

Healthcare Transformation in Saudi Arabia: An Overview Since the Launch of Vision 2030

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ABSTRACT: Saudi Arabia's Vision 2030 has taken a centre stage in the development of its healthcare sector through privatization adopting Public Private Partnerships (PPPs). The objective of this study is to provide an overview of healthcare transformation in Saudi Arabia since the launch of the ambitious Vision 2030, identifying issues those need to be addressed and steps taken towards provision of health systems transformation. Literature review was based on extensive review of published and unpublished articles, where different search engines and databases searched using the key words: 'Saudi Healthcare', 'Healthcare transformation', 'Saudi vision: 2030', 'Public-Private Partnerships' and 'Privatization', in addition to secondary data as published in government reports, policy, government strategy documents and pertinent press releases. The future of the healthcare like many other developing economies continues to weigh policies for universal coverage while containing costs and the national transformation programme driven by social and economic factors has implemented strategic steps to develop its private healthcare system that includes: establishing health clusters, National Centre for Privatization & PPP – an official enabler for privatization of all government sectors and recently approved Private Sector Participation (PSP) Law involves several legislative enablers designed to enhance investor confidence in the privatization process. Although this study demonstrates systemic legislative progress to facilitate transformation process of healthcare sector, also endorses caution and research in identifying barriers to the implementation of PPPs, Saudi workforce development, implementing effective revenue cycle management function for healthcare reimbursement and ensuring vulnerable population access to good quality and tertiary healthcare. As healthcare of Saudi Arabia embarks on the transformation journey facing daunting challenges, but it appears that the government has laid out a roadmap with the legislative framework; however it is important that there is ongoing monitoring with adjustments as this complex and multifaceted process proceeds.

KEYWORDS: Healthcare transformation, public-private partnerships, privatization, Saudi Arabia, Vision 2030

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Background

Saudi Vision 2030 is a strategic framework of initiatives to reduce Saudi Arabia's dependence on oil and diversify its economy through unique transformative economic and social reforms to develop public service sectors such as health, education, infrastructure, recreation and tourism under the Leadership of King Salman Bin Abdulaziz Al-Saud and Crown Prince, Deputy Prime Minister and Chairman of the Council of Economic and Development Affairs Prince Mohammed Bin Salman Bin Abdulaziz.^{6,7}

Health Sector Transformation programme under the Vision 2030 was launched in 2021 with sight for next 5 years aimed at restructuring the health sector to be a comprehensive, effective and integrated health system based on the health of the individual and society, that includes citizens, residents and visitors.^{18,21} The programme depends on the principle of value-based care, ensuring transparency and financial sustainability by promoting public health and preventing diseases. The specific aims of the programme is to improve access and quality of health services through optimal coverage and comprehensive and equitable geographical distribution by expanding provision of e-health services and digital solutions.^{18,19,21}

The population of Kingdom of Saudi Arabia continues to grow with age, expected to rise from 33.5 million in 2018 to

39.5 million by mid-2030, and the number of elderly (ages 60–79) is expected to grow from 1.96 million in 2018 to 4.63 million by mid-2030. The primary health-care in Saudi Arabia is the first level of health care services provided by the Ministry of Health (MOH) as basic curative and preventative services, while those requiring higher level of health services are referred to the secondary and tertiary level of care. The need to establish more primary healthcare centres is identified by the MOH to meet growing needs for health services, in addition to effective referral systems to secondary and tertiary care centres poorly distributed across the Kingdom.^{1,3,12} There exists significant gaps in the quality of patient-services due to lack and/or limited standardization of protocols and treatment pathways that is further exacerbated by unwarranted variation in provision, access and investment when assessed using the population served rather than the patient treated, which includes both 'over-use' as well as the 'under-use' leading to significant deficits in value as well as quality.^{4,21}

