

### Saudi Arabia has the highest healthcare expenditure in the entire Gulf Cooperation Council (GCC) region.

The Kingdom currently spends US\$37 billion annually. Private spending on healthcare is also the highest in the region at over US\$9 billion<sup>1</sup>.

With the Vision 2030 goals, there is an urgent effort underway to transform the cost of healthcare delivery. The goals are aimed not only at finding ways to reduce current costs but also to contain future increases as a result of changes in population demographics, improved life expectancies, an overall shift to sedentary lifestyles in the country, changing disease patterns, and high expectations from consumers. The government is dedicated to reforming the healthcare sector to provide the best possible health services and reduce expenses<sup>2</sup>.

Generic medications, new approaches to healthcare managing systems and using advanced technology, like artificial intelligence, are three ways that can help the Kingdom deliver efficient, more affordable healthcare for the long term.

# Generic medication can reduce costs — and offers opportunities

One underexplored way to reduce healthcare costs in the Kingdom is through the increased use of locally produced generic drugs.

The entire Saudi Arabian pharmaceutical drug market was estimated to be worth USD\$10 billion in 2020 and is expected to grow at an annual rate of 7.3% over the next six years<sup>3</sup>.

A new report released by Bupa Arabia for Cooperative Insurance says the implementation of a generic medicine framework in Saudi Arabia could result in an estimated decrease of 35%-40% in medication spending annually.

The generic drug market currently represents 36% of total pharmaceutical sales and is forecast to increase to 41% by 2025<sup>5</sup>. Physicians in the Kingdom support generic substitutions in most cases for patients<sup>6</sup>. Outside of the Kingdom, the generic drug market in the GCC area is worth \$3.94 billion in 2020<sup>7</sup>.



This presents Saudi Arabia with an opportunity to be a source of pharmaceutical drugs for the region. Given the potential for cost savings and growth, rapid reforms by the government and multinational companies are expected to propel the local pharmaceutical industry.

The Vision 2030 goals aim to have the local market provide more than 96% of essential medications for Saudi Arabia. Currently, the Kingdom has more than 40 registered pharmaceutical factories, which covers only 36% of the local market need for medicines. The Ministry of Industry and Mineral Resources seeks to increase it to achieve drug security as a strategic goal within Vision 2030.

To support local growth, the government launched the Local Content and Government Procurement Authority, which develops lists of products that are required to be procured from local manufacturers.

The first of these lists identified more than 100 medicines all from local providers. In addition, a price preference initiative was announced of up to 30% for 42 products that use locally manufactured active pharmaceutical ingredients<sup>10</sup>.

### New approaches to drive more efficiency in the healthcare industry

Within the healthcare industry, there are opportunities to drive more efficiency through adopting new models for delivery of patient care, improving digital capabilities within facilities across the Kingdom and refining the system of healthcare payments.

A recent study identified that 75.8% of public hospitals are technically inefficient with smaller hospitals being more efficient than medium-sized and large ones. The study indicated that hospitals in the central region showed greater efficiency than those located in other geographical locations.

Among all, the major causes of inefficiency are overuse of physician's numbers and shortage of health services production!

One approach to improving efficiency is through new operational models. Leaders from the Ministry of Health (MOH) have shared that during the pandemic, the healthcare organizations that adopted a Value Based Healthcare (VBH) model demonstrated significantly greater resilience than those with other approaches<sup>1,2</sup>



VHB involves measuring outcomes, standardising data, creating integrated care pathways and implementing payment for performance. The Kingdom's healthcare industry would benefit from a managed rollout of the VBH or a similar model to more facilities.

Improving the digital and technical capabilities of healthcare facilities is another route to greater efficiency. Tools such as health information systems, enterprise resource planning software and clinical support tools can help hospitals and other facilities streamline operations and reduce operational costs, especially in relation to management of

electronic health records. One example is an initiative that uses evidence-based support tools — which are embedded directly into existing software systems — to help improve clinical workflow and drive best practice<sup>1,4</sup>

As the improvements driven by the Vision 2030 initiatives continue, one additional area for reform is the current system of healthcare payments.

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A recent study found that the current system is largely fragmented and provides incentives to different governmental healthcare sectors.

A government-led project of reform that supports goals of improving the quality of healthcare in the Kingdom, reducing costs and maintaining funding for universal healthcare coverage in the future. Reforms should consider using a mixture of different payment models to pay hospitals and physicians<sup>1,5</sup>

One major effort by the government to increase industry efficiency is moving healthcare providers into 'Accountable Care Organisations' (ACOs), which will eventually include a risk-adjusted capital funding model<sup>16</sup>. To start, each ACO

is provided a fixed budget and tasked with managing all health and social care for patients as well as the authority to allocate system resources to their population's needs.

The goal for the ACOs is to address three key issues within the healthcare system. The first is insufficient or poorly distributed capacity across primary, secondary, tertiary, and other services. The second is service quality and efficiency deficits, including workforce productivity. Finally, the third is unwarranted variation across or within each ACO.





## The role of AI in generating more cost-effective healthcare outcomes

Artificial intelligence (AI) offers the healthcare industry digital-first approaches to reduce costs while improving patient outcomes. The government is leading the way on this initiative by exploring a variety of opportunities to aggressively meet the Vision 2030 goals.

Nala, Saudi Arabia's leading digital health service, recently launched its AI platform that enables instant medical diagnosis. The platform provides users with an accurate medical diagnosis in seconds<sup>17</sup>

Public-private partnerships are being leveraged to drive greater adoption of advanced technology. For example, the Saudi Data and Artificial Intelligence Authority (SDAIA) has partnered with Royal Philips to further support the Kingdom's goal of becoming a leader in driving AI in healthcare.

The intention is to develop integrated solutions that improve the performance and productivity of healthcare systems<sup>18</sup>



In addition, the University of Oxford and King Abdul Aziz University are creating the first joint international innovation center for Al and precision medicine.

Operating from both universities, the new center will bring together senior AI researchers to develop innovative and creative treatments for rare, metabolic, and cardiac diseases<sup>19</sup>

Specialist teams will include biochemistry, medicine, pharmacology, epidemiology, IT, bioinformatics, and data science.

While there is room to increase healthcare operational efficiency and reduce the cost of delivery, the breadth and variety of initiatives undertaken by the government are already providing the leadership necessary to ensure the future of the Kingdom's healthcare industry remains world class.



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