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Saudi Healthcare

Government led growth

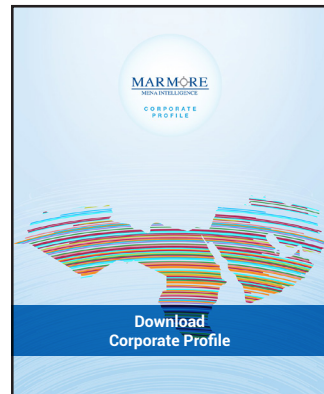
Research Highlights:

Examining the status of Healthcare sector in Saudi Arabia highlighting the key indicators, growth drivers and future investment areas.



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Executive Summary

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Saudi Arabia is a strategic market for any company that is looking to enter the into the country's healthcare sector. Increasing population and incidences of lifestyle related diseases are the reasons for Saudi Arabia being priority market. Public healthcare expenditure as a percentage of GDP is one of the highest in KSA and it is expected to continue this trend for the next few years. Almost 60% of the hospitals operating in the Kingdom are run by the Ministry of Health (MoH), which strains government finances. Treatment at government hospitals are available free of cost for the nationals.

Saudi Arabia took introduced mandatory health insurance for expats working in the private sector in 2005. In 2015, Saudi Arabia made health insurance mandatory even for the visitors to the country, with a few exceptions. Saudi Arabia plans to enforce similar schemes to its own citizens to help reduce the burden from healthcare expenditure which potentially opens up a huge opportunity for health insurance providers. The current health insurance market is fragmented with 24 companies operating and 50% of the market share held by top 2 companies, Tawuniya and Bupa Arabia, which makes Saudi Arabia a perfect target for consolidation.

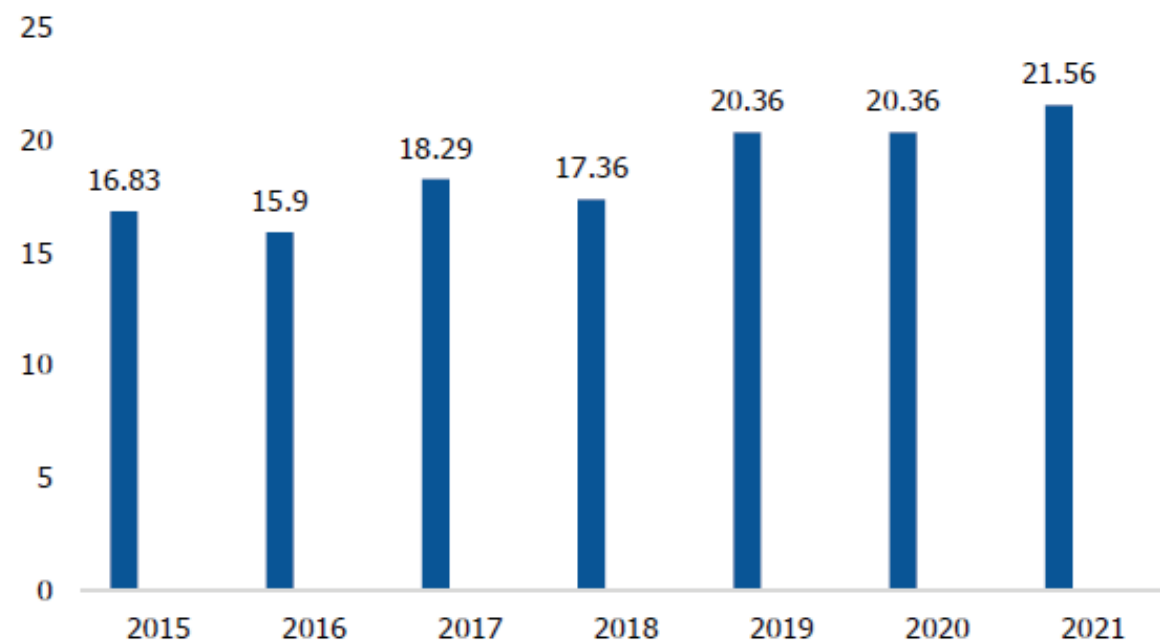
Pharmaceutical and medical devices are entirely depend on imports, and a major portion of the medicines sold in Saudi Arabia are patented drugs. Pharmaceuticals in Saudi Arabia is heavily regulated by the Saudi Food and Drug Authority that extensively tests the medicines and devices apart from the pricing the drugs. Despite stringent regulations, Saudi Arabia's huge population (35Mn in 2020¹); prevalence of lifestyle related diseases such as diabetes, obesity and heart related ailments make it one of the largest market for pharmaceuticals in the GCC region. Saudi Arabia falls below the international standards in terms of availability of beds, doctors and nurses etc. In order to improve the facilities and plug the gap in healthcare infrastructure, the government has been increasing its budget allocation to the segment in the past decade.

¹ Central Department of Statistics and Information

Healthcare Market Overview: Improving facilities with government spending and investments

Chapter 2

Figure 1.1: Budget Allocation for MoH (USD bn)



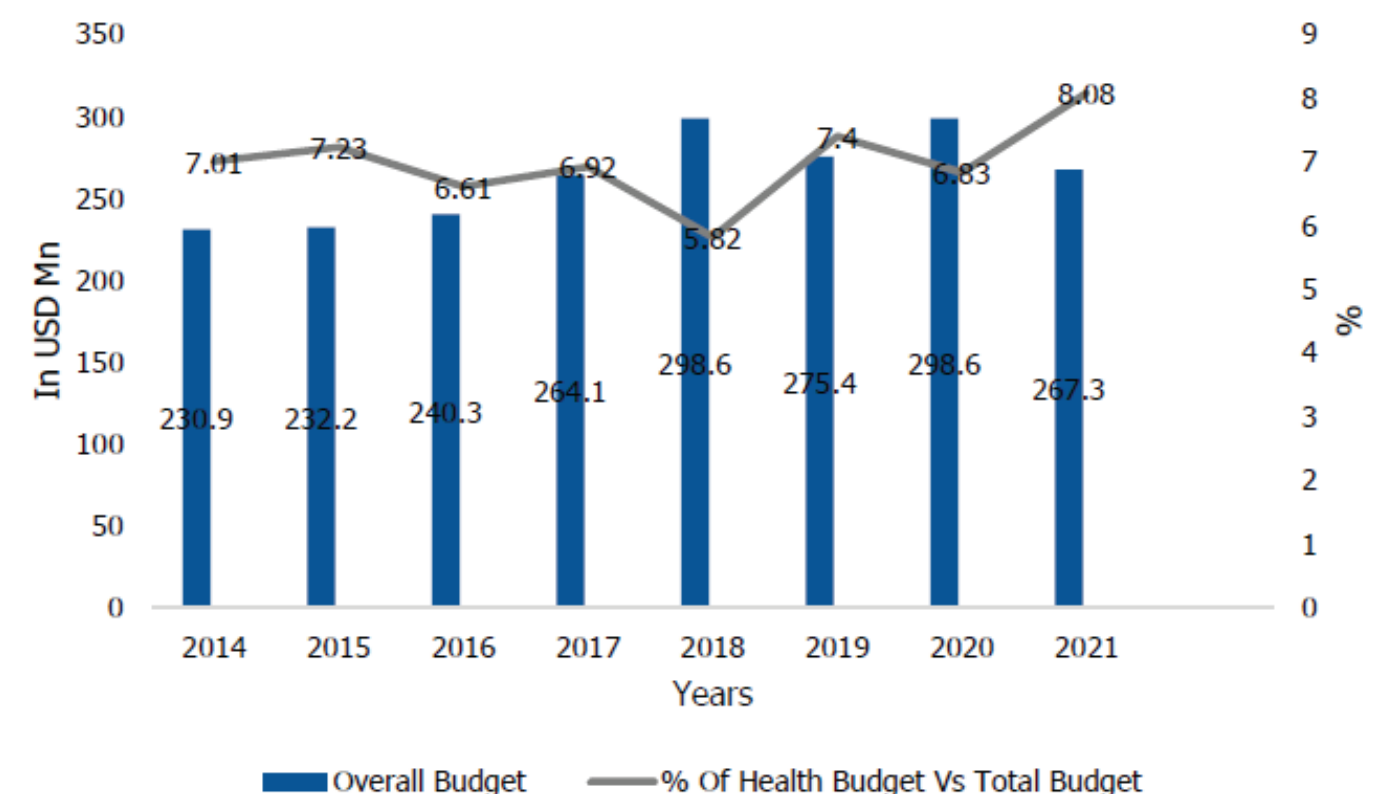
Source: MoH

Saudi Arabia has a higher number of expatriates working in the healthcare space, acute shortage of local talents being one of the key reasons for higher expatriates in the workforce. Saudi Arabia has started investing in medical colleges and universities to reduce its dependence on expatriate work force. Saudi Arabia holds huge potential to be a game changer in the GCC region owing to its huge population, encouraging new investments and enacting new laws that are business friendly for international players to enter into the sector. However, companies investing in Saudi Arabia should carefully consider the laws that govern their business. Getting a local partner onboard would help a great deal in tapping its potential to its maximum.

Saudi Arabia offers three levels of healthcare service – primary, secondary and tertiary – the nature of treatment offered increases in complexity to match the nature of the patient's complaints as one moves to higher levels. Primary healthcare is typically offered at Primary Healthcare Centers (PHC), that are similar to clinics; secondary and tertiary care is offered at hospitals and specialized hospitals respectively. In 1980s the Kingdom began focusing on preventive healthcare in addition to curative healthcare during which period many primary healthcare centers were developed.

Saudi Arabia has witnessed substantial improvements in healthcare facilities available in the last decade mainly on account of increasing government investments in healthcare sector. Public sector expenditure constituted almost 60% to 80% of the total health care expenditure in KSA unlike in the emerging and developed economies where it is about 40% or even lower in the last ten years. Among the GCC nations, Saudi Arabia ranked first in terms of health expenditure as a percentage of GDP at 6.4 % in 2018.² GCC region as a whole expensed 3% of its GDP on healthcare in 2019. MoH runs 57 % of the hospitals within Saudi Arabia, which explains the reason for higher healthcare expenditure in the country.

Figure 2.1: Total Budget and Budget Allocation for Healthcare³ (In Billion USD)



Source: MoH

² World Bank

³ Total budget is the Budget for the country.

Healthcare Infrastructure: Yet to match international standards

Though higher public sector expenditure facilitated the growth of healthcare sector and provided better facilities to the people, it would be difficult for the government to sustain the same budgetary allocation in the coming years as oil prices have fallen by 31% from USD 75 per barrel currently compared to USD 108 per barrel in June 2014. The government has proposed to spend USD 21.5Mn in 2021 for health and social development, 7.82% % of the total government budget, a marked increase of 5.4% over the 2020 budget.

However, there is a need to increase and improve the healthcare facilities in the country as the average age of the population will increase in future and lifestyle related diseases are on the rise. Demands and expectations of the patients for better facilities and quality healthcare is escalating as patients who have travelled abroad for healthcare expect better facilities in the home land as well. The situation presents a need as well as an opportunity for the development of private healthcare in Saudi Arabia. Government's initiative and provision of a conducive environment would be the key for emergence of private sector and development of the healthcare sector in the future.

Table 2.1: Saudi Healthcare Spending (Public and Private)

	2007	2013	2015	2018f
GDP, current (USD bn)	415.96	744.3	770.6	870.98
Health expenditure – Public/Private				
Public	75%	64%	58%	54%
Private	25%	36%	42%	46%
Health expenditure				
Public (% of GDP)	2.71%	2.03%	3.85%	3.70%
Public (USD Bns)	11.27	15.11	29.67	32.23
Private (% of GDP)	1.04%	1.13%	2.83%	2.70%
Private (USD Bns)	4.33	8.41	21.81	23.52

Source: World Bank

Despite developments in healthcare facilities and growth of the sector in the past, health care infrastructure in Saudi Arabia needs to be elevated to match the international standards. Saudi Arabia lags behind countries such as the U.S, United Kingdom and Singapore when compared to number of beds, physicians and staff nurses available for 1,000 persons.

Table 3.1: Major Health Resource Indicators for KSA

Indicator (per 10,000 population)	2018	2019	2020
Physicians	26.4	27.6	27.2
Dentists	5.0	5.5	5.6
Pharmacists	8.7	9.3	7.9
Nurses	55.2	58.2	56.2
Allied health professional	37.2	36.1	35.4
MoH primary health care centers	0.7	0.66	0.64
Hospital Beds (all sectors), KSA	22.5	22.5	22.4
MoH hospital beds	13.1	13.1	12.9
Other governmental sector hospital beds	3.8	3.8	4.0
Private hospital beds	5.6	5.6	5.5

Source: MoH, KSA

Snapshot of healthcare infrastructure in KSA

Hospitals - Saudi Arabia's healthcare system is largely controlled by the Ministry of Health (MoH). Saudi Arabia allocated close to 7.4 % of its state budget in 2020 to MoH⁴. As of 2020, the MoH operated 287 hospitals and private sector operated 167 hospitals.

Pharmaceuticals – The Saudi Pharma market has grown by almost 5% CAGR to reach 8.2 Bn \$ in size in 2018. The KSA market is expected to grow at a 5% rate each year until 2025 to reach \$10 Bn. Contribution of KSA to MENA region is expected to increase and reach 30% by 2025.⁵ Patented drugs are usually more expensive than generics, owing to huge R&D costs involved in developing these drugs. Domestic pharmaceutical industry lacks sophisticated R&D environment. With lack of local players in pharmaceuticals, Saudi Arabia remains as one of the most important markets in the GCC region for international pharmaceutical companies to export their products.

⁴ MoH

⁵ National Industrial Developmental Centre

Medical Equipment – Saudi Arabia's medical devices market is estimated to be close to USD 2250Mn in 2017 and is expected to reach USD 3870Mn at a CAGR of 9.5% by 2023. It has the largest market in the region⁶. Saudi Arabia imports almost all of its medical devices from abroad.

Healthcare Personnel – Saudi Arabia has one of the highest percentages of expatriates working in their healthcare industry. Among the 55,880 physicians working for MoH in the country, only 40.3% were Saudi nationals in 2020. With increasing number of public and private hospitals being established, demand for healthcare personnel is on the rise and subsequently their salaries as well. Saudization of workforce is cumulating the pressure of finding human resources for the healthcare jobs.

Healthcare Insurance – The health insurance market accounted for 58.9% of total insurance market in Saudi Arabia in 2020. Overall Saudi Arabia's insurance market in terms of Gross Written Premium (GWP) was at USD 10.47 billion in 2020. Other general insurances accounted for 37% and P&S (Protection and Savings) insurance formed the rest 3% of the market value. GWPs in all Health and General insurance grew at a CAGR (2016-2019) of 4.89% and -4.28%, respectively⁷. Healthcare insurance is expected to proliferate more among the Saudi population in the future with increasing awareness and government policies that are inclined towards having mandatory health insurance for nationals as well.

Table 3.2: Major Health care indicators, Government vs Private

MoH hospitals	2016	2017	2018	2019	2020
Physicians (incl. dentists)	42,768	46,605	49,708	53,982	55,880
Nurses	1,01,256	1,03,990	1,05,473	1,07,092	1,07,846
Pharmacists	3,525	3,853	4,006	4,221	4,358
Allied health professional	5,7474	59646	69,530	71,284	71,838
Hospital Beds	41,835	43,080	43,680	44,665	45,180

Private hospitals	2016	2017	2018	2019	2020
Physicians (incl. dentists)	29,701	33,840	35,481	39,017	37,076
Nurses	42,638	45,895	43,395	47,773	44,568
Pharmacists	19,309	22,155	22,467	24,711	20,411
Allied health professional	19,978	22,001	23,925	26,303	25,094
Hospital Beds	17,428	17,622	1,88,83	1,91,46	19,427

Source: MoH, KSA

⁶ Medgadget

⁷ Saudi Insurance Report, Marmore (2020))

Government expenditure and focus of investments in infrastructure was the major driver for the construction of hospitals and multispecialty centers in KSA. Apart from government's efforts, major organizations such as Saudi Aramco invested in developing healthcare infrastructure to cater to the needs of their employees.

Saudi Arabia's healthcare infrastructure is dominated by public sector hospitals. Saudi Arabia spent 6.8%%⁸ of GDP on health in 2020, well below the 10.69% average in the group of high-income countries to which it belongs. The gap in expenditure can mainly be attributed to the lack of private investments, which is the major driver for healthcare facilities in countries such as USA and UK. There were 22.4 hospital beds in the kingdom per 10,000 population in 2020; far short of the average of 56 beds among high-income countries in 2015. Saudi Arabia had 32.8 physicians per 10,000 population in 2020; almost equal to the 27.1 average among high-income countries in 2015. In 2020, there were two nurses for every physician employed at MoH hospitals in the KSA which is in comparison to two nurses for every physician globally as well¹⁰. Although Saudi Arabia is well placed relatively amongst its neighbors in terms of healthcare infrastructure, it falls far behind the world average. Private sector hospitals account for just 25 % of the total beds available for patients in the country. This clearly indicates the opportunity for private players to expand their presence in the sector in the coming years.

Saudi Arabia is placed 39th in the ranking of efficiency of healthcare systems around the world (based on life expectancy, healthcare expenditure as a proportion of GDP, and healthcare costs per capita)¹¹.