The health system in Saudi Arabia also requires to support containment of public expenditure and diversification of the economy given the risk of long term reduction in the price of crude oil and its projected impact that will have on public revenues.^{21–28} The Saudi Health transformation strategy while defining its goals and methods deliberately formulates to



utilize and combine aspects of the Financial, Economic and Institutional framework. The policy intentions of the government expressed through vision 2030 mitigating the need to have a high-level of control of overall health services expenditure and a close interest in the health of the whole population are recognized.^{18,20}

The National Transformation Programme (NTP) that was enacted as an economic action plan and the Vision 2030 development plan outlines the economic development process at all levels, including the healthcare system encouraging more Private Partnership and Privatization of the government services. The NTP expects to increase private sector contribution to the Gross Domestic Product (GDP) from 40% to 65% by 2030 and sets out to achieve the 3 main healthcare transformation objectives: (1) improved access to healthcare services, (2) better quality and efficiency of healthcare services and (3) promoting disease prevention through better access to care and preventative services.^{13,17,20}

There is developing Literature on the topic of healthcare transformation in Saudi Arabia since the introduction of vision 2030, and through this study we aim to provide an overview of healthcare transformation in Saudi Arabia since the launch of the ambitious Vision 2030, identifying issues that need to be addressed and steps taken towards provision of health systems transformation. The focus of this manuscript is to outline reforms taken to facilitate the transformation process and while analysing the same, this article aims to describe the following: (1) the process and plans towards privatization, (2) development of Saudi Health Clusters to facilitate decentralization of health care resources, (3) the legislative framework that supports development of public-private partnership and (4) the possible consequences of privatization based on the existing literature. The discussion section of the article discusses the conclusion in-light of the progress made with possible suggestions to practice caution in predicting and identifying barriers to the implementation of PPPs, implement effective Revenue Cycle Management (RCM) function for healthcare reimbursement and to ensure vulnerable population have access to good quality and tertiary healthcare.

Method

The research adapted scoping literature review strategy in finding the appropriate articles for the study based on extensive review of published and unpublished documents using the key words: 'Saudi Healthcare', 'Healthcare transformation', 'Saudi vision: 2030', 'Public-Private Partnerships' and 'Privatization'. The authors used Science Direct, PubMed, Google scholar, Current contents and Open Access Journal. In addition both Governmental and Non-Governmental documents were closely studied as a secondary data source and use of the official report Saudi Vision 2030: Health Sector Transformation Strategy from the Ministry of Health. The Boolean operators AND, OR and NOT were used in synthesizing the search; the following command lines utilized during the search process:

"Healthcare" AND 'Saudi Arabia' AND 'Saudi Vision 2030' OR 'Healthcare transformation' AND 'Privatization', while the operator NOT was utilized to exclude articles on privatization of other public sectors such as 'Educations' 'Sports' 'Transportation' and 'Municipalities'. The timeframe of the research articles and documents was from 2000 to 2021 as this era was deemed more pertinent and representative of the growth of private healthcare in Saudi Arabia while articles not in English language were excluded from this review. The search helped to find the relevant documents including journal articles, government reports and policy documents of the Kingdom of Saudi Arabia.

The inclusion criteria during the review process involved literature on the topic of healthcare sector transformation in Saudi Arabia in line with Saudi Vision 2030 and screening of factors driving healthcare transformation in Saudi Arabia such as the relevance of privatization in healthcare sector and its framework of development and impact on the quality of healthcare delivery in the Kingdom. Literature on transformation of other public sectors as part of the Vision realization programme were excluded from the review process. During the review process, all efforts were made to analyse relevant literature to gain a comprehensive understanding of various factors driving the healthcare transformation, development of legislative framework and challenges or issues. The study's initial search strategy helped identify 127 articles and documents, which were screened that resulted in the inclusion of 28 studies (Supplemental Appendix 1) through the scoping literature review process (Figure 1) as a point of saturation was reached when further literature was not found.

