

GCCE | March 2022

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Outlook Report 2022

Emerging Trends and Recoveries Post-COVID-19

GCCE HEALTHCARE INDUSTRY REPORT



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GLOSSARY

Abbreviation	Details
ADQ	Abu Dhabi Developmental Holding Company
AI	Artificial Intelligence
ALOS	Average Length of Stay
BI	Business Intelligence
BOR	Bed Occupancy Rate
CAGR	Compound Annual Growth Rate
CMRC	Cambridge Medical & Rehabilitation Centre
COEs	Centre(s) of Excellence
COPD	Chronic Obstructive Pulmonary Disease
COVID-19	Coronavirus disease 2019
DHA	Dubai Health Authority
DOH	Department of Health
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortisation
EGP	Egyptian Pound
EHR	Electronic Health Records
GCCE	Gulf Cooperation Council Countries and Egypt
GOSI	General Organisation for Social Insurance
HIO	Health Insurance Organisation of Egypt
HMG	Dr. Sulaiman Al Habib Medical Services Group
IHC	International Holding Company
IHME	The Institute for Health Metrics and Evaluation (IHME)
IP	Inpatient Episodes
IR-DRG	International Refined-Diagnosis Related Groups
IVF	In-vitro fertilisation
LDL	Low Density Lipoprotein
M&A	Mergers and Acquisitions
MENA	Middle East and North Africa
MOH	Ministry of Health
MOHP	Ministry of Health & Population
MoU	Memorandum of Understanding
MTI	Medical Tourism Index
NCDs	Non-communicable Diseases
NMC	New Medical Centre Company
NTP	National Transformation Programme of Saudi Arabia
OP	Outpatient Visits
PHC	Primary Healthcare Centre
PM	Precision Medicine
PPP	Public Private Partnerships
RPM	Response Plus Medical Services

Definition of key formats prevalent in the healthcare industry

Abbreviation	Details
By level of specialisation	
Primary care centres	These provide the entry level of health services into the healthcare system
Diagnostic facilities	Provide simple to critical diagnostic procedures including clinical laboratory examinations by medical laboratory scientists or radiological services supervised by a radiologist. These services are often performed through referrals from other healthcare facilities and medical doctors
Urgent Care	These facilities are often walk-in clinics for emergency primary care. However, these are not designed for treating long-term conditions or immediately life-threatening problems that usually require emergency rooms
General hospitals	Hospitals focusing on general and/or tertiary care for the community, segregated into different departments or units. These may not be equipped to provide long-term care to patients. Amenities generally include a few specialities like general medicine, ENT, orthopaedics, cardiac sciences etc. Also, these might have certain unique services such as organ transplants, speciality medical devices
Specialised hospitals	These hospitals might have a wide range of specialities but have sub-speciality focus for selected specialities (e.g., cardiac care, women care, paediatrics, oncology, orthopaedic surgery, ophthalmology, psychiatric care etc.) and majority of patients receive care for a few Diagnosis-Related Groups (DRGs)
Short Stay centres	Short stay centres provide targeted care for patients requiring brief hospitalisation and dischargeable as soon as clinical conditions are resolved. They provide low complexity surgical, medical care and diagnostic procedures for patients with low-risk clinical conditions
By Length of Stay	
Acute Hospitals	These hospitals focus solely on offering care for patients with short-term needs with most people staying for a maximum of 10 days. In acute hospitals, the medical team can deal with different illnesses and disorders, surgeries, surgery recoveries, obstetric care, and postnatal care; however, they are not equipped to handle chronic or long-term care for patients
Day Surgery	An independent health facility, which provides day surgical services and is not located within or adjoining a hospital. It provides low complexity services for patients with low-risk clinical conditions who do not require hospitalisation or overnight stay beyond midnight (12am). It may include several surgical units to accommodate different procedures by respective surgical teams
Short Stay Hospitals	These hospitals have several wards, which are alternatives to ordinary wards that offer targeted care to patients. In short stay units, patients can be discharged directly after undergoing brief hospitalisation and resolving clinical conditions.
Extended Care Centres	<p>These facilities offer a new level of care including skilled nursing services in a high-quality facility at a lower cost than in a hospital. Some examples of extended care centres are:</p> <p>Long-term Care: Involve a variety of services designed to meet a person's health or personal care needs for an average inpatient stay of 150 days. These services help people live as independently and safely as possible when they can no longer perform everyday activities on their own. Long term care has many levels, with some including ventilation support to those in need</p> <p>Rehabilitation: Rehabilitation facilities offer a set of interventions designed to optimise functioning and reduce disability in individuals with health conditions in interaction with their environment. These services can be offered within an inpatient facility, or on an outpatient basis, depending on patient need and extent of disability.</p> <p>Home care: Home care is intended to be used for persons suffering from any sickness, injury, or disability to offer them a group of individualised therapeutic, social, and health services. This care can be offered as a residential service including day care services for some part of the day, or as outpatient visitations</p> <p>Palliative care centres: Palliative care centres are patient management facilities that focus on the physical, psychological, and spiritual needs of patients who are facing problems associated with life threatening illness or disabling diseases to improve quality of life of patients and their families</p>
Wellness facilities	
Wellness Centres	Healthcare facilities providing services for the body and mind under the supervision of qualified medical professionals. These include medical spas, gymnasiums, sports, and recreation facilities etc. These centres usually offer body care services, fitness activities, personal training, and nutrition consultations etc.

INTRODUCTION

Healthcare has always been a major part of any country's ecosystem. Driven by the COVID-19 pandemic, the sector has witnessed emerging trends at multiple levels globally. Barriers to entry for multiple types of products and services have lowered, and investment in areas related to technology and digital health has significantly grown. The significant pace of change in the way healthcare is delivered has brought significant opportunities for investment in the sector worldwide. The GCC and Egypt reflect faster adaptation to changes in the sector and have been at the forefront of providing advanced medical care to its population.

The Gulf Cooperation Council Countries and Egypt (GCCE) has been fast adapting the changes in sector like establishing Centres of Excellence, using high-end technology etc. and has been at the forefront of providing advanced medical care to its population.

Section 1: Healthcare Market Overview in the GCCE

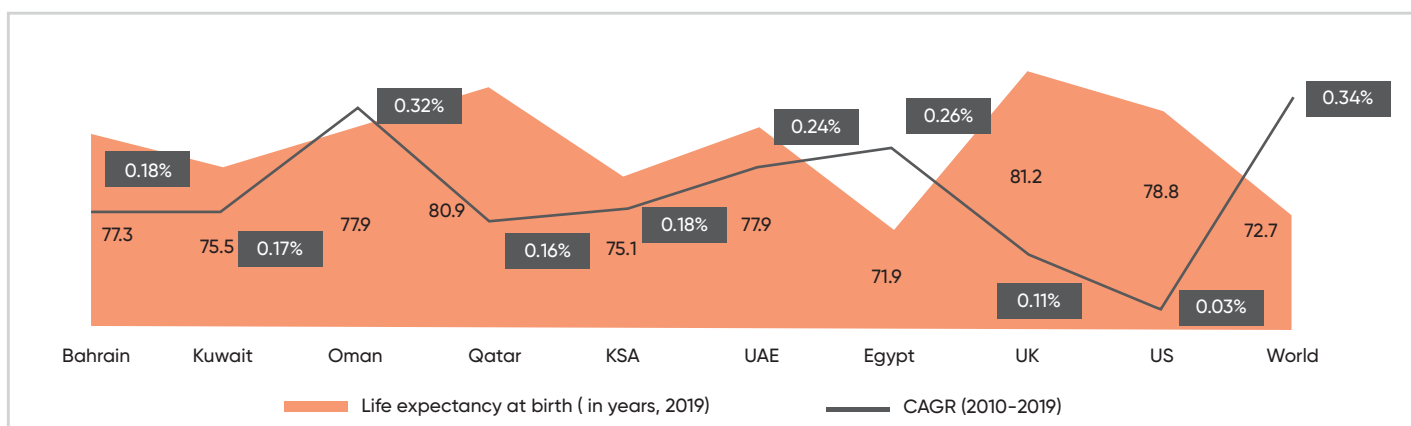
During 2020, the demand for healthcare services continued to grow despite countries being in lockdowns amid strict measures to limit the spread of COVID-19. Hospitals had to delay non-emergency medical care to cater to the emergent cases of COVID-19. Delays in scheduled treatments, and the temporary reallocation of resources to treat COVID-19 cases created a large pool of untreated cases. As the year came to its end, the sector witnessed rise in cases while simultaneously resuming non-COVID-19 care.

Apart from COVID-19, major factors driving demand for healthcare in GCCE are population growth, higher life expectancy, increase in lifestyle related illnesses and non-communicable diseases etc., which are discussed in detail in this section.

- **Life expectancy in the GCCE countries has increased significantly throughout the past few years:**

Life expectancy in the GCCE countries has witnessed an average growth of ~0.2% (between 2010 and 2019). Also, it is higher in the GCCE countries (except in Egypt) than the world average (72.7 years). Increase in life expectancy at birth and the share of population above 65 years old indicates a foreseeable growth in ageing population and in demand for services related to that segment i.e., geriatric care, extended care, and assisted living etc

Exhibit 1: Life Expectancy at Birth (years) in GCCE, 2019



- **Rising prevalence of lifestyle related morbidity has been driving demand for preventive care and chronic disease management services:**

Preventable causes of death are still high and among the top leading causes of death in GCCE. Those include ischemic heart disease, stroke etc.

Exhibit 2: Top 5 Risk Factors Driving Death and Disability, 2019

	Bahrain	Kuwait	Oman	Qatar	KSA	UAE	Egypt	UK	US
High Body-Mass Index	1	1	1	1	1	1	2	3	2
High Blood Pressure	3	3	2	5	2	2	1	5	4
High Plasma Glucose	2	2	3	2	3	4	5	2	3
Dietary Risks		5	4	1	4			4	5
Air Pollution	5			4	5		4		
Tobacco	4	4		3		3	3	1	1
High LDL			5			5			

 Metabolic Risks

 Behavioural Risks

 Non-modifiable Risks

As shown in exhibit 2, risk factors associated with many of the most common causes of death are largely related to lifestyle, highlighting the fact that most causes are preventable and can be reduced through mature preventive care and public health systems.

Exhibit 3: Top 5 leading causes of deaths, 2019

	Bahrain	Kuwait	Oman	Qatar	KSA	UAE	Egypt	UK	US
Ischemic Heart	1	1	1	1	1	1	1	1	1
Disease	1	1	1	1	1	1	1	1	1
Road Injuries	4	4	2	2	2	2	4		
Stroke	3	2	3	4	3	3	3	2	4
Chronic Kidney	5				4	4	5		
Disease	5				4	4	5		
Diabetes	2		4	3		5			
Lower Respiratory		3	5		5			5	
Infections		3	5		5			5	
Infections		5							5
Liver Cirrhosis				5			2		
COPD								3	3
Lung Cancer								4	2

 NCDs

 Communicable Disease

 Injuries

The case is slightly different for Egypt as liver cirrhosis is one of the top causes attributed to high prevalence of hepatitis virus infections. Hepatitis C is generally caused by unsafe medical injections and inadequate infection control. However, the Egyptian government has been successfully tackling this issue, with the prevalence of the infection dropping

Insight:

Most of the top causes of death being preventable means an opportunity exists for preventive care in the region. This coupled with other factors like government support and attractive investment environment in the region creates opportunities for lucrative business models that address needs in this region.

Section 2: Country Profiles

2.1 UAE

The UAE government took swift action to support its economy amid the COVID-19 crisis, right from a comprehensive Economic Support Scheme and stimulus packages to an aggressive vaccination programme.

