International Journal of Medical Science and Clinical Research Studies

ISSN(print): 2767-8326, ISSN(online): 2767-8342

Volume 03 Issue 12 December 2023

Page No: 3187-3195

DOI: https://doi.org/10.47191/ijmscrs/v3-i12-48, Impact Factor: 6.597

Saudi Arabia's New Care Model and the Transformation of Health Care Kingdom's Vision 2030

Rashidah Jamal Izzuldeen Ali[1], Tagrid Masnad A Alenezi[2], Nawal Abdullah O ALdhafeeri[3], Ashwaq lafi Ghannam Alrashdi[4], Nojood Moufreh A Alenezi[5], Mohammed Fahad W Alkhatami[6], Hanan Alari Mater Alanazi[7], Hanan Wanis Nayir Alanazi[8], Hamoud Mashhour Dhaifallah Alruwaili[9], Abdulrahman Atallah R Alenezi[10], Habiba Saleh G Alenzi[11] Bader Faleh Awadh Alanazi[12], Aisha Mohamad Saleh ALjehani[13]

[1,2,3,4,,6,7,8,9,10,11]Ministry of Health, Saudi Arabia

ABSTRACT

"Vision 2030" was the framework adopted by the Kingdom of Saudi Arabia to guide its economic development and foster national expansion. The vision outlined the Kingdom's aspirations to establish itself as a global leader by accomplishing the following three primary objectives: a flourishing economy, a dynamic society, and an ambitious nation. In June 2016, the Kingdom initiated a national transformation program (NTP) in accordance with "Vision 2030" in order to achieve this objective. The transformation of health care is among the NTP's eight themes. Healthcare facilities in the Kingdom have a history of nearly a century. To attain the "vision 2030" objective, the Kingdom must modernize its health care system, despite significant strides in improving the health of its population in recent decades. The objective of this essay is to provide a description of the new Model of Care (MOC) as it pertains to the recent healthcare transformation in Saudi Arabia as outlined in the Kingdom's vision 2030. The MOC concept originated from a desire to comprehend the present condition and amass knowledge. It is predicated on the six systems of care (SOC): preventative care, premeditated interventions, pediatric and maternal care, critical issues, chronic ailments, and end-of-life care. The SOC is segmented across various "service layers" in order to facilitate individuals' recovery and restore their health when necessary. Twenty-seven of the forty-two interventions described in the new MOC are distributed across the six SOC, while the remaining fifteen are distributed across the numerous SOC. The completion of all MOC interventions will facilitate the Saudi health care system's transition to the "vision 2030" of the kingdom.

KEYWORDS: Saudi Arabia, global health, organizational models, health policy, delivery of health care.

ARTICLE DETAILS

Published On:
23 December 2023

Available on:
https://ijmscr.org/

INTRODUCTION

Saudi Arabia, boasting an estimated population of 33.4 million and a land area of 2250,000 square kilometers, is the most expansive nation on the Arabian Peninsula [1, 2]. It is regarded as an energy superpower and one of the twenty largest economies in the world [3]. "Vision 2030" was adopted by the Kingdom as a developmental and national expansion strategy. The vision outlined the Kingdom's aspirations to establish itself as a global leader by accomplishing the following three primary objectives: a flourishing economy, a dynamic society, and an ambitious nation. The Kingdom unveiled its "Vision 2030" in April 2016, which consisted of 96 strategic objectives and was monitored by a number of Key Performance Indicators (KPIs). Several endeavors, referred to as vision realization programs (VRPs), were established with the intention of accomplishing this objective as part of the implementation processes of various private, public, and non-profit organizations. The Council of Economic and Development Affairs established a pragmatic and integrated governance framework to convert "Vision 2030" into a series of VRPs operating in tandem to accomplish the strategic goals and actualize the vision [4, 5]. The National Transformation Program (NTP), which a VRP involving twenty-four government agencies, was initiated in June 2016 with the intention of constructing the capabilities and capacities necessary to realize the lofty objectives of "Vision 2030" [4, 5].