Despite efforts, Saudi Arabia's healthcare systems are still struggling with capacity gaps. There is a shortage of healthcare professionals and limited availability of competent specialized services.

Private participation in healthcare services can help to bridge the gap. In terms of financial stimulus, the government can choose from multiple alternatives to offer incentives to private players. The government can guarantee the private sector to raise financing for projects. Public private partnership projects are expected to help increase private participation. The government of Saudi Arabia has conducted studies in developed countries to understand the functioning of PPP projects and implement the same in KSA.

One such PPP project is the Saudi Trans Sadara Company and China International Development and Investment Corporation Limited (CIDIC) joint venture to build four private hospitals in Dammam, Jubail, Riyadh, and Jizan, with a total project cost of USD 0.35 billion. These hospitals are fully operational from the end of 2017 and has generated over 2,000 jobs for young Saudi nationals in the fields of nursing, procurement, marketing, administrative affairs, pharmacy and safety and security. Similar initiatives in the sector can come handy for the government to tackle the increasing demand for healthcare services in the country.

⁸ Deloitte

⁹ WHO

¹⁰ MoH, KSA

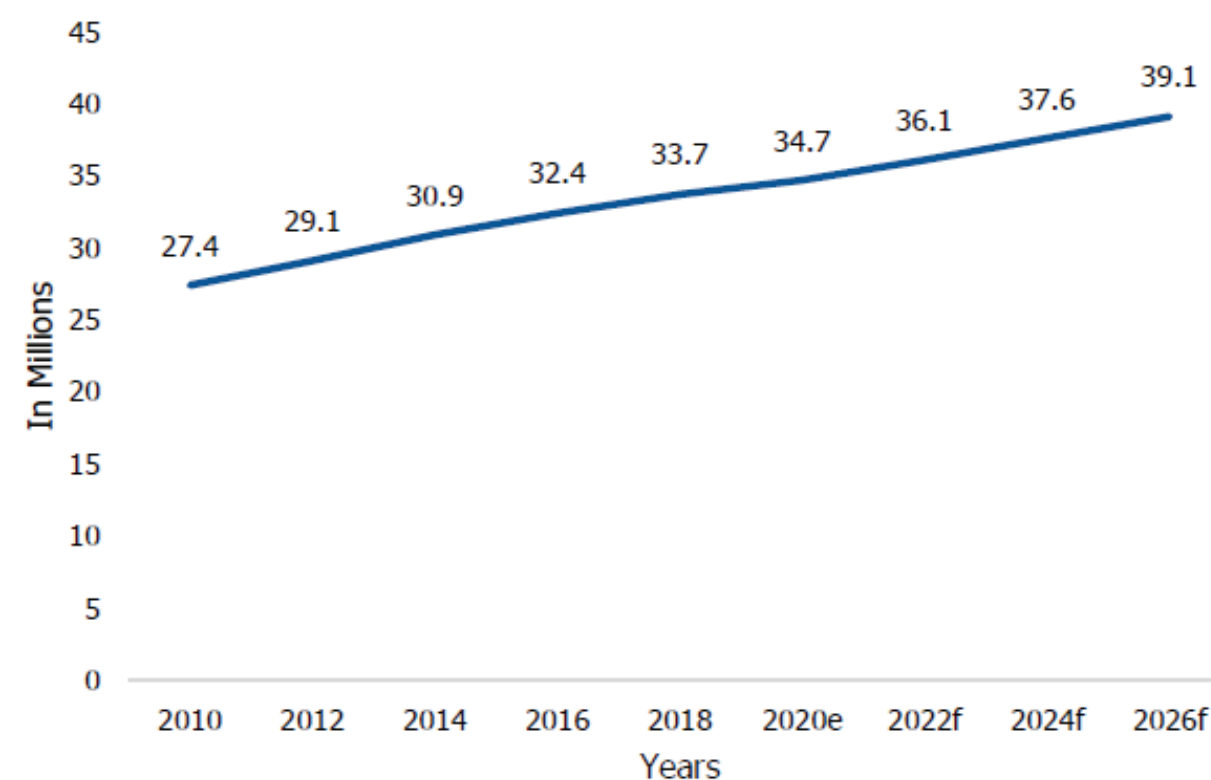
¹¹ Bloomberg

Demography and lifestyle driving the demand

Population growth: Expected to reach 38 Mn in 2025

Saudi Arabia's population is expected to increase to 39 Mn by 2026 from 34 Mn in 2019 at CAGR of 2%. As the population increases, the need for healthcare facilities and services will surge in the coming years.

Figure 4.1: Population of Saudi Arabia

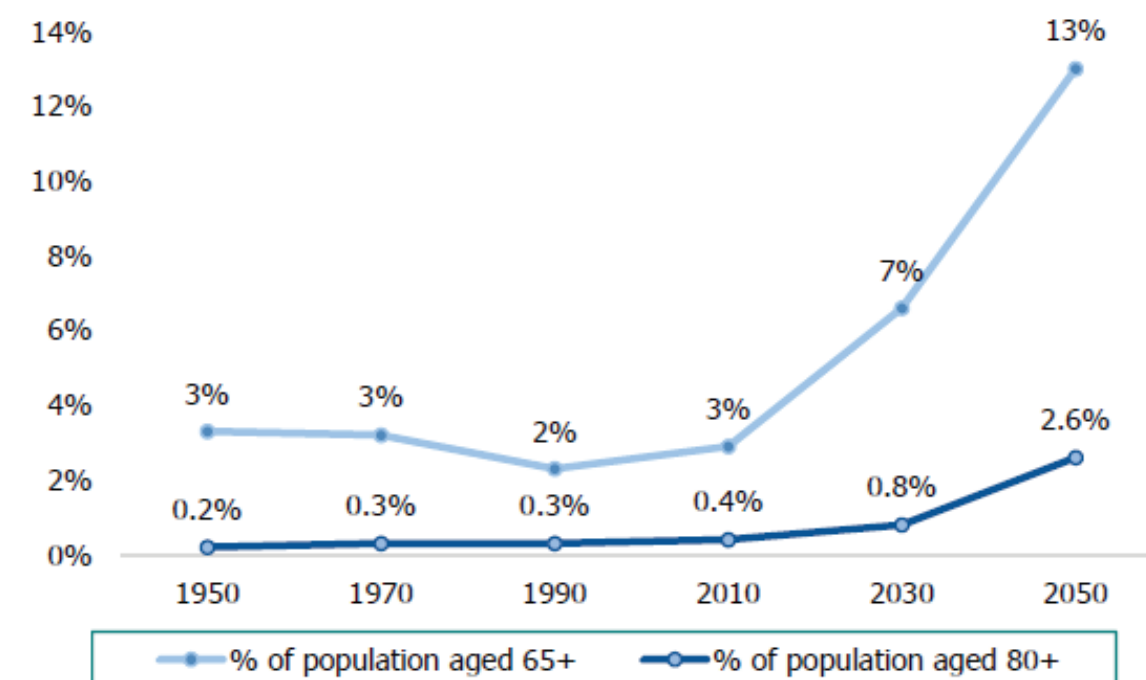


Source: World Bank

Demographic factor is one of the key drivers for healthcare services in the Saudi Arabia¹². A rapidly growing and ageing population significantly drives healthcare spending. More than 50% of the population in KSA will be in the age group of 25-64 years in 2025. The proportion of population aged 60 or more is expected to be around 25 percent of the total population of 40 million by 2050. The number of people aged 80 or more is expected to reach 1.6 million (4% of the total population). The dependency ratio in the Saudi economy is expected to increase to 52 percent in 2050 compared with 46 percent in 2015. The ageing population not only indicates the need for increasing healthcare but also indicates the need for people to cover their health expenses by obtaining health insurance, especially with an increasing dependency ratio.

¹² SAMA working paper

Figure 4.2: Proportion of old age Population as compared to total Population



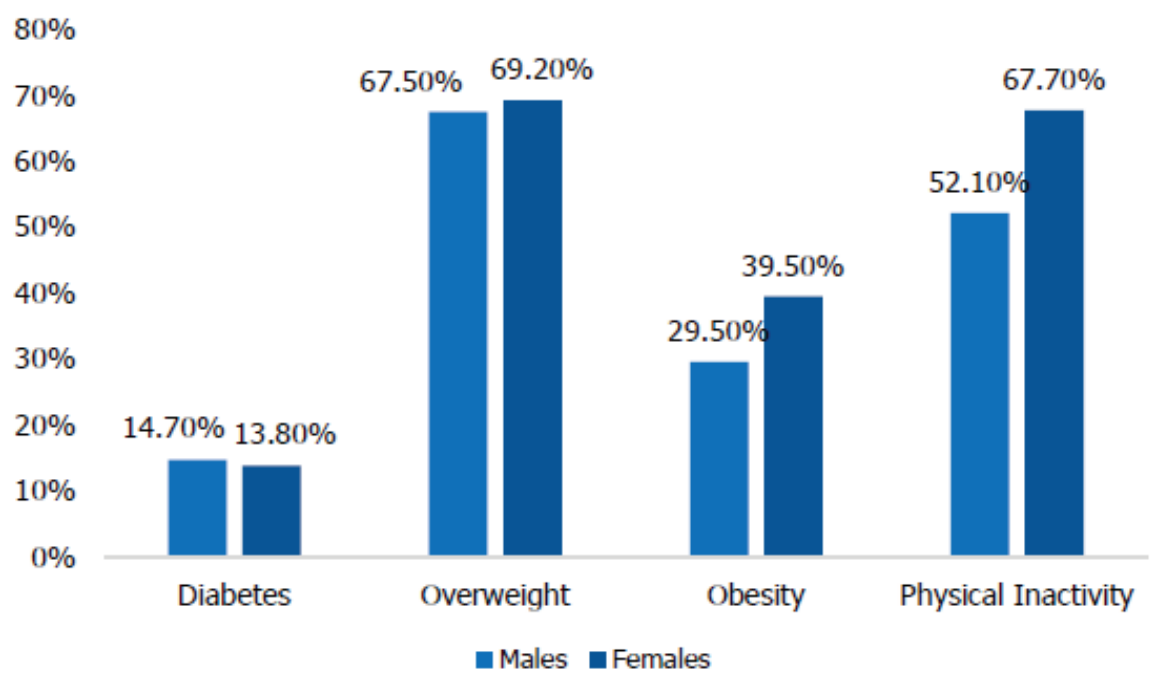
Source: UN World Population Prospects

Prevalence of lifestyle diseases: alarming incidence of obesity among children

The rapid economic growth over the past three decades in Saudi Arabia has caused vast changes in the lifestyle of citizens. Unhealthy diet and a sedentary lifestyle has increased the number of people suffering from obesity and diabetes. The number of diabetic people in Saudi Arabia is expected to rise to 2.5 Mn by 2030.

About 14.4% of the adult population aged between 20-79 years are diabetic in Saudi Arabia. Diabetes has side-effects on other vital organs of the body such as heart and blood vessels, eyes and may even lead to kidney failure. Heart diseases and diabetes have been the leading cause of death among males in the country. Diabetes and its after effects such as blood vessel damage, Glaucoma, Cataract, kidney failure etc. require the patients to have constant medical treatment which is expected to increase the need for medical care.

Figure 4.3: Prevalance of diabetes and causal factors in Saudi Arabia (2015)



Source: WHO

Obesity and overweight has affected around 75% of the population in Saudi Arabia. It has been observed that women are at a higher risk than men.

Table 4.1: Obesity Rates by Age group

Age group	Obesity rates
Children (5-18)	11.3%
Males (Above 20)	29.5%
Females (Above 20)	43.5%

Source: Management of obesity: Saudi Clinical Guideline, WHO 2013.

The alarming incidence of obesity among the children is a major concern in Saudi Arabia. The obesity rate for school-age children is 9.3% and for pre-school children it stands at 6%. Bariatric surgeries conducted have increased on children below the age of 14. It comes in contradicition with the norm in US that bariatric surgery needs to be condcuted only for people above the age of 14. Though this surgery results in immediate reduction in weight, it is not sustainable in the long run if the patient doesn't maintain a healthy lifestyle apart from the fact that side effects of such a surgery are not clearly known till date.

Lower healthcare expenditure

KSA spends just 14 % on healthcare per capita of what US does

KSA has the lowest per capita total expenditure on health when compared to most of the developed regions of the world. The per capita healthcare expenditure was the highest in the US at USD 10,623 followed by Germany and Canada. The per capita healthcare expenditure of Saudi Arabia is among the lowest in the GCC region with the exception of Oman and Bahrain . With current levels of health care expenditure being low compared to other high income countries such as USA and Germany, and increasing demand, expenditure in healthcare can be expected to rise. More spending on healthcare infrastructure and facilities, especially from the private sector is expected to raise the standards of healthcare services.

Table 4.2: Per capita Health care expenditure, 2018 (in USD)

Country Name	Per Capita expenditure
United States	10,623
Germany	5,472
Canada	4,994
United Kingdom	4,315
Japan	4,266
Qatar	1,716
United Arab Emirates	1,817
Kuwait	1,711
Bahrain	994
Saudi Arabia	1,484
Oman	678

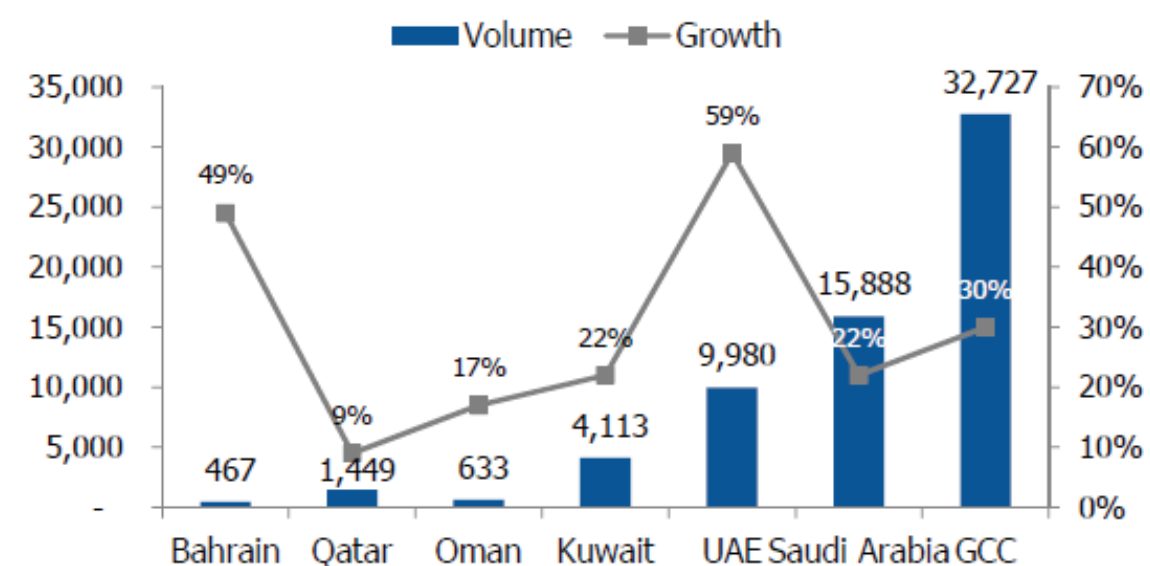
Source: World Bank

Medical Development and Infrastructure in GCC

The gradual improvement of health care infrastructure and standards in the kingdom along with increasing insurance penetration should result in surge in number of patients opting for treatments locally rather than travelling to other countries, thereby increasing the requirement for hospital infrastructure. For private-sector investors, however, hospitals and medical facilities represent a capital-intensive challenge. There is usually a long gestation period before medical facilities can start generating revenue and an even longer payback period. The health authorities in GCC countries act as the main providers of care, making it difficult for private-sector players interested in competing. The Ministry of Health in Saudi Arabia operates almost 60% of hospitals in the

country. However, in the current economic situation, the government has started to encourage private sector participation through PPP projects.

Figure 4.4: Number of Beds required up to 2018*



Source: Frost & Sullivan; Note: Growth rate computed for 2013-2018 period

Saudi Arabia would require 15,888 beds in 2018 accounting for almost 50% of the requirement in GCC. The health ministry in KSA recently launched an ambitious program to build 42 new hospitals with 13,645 beds in the next five years. Largest hospital project in pipeline is USD 6.7 billion King Abdullah Bin Abdulaziz Project for the Development of Security Forces Medical Complexes in Saudi Arabia. Despite government's efforts, private players' participation would be required to bridge the gap in the infrastructure requirements.