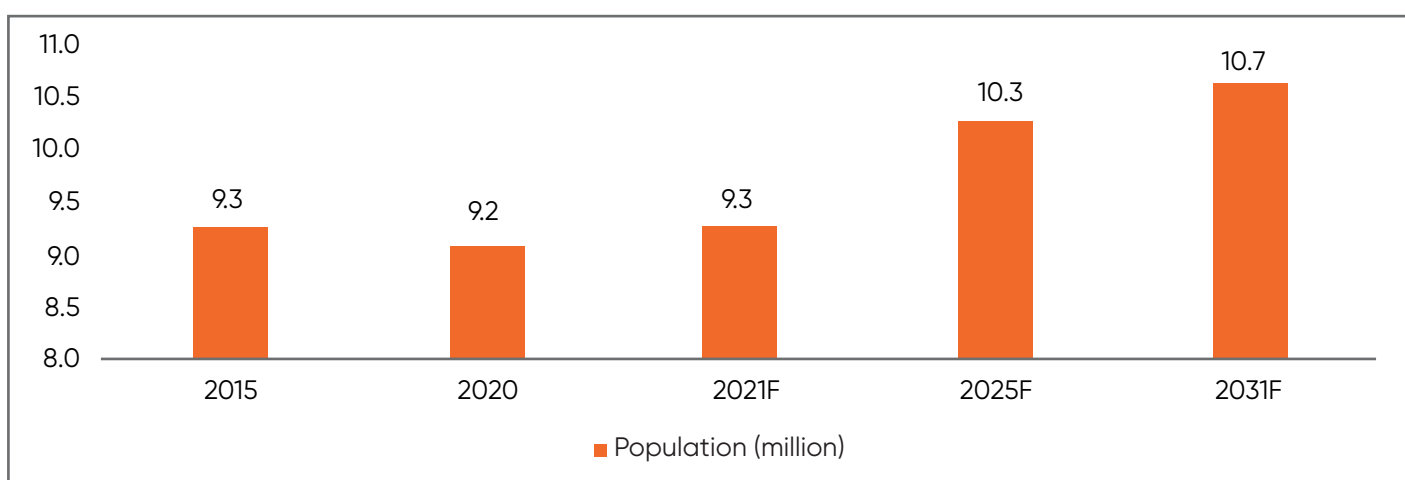
As the economy gets back on track post pandemic related restrictions, Expo 2020 has provided an additional boost to the economy.

2.1.1 Demographic Analysis

• Population and growth:

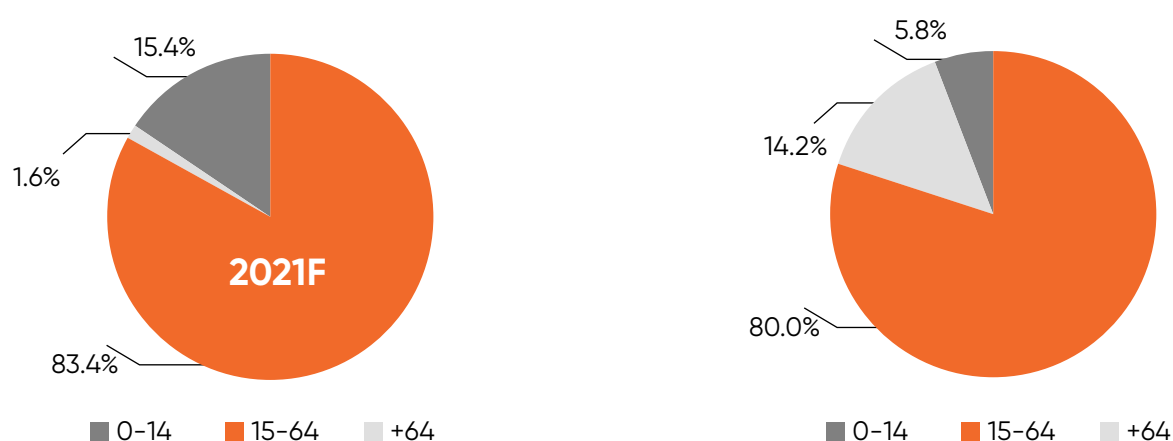
UAE is one of the most diverse countries in the GCC with a population of ~9.3 million in 2021, making it one of largest nations in the GCCE. The global pandemic had a negative impact on UAE's population growth with a large expatriate exodus due to massive job losses and lack of job opportunities. Expatriates comprise majority share of the population in UAE, about 88% in 2021. However, in the future, the population is estimated to grow by 1.4% by 2031, to reach ~10.7 million. Growth in population will in turn entail higher demand for healthcare services. This will create more opportunities for existing players to expand and for new entrants to invest in the healthcare market

Exhibit 4: Total Population of UAE (2015-2031F)

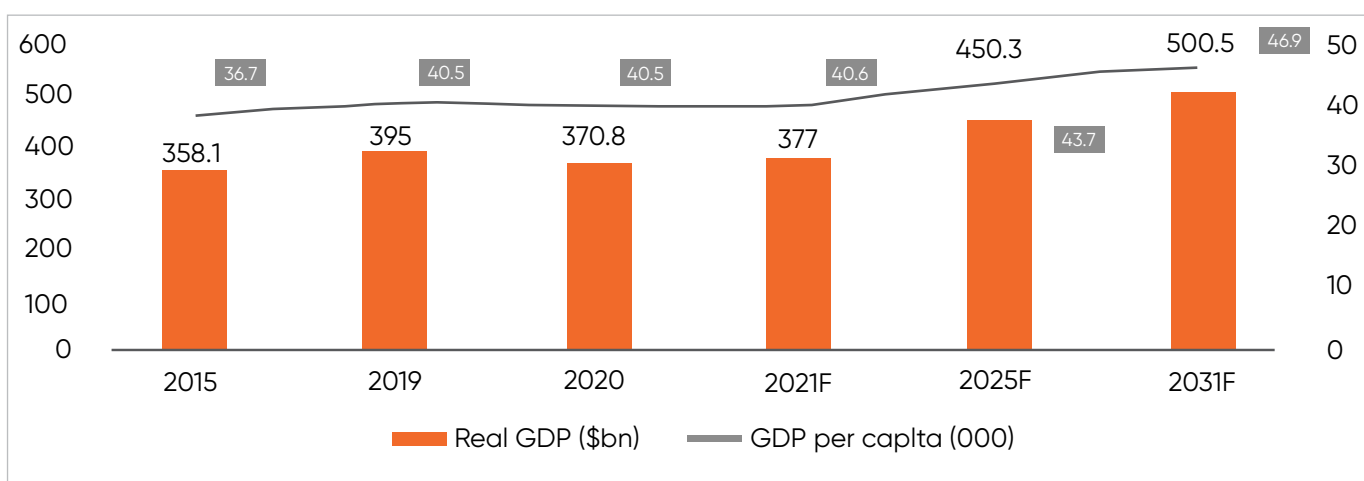


• Growing share of ageing population:

to drive demand for geriatric, and specialised care segments: Young and middle-aged population forms a majority in the UAE in 2021. While the ageing population (people aged 64 years and above) formed only 1.6% of the total in the same year, by 2031, this segment is expected to comprise about 5.8% of the total population.

Exhibit 5: Age Group Demographics of UAE (2021 vs. 2031F)**2.1.2 GDP and growth:**

UAE's economy has witnessed significant growth in recent years and this trend is expected to consolidate further. Although GDP contracted by about 6% in 2020 compared to 2019 due to the COVID-19 crisis, it is forecast to grow at 1.7% between 2020 and 2021. Further, the economy is expected to grow at a CAGR of 2.9% over the 2021-2031 period. The GDP per capita is also expected to grow at a CAGR of 1.5% over the same period. Expo 2020 has been a major boost to the country's economy and has helped significantly in the post COVID-19 economic market recovery.

Exhibit 5: Age Group Demographics of UAE (2021 vs. 2031F)

Although oil is a major segment of the UAE economy, the country has worked on diversifying into manufacturing, construction, and financial service industries to lower dependency on natural resources. Incentives have been announced to attract investment across the UAE, like:

- **Offering 10-year residency visas for foreign investors and professionals (medical, science, technical fields etc.)**
- **100% ownership of companies**

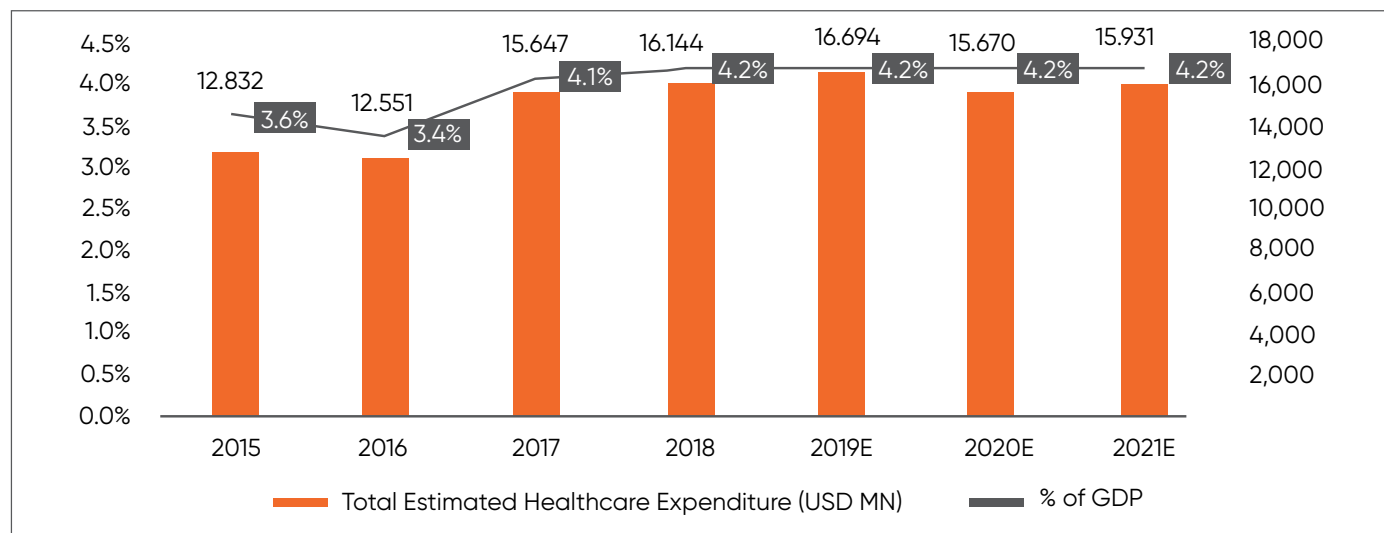
Creating and maintaining a sustainable and diversified economy has been a component of Vision 2021.

Government is focusing on the UAE becoming the economic, touristic, and commercial capital of the region. To achieve this, it has set 12 key performance indicators (KPIs) including Non-oil real GDP growth, Net inflow of foreign direct investment (FDI) as % of GDP, Ease of doing business index etc.