The NTP has three primary objectives: firstly, to elevate living standards through the development of improved systems of social services, health care, and safety; secondly, to support the growth of the private sector, increase labor market attractiveness, ensure the sustainability of vital resources, and develop the tourism and non-profit sectors; and thirdly, to improve economic enablers by fostering the growth of the private sector. As illustrated in Figure 1, the NTP comprises thirty-seven strategic objectives organized into eight themes. Transformation in health care is among the eight overarching motifs of the NTP [4, 5].

The objective of this essay is to provide a description of the new Model of Care (MOC) as it pertains to the recent healthcare transformation in Saudi Arabia as outlined in the Kingdom's vision 2030.

MATERIALS AND METHODS

Information pertaining to the national transformation program, the Saudi health system, the transformation of healthcare, the new MOC, and the Saudi Arabian vision 2030 was obtained from the Ministry of Health (MOH) and other pertinent websites or portals. An additional investigation was conducted in multiple databases, including Wikipedia, Google Scholar, PubMed, and Medline, to gather additional information and published literature. The contents of every pertinent study, government report, and document were examined, and a synthesis of the data was subsequently presented.

RESULTS

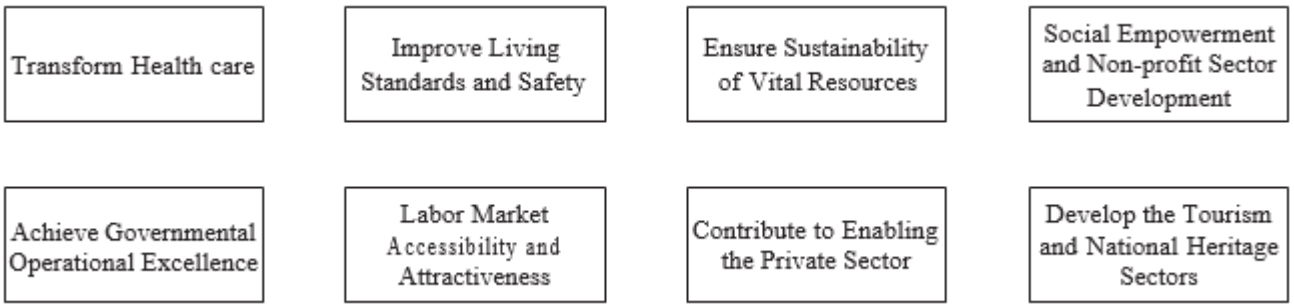

Figure 1. The Themes of the National Transformation Program [4].

Transformation of Healthcare

As a result of the country's expanding population, the Saudi health sector is undergoing substantial reform in response to regional and international developments. "Transform health care" is the First Theme of the NTP, which seeks to reorganize the health sector into a comprehensive and beneficial system. A novel MOC will advance public health through initiatives that emphasize health awareness and prevention. By means of optimal coverage, equitable geographical distribution, and comprehensive and expanded digital solutions and e-health services, it will guarantee access to health services. Furthermore, it will strive for the ongoing enhancement of healthcare provisions by prioritizing the contentment and experience of recipients in accordance with globally recognized benchmarks and optimal methodologies [4, 5].

The Ministry of Education, Saudi Health Council, King Faisal Specialist Hospital and Research Center, Saudi Food and Drug Authority, and The Saudi Red Crescent Authority are prominent organizations engaged in health care transformation. The health care system was found to face three notable obstacles: 1) restricted availability and ineffectiveness of preventive healthcare services; 2) difficult access to health services; and 3) inadequate quality of health services. Diverse approaches were devised in order to surmount these obstacles.

Saudi Health System

Healthcare facilities in the Kingdom have a history of nearly a century. In 1925, the first public health department was established in Mecca [6]. Following World War II, the Saudi economy expanded as a result of a substantial surge in oil production, accompanied by the construction of additional healthcare infrastructure. The MOH, comprised of numerous health care institutions, was established in 1950 [6]. In 2018, there were 75,225 beds in 484 hospitals in Saudi Arabia, or 22.5 beds per 10,000 inhabitants. In 2018, the health budget amounted to 90 billion SR, which accounted for 9.2% of the overall government budget [2].