An Impetus to Privatization of Healthcare Sector

Kingdom of Saudi Arabia is a high-income country and its economy largely depends on the oil revenue that accounts for about 80% of governments' revenue, however plummeting oil prices and fluctuations in the volatile international oil market have posed a major challenge to most oil-dependent Gulf economies.^{2,19-21} Saudi Arabia has been heavily reliant on oil revenues since the 1970's and the falling oil prices has directly affected the government revenue and all sectors of the Saudi economy; with the launch of the ambitious Saudi Vision 2030 the Kingdom sets on a strategic path to reduce the country's dependence on oil and diversify its economic resources. Comprehensive and Universal Healthcare services has been provided by the Ministry of Health (MOH) for decades to its entire population without any external aid or collection of taxes pertaining to the Kingdom's welfare state model of governance facilitated by oil revenues, however this policy sustenance seems to be challenging with the increasing costs of healthcare provision, changing country's demographic, rise in non-communicable diseases and inefficient access to healthcare.^{3,7,22-25}

The Saudi cabinet approved 2020 budget saw a lowered expenditures by 2.7% and although healthcare sector contributes to the third-largest share (16.4%) of the budget

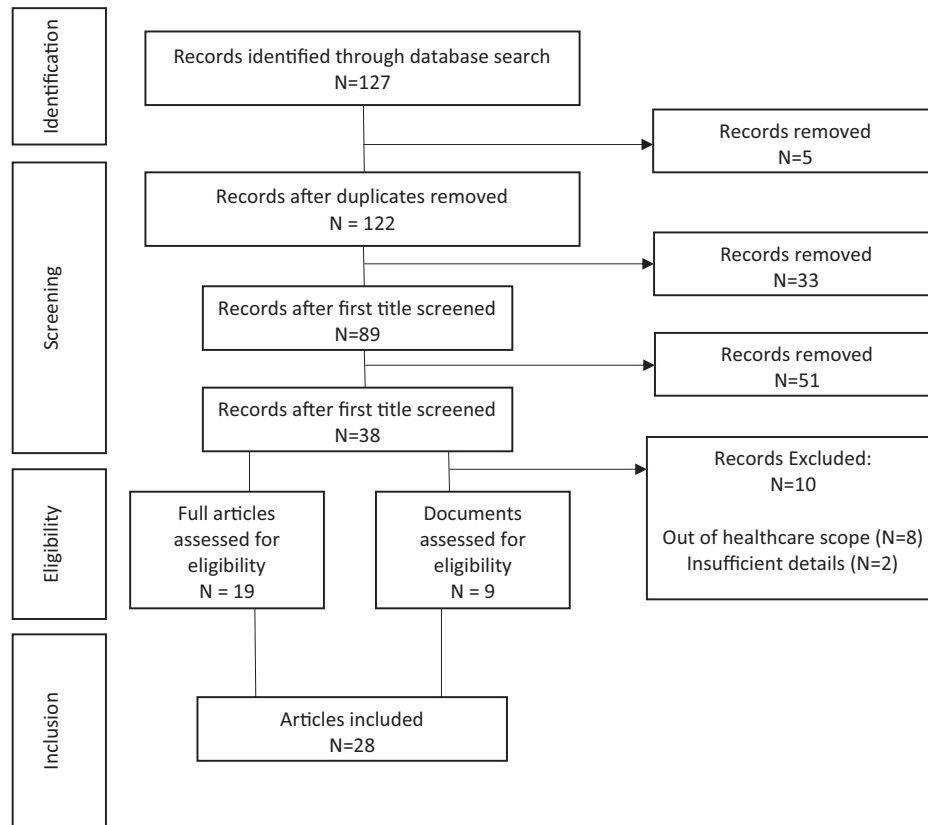


Figure 1. PRISMA Flow diagram of the scoping literature review to determine appropriate articles for review.

expenditure but witnessed negative growth by 4.0% in 2020 at a budgeted allocation of 45.5 billion as compared to the fiscal year 2019 allocation of USD 46.4 billion. The government intends to utilize this share in Public Private Participation (PPP) healthcare projects to accomplish the Vision 2030 target of privatizing 295 hospitals by 2030 to boost quality and efficiency of healthcare sector for a value-based model of care.^{4,18}