2.1.3 Healthcare market size:

The UAE has significant total and per capita healthcare expenditure and has witnessed a significant growth in healthcare expenditure over the past, mainly driven by growth in the private sector. But the value is not at par with other developed countries, owing to increasing population and healthcare needs of the country. It indicates need of further investment from the Government and private players in the healthcare industry

Exhibit 7: Total Estimated Healthcare Expenditure (USD Mn) and as % of GDP



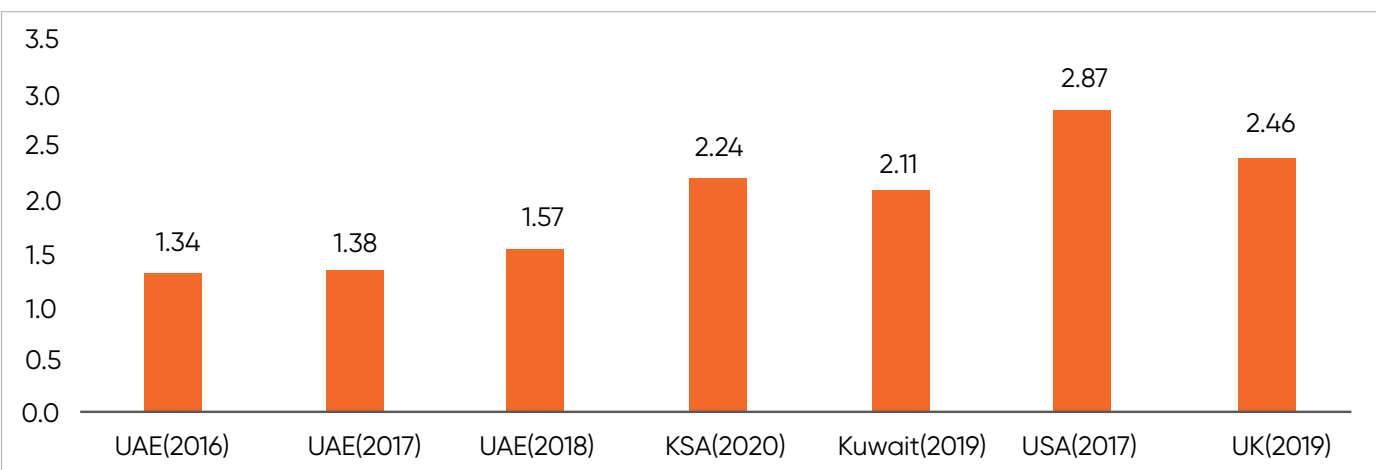
Note: Healthcare market size has been estimated based on total GDP of the country and share of healthcare expenditure as % of total GDP. The World Bank data for Healthcare expenditure as % of GDP is available till 2018 only. Post that, similar share of GDP has been considered to arrive at total healthcare market size for all the GCCE countries.

The UAE government is encouraging the PPP (public-private partnership) model to meet its rising medical needs while reducing the financing burden. These factors are luring private healthcare companies to the UAE.

2.1.4 Hospital bed density:

While the country offers top medical facilities and quality care, hospitals beds are still lower per 1,000 population, when compared to developed economies like the USA and the UK. The density was also lower than regional counterparts such as the KSA and Kuwait.

Exhibit 8: Hospital Bed Density per 1,000 Population



2.1.5 Bed Gap in 2021 and additional beds needed by 2031:

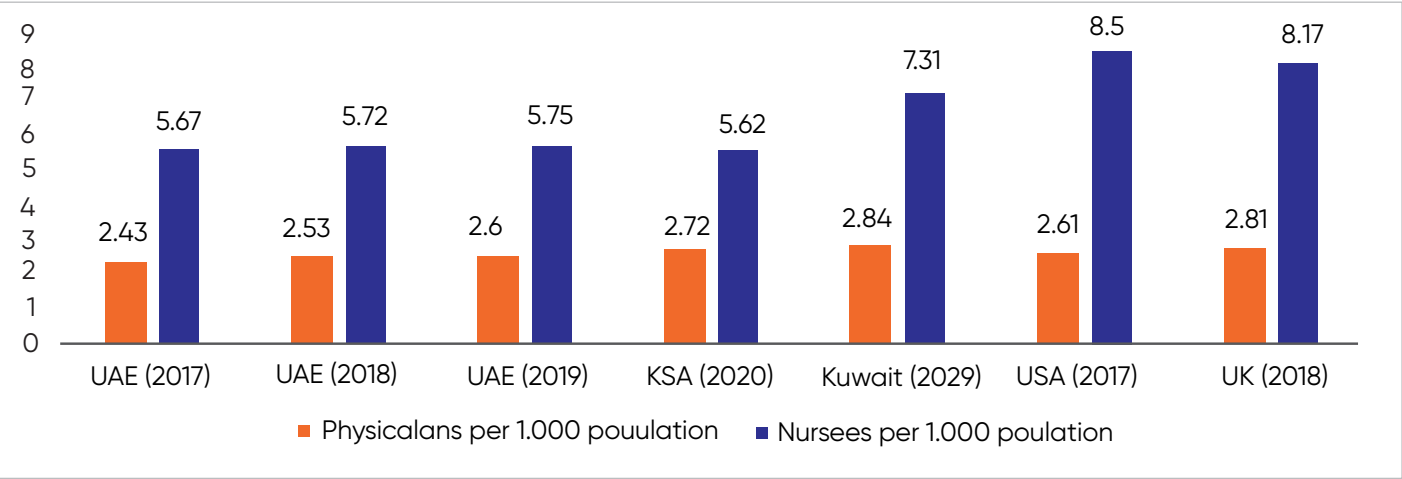
The MOH in KSA has identified 2.7 per 1,000 population as a target benchmark for the country based on an extensive regional and global benchmarking exercise. This density is being considered for all health clusters in the KSA as part of the National Transformation Programme (NTP). For the purpose of this report, the same benchmark has been considered for all GCCE to arrive at bed demand between 2021 and 2031. However, the required bed density may vary from country to country depending on population age and disease profile. As per this benchmark, UAE's bed numbers fell short to reach 2.7 bed density per 1,000 people and an additional 10,900 beds are needed by 2021 over 2018 numbers (as per latest availability). Similarly, an additional 13,700 beds would be required by 2031, indicating significant investment opportunity in the healthcare sector.



2.1.6 Demand for manpower to Increase:

UAE's comparable availability of nurses per 1,000 population is lower as compared to the developed economies (i.e., the UK and USA); while physicians per 1,000 are comparable to the US/UK in 2017/2018. The demand for physicians and nurses, especially since the onset of the pandemic, has only increased. Multiple medical universities across the Emirates offer students education in medicine, pharmacy, and related fields and attract both local and international students.

Exhibit 9: Healthcare Manpower Density of UAE (compared to other countries)



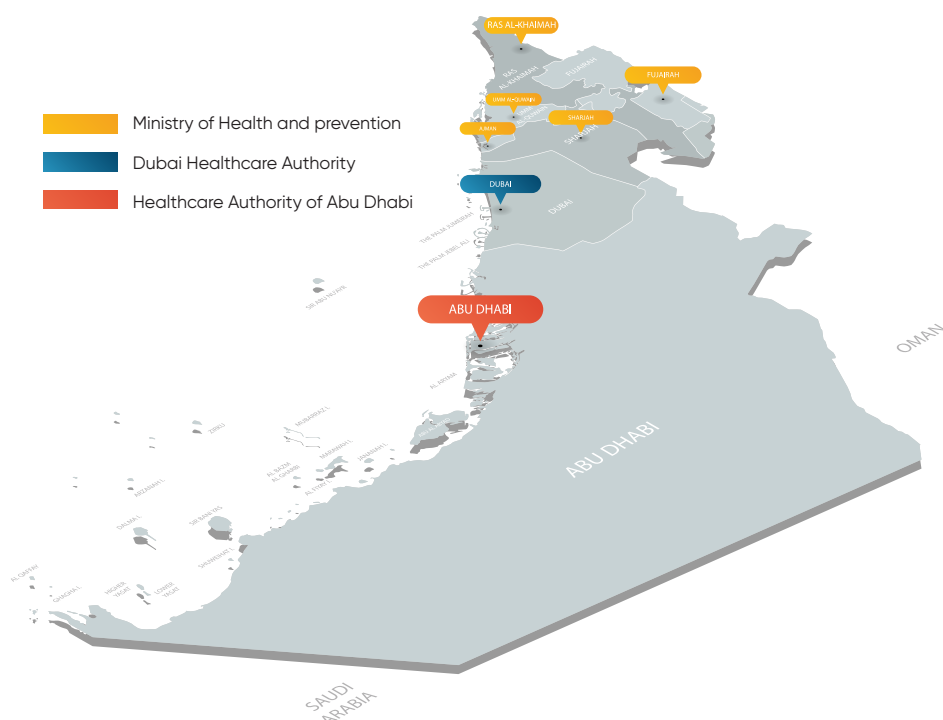
2.1.7 Transformation Strategies

The UAE's Healthcare ecosystem is arranged and managed on different levels depending on jurisdiction. There are three main healthcare regulators – the Ministry of Health (MOH), the Dubai Health Authority (DHA), and the Department of Health – Abu Dhabi (DOH) with MOH being the federal authority. Also, the MOH makes policies and manages healthcare markets of Sharjah, Ajman, Umm Al Quwain, Ras Al-Khaimah, and Fujairah. The DHA administers the healthcare sector in the Emirate of Dubai. DHA is the regulatory body while Dubai Healthcare City Authority (DHCA) was merged to include all other DHA hospitals. A new organisation, Dubai Academic Health Corporation (DAHC) has been formed to integrate healthcare, medical education, and research.

DHA makes regulations and controls licencing procedures for all hospitals, medical clinics, and primary care centres in Dubai – both public and private. The DOH-Abu Dhabi manages all health insurance, legislation, medical practice, and pharmaceutical areas in the emirate of Abu Dhabi. In addition to these, DOH has the role of maintaining investment opportunities, research, development, and education in the sector. It is also responsible for management and development of medical activities of public hospitals and medical clinics in the Emirate of Abu Dhabi.

Exhibit 10: Key Health Regions and their Jurisdictional Body, UAE (2021)

The healthcare market in UAE has started witnessing an increase in government initiatives to boost sector growth. Further, the private sector has an opportunity to easily access the healthcare market due to the recent change to include 100% foreign ownership in the UAE and increasing international collaborations. This change is expected to boost healthcare investments in the country. Also, regulatory changes like increasing focus on PPP model are leading to increasing opportunities for private players in the country.



Dubai: The implementation to IR-DRG in Dubai in 2020 has eased payment and increased transparency of the billing system. Hence, mandatory coverage along with IR-DRG implementation encourages foreign investments to be established in the country. The Dubai Government is seeking to improve inbound medical tourism, especially, in Dubai and aiming to make the Emirate a medical tourism hub. This will increase the opportunity for investors to establish new business in the country. There is also focus on reducing outbound medical tourism in Dubai. The overall number of patients travelling overseas from Dubai has decreased at a significant rate with almost ~29% CAGR between 2015 and 2019. This is mainly because of expanding medical facilities in Dubai. The number of medical tourists has been growing significantly in Dubai and the Emirate aims to achieve its goal of attracting 500,000 medical tourists by end of 2021, supported by Expo 2020 and the continued development of the healthcare sector.

The DHA is also focusing on the following 15 strategy programmes to help growth of the healthcare market:

Exhibit 11: Health Strategy Programmes, UAE (2016 – 2021)

Abbreviation	Details
Care Model Innovation	Designed to promote innovation and efficiency and ensure that Dubai residents and visitors have access to high quality services across the continuum of care. It introduces innovative care models to fill existing care delivery gaps and enable an integrated cost-effective, patient and innovation-oriented care delivery system.
Prevention & healthy lifestyle	Designed to promote innovation and efficiency and ensure that Dubai residents and visitors have access to high quality services across the continuum of care. It introduces innovative care models to fill existing care delivery gaps and enable an integrated cost-effective, patient and innovation-oriented care delivery system.
Public Health & Safety	Aims to promote a healthy environment for the population, especially, for the most vulnerable. It also helps in defining public health standards, policies and guidelines and design organised measures to prevent disease, promote health, and prolong life.
Primary Care	Designed to ensure that all the population including the most vulnerable have access to high quality primary care in an equitable fashion and focuses on promoting primary care as an entry point to the healthcare system.
Oral & Dental Care	Focuses on improving oral health outcomes and ensure that all individuals have access to high quality treatments and effective prevention programmes for dental care.
Mental Health	Stimulates the development of an ecosystem that ensures that the population of Dubai has access to high quality care (including prevention and promotion) for mental health conditions, and addresses the social stigma associated with mental health.
Chronic Disease Management	Drives the development of speciality centres that can provide programmes focused on the management of chronic diseases outside the setting of acute/tertiary hospitals. Such programmes help chronic disease patients better manage their conditions and reduce their need for hospitalisation and tertiary care treatments.
Centres of Excellence (COEs)	COEs respond to the high demand for specialised and tertiary care for selected high prevalent diseases in UAE such as cardiovascular, cancer, trauma, ophthalmology, neurology. This programme also endorses clinical research and training programmes in those specialities.
Medical Tourism	Focuses on promoting the development of medical tourism in Dubai, and positioning Dubai as a global health tourism destination.
Excellence & Quality	Promotes excellence in healthcare service delivery in Dubai while enhancing patient happiness, experience, satisfaction, and trust
Governance (Regulation & Service delivery)	DHA is undergoing a huge transformation and this programme aims at improving the governance framework of Dubai healthcare sector. It also aims at strengthening the internal governance structure of DHA, through re-engineering its public service delivery and regulatory functions
Workforce & Medical Education	Aims to attract, retain, and develop the healthcare workforce for the emirate of Dubai. Simultaneously, the programme aims to further strengthen the national healthcare workforce by providing them and the rest of the workforce world class medical education.
Medical Informatics & Technology	Technology today is an intrinsic part of organisations, and this programme aims to drive the implementation of an integrated data platform across all public and private facilities in Dubai and enhance data analytics tools needed for research and decision-making policies.
Health Insurance & Financing	Aims to ensure the successful implementation of health insurance law in Dubai and improve coverage and accessibility to healthcare services
Investment & Partnerships	Promotes competitiveness and encourages foreign and domestic investments in the health sector in Dubai.