Effect of Covid-19 and MoH's response

By the end of December 2019, China witnessed a widespread of acute pneumonia cases, later known as Coronavirus disease 2019 COVID-19. Thereafter, countries around the world started preparedness and response efforts, in different ways at different times, in an attempt to limit the spread of COVID-19. The first case was confirmed in the country on March 2nd 2020. As of May 2021, the total cases reported in the kingdom exceeded 450,000. The Kingdom of Saudi Arabia was one of the first countries that started precautionary and preventive measures and anticipated the danger of this disease, which turned into a global pandemic within a short period of time. The Kingdom did not limit its efforts to curb COVID-19 to the local level, as it also expanded them to the international level, given its political, strategic, and economic roles. These are evident with the Kingdom's leadership role during its presidency of the G20 for the year 2020. Moreover, several international bodies and media channels praised the Kingdom's efforts at the national and international levels to strengthen response, develop a treatment, and ensure the availability of preventive equipment, as well as its \$500 million contributions to support global efforts to curb the pandemic. This support is part of the Kingdom's commitment to fund international organizations according to the agreements announced

at the G20 extraordinary summit initiated by the Kingdom. The Kingdom of Saudi Arabia participated in the Pledging Conference hosted by the European Commission and led by the World Health Organization (WHO) to advance the work of Access to COVID-19 Tools (ACT) Accelerator, as a member and one of the founders of this landmark Global Initiative, which espouses the shared commitment of all partners to equitable global access to innovative tools for COVID-19 for all. The launch of the Act Accelerator has catalyzed an unprecedented level of the partnership of key actors and relevant stakeholders across sectors, to align and coordinate efforts in pursuit of the accelerated development, production, and equitable access to new COVID-19 diagnosis, therapeutics, and vaccines, thus ensuring that in the fight against COVID-19, no one left behind.

Owing to the experience that the Kingdom accumulated over the years in risk management and assessment to secure national and global health, ensure the security and the safety of Hajj and Umrah pilgrims every year, and develop a highly efficient health system, and to its previous experience in curbing the Middle East Respiratory Syndrome (MERS-CoV); the Kingdom took several early, evidence-based precautionary measures at the highest levels. The Kingdom's success in "flattening the epidemic curve", thanks to the strict measures it took early based on scientific evidence and previous experiences, the attack rate in the country was 9 cases per 1,000 population, tests were conducted at a rate of 13,000 tests per 100,000 population, and the case fatality rate was at 1% compared to 3.47% globally, as of August 23, 2020. Since the beginning of the pandemic, the Kingdom has based its decisions on the risk assessment of the COVID-19 spread at the international and domestic levels. The "Jeddah Tool" was used to conduct a strategic assessment of the health risks of Umrah and Hajj due to the pandemic. This assessment revealed that the risks of Umrah were "extremely high". Accordingly, a recommendation was made and a decision was issued to suspend Umrah. "Salem COVID Tool" was used to assess the health risks of COVID-19 in mass gatherings and events, which resulted in the cancellation and suspension of many events before a curfew was imposed. "Jeddah" and "Salem COVID" tools are scientific risk assessment tools that the Ministry of Health's Global Center for Mass Gatherings Medicine (GCMGM), a WHO collaborating center, developed based on scientific methods and reviewed and studied its application several times.

Covid-19 Vaccination Campaign

Saudi Arabia launched its national coronavirus vaccination drive on December 17 2020 after the Saudi Food and Drug Authority (SFDA) approved the Pfizer-BioNTech vaccine. It was one of the first nations in GCC to launch Covid-19 vaccination campaign by the month of December 2020. Since then, the AstraZeneca-Oxford Covid-19 vaccine has also been approved. The first phase of the campaign was only open to people over the age of 65, those who suffer from chronic disease, and those who work on the frontlines of the pandemic.

From February 2021, the second phase of the campaign began where all citizens and expatriates were eligible to receive the jabs. As of May 2021, more than 13.9 million covid-19 vaccine doses have been administered. At least one dose of vaccine was given to 40% of the Kingdom's population.

Overview of Health Insurance in Saudi Arabia

Health Insurance Penetration in Saudi Arabia: Ample scope for growth

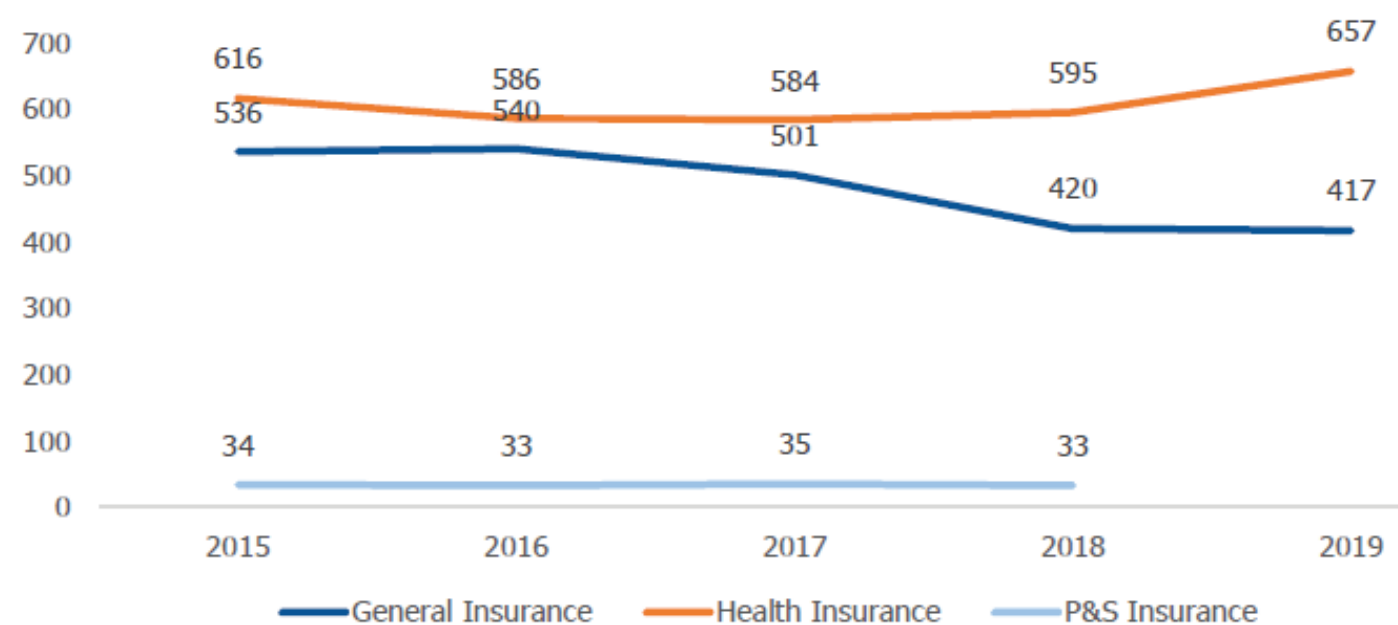
Health insurance penetration measures the ratio of GWP (for Health) to total GDP. Health insurance remained the largest line of business in 2020. It accounted for 58.9% of the 2020 total market GWP. The gross written premiums (GWP) of health insurance have increased from USD 9.7 Bn in 2015 to USD 10.4Bn in 2020. The insurance penetration in Saudi Arabia has increased from 1.28% in 2019 to 1.48% in 2020 due to increase in premiums.¹³ Health insurance penetration remains low at 0.8% of the GDP in 2019, indicating ample scope for the growth of health insurance in the country.

Table 5.1: KSA Insurance Penetration by Segment and growth

Insurance Penetration	2015	2016	2017	2018	2019	2020
General Insurance	0.67	0.71	0.64	0.48	0.48	0.56%
Health Insurance	0.77	0.77	0.74	0.68	0.76	0.87%
P&S Insurance	0.04	0.04	0.04	0.04	0.04	0.05%
Total Insurance		1.52	1.42	1.19	1.27	1.48%

Source: SAMA – General Insurance Supervision Division

Figure 5.1: Insurance Density (Health, General, P&S)



Source: SAMA Insurance Report - 2019

¹³ Insurance penetration as a % of GDP = Gross Written Premiums/ GDP

Current Insurance Market Sector after the onset of Covid-19

In the first half of 2020, while most of the industries have shown slowdown in growth and declining profits amid Covid-19 pandemic, the insurance industry in Saudi Arabia sustained its performance, and in fact reported a marginal growth. This was possible for a healthcare and motor heavy insurance sector, where the government stepped in at the very early stage of the pandemic to relieve insurers of their obligations. The government paid for the treatment of all Covid-19 patients including citizens, residents and even violators of residency laws. Moreover, an extended lockdown in major cities had restricted the mobility of most citizens and residents, resulting in a sharp decline in the motor claims during the second quarter of the financial period. Consequently, insurers have seen an overall growth of 5.9% in gross premiums in first six months of 2020 compared to the same period in 2019 with a drop (improvement) of 12.4% in loss ratios being reflected in the net income, despite a regulatory extension of two months in motor policies endowed by SAMA. Looking ahead, the focus of the Saudi insurance market is consistent with the global one; pursuing the journey of regulatory and accounting change, product innovation, and enhancing distribution channels and efficiencies in the conduct of business. The implementation of IFRS 17 is at the core of harmonizing the accounting rules where the effective date has recently been pushed out by a year to 1 January 2023. This delay has been largely welcomed by market players as it gives an opportunity to clarify and implement the rules without a haste and business interruption. It also allows the insurance companies to refine their systems and educate investors on the expected changes in the financial results. Currently Saudi Arabia's insurance market structure is fragmented with 33 companies operating, out of which 25 are listed on the Saudi Stock exchange. The top two companies, Tawuniya, Bupa Arabia, account for 50%% of the market share. For individuals, selecting a health insurance player in such a scenario comes down to the question of cost vs. quality – bigger health insurance players offering prompt service at a higher cost; smaller players forgoing quality for lower prices.

However, Saudi Arabia's monetary agency, SAMA has tightened regulations in the insurance industry which are expected to trigger a wave of consolidation. Pursuant to the issuance of the Rules for Licensing and Supervision of Branches of Foreign Insurance and/or Reinsurance Companies in Saudi Arabia allowing foreign companies to operate in the Kingdom via branch operations, initial approval was granted to a foreign insurance company to open a branch in the Kingdom.

Saudi Arabia mandates compulsory health insurance for expatriates and visitors. On the other hand, various awareness creation measures have been initiated to encourage nationals to insure life and health. Medical support from the government can also be expected to decline in the coming years.

Takaful Market: KSA has lion's share of 85%

According to IFDI annual report for the year 2020, Global takaful assets grew 10% to US\$51 billion in 2019, expanding on just 1% growth in 2018. Takaful contributions rose 8.8% in Saudi Arabia, the world's largest market for Islamic insurance, providing the industry with a much-needed boost after several years of losses.

Pharmaceuticals Market in Saudi Arabia

New business mainly came from the medical line following the introduction in 2018 of mandatory cover for dependents of Saudi nationals. Takaful operators in other GCC markets saw even higher growth in 2019, with contributions rising 14% over the year. Growth was seen across several business lines and there was an improvement in profitability of investments. However, this growth proved to be short-lived once the Covid-19 pandemic took hold, as the lockdowns and closures of businesses significantly reduced insurance and takaful sales and profits. Takaful operators in the GCC are facing challenges on multiple fronts – from the economic slowdown, greater competition, and raised minimum capital requirements. This is likely to lead to industry consolidation, particularly in Saudi Arabia, which accounts for 85% of the region's takaful contributions.

Market highly dependent on Imports

Due to low domestic pharmaceutical production in Saudi Arabia, approximately 85% of the drugs sold are imported. There are approximately 200 pharmaceutical companies (mainly retailers) in Saudi Arabia, registered with the Ministry of Health. The market is largely dominated by European suppliers. There are around 20 local pharmaceutical companies predominantly manufacturing generic drugs catering to 25% of the medicinal needs in the country.

According to National Industrial Development Centre (NIDC) report, the Saudi Pharma market is looked at as one of the fastest-growing markets today with strong export potentials to serve MENA14 and OIC (Organization of Islamic Countries) with a total market of USD 120Bn. The Saudi Pharma market has grown by almost 5%15 CAGR to reach USD 8.2Bn in size in 2018. The KSA market is expected to grow at a 5% rate each year until 2025 to reach USD 10Bn. Contribution of KSA to MENA region is expected to increase and reach 30% by 2025. Saudi Arabia is in the heart of the Islamic world, besides, leveraging on Saudi Arabia's geographical position, and the support of Saudi Export Development Authority and EXIM bank program, Saudi Arabia can boost the pharma exports to MENA region and to the rest of the world. In addition, King Salman Humanitarian Aids & Relief Center for donating in-kind donation to stimulate the pharma exports. Saudi Government is aiming to increase the number of visitors to Hajj & Umrah to reach 30 million by 2030, which will boost the demands of Pharmaceuticals worldwide.

Opportunities for generic drug makers

Over 70 percent of all prescription drugs sold in Saudi Arabia are patented. Patented drugs are usually more expensive than generic drugs owing to R&D and compliance cost involved. Growing population and increasing instances of lifestyle related diseases opens up a huge market for generic drug makers. Expected decline in government support for healthcare in the coming years can also fuel the generic drugs market as patients might become more cost conscious. Local players such as Saudi Pharmaceutical Industries & Medical Appliances Corporation (SPIMACO) and Tabuk Pharmaceuticals started their business as importers and distributors of pharmaceuticals.

Regulation

The regulation of drugs, cosmetics and other pharmaceutical products are done by the Saudi FDA (Food and Drug Authority). In order to distribute medicines in Saudi Arabia, the company has to register with the Saudi MoH and must comply with the standards established by Saudi Arabian Standards Organization. Prices are highly regulated and the companies should strictly adhere to the pricing requirements before being sold through local agents.

¹⁴ National Industrial Development Centre report

Medical Equipment Market – Strong growth forecasts

Saudi Arabia Medical Devices Market size was valued 2250 million in 2017 and is expected to reach USD 3870 million at a CAGR of 9.5%¹⁵ by 2023. The healthcare sector and medical devices industry is changing robustly due to advancements in neurology, cardiology, orthopedics, medical imaging, and oncology. The robust advancements in the ECG, pacemakers, and other devices including brain monitoring devices, are benefiting several patients. Owing to its efficiency, the adoption of these devices is higher. Additionally, the emergence of 3D imaging for orthopedic treatments is benefiting growth of the medical devices market in Saudi Arabia.

The medical device industry is growing with pace due to continuously changing technology and innovations. The medical devices industry also resulted in huge growth due to the employment of several new technologies in the devices catalyzing market growth. Additionally, the introduction of newer products is estimated to benefit market growth and witness the most worthwhile opportunities in the coming years. The other factors driving the market growth are robust investment by private, and the public sector is fueling growth of the medical devices market. Increasing patient pool in the region is creating need for advanced healthcare, which is augmenting growth of the market in the region. Further, rising geriatric population in the region, which require advanced care is estimated to benefit the market growth in coming years.

Saudi Arabia Medical Devices Market Competitive Analysis:

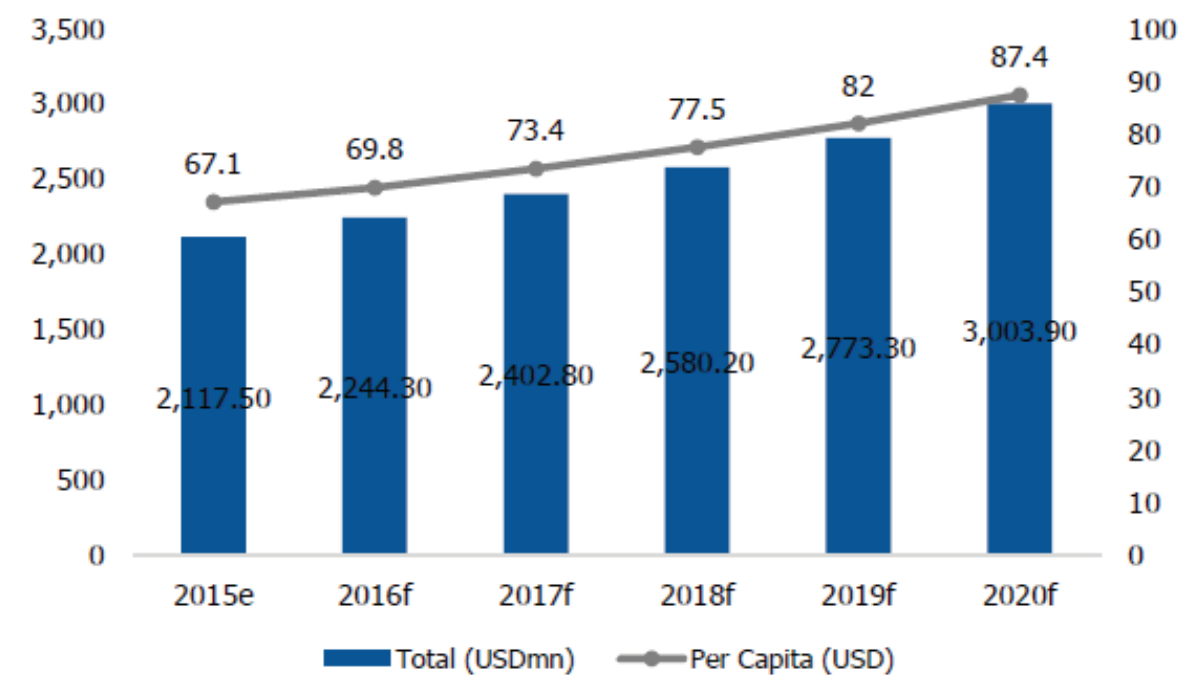
Some of the key players in the Saudi Arabia medical devices market include

- General Electric
- Johnson & Johnson
- Medtronic
- Baxter International
- Koninklijke Philips Electronics NV.
- Fresenius Medical Care AG & Co.
- Al-Salehiya Medical Establishment
- Cardinal Health
- Saudi Pharmaceutical Industries & Medical Appliances Corporation (SPIMACO)
- Al Faisaliah Medical Systems (FMS)
- Al Amin Medical Instruments Company (AMICO)
- Siemens Ltd

¹⁵ Medgadget report.