Saudi Arabia has made a remarkable progress in improving the health of its citizen that has seen an improvement in life expectancy at birth from 64 years in 1970 to 75 years in 2015 and the number of older population is expected to grow from 1.96 million in 2018 to 4.63 million by 2030. A major demographic shift in the Saudi population is predicted in the next decade, with population between ages of 40 and 59 expected to increase by 1.5 times and population over the age of 60 predicted to increase by more than 3 times.^{3,11} This shift in population dynamics is projected to be associated with an increased burden of diseases related to lifestyle and Non-Communicable diseases (NCDs) prompting a rise in demand for highly sub-specialized medical and surgical care in the Kingdom. Additionally, geriatric related care, rehabilitation and home healthcare for population beyond the age of 60 years is projected to increase.^{4,14} It is anticipated that for Kingdom to be able to catch-up with the population growth an additional 20 000 beds would be required by 2035 and based on global average bed density, in 2016 a gap of 14 000 beds was observed and this gap is projected to grow by 40 000 beds by 2035.¹⁴

The Mandatory Health Insurance that was rolled-out to private sector employees in Saudi Arabia took place in several stages since 2005, which has turned out to be one of the governments calculated initiatives paving path for privatization of healthcare sector in the country. It is observed that there exists a desire and ability amongst Saudi Nationals to pay for healthcare in the form of health-insurance depending on private healthcare for their healthcare needs and it is estimated that as much as 75% of patients use private clinics or hospitals for better accessibility and patient experience.¹⁴

Provision for Public-Private Partnerships in Health Sector

Public Private Partnerships (PPPs) business models in healthcare infrastructure development and maintenance are often sought as an effective way to reduce financial burden on the public sector and encourages more private capital by building through investment in the economy recognized as one of the key drivers for privatization at the national level.^{3,16,26}

Privatization is seen as a central area of focus in the Saudi Vision 2030 for the Health Sector Transformation program and as outlined by Knight Frank, the strategic objectives include: privatization of one of the medical cities through a PPP scheme and increasing private sector share of spending in healthcare through alternative financing methods and service providers. The Privatization Programme 2025 outlines 9 health care privatization initiatives approved with 23 such initiatives being reviewed.^{14,18}