Abu Dhabi:

Abu Dhabi has been a pioneer in the UAE's healthcare sector and has been the first mover in introducing mandatory health insurance, which is one of the key drivers for the healthcare market across all specialities in the Emirate. The Emirate has been a pioneer in bringing specialised healthcare formats and providing insurance coverage for the same, like in extended care (LTC, Rehab and home care), backed by a strong regulatory framework. The private healthcare sector experienced steep growth due to various initiatives undertaken under the 2014 Abu Dhabi Healthcare Strategic Plan. The 2014 Strategic plan focused on the following major aspects:

- Reduce capacity gaps
- Improve service quality
- Employ qualified healthcare professionals
- Encourage public and private investments
- Digitalise processes
- Ensure affordable services

Recently, DOH- Abu Dhabi introduced Certificate of Needs for key specialities in Abu Dhabi to regulate any new addition in the healthcare system based on current supply of services and estimated demand and supply gap in the healthcare sector.

Northern Emirates:

All the Northern Emirates operate as medical districts under the purview of the MOHAP. The MOHAP is moving towards privatisation in the Northern Emirate. In 2017, Pure Health took over operations of medical diagnostic laboratories under the Ministry for renovation, upgrading and staffing with high calibre laboratory expertise. This had led to improvement in efficiency of laboratories in the region. Northern Emirates are yet to roll out mandatory insurance schemes similar to Dubai and Abu Dhabi.

In Sharjah, a free zone authority called Sharjah Health Authority (SHA) was established in 2010. SHA's mission currently is primarily to develop Sharjah Healthcare City (SHCC).

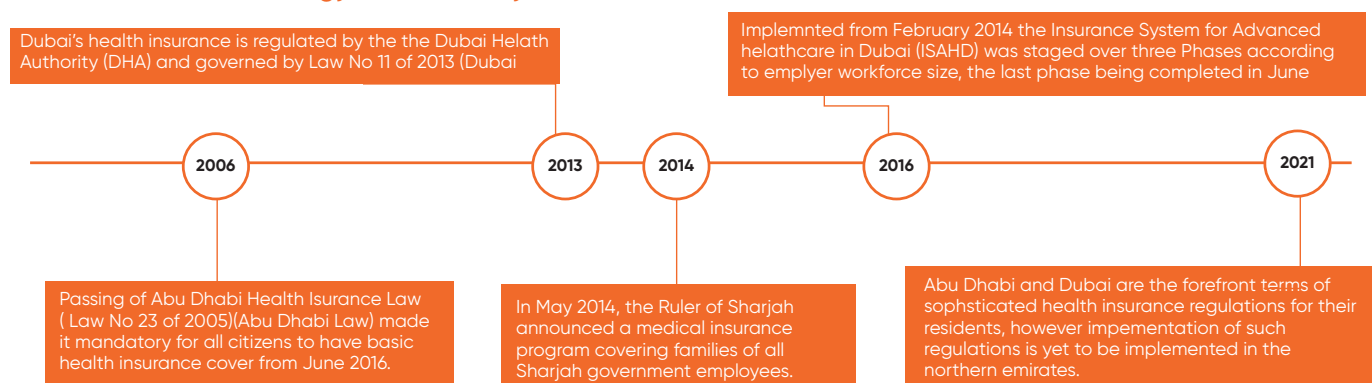
Exhibit 12: MOHAP Strategic Objectives (2017 – 2021)

Abbreviation	Details
First Objective	Provide a comprehensive and integrated healthcare in innovative and sustainable ways to prevent spread of diseases in the community
Second Objective	Develop effective health information systems and apply global standards in the management of health facilities and infrastructure
Third Objective	Build quality and safety in therapeutic, healthcare, and pharmaceutical systems according to international standards.
Fourth Objective	Provide a vital legislative framework and, governance, and distinctive regulatory and supervisory services for the healthcare sector
Fifth Objective	Ensure and guarantee the provision of all administrative services according to the standards of quality, efficiency, and transparency
Sixth Objective	Entrench a culture of innovation in the institutional work environment

2.1.8 Medical insurance – UAE

Health insurance coverage in the UAE is a key demand driver for uptake of healthcare services. Also, implementation of mandatory health insurance scheme in the Emirates of Abu Dhabi (2006) and Dubai (2014) led to an increase in the percentage of insured population.

Exhibit 13: Roll out strategy of mandatory insurance in UAE



The UAE is moving towards a more expansive health insurance system and all UAE's residents may have mandatory health insurance in the foreseeable future. A federal law was drafted in 2013 and is currently with the Ministry of Finance for review.

- Under the 'Thiqa' programme, Abu Dhabi Government provides full medical coverage for all UAE nationals living in Abu Dhabi.
- Saada is a health insurance programme for citizens in the emirate of Dubai. It provides insurance coverage to citizens who do not currently benefit from any government health programme in the emirate of Dubai.
- The Government of Ajman provides all its employees with health insurance.
- However, Northern Emirates are yet to roll out mandatory insurance schemes similar to Dubai and Abu Dhabi.

UAE nationals have free access to public healthcare services through respective hospitals and centres. Expatriate population mainly benefits from private health insurance. The percentage of nationals seeking care in private hospitals is increasing in the region due to several factors:

- Increasing availability of private insurance among nationals who are employed in private sector companies.

An example is Abu Dhabi, where although majority of beds are in public sector, a large part of IP admissions is in private sector.

- Improvement in healthcare services available in private sector making it more attractive and reassuring that these services in private hospitals will be of high quality

Insight:

The UAE is home to a wide-range of government-funded and a rapidly evolving private healthcare sector, which delivers high standard of healthcare to the population. Also, the healthcare sector is driven by growing economy, implementation of comprehensive medical insurance in key Emirates, use of high-end technology, boost of medical tourism and liberalising policies to attract foreign investments. But the bed density is comparatively lower, indicating significant opportunity for potential investors. Also, growth in the market, especially in the Emirates of Dubai and Abu Dhabi is expected to be driven by the advent of new business models other than typical multi-speciality hospitals.

2.2 KSA

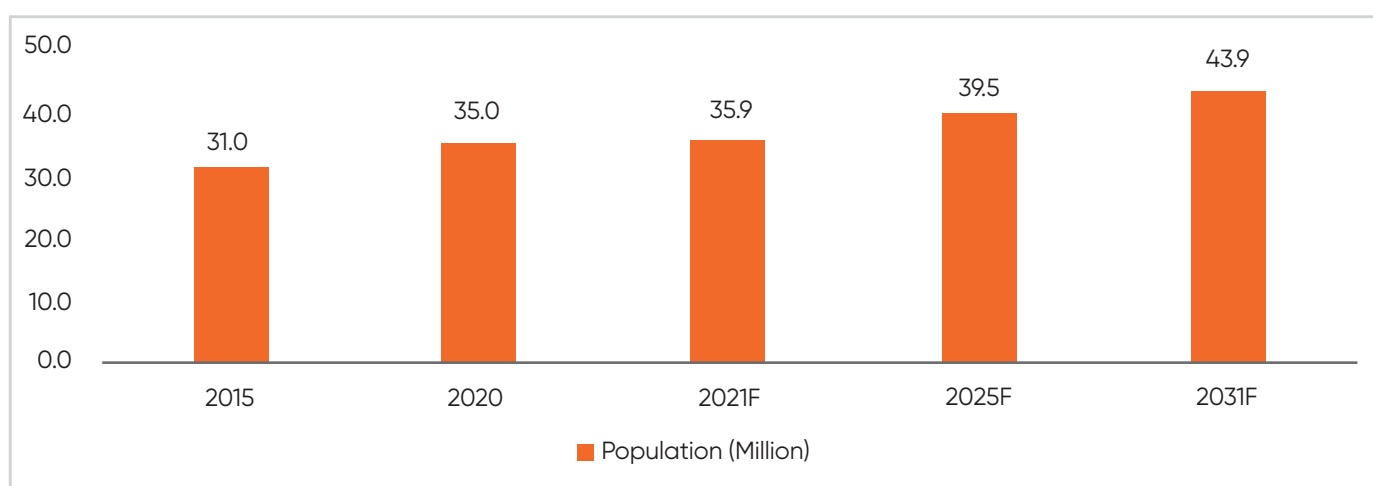
The KSA has been witnessing one of the quickest rebounds post COVID-19, in the GCCE. Most non-oil sectors are returning to their pre-COVID-19 levels, driven by large domestic demand as well as spending on giga-projects. Oil prices are on the higher side, driving the economy strongly forward.

2.2.1 Demographic Analysis

• Population and growth:

KSA has one of the largest populations in the GCCE and it is fast growing. The population of KSA is estimated to grow at a CAGR of 2.0% by 2031, from ~35.9 million in 2021 to reach ~ 43.9 million. Expats form about 38.5% of the population in KSA, in 2021. The large population base has been one of the key reasons for the KSA being a key hub for all sectors of business, including healthcare. The growth in population, which is one of the highest in the region, will in turn entail higher demand for healthcare services.

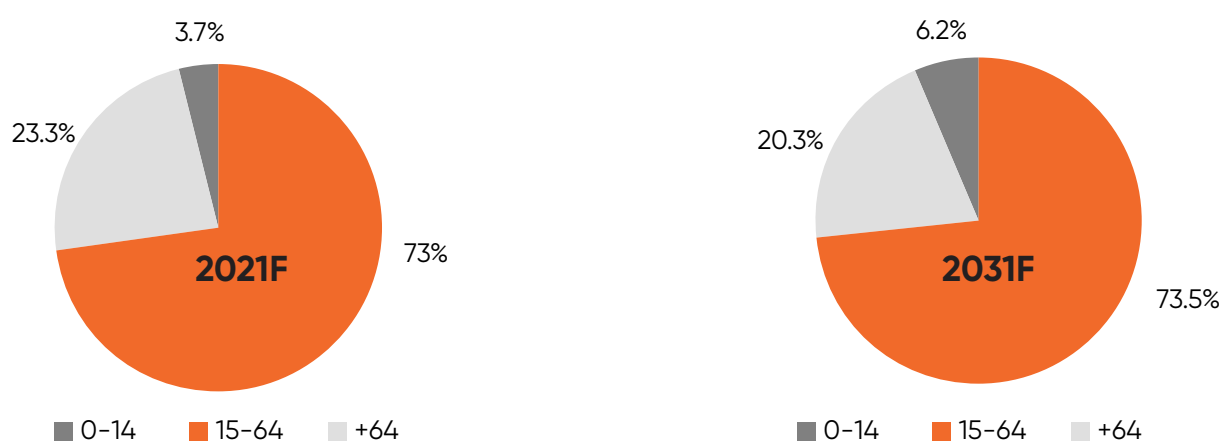
Exhibit 14: Total Population of KSA (2015–2031F)



• Growing share of ageing population:

While all the age groups are projected to increase in size along with overall population growth, the demographic profile is expected to see a higher geriatric population (64+ years of age) share. They are expected to comprise 6.2% of the population in 2031, as compared to the current 3.7%.