In recent decades, the Kingdom of Saudi Arabia has made significant strides in enhancing the health of its populace, specifically with regard to the mitigation of infectious diseases and the reduction of infant and maternal mortality. From 1970 to 2016, the average life expectancy at birth increased from 64 to 75 years [7]. New goals have been established to ensure that this figure reaches 80 years by 2030 [4]. Nevertheless, there are still numerous health concerns that necessitate attention. By regional and global benchmarks, the incidence of preventable injuries and non-communicable diseases continues to be significantly elevated. Significant potential exists for mitigating avoidable morbidity and preventable mortality in the geriatric and working populations alike. Concern areas include cardiovascular disease, stroke, diabetes mellitus, respiratory disease, mental health, automobile collisions, and congenital maladies [8]. All of these are amenable to reduction.

To begin with, the objective was to augment the availability of healthcare services to the general public through the enlargement of healthcare facilities. This would entail enhancing infrastructure, augmenting the bed capacity, and staffing health care professionals. In addition to promoting related medical professions to facilitate emergency medical care and ensure affordable services via specialized consultation facilitated by workforce planning, redistributing responsibilities, and enhancing the referral system and appointment procedures, adequate geographical distribution was also intended to guarantee these benefits. Furthermore, in order to optimize the efficiency and quality of healthcare provisions, the strategy entailed augmenting clinical efficacy, ensuring patient safety and satisfaction, promoting sustainability, and enhancing financial transparency. In conclusion, with respect to advancing preventive measures against health hazards, enhance preparedness to address health catastrophes, and regulate both communicable and non-communicable diseases [4, 5].

THE NEW MODEL OF CARE (MOC)

Definition and background

Individually, the new MOC theme emphasizes the need for enhanced treatment and care modalities. A worldwide phenomenon is the transition from activity-based to outcome-based payment models, which provide incentives for improved care quality and performance. Health care providers have a vested interest in the long-term cost management of the population's healthcare and in promoting longer, healthier lives. There is also a discernible trend toward the implementation of Accountable Care Organizations (ACOs), which prioritize the delivery of care through enhanced collaboration, integration, and fiscal accountability. A National MOC will enable access to numerous benefits that are fundamental to the transformation of health care. The primary benefits of the MOC are detailed in Table 1 [9].

The MOC concept originated from a desire to comprehend the present condition and amass knowledge. This was also motivated by significant directional trends and developments in global health care. The public survey regarding the patient-centric design garnered the participation of over 60,000 citizens. In addition, over 2500 health care professionals engaged in e-discussions, and over 1000 health care professionals were surveyed to identify opportunities for enhancement. The MOC responds to six inquiries as perceived by the general public:

1. How will the health system assist individuals in maintaining their well-being?
2. In what ways will it be beneficial in the event of an essential issue?
3. In what ways will it facilitate them in attaining a favorable result for any intended procedure?

Table 1. The benefits of the new Model of Care (MOC).

Set a blueprint for ACOs to build service provision capabilities and plans on unlocking intrinsic value through integrated services.
Improve patient experience by introducing clear citizen-centric pathways delivering quality, timely and accessible services.
Organizes large scale transformation by regulating and directing a multitude of initiatives towards a common goal.
Enables value-based financing of health care by linking payment mechanisms to MOC pathways and outcomes.
Facilitates national knowledge and capability sharing, patient flow between ACOs, and economies of scale efficiency generation.

ACOs– Accountable Care Organizations.

1. How will it facilitate the secure delivery of a healthy infant?
2. What support will it provide for chronic health conditions?
3. In what ways will it ensure that they receive empathetic care in their final days of life?

These inquiries are comparable to the Six Systems of Care (SOC) of the MOC. The SOC is the arrangement and configuration of all available services to a patient in order to meet a need: women and children, urgent problems, chronic conditions, maintaining good health, planned procedures, and the final stages of life. Once more, the SOC is divided into distinct "service layers" in order to facilitate individuals' recovery and ensure they are quickly restored to good health when necessary (Figure 2). [9].

Activated individuals constitute the MOC's nucleus. It emphasizes the responsibility of families and individuals to maintain their health and well-being through self-care, empowerment, and awareness. Activated individuals will be supported by healthy communities through the provision of pertinent information, encouragement to adopt healthy behaviors, and access to community care and wellness facilities. Health advice will be authoritatively provided via virtual care. Virtual care will typically function as the initial interface between patients and medical care providers, facilitating access to pertinent medical information and aiding patients in navigating the complex health care system while seeking suitable treatment. In addition to virtual care, primary care, secondary care, tertiary care, and quaternary care will continue to be the principal providers of healthcare [9].