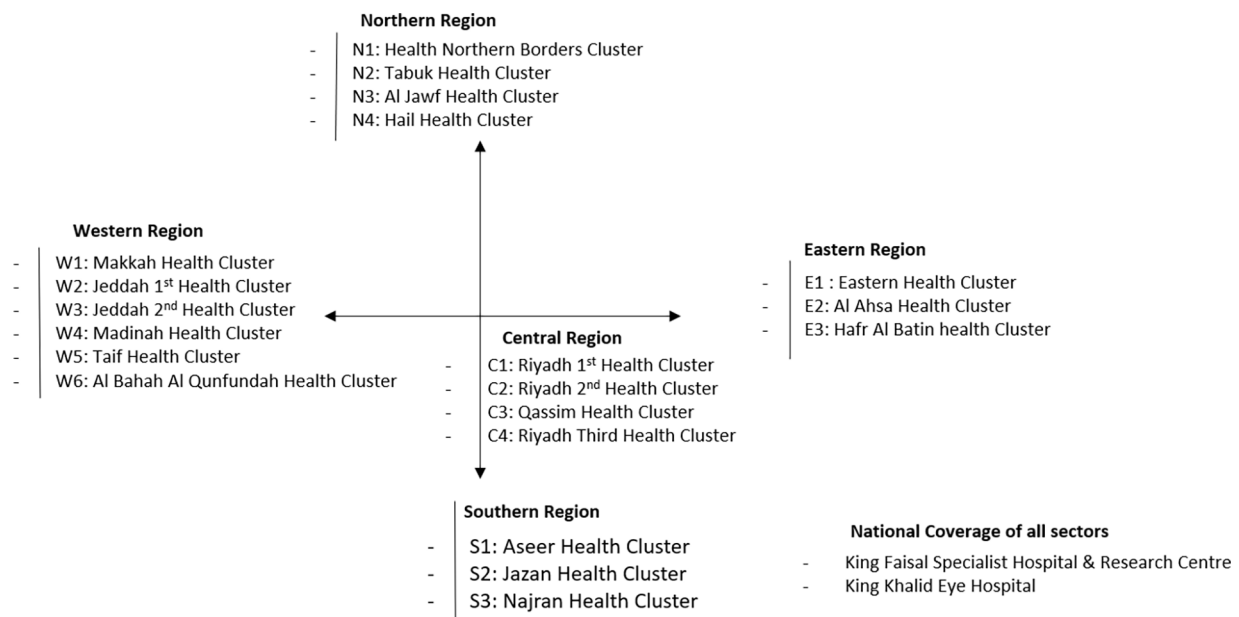


Figure 2. Overview of clusters.

The main targets of healthcare privatization plan involves updating and expanding the primary care across the kingdom, rehabilitation and long-term care beds, planning and establishing additional medical cities and modernizing and expanding laboratory and radiology services in partnership with the private sector. Further, privatization plans include establishing dialysis centres for chronic renal failure patients by contracting with leading companies in the field to increase access to centres in various towns and cities and to prepare King Faisal Specialist hospital & Research Centre for privatization to be able to achieving its leadership position nationally and regionally through its focus and innovation in tertiary care.^{17,18}

Understanding Saudi Health System and Developing Saudi Health Clusters

Healthcare in Saudi Arabia is a fundamental right of Saudi citizens and Ministry of Health (MOH) with public revenues being the major government agency entrusted with the delivery of preventive, curative and rehabilitative healthcare through a network of healthcare centres in the Kingdom.^{1,9} Expatriate workforce in the private sector receives healthcare services through health insurance provided by their employers, while health coverage costs paid by the employee and employers.^{3,12,19} In 2005, health insurance was made compulsory for all non-Saudi nationals working in the Kingdom under the cooperative health insurance Act and in 2008, the act extended to include Saudi nationals in the private sector. The mandatory Health insurance coverage is reinforced by the Saudi Labour Law that includes fines for non-compliant employers (companies) and regulatory oversight in place to monitor and refuse renewing work permits without health insurance coverage.^{9,17,22}

The government through MOH has continued to show its profound commitment to enhance healthcare services at

primary, secondary and tertiary levels and MOH continues to be a major health care provider for more than 60% of the services with annual spending amounting to ~ 4.6% of the GDP (\$2.4billion) and 15% of the governments budgetary expenses. The private sector is capable and engaged in a range of health-care-related services through various non-state actors such as national and multinational companies as hospitals, dispensaries, laboratories, pharmaceutical companies however, they accounts for less than 25% of the total expenditure on health care in Saudi Arabia, which is far less when compared to other countries in the developed or developing world.^{3,15}

The Kingdom operates under 20 health directorates based on the 13 regions of the country, with each directorate managing their health affairs under policy guidelines set forth by the MOH, with regions provided with lump-sum budgets that is distributed to their hospitals and this governance pattern as outlined in the need for transformation strategy lacks the culture of stewardship, in which all clinicians must be able to take responsibility for the use of resources, prevention of waste and the long-term sustainability of universal healthcare.^{1,2,6}

Ministry of Health is approaching privatization by establishing health clusters in different regions of the Kingdom (Figure 2) representative of the region's demographics, available resources and facilities and projected capacities with autonomy in terms of providing and managing medical & clinical services within its own cluster of hospital allowing decision making rights including but not limited to resource allocations, employee evaluation and salaries.^{2,8}

Understanding the Legislative Framework: National Privatization Programme

The vision 2030 was announced in 2016 with an emphasis on privatization plans to boost private sector in Saudi