In March 2019, the government of Saudi Arabia announced foreign companies could manage and own healthcare services in the country. Both the Ministry of Health (MOH) and the Saudi Arabian General Investment Authority (SAGIA) have implemented the changes. Thus, companies such as Abbott are likely to look to invest in the country and enter into the medical devices market in the Saudi Arabian market. The company also launched the University Relations program in different universities across the country, which will work on the training of students using and manufacturing medical devices.

Figure 7.1: Forecast of Expenditure on Medical Equipment in Saudi Arabia (2015 – 2020)



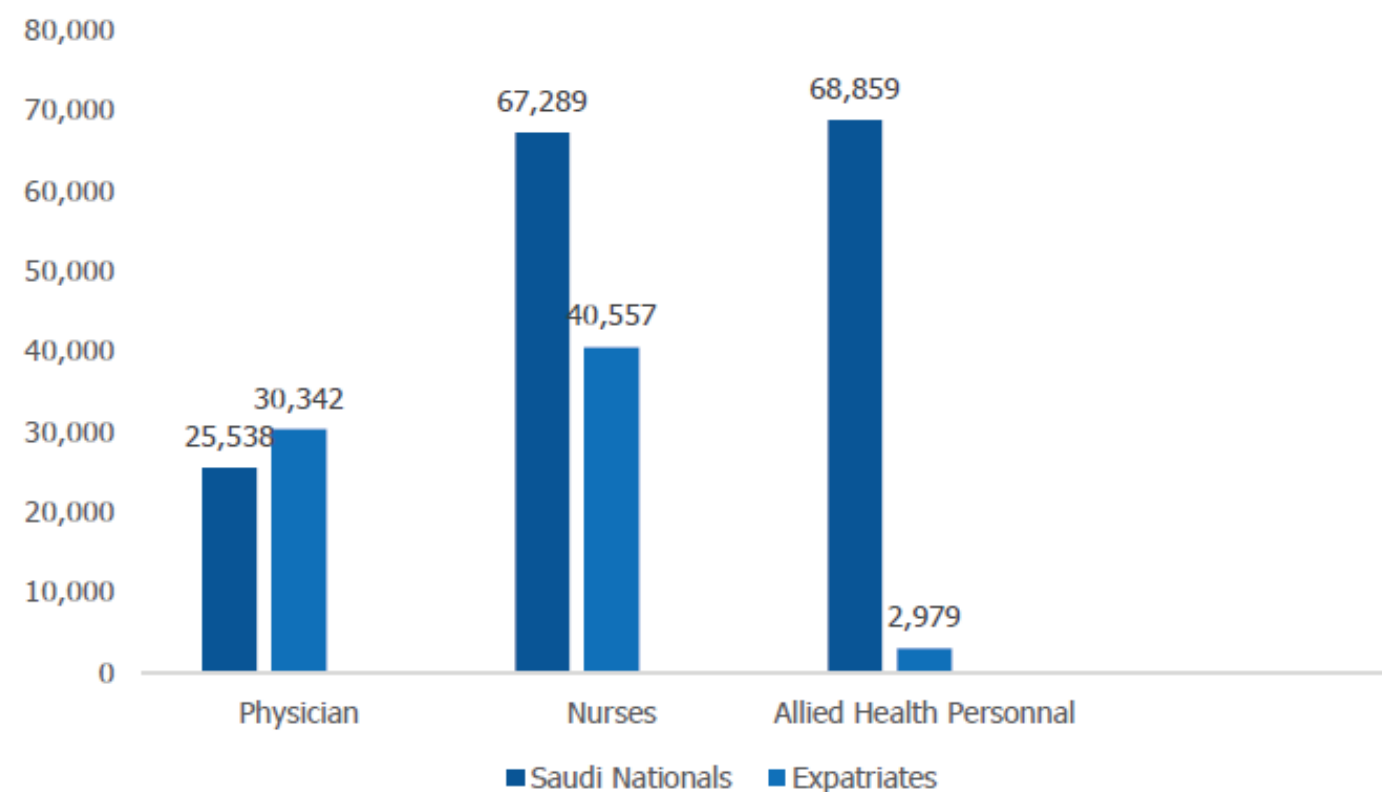
Source: BMI Research

Overview of Medical Professionals in Saudi Arabia

Expatriate medical professionals

According to the latest data available from the MoH (2020), there are over 55880 doctors working in the Kingdom, however only 25538 doctors are Saudi nationals (45%), which highlights the fact that Saudi Arabia predominantly depends on expatriate medical professionals. Demand for medical services and professionals are constantly on rise with increasing need for medical care. Government expenditure to support the rising demand for healthcare has also raised the need for qualified professionals in the country. Among nurses, nationals have a relatively high proportion constituting close to 60% of the nursing workforce. Saudi Arabia is planning on increasing its current healthcare workforce over the period of five years (2025) to keep up with the demand for healthcare services. The government aims to encourage the youth population of the country to occupy skilled professions such as doctors in order to support the nationalization of workforce.

Figure 8.1: Healthcare Professionals – Saudi vs. Expatriates



Source: MoH

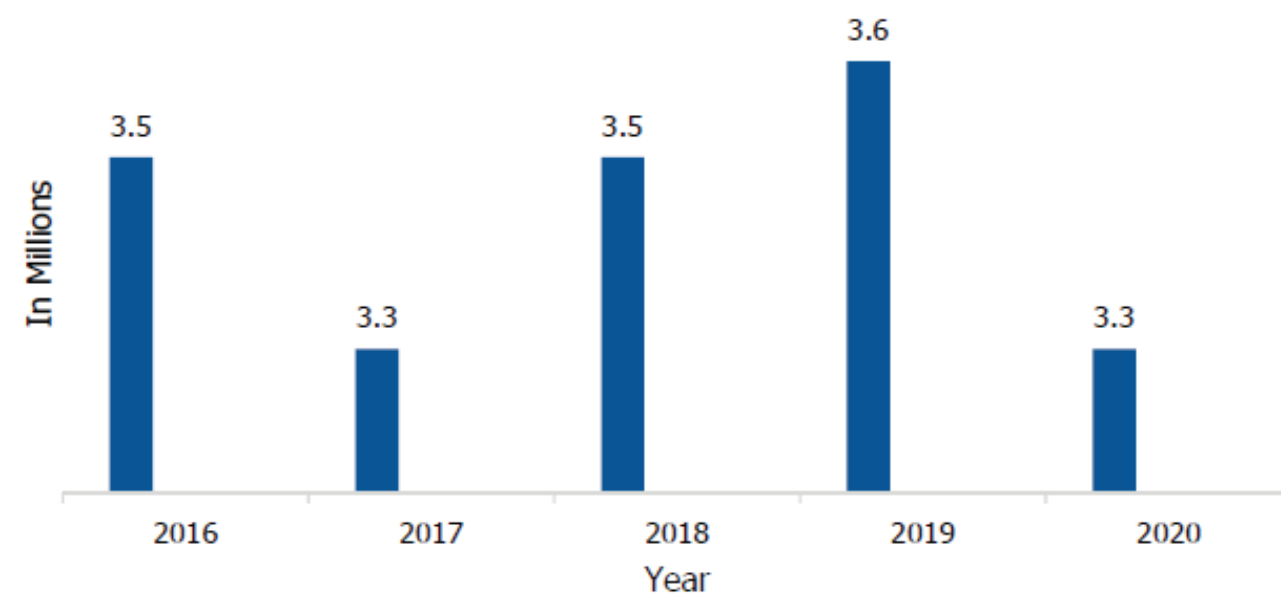
Lack of qualified medical practitioners

One of the major costs for healthcare providers is spending on qualified medical staff. A large number of doctors, nurses, and paramedical staff in Saudi Arabia, mainly expatriates migrate to western countries after a few years due to better opportunities and training facilities. In addition, the current regulations for recruitment and nationalization increases the staff cost multifold. Government's role is extremely important in establishing career-focused educational institutions (such as medical and nursing colleges) to increase the supply of local medical professionals and to drive qualified Saudi talent into opting medicine as a career.

Inpatient and Outpatient Analysis

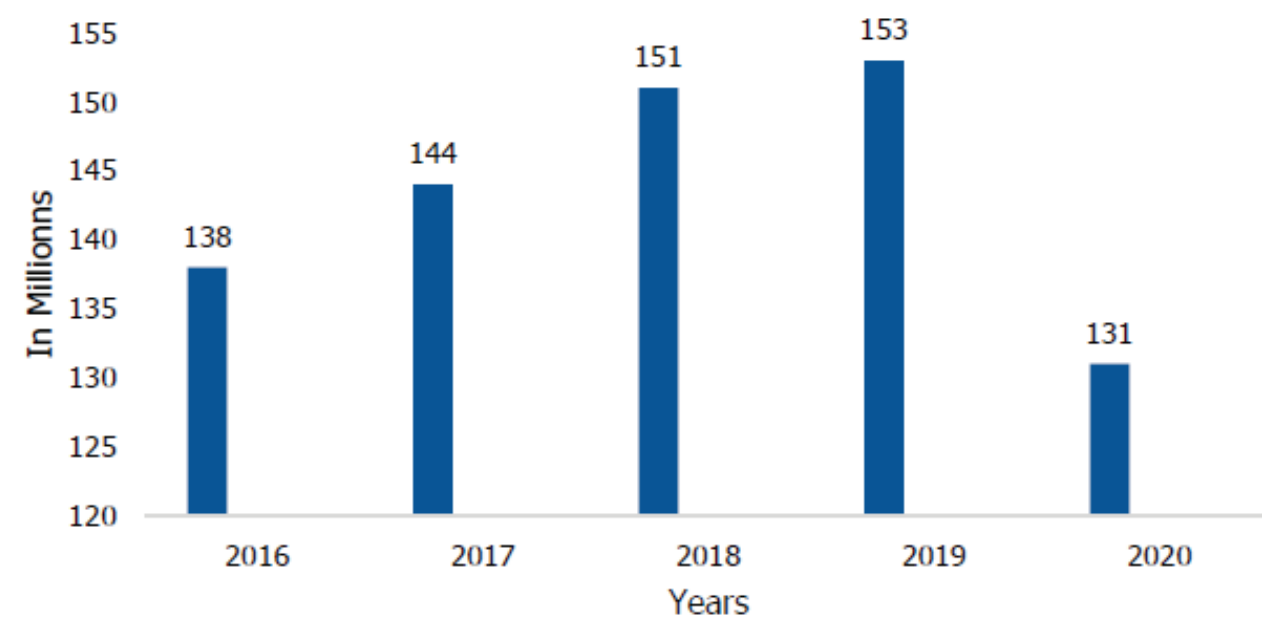
A total of 3.3Mn inpatient admissions were recorded for the year 2020 out of which 1.7Mn were in the MoH hospitals (51.5%). The total number of inpatient visits was 8.3% lower than 2019 and have constantly been recorded around 3.3 – 3.6Mn since 2014. Out of the 1.7Mn inpatient visits recorded, 1.47 Mn or 86.9% visitors were Saudi nationals and 0.23Mn or 13.1% visitors were expats. The average length of stay for an inpatient was 3.9 days.

Figure 9.1: Saudi Arabia Inpatient Trend



Source: MoH

Figure 9.2: Saudi Arabia Outpatients



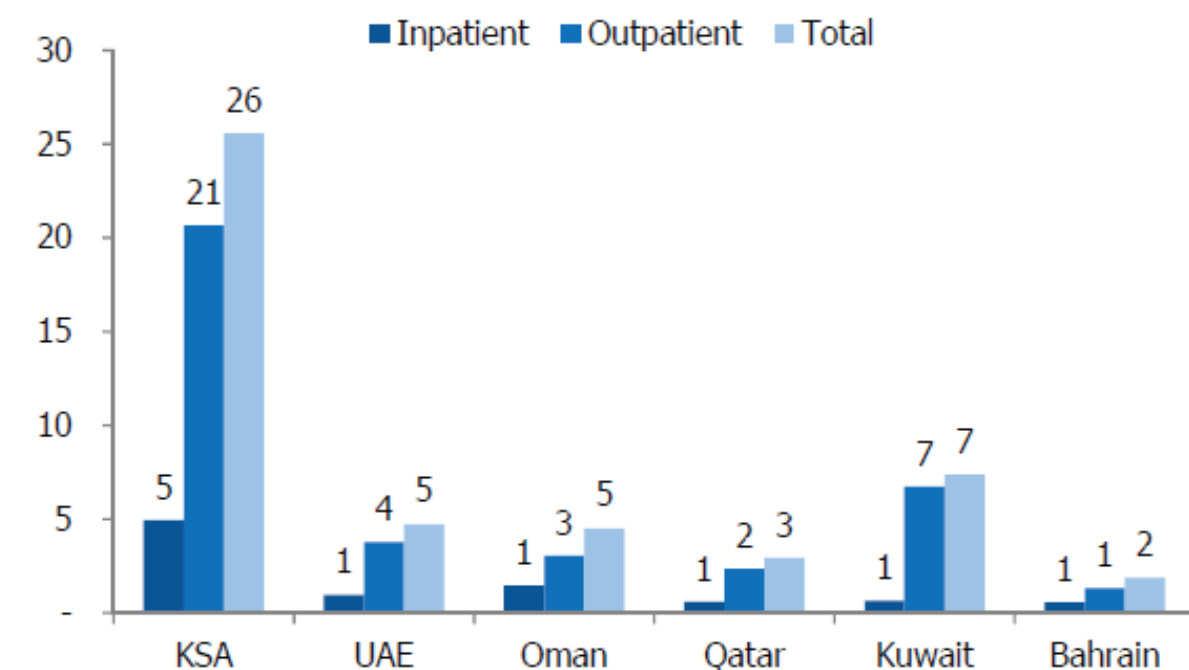
Source: MoH

A total of 131Mn outpatient visits were recorded in Saudi Arabia in 2020. Out of the 131Mn visitors, 89.5% of the visitors were Saudi nationals and 10.5% visitors were expats.

The GCC healthcare market is also anticipated to grow in the coming years, especially with the increasing population and wide prevalence of lifestyle diseases.

The inpatient market is estimated based on the cost of stay for inpatients, the occupancy rates and the average length of stay in hospitals. The data for GCC nations are forecasted based on the past available information. The inpatients occupancy rate is expected to increase by 2% per annum and the cost of services are expected to increase by 10% per annum as the cost of medical services is expected to increase at a higher rate in GCC region in the coming years. The current rate of inflation for medical services in GCC region is c.6%¹⁶.

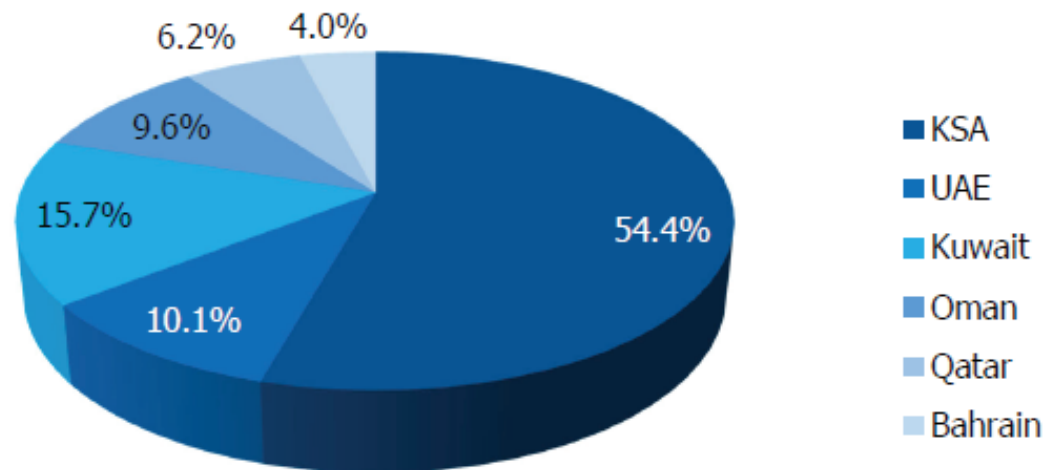
Figure 9.3: Market Size (in USD Bn), 2020



Source: Ministry Websites, World Bank, IMF, WHO, Marmore Analysis

The outpatients market is estimated based on the number of outpatient visits and the average cost per visit for an outpatient. The current inflation rate for outpatient services in the MENA region is c.4.4% and is expected to be c.7% in the coming years.

Figure 9.4: Market Share (Country Wise in %), 2020



Source: Ministry Websites, World Bank, IMF, WHO, Marmore Analysis

The market share of Saudi Arabia would be the highest in the GCC region with 54.4% mainly due to the higher population followed by Kuwait at 15.7% due to a larger outpatient market owing to higher incidence of diseases and higher cost of services. UAE and Oman are estimated to have a market share of 10.1% and 9.6% by 2020.¹⁷

The Ministry of Health (MoH) of Saudi Arabia has announced a number of objectives and initiatives which can be achieved through the e-health. The MoH aims to build 3,500 healthcare facilities with 70,000 beds as a part of one integrated network, all interconnected through IT.