Exhibit 15: Age Group Demographics of KSA (2021 vs. 2031F)

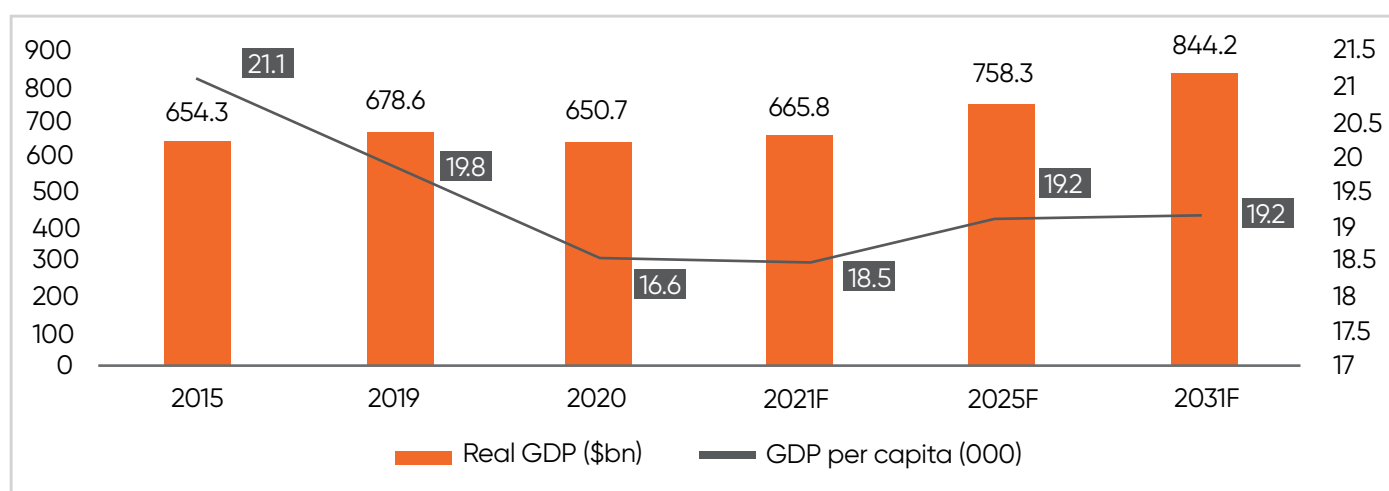


2.2.2 GDP and growth:

Although, KSA has been investing heavily in its infrastructure and non-oil sectors, the country's economy is still heavily dominated by the oil sector and related industries. The economy has been boosted by the rise in oil prices over last few years. In 2019, it was USD 64.04 per barrel and increased to ~USD 68.09 per barrel. Non-oil revenue has also increased, due to additional fees (such as excise duty on harmful products and levy on expat dependents) and contribution from VAT (introduction in January 2018).

Although GDP contracted by about 4% in 2020 compared to 2019 due to the COVID-19 crisis, it is expected to grow at 2.3% in 2021. Further, the economy is expected to grow at a CAGR of 2.4% over the 2021-2031 period. As growth in population exceeds growth in real GDP, real GDP per capita is seen to fall till 2021. However, that trend is reversed and the GDP per capita is expected to be stable going further.

Exhibit 16: Real GDP (USD Bn) and GDP per Capita (in '000) of KSA (2015-2031F)

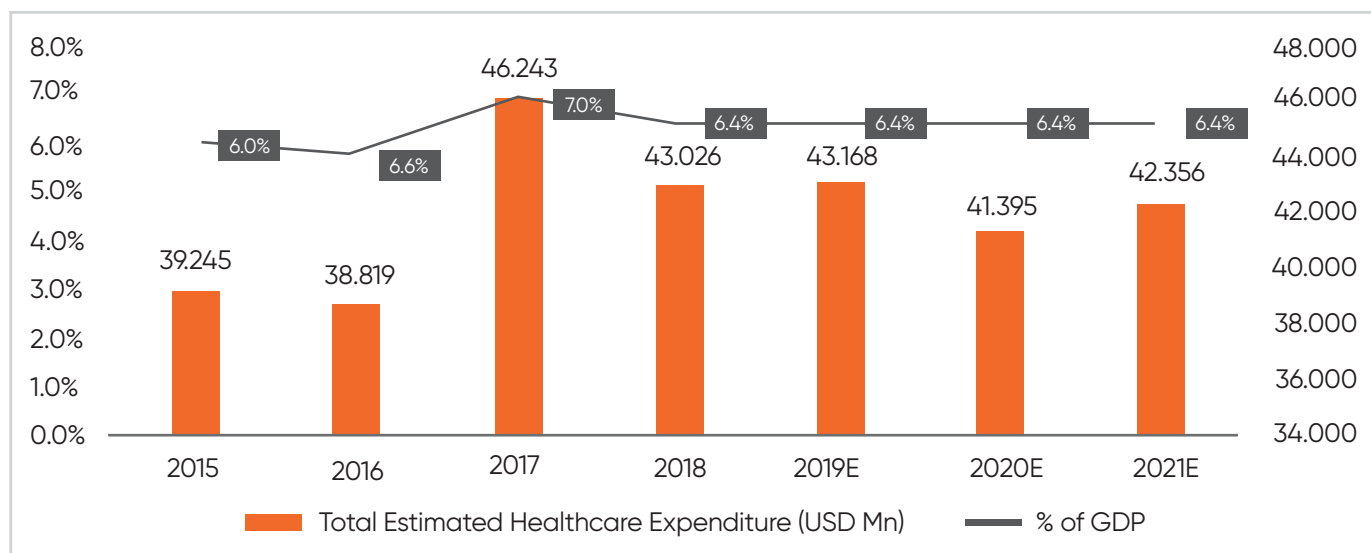


Also, as part of Saudi Vision 2030, the Government is reducing the country's dependence on its oil sector. One of the key goals is to raise the share of non-oil exports in non-oil GDP to 50% by 2030. Additionally, increased investment in infrastructure and non-oil sectors of economy, particularly the entertainment, tourism, and hospitality sector, are expected to boost other industries in the long term.

2.2.3 Healthcare market size:

The overall growth in healthcare expenditure in the KSA has been robust, driven primarily by the private sector. Also, its healthcare expenditure as % of GDP has been the highest in the GCCE. However, it is still lower than other developed economies (UK- ~16.9% of GDP and USA- ~10.0% of GDP in 2018) indicating a major growth opportunity.

Exhibit 17: Total Estimated Healthcare Expenditure (USD Mn) and as % of GDP



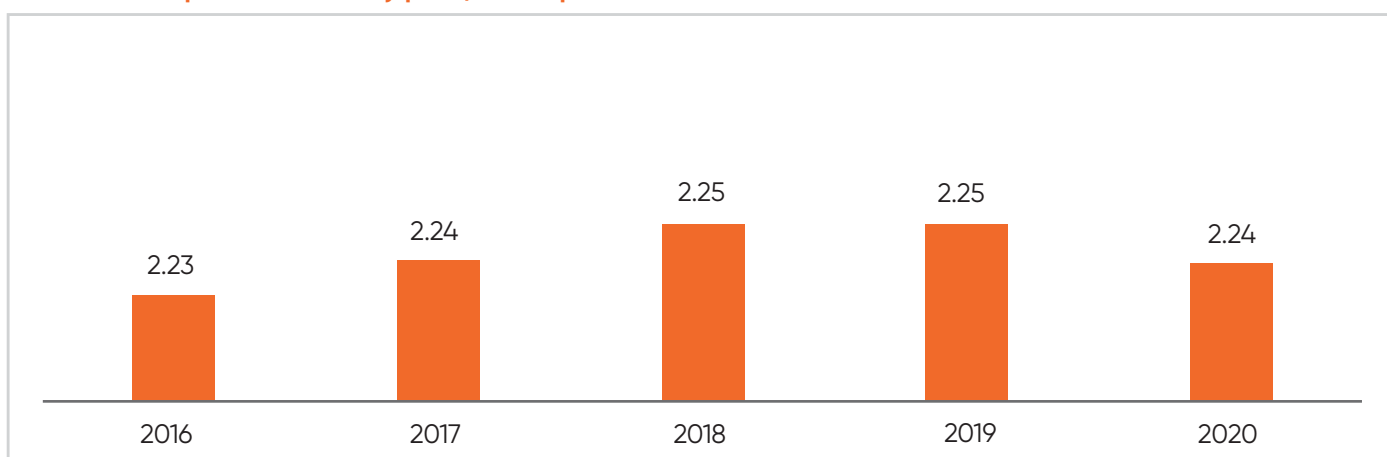
The KSA Government is pushing towards reduction in overall public sector spend on healthcare and moving towards the PPP framework:

- Recent announcement to establish a holding company and five regional companies as part of its plans to privatise the sector. It will allow full foreign ownership in the health sector, so the MOH will become a regulator and not service provider.
- Plans to develop various medical cities, which would be operated in conjunction with the private sector investment using various PPP models.

2.2.4 Hospital bed density:

Public sector hospitals in KSA held around 57% of the total beds in 2020. This is expected to change with the Government focusing on public-private-partnerships in healthcare. Although the country stood at the top among other GCCE countries in hospitals bed density per 1,000 population, it is lower when compared to developed economies like US and the UK.

Exhibit 18: Hospital Bed Density per 1,000 Population



2.2.5 Bed Gap in 2021 and additional beds needed by 2031:

After a thorough study for demand for healthcare services, KSA set a target in its Quality-of-Life Initiative as part of Vision 2030 and encouraged healthcare institutions to start implementing plans to increase future bed density per 1,000 population to reach 2.7 per 1,000 population by 2030. As per this benchmark, KSA's bed numbers fell short in reaching 2.7 bed density per 1,000 people and an additional 16,000 beds are needed by 2021 over 2018 numbers. Similarly, an additional 40,000 beds would be required by 2031, indicating significant investment opportunity in the healthcare sector.



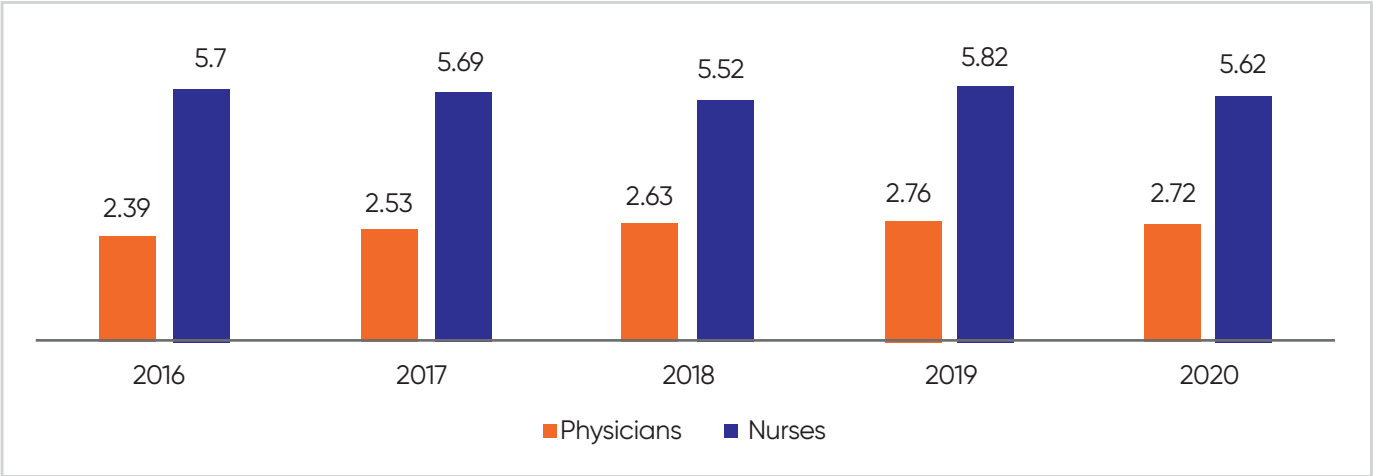
Also, there is shortage of critical care and other tertiary care speciality beds like cardiac care, neurosciences, oncology etc. with general care beds comprising a high share. With the increase in lifestyle diseases, the country requires an increased share of specialised beds.