While the MOC delineates a comprehensive care system to address health requirements, its execution will necessitate the presence of six critical enablers.

These include participation from the private sector, health care financing, workforce, eHealth, corporatization, and governance.

The primary responsibility of the Vision Realization Office (VRO) at the Ministry of Health (MOH) is to ensure the effective implementation, oversight, and assessment of health care transformation initiatives. These initiatives are consolidated under the MOC. The implementation of the MOC, which primarily delineates a comprehensive care system to address health requirements, will necessitate the assistance of six key enablers, as outlined in Table 2 [9].

In what way was the MOC conceived and designed?

Understanding the current situation, designing the new MOC, and defining the necessary interventions for the new national MOC for the Kingdom comprised the initial phase of the MOC project. Between October 2016 and April 2017, the MOH and the VRO spearheaded an enterprise-wide endeavor to revolutionize the healthcare industry throughout the Kingdom. There were three national seminars (the CDG comprised of three care design groups).

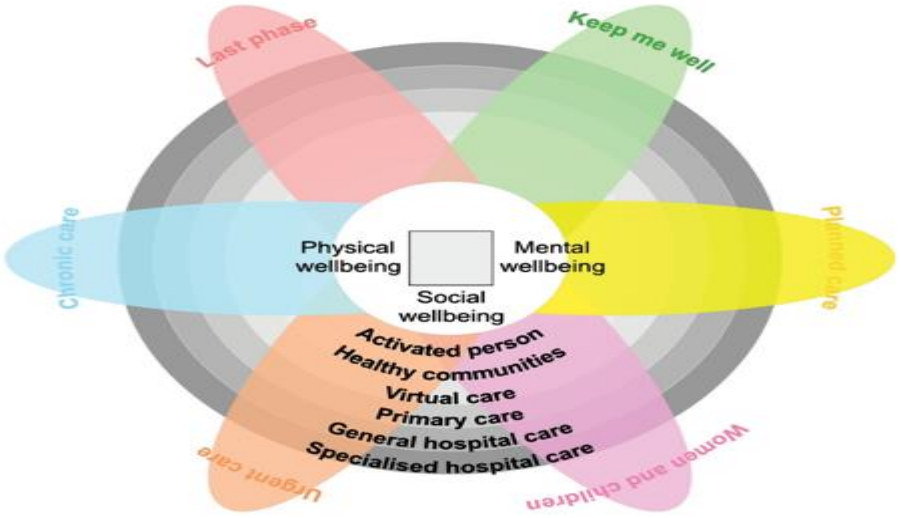

Figure 2. Model of Care: the "Six Systems of Care" and "Service Layers".

Table 2. The six key enablers and initiatives by The Vision Realization Office (VRO).

Private Sector Participation	• Increase private involvement by facilitating ownership, or management of MOH hospitals; • Actively support localization of pharmaceutical and medical devices leveraging MOH procurement.
e-Health	• Provide digital tools (apps) for patient self-services, prevention, connected care, and workforce efficiency; • Accelerate IT infrastructure build-up at MOH to reach 100% deployment by 2020.
Workforce	• Enhance the quality and quantity of workforce through increased capacity, improved licensing criteria, and making profession attractive; • Establish a National Health care Workforce Planning Unit to coordinate actions across key stakeholders.
Health care Financing	• Establish a value-based provider payment system; • Set up National Health Insurance with a gradual rollout.
Corporatization	• Split MOH to corporatize delivery, creating independent provider networks with operational autonomy; • Create local clusters that bring providers together, ultimately forming accountable care organizations.
Governance	• Strengthen MOH mandate to lead sector reform with strong oversight over regulatory agencies ("super-regulator") and transform the role of MOH to be more strategic; • Create a range of new development and regulatory bodies at arm's length from the MOH.