The aim of e-Health policy is to implement a program in order to achieve its vision of **"safe, efficient health system, based on the care centred on a patient, standard-oriented, and supported by the e-health"**. The strategies were launched in 2011 in two phases: each one extending for five years. Since its inception in 2011, the government has constructed 2,750 Primary Health Centres, 287 hospitals with 78,596 beds and 27 specialised medical centres by 2020, which are all IT enabled.

Figure 10.1: Primary Business goals of MoH e-Health Strategy

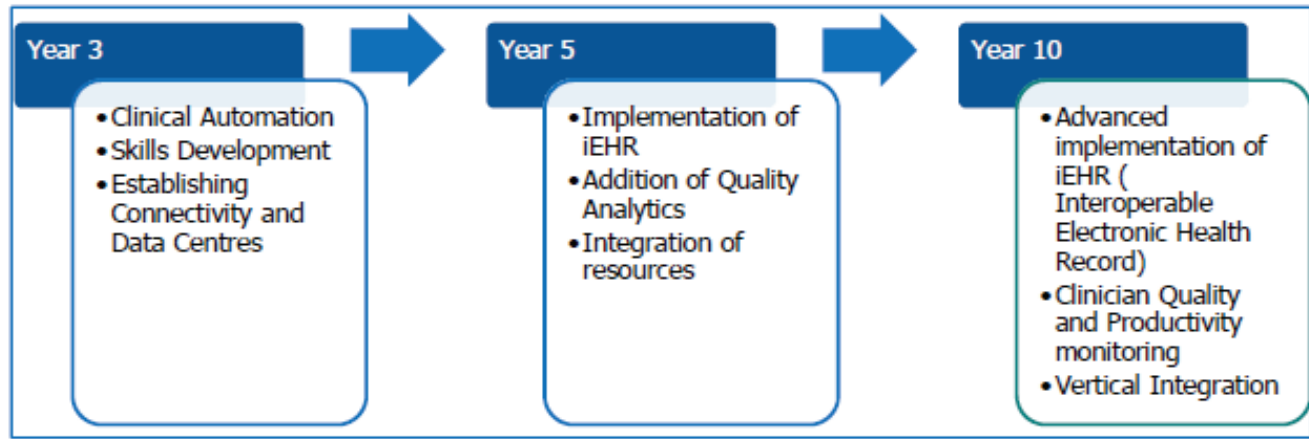


Source: MoH

Through its e-health policy, MoH aims to provide healthcare and transform the current facilities to world-class interconnected health system as available in developed nations such as the US and UK. In order to successfully execute the project and achieve its vision, MoH has laid the following roadmap for the e-health initiative.

¹⁷ GCC Healthcare Report: Marmore

Figure 10.2: Roadmap of e-Heath plan



Source: MoH

Availability of skilled Healthcare IT resources is the key to implementation of these projects. The e-health initiative offers vast opportunities for IT companies to expand and cash in on the upcoming projects in the region.

Recent technological developments

Technological Innovation, Digital Health

Digital technology and innovation is an emerging driver in healthcare. The following innovations in digital health products and services can be implemented to improve quality, increase access and decrease the costs.

Mobile health

M-health is the use of mobile computing and communication technologies in health care and public health. When mobile phones transitioned into becoming hand-held computers within the last decade, the new possibilities provided lower income populations with increased access to technology. In addition, since they are portable and accessible, they allow both consumers and healthcare providers to both receive and provide care on a daily basis. As mobile penetration and internet penetration rates are high in KSA, m-Health is an excellent option for meeting the healthcare needs of a region that has some of the strongest ICT sectors in the world. Tablet computers are increasingly replacing laptops in the portable digital world, and they are being used extensively in healthcare. Within health IT systems, electronic communications cover the span of a myriad of applications, either within a patient's electronic health record, or through application interfaces to communicate with other departments - such as radiology, pharmacy and scheduling. This enhances patient care by increasing continuity and allowing all providers involved to operate within a central record that contains essential information to optimize outcomes. Some of the smartphone applications launched by MOH are-

Sehhaty App: It is an application providing various health services for all individuals in KSA. These services include testing for COVID-19, appointment booking, medicine search, medicine list, sick leave, e-prescription, infection prevention & control, dependent service, biomarkers, and school screening.

Mawid App: The E-Appointment «Mawid» App enables patients to book their appointments in primary healthcare centers in coordination with the concerned department. Hence, patients can book, amend or cancel their appointments at any hospital where they were referred through a seamless channel offered by this App.

Seha App: E-Health «Seha» App. provides innovative and sustainable solutions to enable individuals to receive health and preventive care at their homes and to enjoy a better health services through audio-video medical consultations by MOH's specialists, and through artificial intelligence technologies, which enable you to receive safe medical information and provide you with health tips electronically.

Remote Care Delivery

The remote areas in the KSA make it difficult for consumers in those areas to obtain the care they need. M-Health strategies, as well as telemedicine, offer attractive solutions to bridge the gap. Both equip healthcare providers with the ability to send patient data and diagnostic images across wired or wireless telephonic systems to access expert analysis and treatment recommendations, as well as improve consistency in information about the patient's care.

Although the increase in ambulatory clinics in the KSA has improved local access to care, patient outcomes would be further enhanced by the ability to collaborate with experts located in advanced healthcare centers in the city¹⁸.

Unified Care

Fragmented healthcare data exists in silos of paper which is difficult to access. Digital health creates a unification of all patient data across various platforms, using effective interfaces that enhance information flow. This supports the provision of care by teams of practitioners, rather than individuals, through the sharing of information and integration of services. The quality of care can be improved, and costs can be dramatically reduced when patient information is shared within health information exchanges, decreasing redundant radiological exams thus saving millions of dollars.

Standardization of Care

When care is provided based on the use of clinical protocols that are evidence-based and validated through scientific research and clinical trials, patients receive care that has been proven to be the best. Digital healthcare supports this through the use of technology and information to test treatment outcomes, shorten feedback time, and enhance decision-making by healthcare providers.

Additionally, electronic medical records within healthcare IT systems typically provide reminders for physicians regarding diagnostic protocols, such as hemoglobin A1c testing for diabetes, breast cancer screening, colorectal cancer screening, etc. Published in the Journal of General Internal Medicine, a recent Weill Cornell Medical College study found that when physicians use Electronic Medical records (EMRs), they provide better

¹⁸ Boston Consulting group

On-Going projects in the healthcare sector – Imperceptible Private Participation

care. Electronic Health Record (EHRs) may improve the quality of care by making information more accessible to physicians, providing medical decision-making support in real time and allowing patients and providers to communicate regularly and securely.

Accountable Care Models

Accountable Care Models are being tested across the GCC to help reduce healthcare costs. Certain clinical centers of excellence in Saudi Arabia are piloting an interesting initiative whereby physicians are actually made aware of the costs of procedures and prescriptions before prescribing their treatment to their patients through a computerized physician order entry (CPOE) system that prints out the associated cost of the procedure or prescription. This is expected to rationalize spending in the following two ways:

- A. Physicians are less likely to prescribe useless tests and psychological placebo medications, thereby reducing the cost burden on their respective department.
- B. Patients, who do not even pay a simple co-payment and are used to receiving both the treatment and prescription for free, are made aware of the 'value' of the service the government is providing them.

Despite efforts on various fronts to integrate IT and healthcare, only 20% of hospitals in Saudi Arabia had applied for the new medical coding system, ICD-10-AM, which is the International Statistical Classification of Diseases and related health problems, 10th revision, Australian Modification. The system provides solutions and software for medical coding and health information and service management for medical records, medical files and medical education. The deadline for implementation is June 2014. There is long way for the country to make its healthcare facilities IT enabled in terms of patient management systems, hospital information systems, quality controls for suppliers and service providers in the healthcare industry and integrating multiple verticals such as pharmaceuticals and insurance claims into the system.

Assessing the budgetary allocations for the past couple of years, education, health and social welfare remain the priority for the Saudi government, as they are pre-requisite for the government's vision 2030 to materialize. Considering the importance of the healthcare, the government awarded projects for the construction of 750 primary healthcare centres and 117 new hospital in August 2016, despite cut down in its capital expenditure.

Table 11.1: Top Health care projects

Project Name	Announced date	City	Project value (USD)
King Saud Medical City General Hospital	14th November 2019	Riyadh	50.7Mn
Batterjee Medical City Phase 4	16th September 2019	Dammam	N/A
Prince Sattam Bin Abdulaziz University Hospital	27th September 2018	Al Sayh	92Mn
Al Habib Medical City	29th July 2018	Riyadh	320Mn
Al Sahafa Hospital	29th April 2018	Riyadh	400Mn
Dr.Sulaiman Al-Habib Medical Group	25th April 2018	Jubail	400Mn
KAEC Hospital	23rd January 2019	Rabigh	NA

Source: Reuters

Currently, there are 81 projects on-going in the healthcare sector at various levels, most of them awaiting completion during 2018 and 2021. Despite government's efforts to encourage private participation, the list of projects clearly suggests that private sector's role in the upcoming projects is minimal (2.6% of the total value). Among the top 10 projects by value, six of them are funded by Ministry of Health (MOH) and the remaining by the other government agencies. In all, private sector projects were only four in number worth USD 378 Mn.

King Saud Medical City General Hospital-

The Hospital will expand to accommodate 170 new beds . This project is located at King Saud Medical City in Riyadh, Saudi Arabia. Project. A multi-disciplinary, international team is working together on this important healthcare project. The master plan includes 1,000 single patient rooms in two new medical towers. The first phase will include a surgical tower above the Diagnostic +Testing (D+I) block with 480 private in-patient rooms designed for maximum flexibility to accommodate a broad range of acuity requirements.

Public Private Partnerships in Healthcare: Viable option in current scenario

King Faisal Medical City

As a part of the country's vision to create world class health infrastructure, King Faisal and Prince Mohammed medical cities are being developed. King Faisal Medical City will have 1,350 beds providing specialized health care facilities in cardiology, neurology, oncology, rehabilitation and ophthalmology. Worth USD 1,500 Mn, the mega project is expected to be completed in 2021. Located in the southern province (Abha), the medical city is designed as per Islamic geometry and popularly acclaimed to its architecture and planning.

King Fahad Medical City Expansion

King Fahad Medical City (KFMC) is located in the heart of Riyadh with a capacity to house 1,200 patients. KFMC offers healthcare services in oncology, pediatrics, ophthalmology and general medicine. The proposed expansion project to construct specialized health centers was signed in 2012, by the Minister of Health at the cost of USD 1,300 Mn. National Cancer and Proton Beam Therapy Center will also be a part of KFMC. King Fahad Medical City's new state-of-the art cancer and proton beam therapy center would be among the very few of them available across the globe. The other projects include cancer center, the neurosciences center, laboratory building, a center for stem cell research and a center for cardiac research.

King Khalid Medical City

Located in Dammam, King Khalid Medical City is one of the best multispecialty hospitals and healthcare center in the Eastern province. Centers of Excellence include Cardiovascular, Neurosciences, Rehabilitation, Multi- Neurosciences, rehabilitation, multi-organ Transplant, Genetic organ Transplant, Genetic & Metabolics, Ophthalmology, and Oncology. Anchored by a 1500 bed hospital, the KKMC focuses on delivering the highest quality of patient-centered care in an environment conducive to healing. KKMC reflects its cultural identity. Locally-sourced materials, geometric patterning inspired by traditional screening, large-scale public art features and a respect for cultural traditions ensure KKMC reflects and responds to unique culture of its place.

Riyadh Security Forces Medical City

Undertaken by the Ministry of Interior (MOI), the government has decided to build hospitals for the security forces of the country, one in Riyadh and the other in Jeddah. Being built at a cost of USD 906 mn, the medical complex consists of women and children's hospital, general hospital and other utility buildings consisting of more than 1,000 beds altogether. The project is expected to be completed before the end of 2017.

After 2015, persistently low oil prices and reducing government budgets are threatening the government support to healthcare sector in the country. Investments in public healthcare, expenditure to medical treatments abroad and incentives that are offered to private players in the industry were reduced by 35% in 2016 YoY by the government. Declining government support offers an opportunity for the private players to take advantage and invest in developing health infrastructure apart from providing healthcare services.

The Saudi government views healthcare as the sector with the best privatization potential, targeting the privatization of 290 hospitals and 2300 primary health centers by 2030. In February 2020, the first privatization of a government-owned healthcare entity under Vision 2030 was announced. Jadwa Investment announced the successful completion of its advisory mandate for the privatization of Saudi Medical Services Company, a Saudi Arabian Airlines subsidiary.

Saudi Arabia is promoting the use of Public Private Partnership (PPP) mechanism which has been used globally to promote healthcare financing, supplies and education. PPPs can be customized according to needs and opportunities available in Saudi Arabia. Such projects can provide its citizens with benefits such as greater accessibility, higher quality of health care and affordable price for patients. Despite an increased spending on insurance schemes and infrastructure development (hospitals, service hubs), the government is still struggling with capacity gaps and inconsistent quality of healthcare. The quality of quaternary services, the most specialized form of healthcare service is very poor because of suboptimal distribution.

The participation of private sector in the healthcare services would be essential to cater to the needs of the people. With the existing capacity in the government-run and aided hospitals, it would be difficult to serve the increasing population and their health care needs.

Proper regulations and framework of laws must be implemented while introducing public – private partnership and increasing the participation of private players in the health care segment to reduce undue competition and increase in costs of services. Services that are the farthest from patient contact and with the greatest commercial value are well suited for PPPs. Services with social value, such as health education for the population, should be retained by the public sector.

The private sector can improve the efficiency and effectiveness of health operations by leveraging its expertise in fields such as clinical, administrative and support services and call on financial resources to inject capital into profitable opportunities and mobilize entrepreneurship to spur innovation.

Private players can act as providers of care, payer for care, suppliers of products, or they can operate academic institutions. Private-sector participants can be international players or locally based firms

Table 12.1: Examples of PPP models

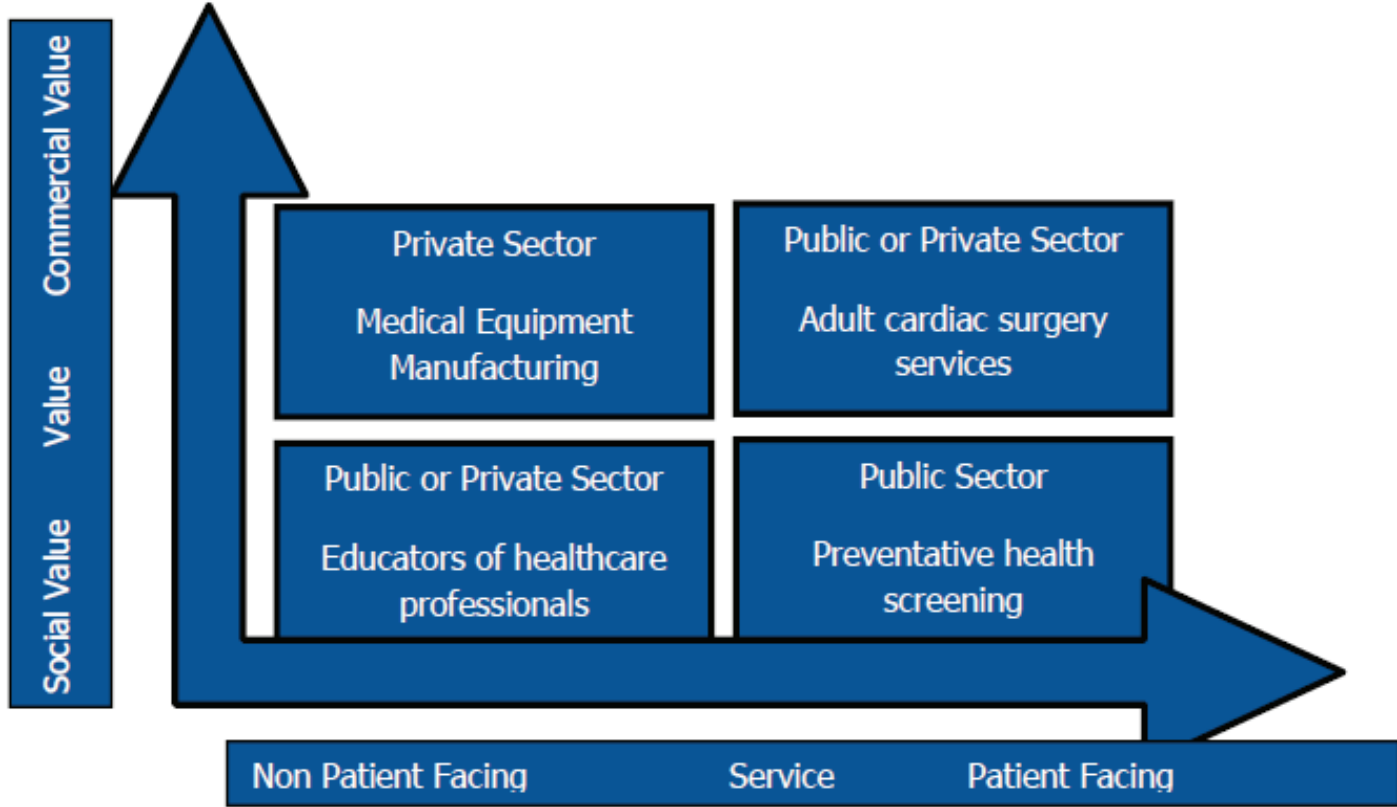
PPP Model	Description
Management contract	Private sector manages the public asset without assuming operational risks
Turnkey	Private contractor selected through a bidding process to design and build asset for a fixed fee
Lease	Private sector operates infrastructure, receives revenues from the public sector through a lease fee
Concession/Build Operate Transfer	Private sector builds, operates, and owns the asset; eventually transfers it to the public sector
Private Finance Initiative	Private sector assumes all risk (including financial) for the asset until its eventual transfer to the public sector

Source: Booz & Co

In terms of healthcare PPPs, value for money relates to a quantitative measure that compares the net present value cost of a PPP to the best and most realistic public-sector alternative. A healthcare PPP should clearly indicate that value for money is an objective from the beginning and define KPIs that will measure it during the lifetime of the project.