Additionally, with Riyadh and Jeddah being developed as major medical hubs in the region, there would be requirement of additional specialised beds in future in these locations.

2.2.6 Demand for Manpower to Increase:

This density of nurses and midwives in KSA in 2018 fell below regional counterparts such as Kuwait, Qatar, and UAE. There is significant need for specialised physicians across various specialities.

Exhibit 18: Hospital Bed Density per 1,000 Population

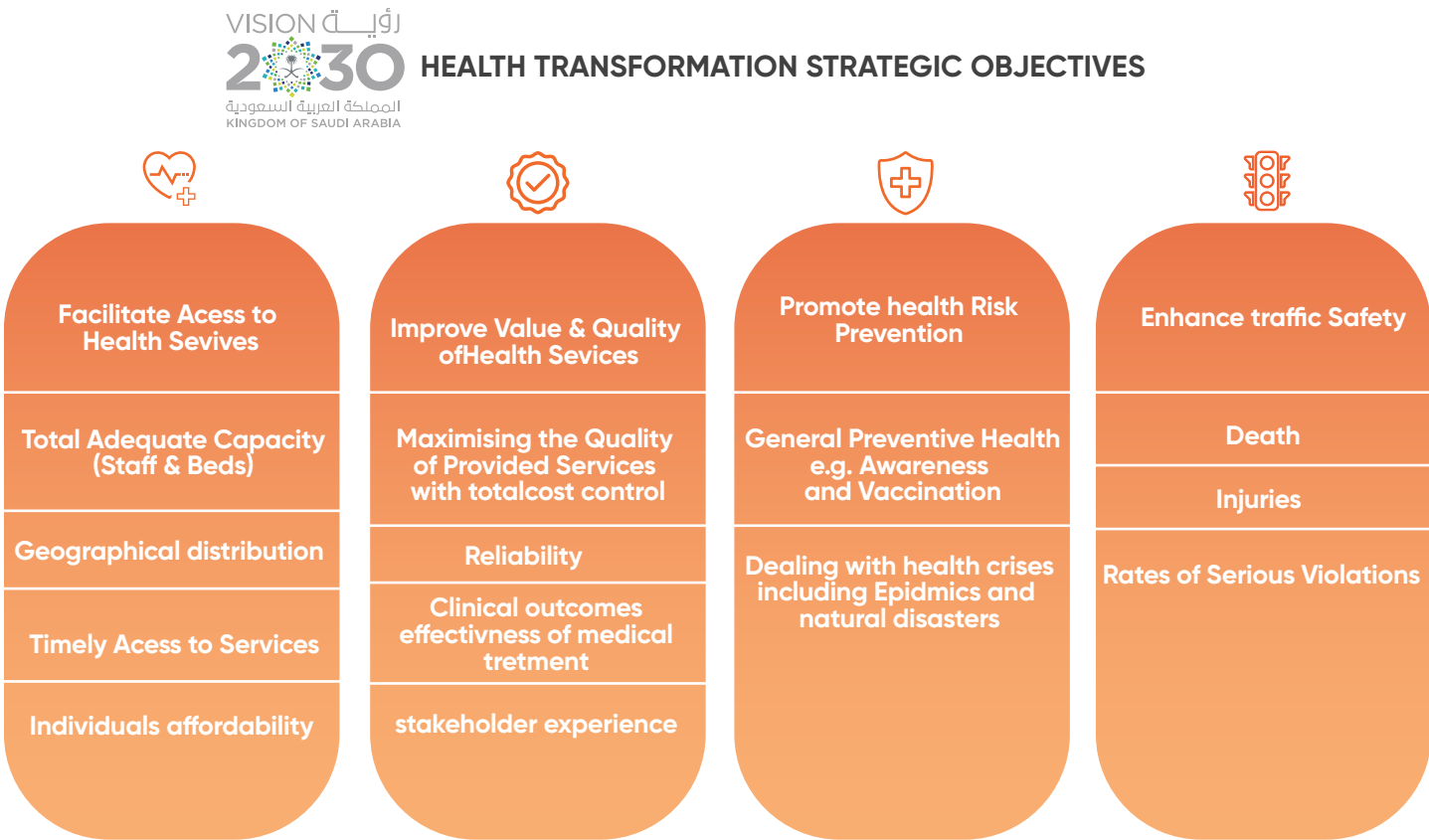


Very few Saudi Nationals are employed in the healthcare sector. Most health professionals are either from the Indian subcontinent or South East Asia. With the growing population base in the KSA, there is a gap in healthcare manpower availability, indicating a need for relevant training and medical educational institutions.

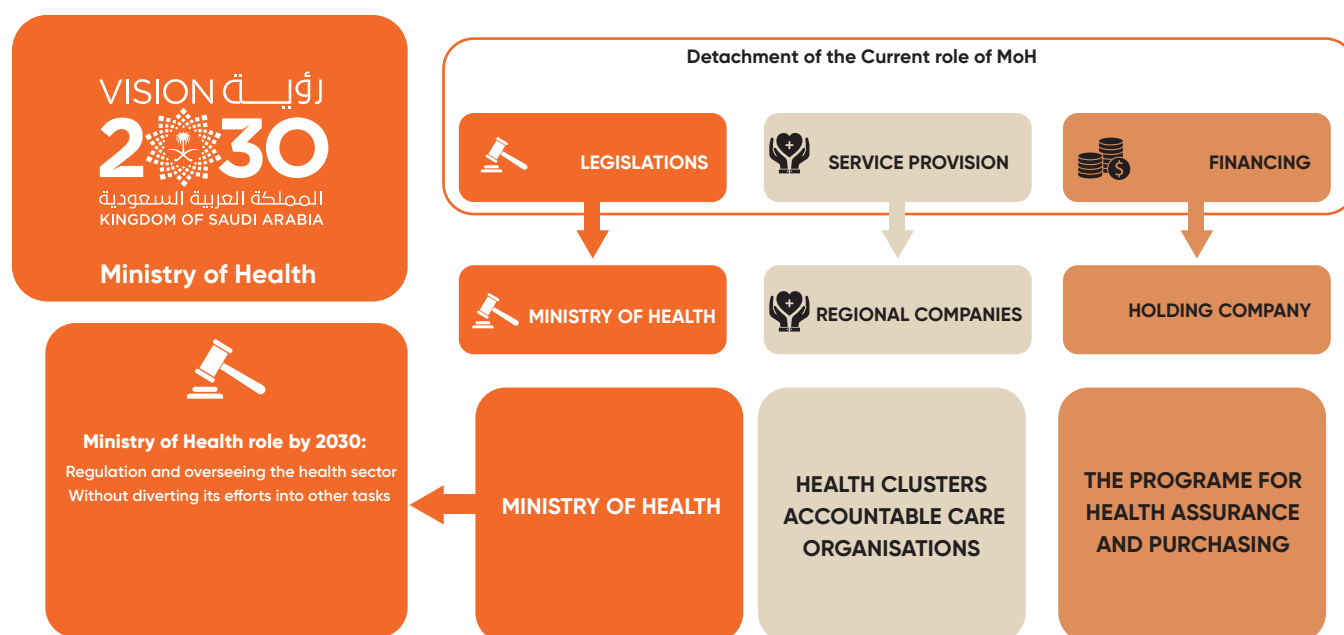
2.2.7 Transformation Strategies – KSA

The Government of Saudi Arabia has seen the need for transformation in the healthcare sector. There is a growing demand for healthcare, and inadequate supply in identified areas such as primary care and extended care, and significant gap in quality in services given to patients, unwarranted variation in provision, access, and investment in serving the population, and lack of patient centricity in existing models of healthcare in the Kingdom. This in turn has mandated transformation of the health sector; strategic objectives for the same are explained in the following exhibit:

Exhibit 20: Health Transformation Strategic Objectives, Saudi Arabia 2018



The transformation of the Kingdom’s healthcare sector in alignment with Vision 2030 constitutes the detachment of the three roles currently provided by the Ministry of Health, which will direct the ministry’s endeavours towards regulating and overseeing the health sector, without consuming its efforts in other tasks. This process serves as the cornerstone of the sector’s development. The service provision role will be undertaken by five regional companies, known as clusters, in a concept described as accountable care organisations while a government holding company will take charge of financing service provision.

Exhibit 21: Role of MOH in the New Health Transformation, Saudi Arabia (2018)**Transformation areas are as follows:****Health Transformation Programmes:**

- Corporatisation of healthcare model
- Health insurance programme and purchase of health services
- Private sector participation programme
- Governance
- Workforce
- E-Health

Part of the Ministry's plan to involve the private sector in service brings into play private sector participation initiatives. It provided detailed information about nine principal areas:

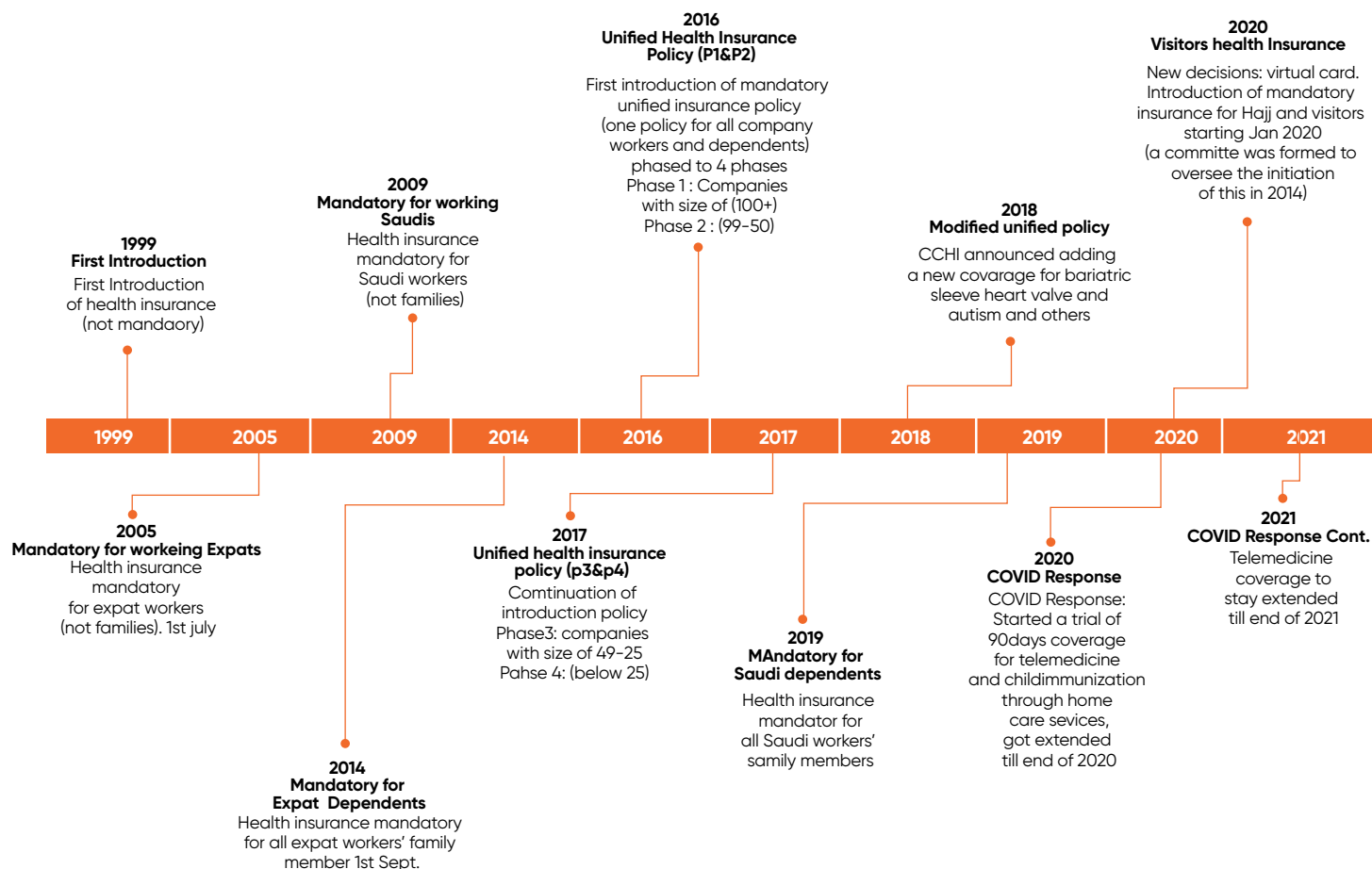
1. Primary Care
2. Radiology
3. Laboratory services
4. Extended care
5. Rehabilitation
6. Long Term Care
7. Home Care
8. Pharmacy
9. The commissioning of hospital services and medical cities (completing, equipping, and making operational partly built facilities; equipping and making operational built facilities; and making operation al built and equipped facilities)

The Ministry of Investment Saudi Arabia (MISA) announced in a recent document published in 2020 that the Kingdom is also enhancing and promoting investment in healthcare as is the case for other areas of the economy. Through MISA, the Government supports investors in understanding lucrative areas and feasible formats of investments in the Kingdom, in finding and locating the right local partners, in selecting suitable sites, in assisting new companies' launch and in providing incentive packages to accelerate their growth.