MOH - Ministry of Health

With the active involvement of the principal stakeholders, which comprised more than 450 Saudi physicians, nurses, pharmacists, dentists, and patients (with an additional 2000 participating in virtual dialogues). Collaboratively, they devised an all-encompassing healthcare infrastructure to address the health requirements of the entire kingdom. During the initial symposium, referred to as the CDG 1, attendees convened from various regions and health care sectors in Saudi Arabia to reach a consensus on the most pressing challenges confronting the present health care system and crucial domains that require enhancement. The participants of the second workshop in the CDG 2 formulated and recommended the initial list of interventions for each of the six Systems of Care (SOC) incorporated in the new MOC, in light of the critical issues and priorities identified in CDG 1. The third workshop, known as the CDG 3, was where

international experts, National SOC Leaders, and other attendees collaborated to finalize the new MOC design for the Kingdom. The process encompassed providing comprehensive designs for the six SOCs that comprise the MOC, as well as contemplating potential modifications to the MOC to cater to distinct contexts—such as the requirements of the City, Town, Rural, Hajj & Umrah, Mental Health, and Children's sectors. On April 23, 2017, His Excellency, the Minister of Health, introduced the new MOC [9].

Twenty-seven of the forty-two interventions described in the new MOC are distributed across the six SOC (Figure 4), while the remaining fifteen are divided across the multiple SOC (Figure 5). An intervention consists of a collection of program strategies that are intended to alter behavior, enhance the health of individuals or the population as a whole, or reduce costs. It is possible to apply each cross-cutting intervention to two or more SOCs, and they should be further developed without being confined to a single SOC [9].

From April to August of 2017, the second phase of the New MOC was executed in two concurrent workstreams for a total of five months. The initial workstream, regional pathway development, aimed to transform the national SOC designs into executable regional pathways in collaboration with five pathfinders. The patient traverses the pathways in order to access the health care system in accordance with their specific needs. This is operationally distinct with regard to the provider that the patient contacts along the way. The hospitals comprising the pathfinders, which include the designated Medical Cities (and their affiliated providers) and additional facilities, are the pioneers in the nation in their efforts to implement Accountable Care Organizations (ACOs) and prototype components of the novel MOC. The aforementioned medical facilities are as follows: King Abdullah Medical City-Mecca (KAMC), King Fahad Specialist Hospital-Dammam, and King Saud Medical City-Riyadh (KSMC) [9]; King Khalid Eye Specialist Hospital-Riyadh (KKESH); and King Abdullah Medical City-Mecca (KAMC).

The second workstream, national implementation planning, aimed to collaborate with national taskforces comprised of experts in order to devise and strategize for the nationwide execution of six cross-cutting and "Keep Well" interventions that necessitate standardized approaches.

Figure 3. The forty-two Model of Care (MOC) interventions.