In terms of healthcare subsectors, opportunities lie in provision, payment, supplies, and education spaces.

Figure 12.1: Examples of Public/Private Division of Services



Source: Booz & Co

Table 12.2: PPP Potential in KSA Healthcare

Provider	Payor	Supplier	Educators
Rural care systems	Case/disease management	General pharmaceutical/ vaccine manufacturing	Higher education of health professionals
Patient transportation systems/ emergency medical services	Third-party administration	Diagnostic services	Continuous medical education

Source: Booz & Co

The Ministry of Health (MOH) has concluded a series of agreements with charitable associations, institutions, private companies, and businessmen, in order to enhance the contribution of the private sector in health development. This would happen in accordance with the Saudi Vision 2030 Vision. It aims to enable the private sector to provide support to health services, working with the government sector to meet the needs of citizens, with high quality and efficiency. Some of the agreements concluded by the Ministry with private companies and businessmen include

- A partnership agreement with Al-Dawaa pharmacies; to provide citizens and residents with COVID-19 vaccines inside the pharmacy branches. This agreement was concluded as part of the adopted strategic plan of the Kingdom; to fully control the COVID-19 pandemic.
- A partnership agreement with Bank Aljazira; to train professionals of health institutions and associations.
- A community partnership agreement with Magrabi Hospitals and Centers; to perform 400 cataract surgeries.
- A partnership agreement with Mohamed Ibrahim Al-Subaie Endowment; to support and finance an initiative to reduce surgeries waiting time in MOH hospitals, and the “Visiting Doctor” program in ophthalmology.
- **(Wateen) Initiative**, which seeks to reduce the communication gap between donors and blood banks; making the blood donation process much easier.
- **(Shefa) Electronic Platform**, which aims to facilitate providing treatment to the needy, stranded people, and emergency cases.

Health care segment leads in M&A deals

Fragmented nature of the healthcare industry, in terms of service providers, pharmaceuticals and insurance providers paves the way for consolidation, both within the business segment and across verticals. KSA has become one of the most attractive markets for international companies seeking new M&A and 2021 is set to witness an increase in the trend following several deals in 2020. During the 3rd quarter of 2020, KSA ranked among the top investment banking fee earners in the MENA region as more companies take advantage of the investment climate in the region. An increased curiosity is noted in longer-term healthcare strategic assets, with PE investors focusing on value building deals that possibly offer exit strategies after five years. Also deal making opportunities are moving from the competitive UAE to KSA, where the health care market remains largely untapped and there are upcoming opportunities as the government seeks to privatise a number of healthcare holdings.

Very few vertical integrations have happened in the healthcare market, though it has been very popular in the developed world. All service providers across the healthcare segment such as clinics, hospitals, equipment manufacturers, pharmaceuticals, IT service providers and insurance companies that operate in silos are acquired by one company providing a plethora of services in healthcare. Such mergers/acquisitions could create issues if the organizations' culture do not have synergies.

Table 12.3: Healthcare M&A deals in KSA, 2016-2020 Reuters Report

Year	Target Name	Target Nation	Acquirer Name	Acquirer Nation	Deal size (\$ Mn)
2020	Bupa Arabia for Cooperative Insurance Co	Saudi Arabia	Bupa Investments Overseas Ltd	United Kingdom	134.35
2020	Saudi Pharmaceutical Industries & Medical Appliances Corp SJSC	Saudi Arabia	Undisclosed	Undisclosed	128.51
2019	Al-Muhaidib Dental Group	Saudi Arabia	United Eastern Medical Services LLC	UAE	133.33
2017	Al Ahlia For Cooperative Insurance Co SJSC	Saudi Arabia	Gulf Union Cooperative Insurance Co SJSC	Saudi Arabia	170.8
2015	Sanad Hospital	Saudi Arabia	Aster DM Healthcare LLC	UAE	247.02

Source: Reuters

Regulatory bodies and recent developments

Healthcare sector in Saudi Arabia is regulated by multiple organizations such as the National Guard Health Affairs, Ministry of Defense, Ministry of Health, Ministry of Interior and Ministry of Education through university hospitals. The MoH plays the role of overall supervision in addition to follow up with healthcare related activities carried out by the private sector.

Ministry of Health

The MoH is the regulatory body through which the government of Saudi Arabia funds most of its healthcare projects. The MoH is responsible for planning and development of laws, policies and guidelines for the healthcare sector. MoH also has 287 hospitals in the Kingdom. In addition to this MoH is also responsible for provision of general health, prevention of diseases, regulating government and private health institutions, monitoring health institutions, research activity and academic training. The ministry is bestowed upon with an umbrella of functions related to healthcare apart from its regulatory role. It takes care of the implementation of the projects and monitors the various on-going projects. It also conducts various health awareness campaigns by encouraging societal involvement in improving health among the people.

Saudi Food and Drug Authority (SFDA)

The Saudi Food & Drug Authority (SFDA) was setup following a royal decree issued in 2004. The SFDA monitors and controls the import and distribution of medical devices, pharmaceuticals, and food products. For medical devices, the SFDA will usually accept, register, and authorize the marketing and sale of any device that complies with applicable provisions of the SFDA's Interim Regulations and relevant regulatory requirements applicable in one or more of the countries of the Global Harmonization Task Force (GHTF), which includes Australia, Canada, Japan, USA, and EU/EFTA.

From the outbreak of Covid-19 the SFDA has taken steps to ease importing restrictions, accelerate registration processes and provide all support for local factories and distributing companies to ensure regulations do not block the development or supply of devices that could save lives. In January 2020, the SFDA issued guidance

on requirements of medical devices quality management system for distributors, importers and authorised representatives. Organisations manufacturing and servicing medical devices (manufacturers, authorised representatives, distributors and importers) now have to be certified to ISO 13485:2016, the international quality management system (QMS) standard for medical devices

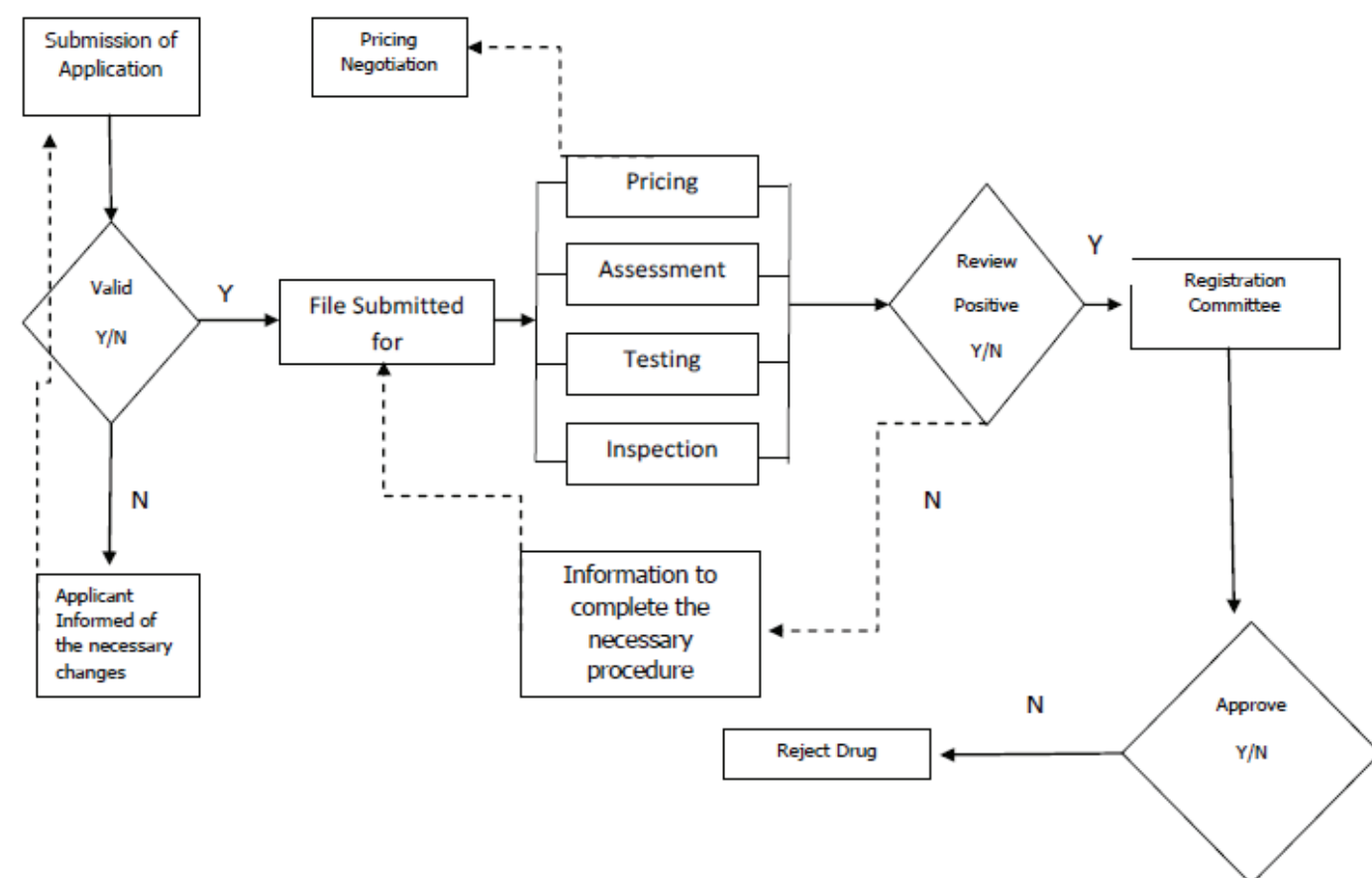
Pharmaceutical Approval Process

Saudi Pharmaceutical application is an elaborate process; the application for the drug that intended to be sold should be submitted to the SFDA which then reviews the application on the following four aspects – Pricing, Assessment, Testing and Inspection. During this phase, negotiations for pricing of drugs go on. On successful review, the drug is sent for the formal and final approval of the Registration Committee. The Registration Committee has the power to approve or reject the drug, on successful approval final negotiations for pricing of the drug starts after which the company would be free to sell its drug in the Kingdom. Under the New Pharmaceutical Law and the proposed foreign ownership exemptions, the New Pharmaceutical Law excluded pharmacies and herbal substance sale stores from its scope of application. As such, ownership of these establishments is yet, legally speaking, still limited to Saudi nationals. Nonetheless, the KSA Ministry of Health, has occasionally permitted, foreign ownership of pharmacies and herbal substance sale stores outside the six largest cities in the KSA on a case-by-case basis. The intention for this exemption is to promote foreign investment into rural, under-developed areas in the KSA. As set out above, a new regulation is anticipated in respect of pharmacies and herbal substance sale stores. It is yet to be seen whether foreign ownership of these establishments will be permitted under the anticipated regulation.

Pricing of the Drug

The pricing of the drug is done taking into consideration the following factors – its therapeutic significance, price of similar drugs, prices at factory gate, wholesale price and retail price at the country of origin, insurance, freight, export prices and price of the drug in official pricing references (if available). Prices approved by the SFDA is a ceiling price and pharmaceutical companies can appeal for price revision. The actual purchase price is subject to negotiation, tendering process and purchasing power of the entity buying the drug.

Figure 13.1: Typical Drug Pricing and Approval Flow



Source: Ispor.org

Pricing of Drugs

Key steps in pricing:

Patented Drug – Price of the patented drug is decreased by 20% after the registration of 1st registration drug.

Generic Drug – The 1st version of generic drug is priced 35% lower than patented drug.

Further iterations – The price of further iterations of generic drug is reduced by 10% for subsequent iteration.

Regulation on Intellectual Property Protection

The Saudi government has updated its laws on IPR protection over the past seven years and it has increasingly brought the laws to be in line with the WTO agreement on Trade Related aspects of Intellectual Property Rights (TRIPS). Saudi Arabia updated its laws on Trademark (2002), Copyright (2003) and Patent (2004). The update was aimed at bringing in compliance with TRIPS as well as an effective deterrence against IPR violation.

However, delays and complexity in the enforcement of rights, the insufficient damage awarded in case of infringement and minimal help to the IPR holders from the enforcing agencies have contributed negatively to the establishment of sound and healthy IPR practices in KSA. Other challenges pertaining to the system of

operations, lack of unified laws among GCC countries and very low level of awareness in case of copyrights are deterrents for the increase in IPR registrations in the country. Intellectual property laws and regulatory framework for its enforcement are important for the establishment of the medical devices and pharmaceutical companies, both international and domestic, to set up their operations in the country.

Regulation on decentralization of decision making

MoH of Saudi Arabia comes under lots of pressure as it runs close to 60% of the healthcare facilities in the countries. The public sector hospitals have to approach MoH for even small changes in the way the hospitals operate. In order to manage the pressure more effectively, MoH granted autonomy to its public sector hospitals for effectively managing and taking timely decisions.

Health Insurance – The Council of Cooperative Health Insurance

Health insurance in Saudi Arabia is regulated by SAMA. Health insurance was made compulsory in 2005 through Cooperative Health Insurance Act for all non-Saudi nationals working in the country; Saudi government is working on plans to bring in compulsory health insurance to include all Saudis. The Council of Cooperative Health Insurance controls and regulates the health insurance companies, their qualifying procedures and also disseminates information related to health insurance in Saudi Arabia. In case of non-compliance, The Council of Cooperative Health Insurance has the powers to disqualify companies from the health insurance business. The introduction of mandatory health insurance for expatriates, and insurance reform in general, has certainly shaken up the healthcare market in Saudi Arabia, providing a great amount of potential for pharmaceutical companies, laboratories, insurers and healthcare providers. All Saudi Arabian insurance companies are required to be listed companies in Saudi Arabia. There are a number of insurance companies that are partly owned by foreign parties such as BUPA, Munich RE and AXA.

Saudi Health Council

Established with the aim to coordinate and integrate the various health organizations in the country, the Saudi Health council acts as a liaison between the national health centers. It has various councils established to suggest improvements in specialized areas of work through developing guidelines with its expertise or through international collaborations with specialists in other parts of the world.

Challenges

Figure 13.2: Overall Roles and Responsibilities of Regulatory Bodies

Ministry of Health	SFDA & MoH	SFDA
<ul style="list-style-type: none"> •Developing laws and legislations, both governmental & private sectors •Responsible for the supervision of healthcare & hospitals both public & private sectors 	<ul style="list-style-type: none"> • Design specifications, standards & stipulations for production, distribution, importation & registration of drugs and medical devices •Draw platforms & general policies that ensure availability of appropriate drugs •Pricing of Drugs and Pharmaceuticals 	<ul style="list-style-type: none"> •Independent body that directly reports to The President of Council of Ministers •Observe the safety of medical devices & its impact on public health •Revise, develop and update regulatory laws to cope with quality requirements and health safety

Source: MoH, SFDA

Regulatory and bureaucratic hurdles in Saudi Arabia have been the major impeding factor for establishment of medical equipment manufacturing, pharmaceutical plants and private healthcare facilities in the country. Owing to its work culture, getting approval for a product or technology might take more time compared to a developed country. Identifying a local partner would help in getting over this hurdle. However identification of a local partner could be a challenge, as many of the Saudi companies do not have online presence. Local partners could help the companies in effectively distributing the products in rural areas which are not well connected like cities. Though Saudi Arabia's population is hugely concentrated in cities, rural areas cannot be ignored as the government tries to match the healthcare facilities offered in the country to be on par with developed nations.

Complexity and Lack of Standardization in Regulation

The healthcare sector in Saudi Arabia suffers from overly regulated creating hassles and delays for healthcare providers. Archaic rules and regulations act as a deterrent to development in this sector. The current regulatory framework is not conducive for free market dynamics and carries a lot of bureaucratic burden involved in obtaining visas and documentation. An overseas doctor wishing to work in KSA is required to have a sponsor and undergo a series of examinations before being permitted to seek employment. Although 38% of hospitals in Saudi Arabia are already privately operated, their functions and staff training remain supervised by the kingdom's Ministry of Health¹⁹.

Increasing Differentiation between Expatriates in Terms of Skills

High proportion of expatriates in medical staff poses problems of difference in culture, medical practices followed and patient care offered. In addition, they are subject to high attrition rate as they see their residence in KSA as a learning experience and they choose to move out to their home country or other developed countries later on.

Post-graduate specialization programs and simulation-based training for medical staff from health authorities and academic institutions are necessary to enhance the competence of the medical staff. Many of the existing medical workforce look to relocate to western countries, to take advantage of better training facilities and infrastructure. With the Saudization policy in the governments focus, it will be a challenge to find skilled medical workforce for private investors looking to establish themselves in the Saudi health care industry. The increasing demand for healthcare infrastructure requires a skilled labor force, an aspect in which Saudi Arabia is found inadequate.