2.2.7 Transformation Strategies – KSA

In 2016, KSA began the implementation of a mandatory unified health insurance scheme which aimed to ensure that all citizens and residents of KSA are medically insured.

Exhibit 22: Roll out strategy of mandatory insurance in KSA



- In July 2016 KSA began implementing the mandatory unified health insurance scheme, with the goal of ensuring that all expats and nationals residing in KSA are covered by health insurance.
- This initiative will ensure major issues in terms of healthcare accessibility are resolved for all residents of the Kingdom.
- Insurance packages tend to be split into three main categories, with some offering sub-categories:
- **A low cost / Essential category**
- **Mid-priced / Silver class category**
- **High cost / Gold class category**

Insight:

Key driver of the healthcare industry in KSA includes allowing foreign investors to have 100 per cent ownership in the healthcare sector along with government inclination towards promotion of the PPP model by expanding the private sector's role in providing healthcare services and restructuring the healthcare system to privatise public hospitals under Vision 2030 and the National Transformation Programme. These factors are expected to provide a major boost to the country's healthcare system.

2.3 Kuwait

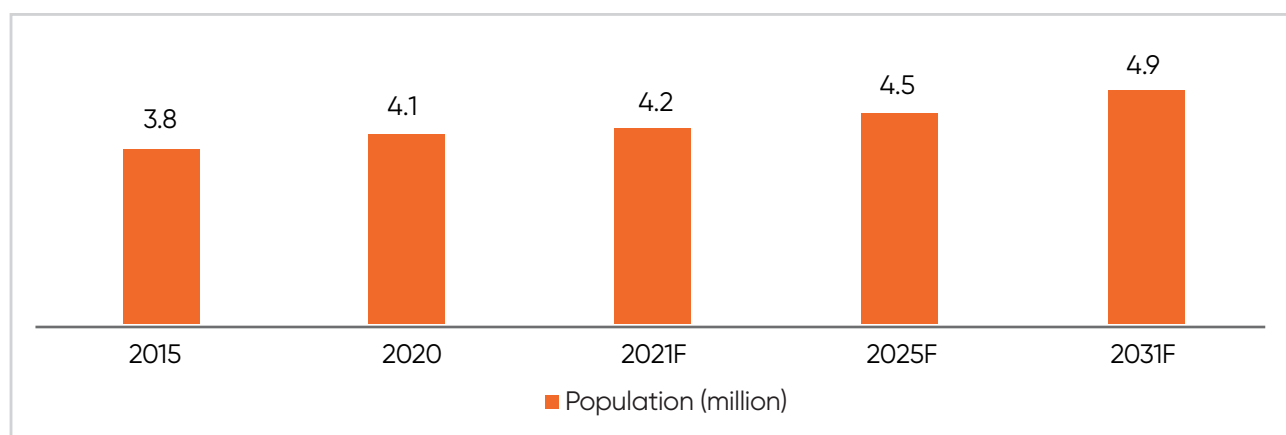
Kuwait is situated along the Arabian Gulf, sharing its borders with KSA and Iraq on the northeast corner of the Arabian Peninsula. As the region emerges from the economic impact of the pandemic, oil exports are expected to continue driving Kuwait's growth. In the long term, the country aims to achieve diversification from hydrocarbons with its Vision 2035

2.3.1 Demographic Analysis

• Population and growth:

Historically, Kuwait's population has been increasing at a moderate growth rate (1.6% CAGR between 2015 and 2021). The global pandemic had a negative impact on Kuwait's population growth with risk of an expatriate exodus as a result of job losses and reduced job opportunities. This is one of the major reasons resulting in the decline in country's population in 2020. Expatriates still form the majority of the population at about 70% in 2021. However, the population of Kuwait is estimated to grow at a CAGR of 1.4%, from 4.2 million in 2021 to 4.9 million in 2031. Hence healthcare service providers must consider the additional demand that would be generated over the coming decade.

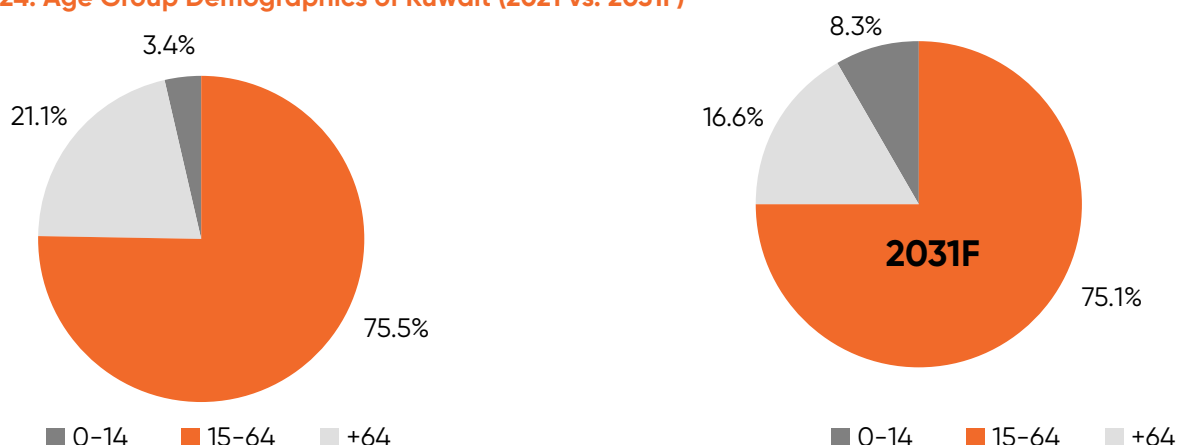
Exhibit 23: Total Population of Kuwait (2015-2031F)



• Growing Share of Ageing Population:

The share of elderly and retiree population (64+years) by 2031 in Kuwait is highest amongst all the GCCE countries leading to demand across all specialties and especially for geriatric care services in the future. This age group is expected to put pressure on the existing healthcare system resulting in demand for additional infrastructure in future. This implies a significant opportunity for potential investors in the region.

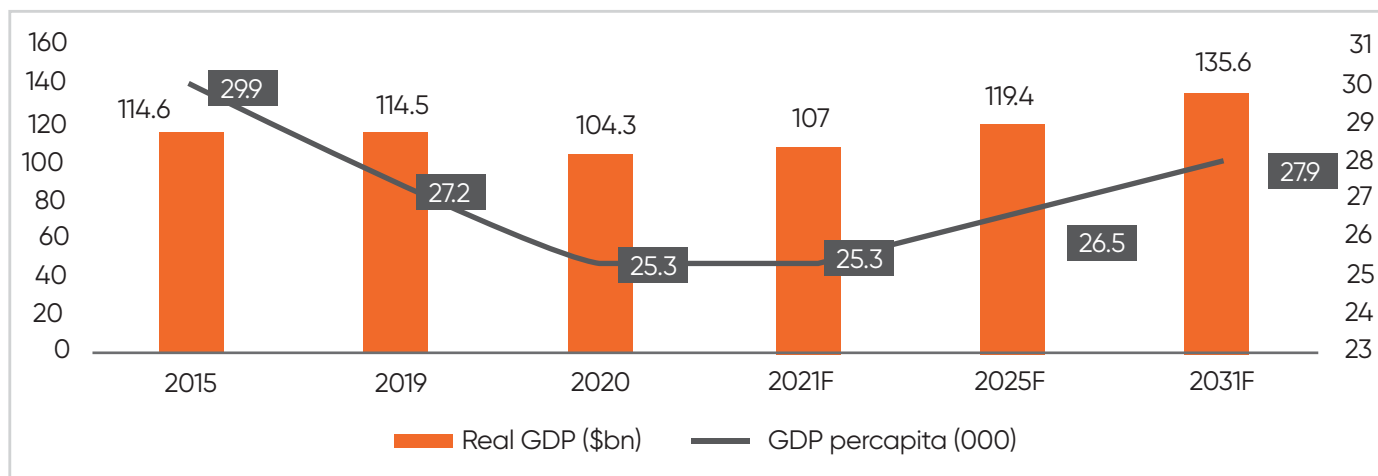
Exhibit 24: Age Group Demographics of Kuwait (2021 vs. 2031F)



2.2.2 GDP and growth:

Although the economy of Kuwait contracted by about 9% in 2020 compared to 2019 due to the COVID-19 crisis, it is expected to grow at a rate of 2.5% in 2021. Further, the economy is expected to grow at a CAGR of 2.4% over the 2021-2031 period. The GDP per capita is expected to rise by a CAGR of around 1% over the same period.