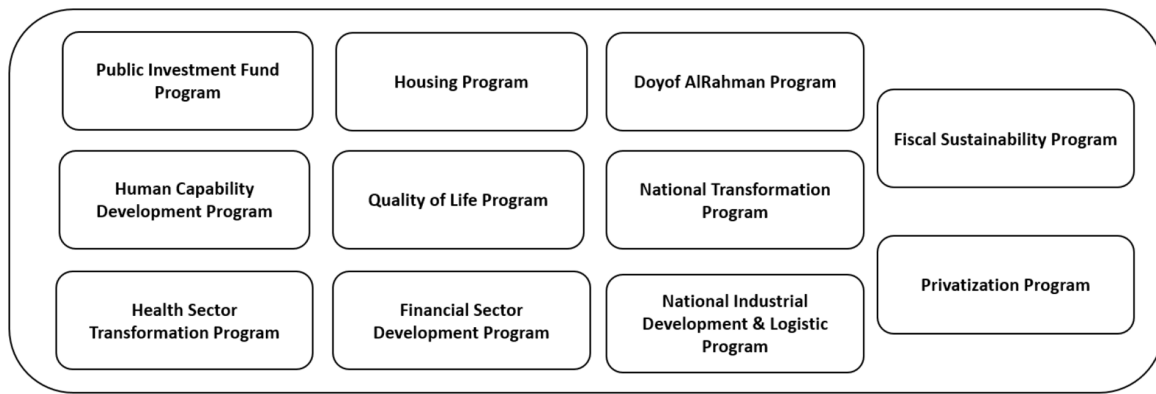


Figure 3. Vision realization programme (VRPs). <https://www.vision2030.gov.sa/v2030/vrps/>

Arabia’s socio-economic development to be able to meet the growing demands of the population. The Vision Realization Programs (VRPs) were announced to translate the Vision into plans during the first 5 years after the vision launch and the VRPs align their activities through official delivery plans. These strategic framework of VRPs have been reviewed and assessed with pre-defined objectives and Key Performance Indicators (KPIs) to match the need of the Kingdom and to be able to efficiently achieve the Vision (Figure 3).^{10,18,19}

The National Centre for Privatization & PPP in Saudi Arabia was established in 2017, an official enabler for privatization of all government sectors providing privatization processes, legal and regulatory expertise to the Privatization Supervisory Committees (PSCs) and Execution Teams (ETs) with the main responsibility of NCP includes policy making by developing privatization regulatory framework, rules, procedures in collaboration with the sector’s regulatory framework. The privatization programme adapted in 2018 seeks to identify government assets and services from a number of sectors with potential to be privatized through development of privatization systems and by defining PPP framework, whilst supporting contributions towards economic development by improving the balance of payments and increasing private sector’s contribution to GDP from 40% to 65%.^{18,19}

To support the privatization process the Council of Ministers in Saudi Arabia approved the Private Sector Participation (PSP) Law in March 2021.²⁰ The PSP law includes several legislative enablers that is designed to enhance investor confidence in the PPP and privatization process. The provision of the law is to strengthen the enforcement of PPP contracts and provide the public sector a framework to participate directly with a project or company, safeguarding rights of the private sector, while ensuring the State will meet the financial obligations arising from the PPP and privatization contracts.^{15,17} On the social front, the PSP law will support improvements in public services to citizens and residents and ensures the social impacts of PPP undertaking or contracts are properly understood before implementation occurs.^{18,19}

Discussion

This study demonstrates that Kingdom of Saudi Arabia is driven by a range of socio-economic factors that warrants reforms for sustainable welfare provision. Volatile oil prices, demographic shift with ageing population, rising healthcare costs, demand for updating technology, inequitable access to care, increasing demand for quality health care provision and prevalence of diseases are some of the main challenges faced by the health care sector. This study also outlines the health care transformation plans with realization of the Saudi Vision 2030 through regulatory and legal framework that favors the development of privatization and PPS in the healthcare sector.