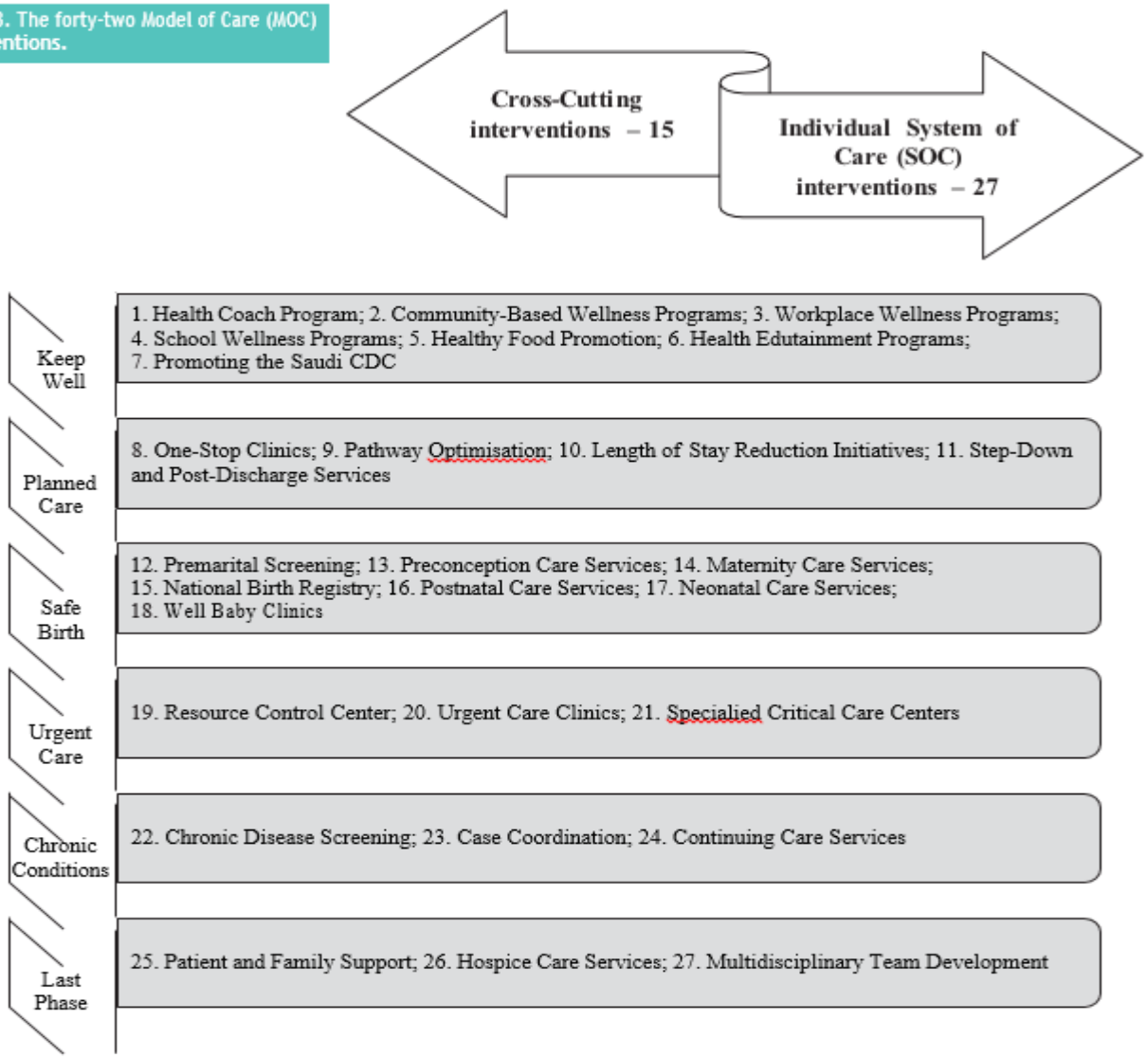

Figure 4. The Twenty-seven Individual SOC interventions.

Health in all Policies
Virtual Self-Care Tools
Virtual Education and Navigation Tools
Health Hotline Services
Healthy Living Campaigns
School Education Programs
Enhanced Primary Care Services
Enhanced Home Care Services
Resource Optimization
Integrated Personal Health Records
National Referral Networks
National Guidelines
Outcomes Monitoring
Systematic Data Collection
Health Research Programs

Figure 5. The fifteen cross-cutting interventions.