¹⁹ GCC Healthcare Report, Marmore

Poor Business Environment – 84th rank in Ease of doing business

Business environment in KSA is often perceived to be opaque with a high degree of information asymmetry. Saudi Arabia carried out a record number of business reforms in the past year, earning the country a spot in this year's top 10 global business climate improvers, according to the World Bank Group's **Doing Business 2020** report. Saudi Arabia implemented reforms in eight Doing Business areas, its busiest activity since the launch of the study. The country placed 62nd globally in ease of doing business rankings with an overall score of 71.6 out of 100. Saudi Arabia made the greatest strides in the area of starting a business. It now costs only 5.4% of income per capita for an entrepreneur to start a business, which is lower than the Middle East and North Africa regional average of 16.7%. Saudi Arabia has made substantial reductions over time to minimum capital requirements, cutting them from a cost of over 1,000% of income per capita in 2004 to zero. Thanks to a reform improving the protection of minority investors, Saudi Arabia now ranks third globally on this indicator and performs as well as New Zealand and Singapore, the two easiest places to do business in the world. The country also performs well in the areas of registering property, where it ranks 19th, and dealing with construction permits, where it sits 28th. With the aid of a new online platform, local businesses need 100 days to obtain all required permits and authorizations to build a warehouse, at a cost of 1.9% of the warehouse value, half the regional average of 4.4%. Similarly, it takes 1.5 days to register property transfers in Saudi Arabia, faster than all but two countries in the world, Georgia and Qatar. Saudi Arabia is also the only economy in the region where this process is entirely free.

The eight business area reforms made in Saudi Arabia according to the World Bank's Doing Business 2020 study:

- **Starting a business** became easier as Saudi Arabia established a one-stop shop that merged several pre- and post-registration procedures. The Kingdom also eliminated a requirement for married women to provide additional documents when applying for a national identity card.
- **Getting construction permits** was made easier thanks to a new online platform and enabling civil defense approval after the issuance of a building permit.
- **Getting electricity:** Saudi Arabia streamlined connection and meter installation, using a geographic information system to review new electrical connection requests and eliminate certificates of completion.
- **Getting credit:** Saudi Arabia strengthened access to credit with the introduction of a secured transactions law and a new insolvency law.
- **Protecting Minority Investors:** Saudi Arabia strengthened minority investor protections by increasing access to evidence at trial.
- **Trading across borders:** Saudi Arabia made importing and exporting faster by enhancing an electronic trade single window, enabling risk- based inspections, launching an online platform for certification of imported goods, and upgrading infrastructure at Jeddah Port.

- **Enforcing contracts** became easier with the publication of court performance measurement reports and information on the progress of cases.
- **Resolving insolvency** was made easier in the Kingdom thanks to a new reorganization procedure allowing debtors to initiate restructuring of firms, improving voting arrangements in reorganization, improving the continuation of businesses and the treatment of contracts during insolvency proceedings, allowing post-commencement credit, and increasing the participation of creditors in the insolvency proceedings.

Saudi Pharmaceutical Industries & Medical Appliances Corporation (SPIMACO)

SPIMACO established in 1986 is the largest medical appliances and pharmaceutical manufacturer in the country. The company's main line of business is the manufacture of generic drugs for sale in the domestic market. It has entered into strategic relationships with many international players for the transfer of technology and skill from them to Saudi Arabia.

Table 15.1: SPIMACO, Financials (2017-2020)

Financials (in USD Mn)	2017	2018	2019	2020
Revenue	374.2	344.2	419.1	415.9
Growth (YoY)	9%	-8%	21.7%	-0.8%
Gross Profit	190.2	167.5	148.7	184.5
Operating Profit	67.6	34.1	-12.1	41
Net Income	55.9	27.2	-12.9	30
Growth (YoY)	20%	-51%	na	na
Net Income Margin (in %)	15%	7.9%	-3%	7.2%
Debt-to-Equity (in %)	64.4	73.8	118.1	136.1
ROE (in %)	7.1	3.8	-22.7	5.7
Current Ratio	2.5	2.1	1.3	1.2

Source: Reuters

Over the past 4 years from 2017 to 2020, the revenue for SPIMACO has increased from USD 374Mn to USD 416Mn. Net Income has reduced over the years which resulted in the reduction of Net profit margin. As a result, ROE ratio has also decreased over the years. SPIMACO current ratio has decreased from 2.5 in 2017 to 1.2 in 2020, which shows that the company has resorted to disposal of current assets.

Mouwasat Medical Services Company

Started as medical dispensary in 1974, Mouwasat currently operates mainly in three segments: Hospitals, specialized centers and pharmacies. The company has developed ambitious plans to expand its existing facilities and the construction of new facilities as part of its strategic plan to meet all regions of the Kingdom

and to meet the growing demand for health services in the Kingdom. The company looks forward to the establishment of specialised centres as required by market needs in the future.

Table 15.2: Mouwasat Medical Services, Financials (2017-2020)

Financials (in USD Mn)	2017	2018	2019	2020
Revenue	374.2	344.2	419.1	421
Growth (YoY)	15%	-8	21.8	0.4
Gross Profit	190.2	167.5	148.7	186.8
Operating Profit	67.6	34.1	-12.1	41.4
Net Income	56	27.2	-13	29.6
Growth (YoY)	25%	16%	-148%	122%
Net Income Margin (in %)	14.9%	7.9%	-31%	7%
Debt-to-Equity (in %)	60.8	72.8	75.2	55.7
ROE (in %)	22.6	21.0	21.5	23.2
Current Ratio	1.9	1.8	1.6	2.0

Source: Reuters

Expansion of the healthcare companies in Saudi Arabia led to increase in revenues in the year 2020. Mouswasat's revenue remained flat in 2020YoY despite having a significant increase in 2019.

Mouswasat's revenue has increased over the past 4 years from USD 374 Mn in 2017 to USD 420 Mn in 2020, but the revenue remained flat in 2020 YOY growth. Like SPIMACO, Mouswasat's net-income has also decreased over the years but ROE ratio hasn't varied much over the years. Debt/Equity ratio of Mouwasat has decreased over the years which shows the reason for better ROE compared to the other two companies in this section.

National Medical Care Company

Established as public joint stock company in 2003, the company runs two private hospitals in Riyadh, namely, National Hospital and Riyadh Care hospital. National Hospital is multispecialty 124 bed hospital offering critical care services and Riyadh care hospital has 340 beds apart from various clinics in areas of pediatrics, pathology, psychology and ophthalmology.

Table 15.3: National Medical Care Company, Financials (2017-2020)

Financials (in USD Mn)	2017	2018	2019	2020
Revenue	230.9	206.2	191.2	218.4
Growth (YoY)		-10.7	-7.3	14.2
Gross Profit	52.7	44.9	44.7	60.4
Operating Profit	27	22.5	27.7	33.3
Net Income	23	16.8	21.6	26.3
Growth (YoY)		-27%	28.6%	21.8%
Net Income Margin (in %)	10	8.1	11.3	12
Debt-to-Equity (in %)	45	40	31	38
ROE (in %)	8.6	6.2	7.8	9.4
Current Ratio	4.1	4.7	5.7	4.4

Source: Reuters

National Medical Care Company's revenue went down from 2017 to 2019 and rebounded sharply last year with increase in demand for medical services. The net-income has gained partially over the years from USD 23Mn in 2017 to USD 26.3Mn in 2020. NMCC has a better Debt/Equity ratio compared to the other two companies and has a better current ratio of 4.4 in 2020 which is significantly higher than that of other two companies.

Private companies

Tabuk Pharmaceuticals

Founded in 1994, Tabuk Pharmaceuticals is headquartered in Riyadh. It is largest private pharmaceutical company and second largest in Saudi Arabia in terms of market capitalization. Tabuk Pharmaceuticals, a subsidiary of Astra Industries, accounts for 3.9% of the market share, in terms of revenue. Tabuk Pharmaceuticals generated annual revenues of over USD 361.2Mn in 2019

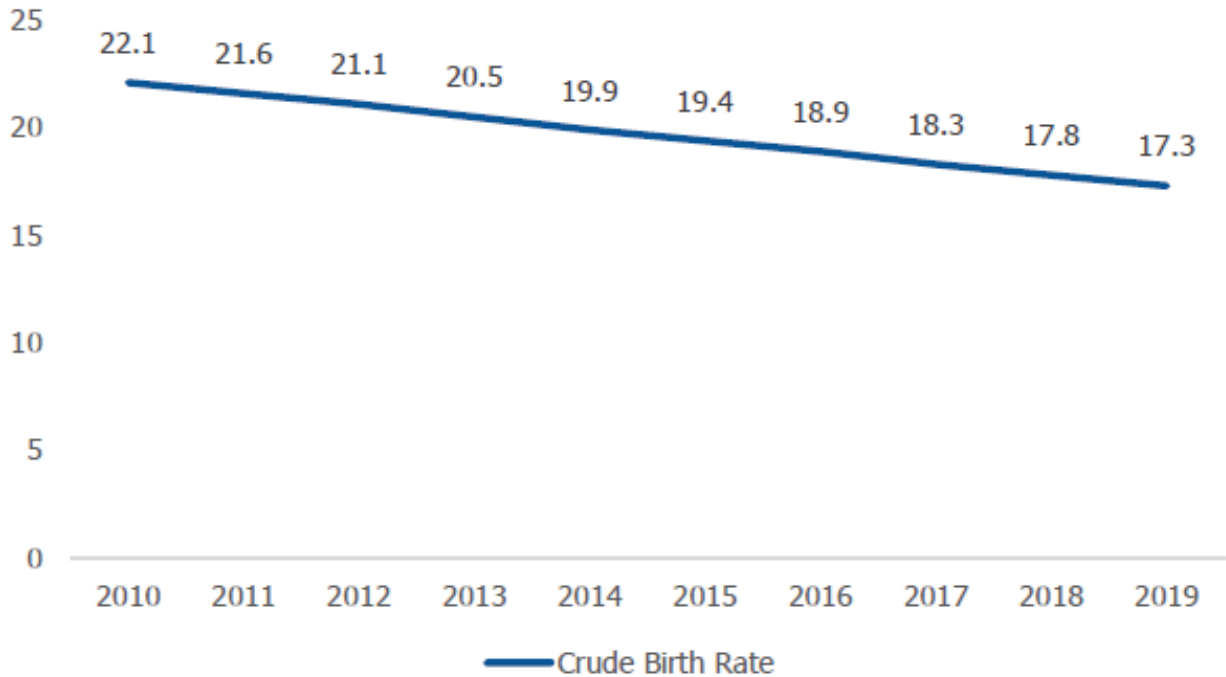
Jamjoom Pharmaceuticals

Jamjoom Pharmaceuticals, a privately held company, started its commercial production in 2000. It operates in 21 countries in the Africa and Asia region. Jamjoom Pharma manufactures Derma medication, Optha medication, GIT Medicine, General Medicine, Cosmoceuticals and Nutraceuticals. Jamjoom Pharma one of the fastest growing companies in the region. In Saudi Arabia, the company is ranked number 3rd in total

pharma market. The international operations have also grown rapidly and the products of the company are available in many countries in the region. Jamjoom Pharma has attracted and retained high caliber individuals in all the functional areas. Jamjoom Pharma has been rapidly expanding operations in the Middle East, Africa, Central Asia and other regional markets. Overseas expansion has been one of the main factors fuelling the rapid growth in the top line revenues of Jamjoom Pharma.

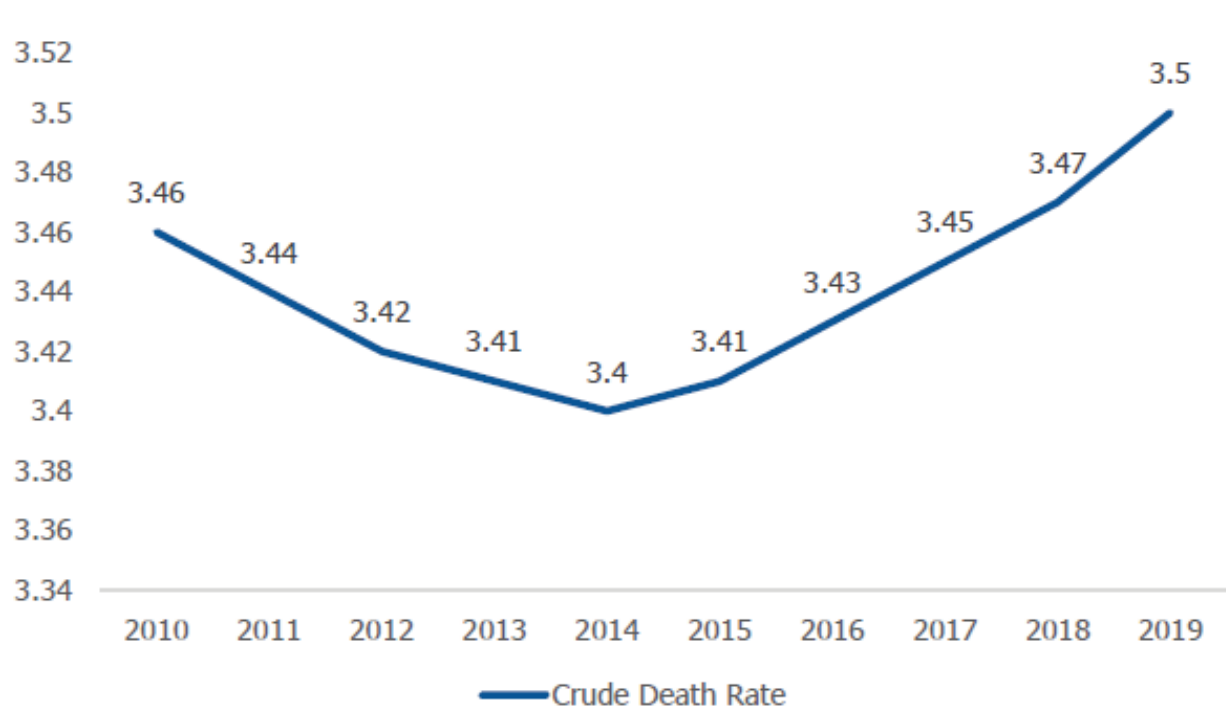
Key Healthcare Indicators

Figure 16.1: Crude Birth rate (per 1,000)



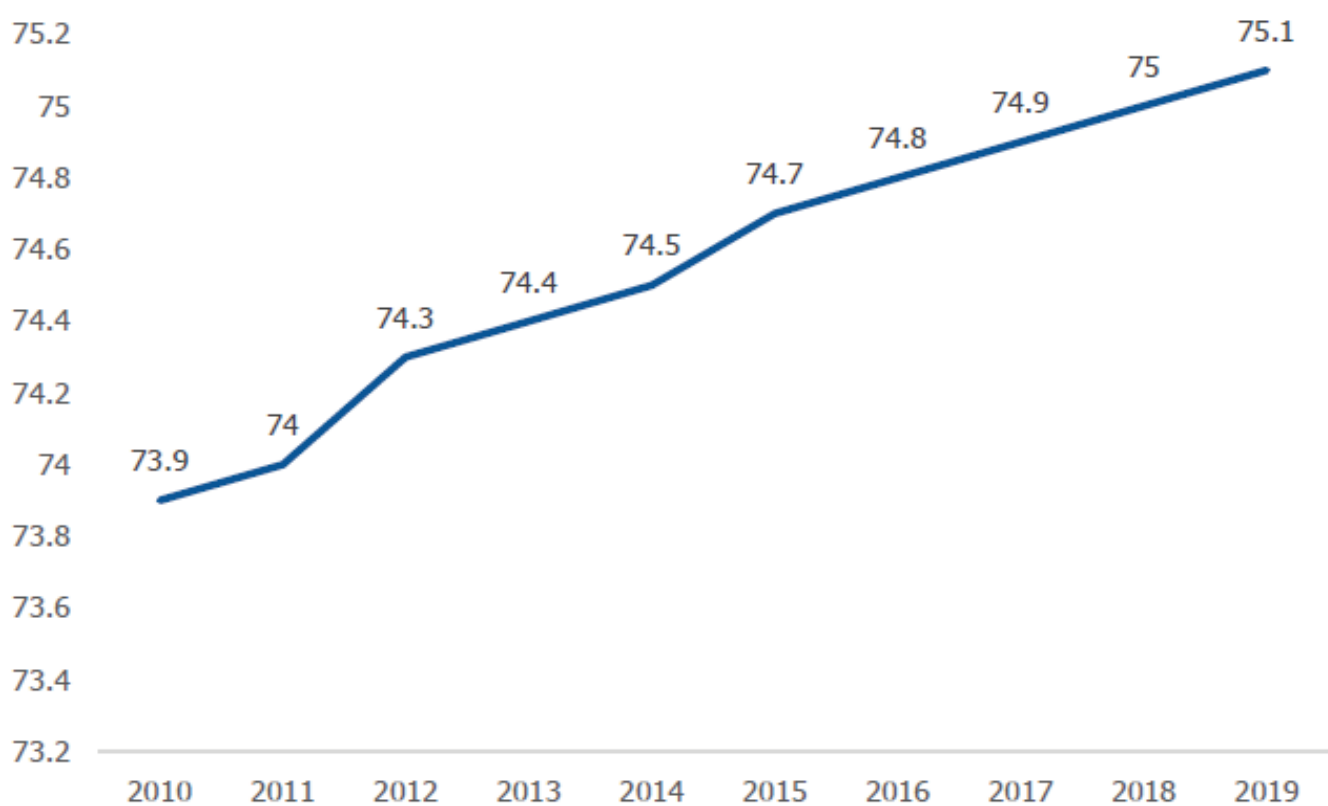
Source: World Bank

Figure 16.2: Crude Death Rate (per 1,000)



