdom of Saudi Arabia. *Journal of the Institute of Economic Sciences*, 23(2), 431-451.
17. Mansour, Hassan Mohammed Hassan. (2013). Efficiency and interactivity in the main interface of electronic websites affiliated with the Saudi Ministry of Health: An evaluative and analytical study. *Journal of Arts*, 25(3), 693-740.
18. Official website of the Ministry of Health in Saudi Arabia: <https://www.moh.gov.sa/Ministry/nehs/Pages/Ehealth.aspx>.
19. Othman, Mohammed Abdulmoula. (2019). The role of comprehensive cooperative health insurance in achieving the Kingdom's Vision 2030. *Mukaashafat Journal*, 1(4), 2-30.
20. Salem, Arwa Abdulaziz, & Nassif, Mohammed Shauki Mohammed. (2020). Economic development indicators in the Kingdom of Saudi Arabia during the period 1999-2018: A geographical study. *Journal of Taibah University for Arts and Humanities*, 24, 478-524.
21. Shubkshi, Osama bin Abdulmajeed. (1999). The development of health services in the Kingdom of Saudi Arabia. *Al-Aqeeq*, 11(21,22), 81-86.
22. Sharahili, Fahd Hassan Ali, & Al-Shammary, Wael Shafi. (2021). The effectiveness of implementing an ERP system in improving supply chain management efficiency in Saudi medical cities: A field study on King Saud Medical City in Riyadh. *Journal of Economic, Administrative and Legal Sciences*, 5(17), 123-145.