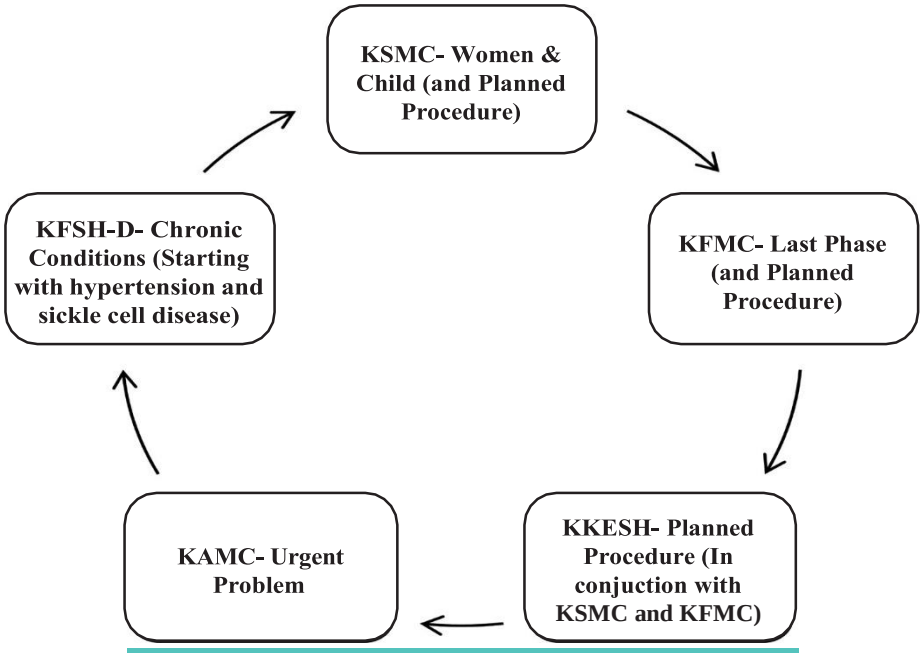

Figure 6. Pathways that will be implemented by each pathfinder.

The process of implementation. In accordance with the approach and planning outcome of phase two, the subsequent phase will execute MOC priority solutions. The "100-day plan" was carried out, and additional details were added to the high-level implementation plan. Cluster-driven implementation is probable to transpire in phases. A cluster is a collection of health care providers that will eventually comprise an ACO. As a geographical location, they are centered in Medical City or another major hospital. An estimated twenty to thirty communities will be dispersed throughout the kingdom. Every health care provider (including primary health clinics, hospitals, and others) within a cluster will be obligated to collaborate and coordinate in order to fulfill the requirements of a specific population. Ultimately, every cluster may be assigned a predetermined budget and operate under a contract that delineates the specific outcomes and additional goals that must be accomplished within that budget [9].

DISCUSSION

It has been difficult for the MOH to establish the interministerial dialogue required to resolve some urgent issues. Similarly, when developing significant policy initiatives, other government agencies in the Kingdom rarely consider the health and healthcare consequences of their decisions. In pursuit of the "Vision 2030" and the modernization of the Saudi healthcare system, substantial challenges that require attention over the course of the forthcoming decade must be resolved.

By 2030, the population of the Kingdom is projected to reach 39.5 million, of which 4.63 million will be elderly (60–79 years). Ten million expatriates comprised one-third of the

population of the Kingdom in 2015; the majority are adult laborers. A considerable influx of international visitors, especially in the course of significant religious pilgrimages (Hajj and Umrah), imposes an extra healthcare strain on the Saudi healthcare system. In recent years, there has been an estimated influx of around 1.8 million foreign pilgrims, with some years witnessing as many as three million foreign pilgrims visit Mecca [10]. Urban population is projected to increase from 83.3% in 2016 to 85.9% in 2030. In the Kingdom, preventable injury and noncommunicable disease rates continue to be elevated in comparison to global and regional norms. To reduce preventable deaths and illnesses, we must enhance the prevention of noncommunicable diseases and accidents. Significant infectious disease epidemics remain a possibility, particularly in the aftermath of natural or man-made disasters or during Hajj.

The Kingdom continues to experience inadequate and inconsistent primary healthcare. Hospitals and ancillary services that are secondary, tertiary, or specialized are dispersed across the kingdom. Nationwide, the provision of rehabilitation, long-term, and home care services is inadequate. Significant inconsistencies exist regarding the standard of patient care. A lack of standardized treatment pathways and plans, as well as inadequate surveillance of patient processes and outcomes, account for the majority of this. During the 2015 Essential Safety Requirements Survey, the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) identified these deficiencies in all categories of hospitals [9].

As opposed to the patients served, provision, access, and expenditure are measured by the population; this variation is unwarranted. Both overuse and underuse were present, leading to significant deficiencies in both value and efficiency. Instead of adopting a patient or individualized approach,

Currently, the system is personnel and resource-centric. Additionally, it emphasizes institutions over individuals. A health system must be both transparent and concerned with patients' well-being as a whole. Significant skill and capacity disparities exist in the labor force, particularly among Saudi employees. Moreover, an absence of resilient, uniform, and cohesive digital information systems permeates every institution within the health system. It may facilitate the management and quantification of performance, activity levels, product quality, and resources [9].