Several market evaluations conducted on the subject of PPPs in health sector in Saudi Arabia has alluded to the need for supportive legislation, which could be attributed to the ‘slow-start’ of privatization than expected. Lack of a clear legal framework for investors was seen as one of the major limitations to the development of the PPP market in Saudi Arabia but with the PSP law approved by the Custodian of the Two Holy Mosques King Salman in 2021, there is a renewed interest amongst international investors as this facilitates international healthcare service providers to directly enter the market covered by a federal law that clearly define roles, expectations and rights

However, ‘lessons learnt’ from the health care privatization experiences from other countries must be carefully reviewed and taken into consideration; such as Latin America applied comprehensive health care reforms that undertook health care privatization during the early 1980’s and it has been extensively documented one of the major risk of privatization is the increased cost of the healthcare – as private hospitals are rather profit-driven than service-driven and thus may not be affordable by all proportions of the society that may create venue for discrimination by private institutes in terms of access to care based on the medical coverage. Therefore, the government must exercise caution by maintaining robust stewardship of the market and strong regulatory framework and PSP law may be

seen as a step in the right direction but the implementation of the law remains to be evaluated.^{6,11}

Ministry of Health (MOH) has been the main healthcare provider in the Kingdom, promoting public health and disease prevention and formulating regulations governing the public and private health sector and this bureaucratic nature of functionality have struggled to bridge the gap in population measures provision, access and expenditure when actually compared to the 'patients treated'. The privatization of health care in Saudi Arabia is believed to introduce decentralization giving a degree of autonomy to the health clusters and hospitals encouraging a cooperative relationship between the public and private sector.^{8,18} Although, implementation of health insurance act (2008) warrants private healthcare insurance for all Saudi citizens and expatriates and may have been perceived as an enabler for healthcare transformation for an insurance-based market but in reality all Saudi citizens are covered by national health insurance, and a major change for the Saudis will be their ability to opt for private healthcare institutions for better quality and access to care.

To be able to facilitate this change in the healthcare utilization (from public to private healthcare) concurrent changes are required for the provider (payer) payment systems, patient deductibles and hybrid payment methods (co-insurances). Real-time utilization reviews are required as with these changes an effect on the private-sector market, patients and providers will be remarkable; as a sizeable switch in patient volume to the private institutions may be projected, which may be welcomed initially by public-healthcare sector with reduced waiting lists but run into the risk of vacant beds if the demands drops below the capacity level. Therefore, it is vital for the MOH hospitals to have contingency plans in place for the developing competition by training managers to analyse and anticipate opportunities in this 'new' competitive environment and accordingly adjust services and budget.²⁷

The new healthcare model of care identifies 6 key enablers to meet the health needs: private sector participation, e-Health, workforce, healthcare financing, corporatization and governance to be able to streamline the Saudi health care system and to fully embrace the Kingdom's ambitious Vision, however a longer timeframe and additional resources must be expected for implementation of all proposed measures.¹⁸ The interconnected Vision Realization Programmes (VRPs) activities are aligned with delivery plans directed by pre-defined KPIs and appears to be supporting each other for instance the Human Capability Development programme aims to develop citizen's capabilities and skills for the future local workforce, the mandatory health insurance coverage in Saudi Arabia will ensure more citizens will have access to the private healthcare facilities thereby expanding the scope of primary and secondary healthcare in the private sector creating a niche for international investment.¹⁹