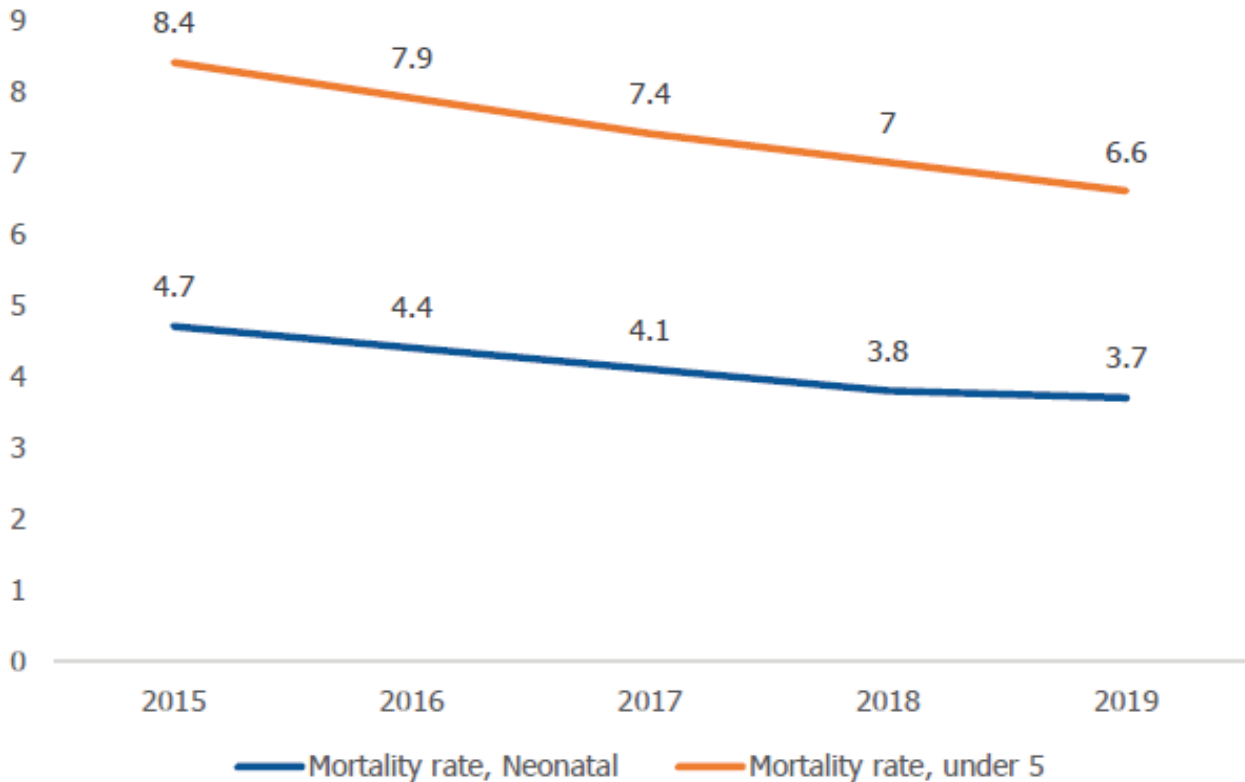
Source: World Bank

Figure 16.3: Life Expectancy at birth (in years)



Source: World Bank

Figure 16.4: Neo Natal and Under 5 Deaths (per 1000) in Saudi Arabia, 2016 – 2019



Source: World Bank

On – Going Projects in KSA

Table 16.1: On- Going projects in KSA

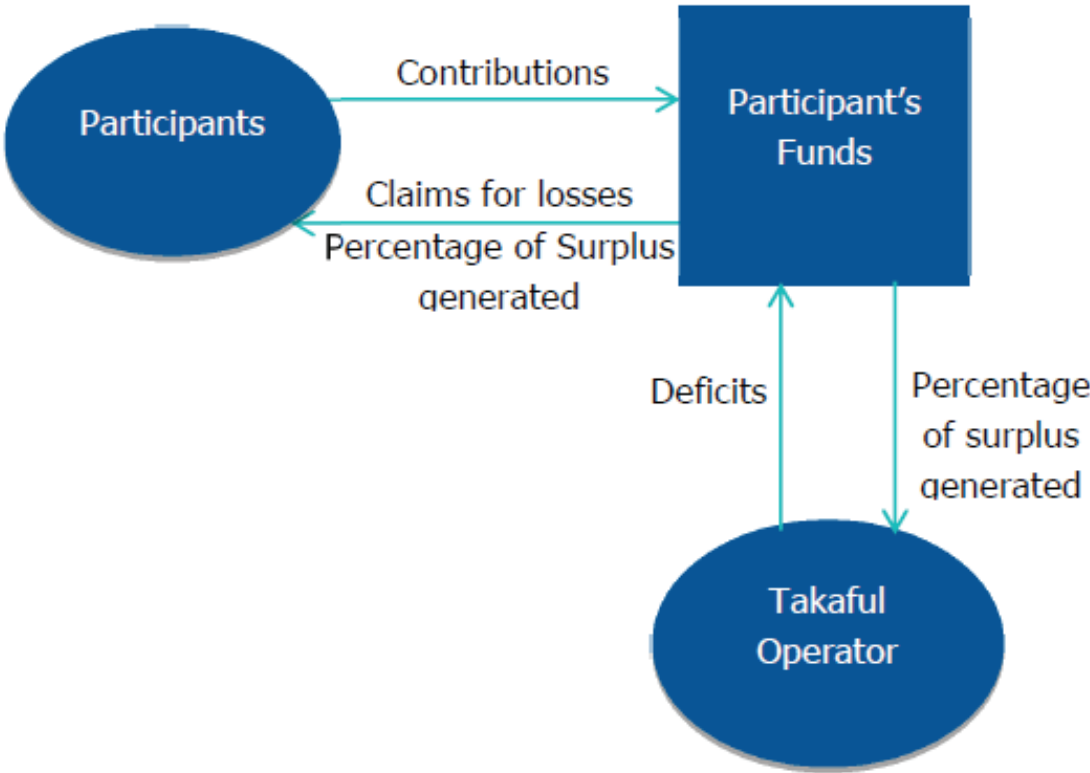
Project Name	Announced date	City	Project value (USD)
King Saud Medical City General Hospital	14th November 2019	Riyadh	50.7Mn
Batterjee Medical City Phase 4	16th September 2019	Dammam	N/A
Prince Sattam Bin Abdulaziz University Hospital	27th September 2018	Al Sayh	92Mn
Al Habib Medical City	29th July 2018	Riyadh	320Mn
Al Sahafa Hospital	29th April 2018	Riyadh	400Mn
Dr.Sulaiman Al-Habib Medical Group	25th April 2018	Jubail	400Mn
KAEC Hospital	23rd January 2019	Rabigh	NA
Green Riyadh Healthcare Facilities	21st March 2019	Riyadh	NA
Jizan Environment and Laboratory Complex	18th March 2019	Jizan City	NA
Southern Jizan Hospital	18th March 2019	Jizan City	NA
Saudi Arabia MOH-Hotat Sdair General Hospital	30th January 2019	Al Majmaah	NA
Sehatcom Medical city Hosiptal	30th October 2018	Jeddah	NA
Jeddah Dr.Sulaiman Al Habib Hospital	11th July 2018	Jeddah	NA

Source: Reuters

Co-operative insurance model in Saudi Arabia

Health insurance in Saudi Arabia is expected to be in compliance with the Shariah law. Currently, Saudi Arabia follows the Co-operative model of Takaful insurance. The participants provide the contributions to the participant's fund that is managed by the Takaful operator. However, the Takaful operator does not charge any fees to manage the funds on behalf of the participants. The operator makes Sharia compliant investments from this fund and generates profits which are shared by both the operator and the participants. This model does not provide for the Qard grant, but the deficits arising in participants funds due to claims made are to be provided by the company in full. As per the regulations, a minimum of 10% of the profits arising due to investment activities is provided back to the participant's funds and the remaining 90% is held by the company. However, this ratio could vary based on the company's discretion to provide more profits to the participants.

Figure 16.5: Pictorial Representation of the Co-operative Insurance Model



Source: Marmore Analysis

PPP Projects – Model

Providers

The private sector can improve the efficiency and effectiveness of existing services in terms of safety and equipment. Although some countries already have these assets, such as the Saudi Red Crescent Authority, these public or charitable providers' capabilities are not always strong across the whole value chain (which incorporates call reception, dispatching, transportation of the patient, and administration of care). Other opportunities that demand capital investment includes specialized care facilities, centers of excellence, knowledge-based economic activities, R&D, development of electronic platforms etc.

Payors

Private companies looking at payor opportunities require a minimum volume for the projects to be clinically and financially viable. Providing such guaranteed amounts of demand for healthcare services to private firms is also in the government's interest. One of the factors impeding the development of quality care is the haphazard nature of coverage, which prevents existing facilities from developing their skills.

An important payor opportunity stems from the introduction of mandatory health insurance schemes. These programs will need private companies that can offer services for front, middle, and back office functions. In the

front office, the private sector can supply actuarial services, design benefit packages, and determine premium and reimbursement rates. In the middle office, opportunities exist for providing disease management services to the public payors. The HAAD is seeking private partners to set up and run the disease management aspect of the Weqaya ("Protection") cardiovascular screening program. The authority plans to reimburse the private providers on a pay for performance basis that links revenues to KPIs. Finally, private firms can sell the public sector back-office administrative services such as claims management, processing, and adjudication. Daman in the UAE provides third-party administrative services to the Abu Dhabi government's health insurance scheme.

Suppliers

The private sector's expertise allows for the supply of reliable and low-cost healthcare necessities to the public sector. The private sector can manufacture generic pharmaceuticals and vaccines locally, partnering with its public-sector client to identify the areas of highest need.

The private sector can leverage its capabilities to reduce test turnaround times such as the provision of centralized laboratory and radiology services to hospitals. Private suppliers can also improve services in medical procurement and facilities management.

Educators

Educators have an important role to play as the GCC needs a large number of healthcare professionals. GCC countries have to meet the demand for provision of care and have more nationals enter healthcare as part of their national education and skills goals. There are shortages of doctors as well as nurses and allied staff, such as technicians. The lack of such support staff means that doctors are distracted from clinical work and forced to spend time on administrative tasks. One existing PPP venture is the Weill Cornell Medical College in Qatar set up by Cornell University and the Qatar Foundation.

PPPs can help the GCC to alleviate the growing burden of healthcare spending. By determining the role of the public sector and PPP-appropriate opportunities, governments can clear away institutional obstacles, build their own capabilities, and encourage private-sector participation. The task of making PPPs deliver healthcare that is accessible, high quality, and affordable does not, however, fall to governments alone. The private sector can be proactive, conduct its own analyses, such as feasibility studies, and share market intelligence with the public sector. By feeding into the PPP process in this manner, the private sector can assist governments and create opportunities for PPPs through a cooperative relationship based on trust.

Figure 16.6: Foundations Needed for PPPs

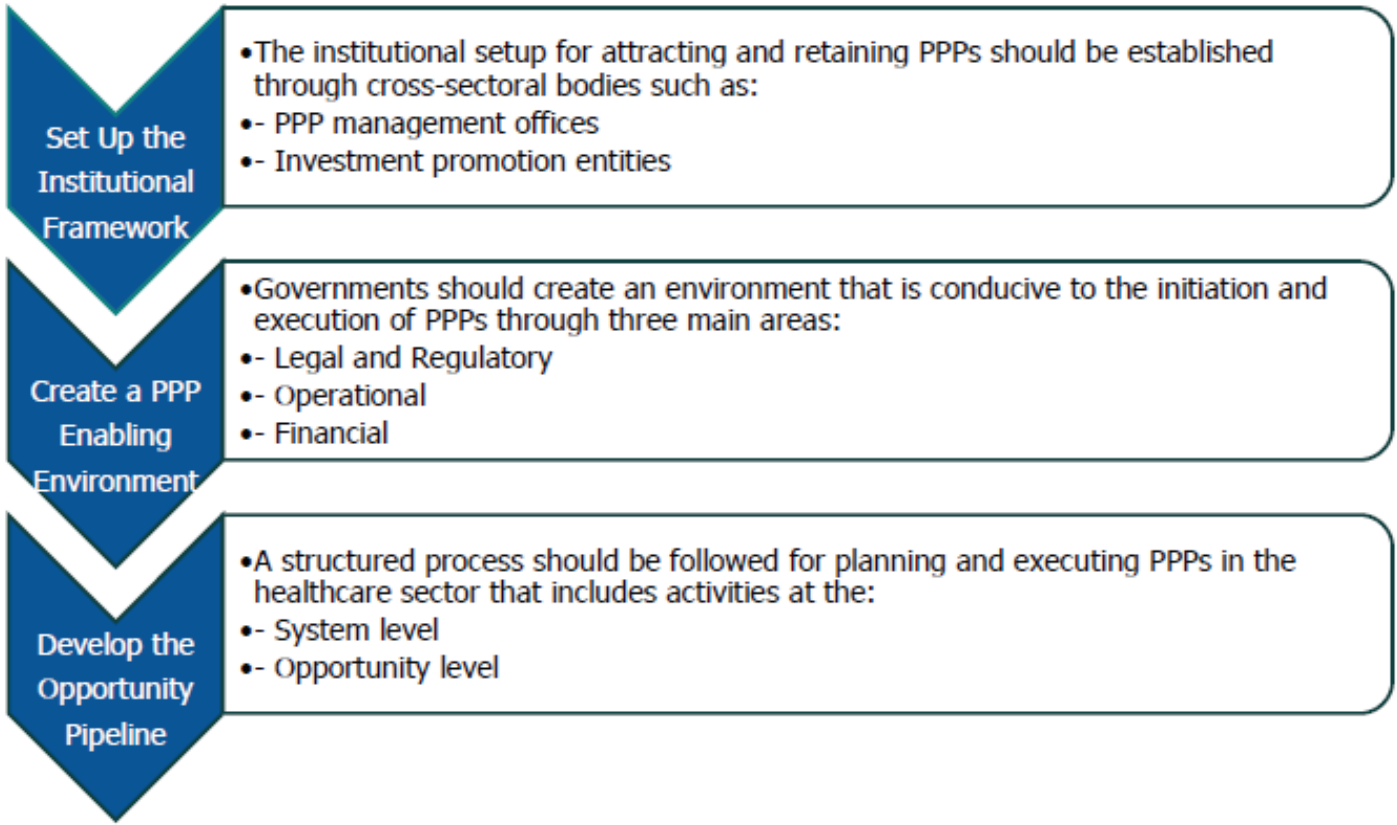
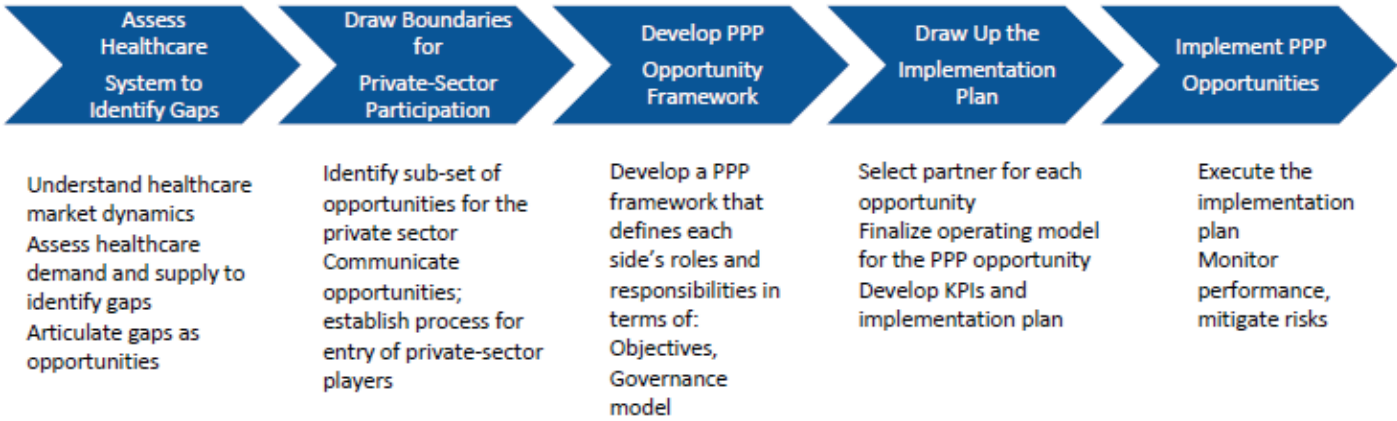


Figure 16.7: Healthcare PPP Planning and Implementation Process



Source: Booz & Co.

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