Seven overarching themes have been the focus of the VRO's circumvention efforts: the New MOC, provider reforms, financing reforms, governance growth, private and third sector engagement, workforce development, and eHealth development. It is possible to perceive the initial three themes as facilitators of three separate levels of value. The central focus of the MOC theme is the augmentation of personal value through the enhancement of individual treatment and care modalities. Improving utilization value at an intermediary level—be it at the clinical microsystem, hospital, or local health system level—is predicated on the provider theme. Enhancing allocative performance is predicated on ensuring that intermediate levels are allocated optimal resource levels in accordance with the requirements and capacity to benefit of patients. One could contend that financing is directly responsible for guaranteeing all three types of value [9].

In addition, patients' needs are frequently constrained by other variables, including their merits, economic objectives to safeguard the health of the working population, or their financial capability and willingness to pay. Based on prior experience with health transformation initiatives, it is improbable that substantial performance improvements can be achieved through organizational and financial reforms alone. Supply-side enhancements, including increased productivity, efficacy, equity, and public health responsiveness, are necessary to achieve such improvements. An imperative comprehension of the interrelation and mutual reinforcement of the three value dimensions is present. Successful completion of all seven work themes would be crucial to the overall success of our transition strategy [11].

CONCLUSION

All of the MOC solutions and the local implementations of the enabler workstreams will necessitate an extended schedule and additional resources. The completion of all MOC interventions will facilitate the Saudi health care system's transition to the "Vision 2030" of the Kingdom. Furthermore, the health sector would contribute to the diversification of the Saudi economy and a reduction in government expenditure. It is critical to consider the potential ramifications of sustained declines in crude oil prices on government revenues. To minimize accidents and promote primary and secondary prevention of noncommunicable diseases, the Kingdom must therefore promote intervention both within and beyond the health system. It is imperative to incorporate methodical evaluations of population requirements and health system efficacy in order to optimize the allocation of resources and deliver the desired outcomes to the public.

REFERENCES

I. Walston S, Al-Harbi Y, Al-Omar B. The changing face of health care in Saudi Arabia. *Ann Saudi Med.* 2008;28(4):243–250. [PMCfree article] [PubMed] [Google Scholar]

II. MOH . Saudi Arabia: Ministry of Health; Statistical Yearbook 2018 Kingdom of Saudi Arabia - Ministry of Health Portal. [accessed 2020 10 October]. https://www.MOH.gov.sa/en/Ministry/Statistics/book/Documents/book-Statistics.pdf. [Google Scholar]

III. Economy of Saudi Arabia Wikipedia. [accessed 202010

October] https://en.wikipedia.org/wiki/Economy_of_Saudi_Arabia#cite_note-13.

IV. National Transformation Program . Saudi Arabia: 2030. Saudi Vision. [accessed 2020 October 12] https://vision2030.gov.sa/sites/default/files/attachments/NTP%20English%20Public%20Document_2810.pdf. [Google Scholar]

V. Saudi Arabia: 2019. May 30, Saudi Vision 2030. [accessed 2020 November 12] https://vision2030.gov.sa/sites/default/files/report/Saudi_Vision2030_EN_2017.pdf. [Google Scholar]

VI. Al-Hanawi MK, Khan SA, Al-Borie HM. Health care human resource development in Saudi Arabia: emerging challenges and opportunities–a critical review. *Public Health Rev.* 2019;40(1):1–16. [PMC free article] [PubMed] [Google Scholar]

VII. WHO Saudi Arabia Country File. *World Health Organization.* [accessed 020 12 November] http://www.who.int/countries/sau/en/

VIII. WHO Global status report on non-communicable diseases 2014. *World Health Organization.* 2014. [accessed 2020 10 November]. https://apps.who.int/iris/bitstream/handle/10665/148114/9789241564854_eng.pdf.

IX. MOH . Saudi Arabia: Ministry of Health; 2019. Feb 20, Health Sector Transformation Strategy V.3. [accessed 2020 October 02]. https://www.moh.gov.sa/en/Ministry/vro/Documents/Healthcare-Transformation-Strategy.pdf. [Google Scholar]

X. Hajj Wikipedia. [accessed 2021 April 11] https://en.wikipedia.org/wiki/Hajj#Number_of_pilgrims_per_year.

XI. Saltman RB, Bankauskaite V. Conceptualizing decentralization in European health systems: a functional perspective. *Health Econ Policy Law.* 2006;1(Pt 2):127–147. [PubMed] [Google Scholar]