The Kingdom heavily relies on the international talent to fill healthcare workforce vacancies, with Saudi citizens constituting about 44% of all health workforce and Saudi physicians employed by the health systems constitutes to only about 30%, to achieve the national healthcare transformation a large number of Saudi

nationals would be required in the healthcare system. Thus, implementation of Saudization programme became one of the major objectives of the Vision 2030 and a considerable success have been achieved in other sectors but the health sector still lags in terms of achieving the Saudization targets requiring great efforts in encouraging Saudi nationals to take up health professional jobs, establishing new medical and health educational schools, empowering women participation and creating positive environment for nursing profession amongst Saudi females.⁵ The rate of hiring Saudi healthcare-givers could be improved by endorsing hiring policies to ensure more hiring of Saudi national healthcare givers and encourage hiring of only very skilled foreign healthcare-providers with sub-specialized experience and certifications, as regulated by the Ministry of Human Resources and Social Development (MHRSD); but it would be interesting to witness the implementation of such hiring policies as private hospitals are cost-driven and would prefer hiring foreign healthcare providers as they are less expensive compared to the Saudi counterparts.^{5,11}

The newly introduced concepts of privatization and PPPs in Saudi Arabia has limited qualitative data available and once such study explored the perceptions of different stakeholders regarding the privatization of the Saudi health care system by interviewing administrators and clinical staff of the public hospital in the Eastern province of Kingdom.⁸ The study findings suggests that the privatization is perceived as an opportunity that introduces the missing role of competition with the private sector, however carefully points-out that a better comprehension of the implementation process and new dynamics determining the Saudi health care system is required.⁸

This study suggests that there is a looming need to modernize the Saudi Health Care sector and launch of the Vision and NTP provided the required platform to inspire a sense of efficiency into the bureaucratic structure of public welfare provision and to secure investment from the private sector through structured privatization roadmap to reduce state's burden. However, caution must be exercised while implementing the PPP projects and government agencies must take into account participation from all actors: health practitioners, consumers, investors, policy makers, market researchers and common people to fully appreciate 'health for individual and Society' objective of the health transformation programme.

The future of the healthcare like many other developing economies in Saudi Arabia too continues to weigh policies for universal coverage while containing costs and the country on its path of transformation driven by social and economic factors has taken strategic steps to develop its private healthcare system that includes legislative and governance framework for implementing PPPs. However, it is vital to predict and identify barriers to the implementation of PPPs early-on as this will allow policy-makers to adjust and overcome,¹ a study investigated perceived potential barriers of implementing PPPs in Saudi health sector by conducting interviews in the public and private sector and the top 3 barriers as rated by the stakeholders knowledgeable of the process were legal involving delays in permits and approvals,

environmental involving lack of transparency and accountability and technological involving shortage of qualified professionals to handle PPP projects and therefore, it is imperative for policy-makers to research and understand how different stakeholders perceive privatization as a reform, as there has been limited experience with the structure & processes involved in institutionalizing PPPs in healthcare sector.²

Additionally, from financial budgeting aspect of the transformation programme, it is important for policy makers to move towards productivity-based budgeting while implementing effective Revenue Cycle Management (RCM) function for healthcare reimbursement capable of generating revenue as MOH switches its role from the primary payer and provider to regulator of corporatized payers and providers (eg, insurance companies, corporates etc.), however caution must be exercised in implementing RCM function to capture clinical activities through proper coding and documentation, typically been lacking in Saudi public hospitals due to an allocated budget mode-of-payments by the MOH.¹⁴ With the decentralization of health services in Saudi Arabia and autonomy given to hospital, policy-makers must ensure that vulnerable population have access to good quality of healthcare and access to tertiary care in general population is not compromised. Additionally, a 'hybrid-payment' model wherein co-pay by the private insurer and the state could be explored by the tertiary care centres in Saudi Arabia.

The healthcare of Saudi Arabia embarks on the transformation journey driven by the Saudi Vision 2030 facing the daunting challenges, but it appears that the government has a laid out a roadmap with the legislative framework to begin the process, however caution must be exercised as these fundamental changes in the healthcare system will directly affect its population in terms of healthcare delivery and wellbeing; therefore it is of utmost importance that there is ongoing monitoring with adjustments as this complex and multifaceted process proceeds.

Author Contributions

All authors had full access to the data and contributed to the conceptualization, methodology, analysis, writing, visualization, and editing.

Supplemental Material

Supplemental material for this article is available online.

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