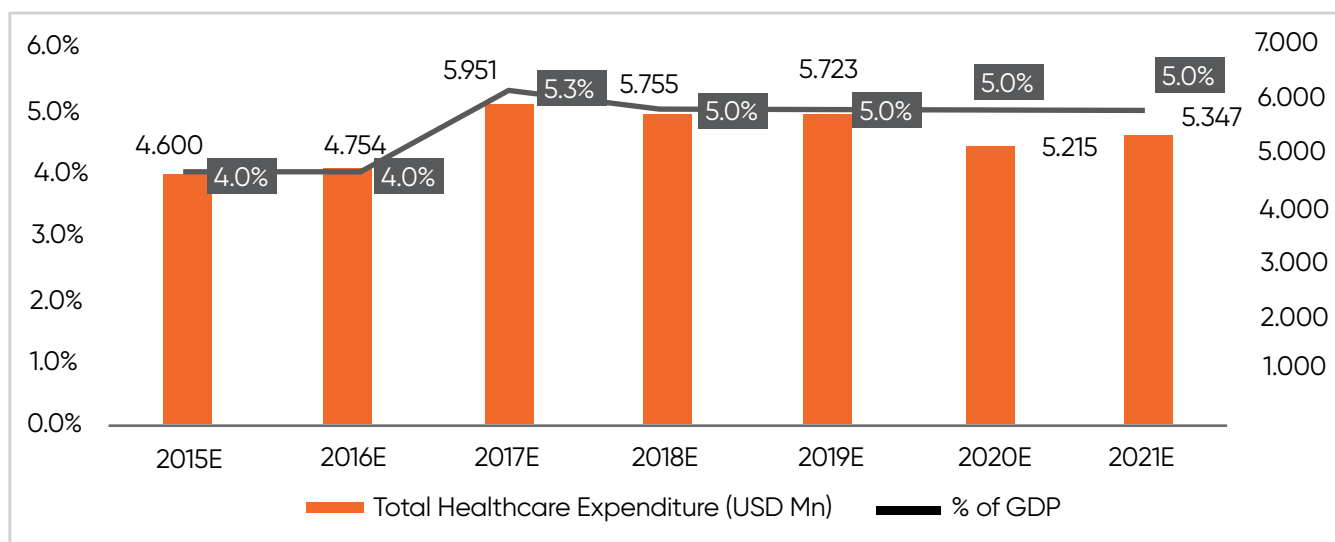
Exhibit 25: Real GDP (USD Bn) and GDP per Capita (in '000) of Kuwait (2015-2031F)



2.2.3 Healthcare market size:

Kuwait's healthcare sector has been nurtured for many decades by the Government through the Ministry of Health (MOH) and Ministry of Défense and Petroleum Company hospitals. Majority share of the health expenditure in Kuwait continues to be met by public sector. Total healthcare expenditure of Kuwait was about 5% of GDP in 2018, which is the latest available data. This share is one of the highest in the GCCE. Assuming that the same proportion of GDP would be spent on healthcare, total expenditure has been estimated below

Exhibit 26: Total Estimated Healthcare Expenditure (USD Mn) and as % of GDP

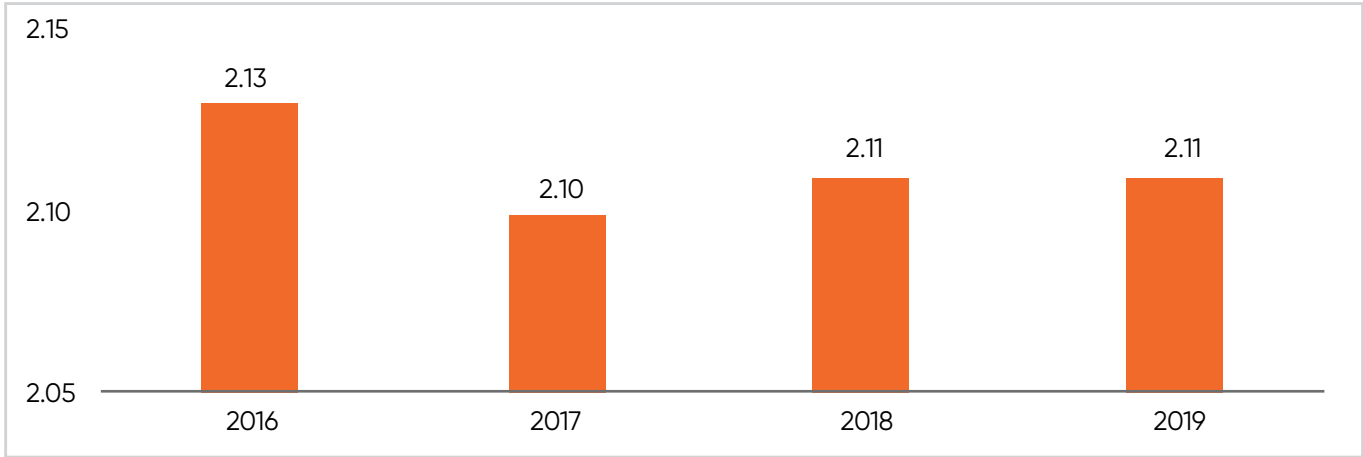


Going further, private sector expenditure has been expected to increase indicating potential growth and rising share of private sector as part of the overall healthcare landscape.

2.2.4 Hospital bed density:

Healthcare infrastructure in Kuwait has been growing at a slow pace and the bed density is also decreasing. While it is second, after Saudi Arabia, in the region to offer the best bed density, hospitals beds are still lower per 1,000 population when compared to developed economies like US and the UK.

Exhibit 27: Hospital Bed Density per 1,000 Population



Whilst medical care in Kuwait has gradually improved over the past many years, accessibility to the public healthcare system, in addition to the waiting time that the patient goes through, together with the growing (and ageing) population base presents a challenge to meet the healthcare needs of the population.

2.2.5 Bed Gap in 2021 and additional beds needed by 2031

As per the benchmark of 2.7 beds per 1,000 population, Kuwait’s bed numbers fell short in reaching this and an additional ~2,500 beds are needed by 2021 over 2018 numbers. Similarly, an additional 4,300 beds would be required by 2031, indicating significant investment opportunity in the healthcare sector.

2,500~
ADDITIONAL BEDS REQUIRED BY 2021

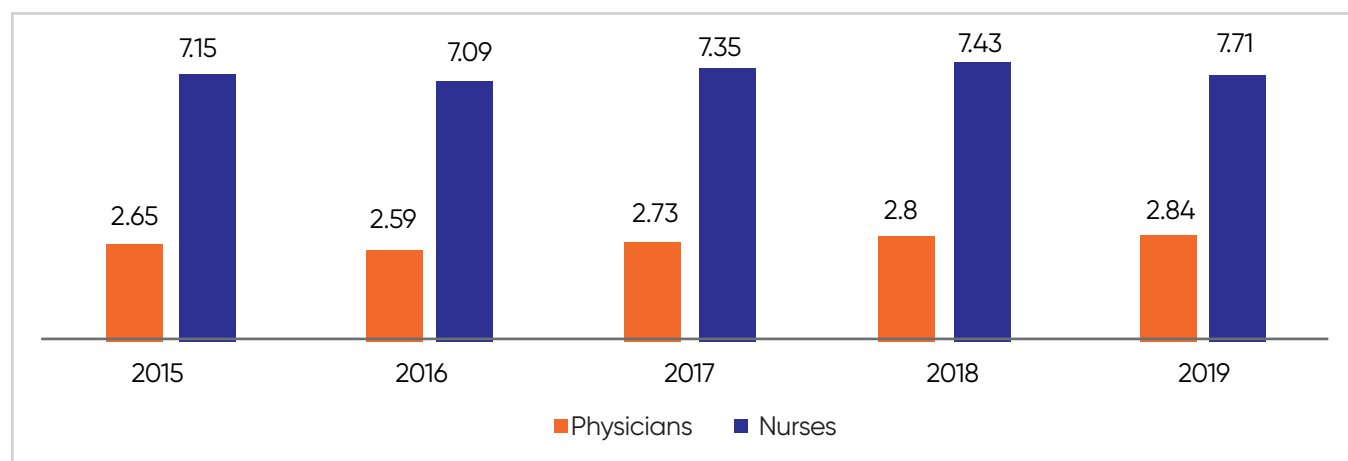
4,300~
ADDITIONAL BEDS REQUIRED BY 2031

Also, there is shortage of critical care and other tertiary care speciality beds for Cardiology, Neurology, Oncology etc. with general care beds comprising a high share. With the increase in lifestyle diseases, the country requires an increased share of specialised beds

2.2.6 Demand for Manpower to Increase:

Kuwait's physician density per 1,000 people is comparably high with respect to benchmarked countries. The density of nurses is comparable with respect to regional densities; however, falls short when compared to global benchmarks such as the UK and USA.

Exhibit 28: Healthcare Manpower Density per 1,000 Population



But there is still a need for specialised physicians across various specialties in the Kuwait market. Kuwaiti doctors who studied and trained abroad are in high demand, especially within the private sector. Labelled as star doctors, they attract and retain local patients. However, these doctors are few in numbers.

2.2.7 Transformation Strategies – Kuwait

Kuwait's healthcare sector transformation is being guided by Kuwait Vision 2035 Development Plan, which was released in 2017. 'High quality healthcare' is one of the seven pillars of the plan, which is the driving force behind the development efforts undertaken by the Kuwait Government.

The Kuwait Vision development plan 2035 aims to:

- Improve quality of care in the country
- Standardise the coding system for healthcare
- Develop a claims transaction hub, like the one in Dubai and Abu Dhabi
- Boost healthcare research by capacity building for conducting research in various disciplines

Also, as per this vision document, the Government is aiming to increase the percentage of insured population so that the private sector can support the public sector and reduce overall healthcare expenditure by providing quality healthcare services to the insured population. The Government of Kuwait also aims to reform the healthcare sector by operating new hospitals and increasing bed supply.

2.2.8 Medical Insurance - Kuwait

Kuwait's Government has been encouraging nationals to access private sector as it is looking to reduce its healthcare cost burden. Before 2017, all expats had mandatory public health insurance that allowed them to access public hospitals. The cost of this insurance was:

- 50 KD for individual
- 40 KD for dependents
- 30 KD for children

Under the public health insurance, patients were paying nominal prices for most healthcare services in public hospitals except for some tests and procedures. For instance:

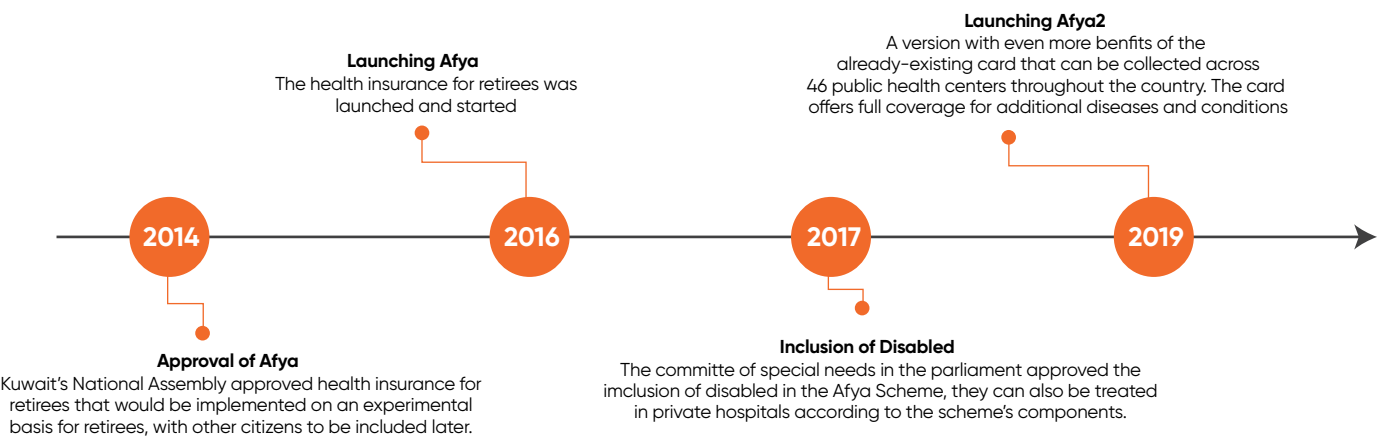
- Full payment by patients for pumps and stents unless covered by charities or sponsored by an organisation
- 50% co-payment for MRI scans

Since 2017, due to the increase in healthcare expenditure, the public sector is shifting its focus towards NCDs and complicated cases. Less complex cases, especially for expatriates are being directed towards the private sector, so that overall burden on the Government reduces.

Additionally, governmental hospitals have increased the rates for treatment for expatriates within their facilities to almost match the private sector. Public hospitals have also assigned special days for expatriate patients to visit, leading to increased waiting time within the public sector.

Afya, a social insurance system that is funded by the Government, aims to provide comprehensive services for retirees in order to enhance their overall health and wellbeing. With Afya insurance people above 45-years can get access to private sector hospitals. The system is covered by the Gulf Insurance Group, which offered the lowest bid to the Government, giving the Gulf Insurance Group an edge if the scheme is expanded to all citizens. Afya 'good health' covers 110,000-140,000 retirees registered in the social insurance system, which is around 67% of the Kuwaiti people above 45 years .

Exhibit 29: Evolution of the Afya insurance scheme in Kuwait



In 2016, the Ministry of Health signed a social insurance contract for retirees worth KWD82 million (USD 272 million) for a year. This is considered the first step towards eventual universal medical insurance for all segments of Kuwaiti society.

Insight:

Whilst medical care in Kuwait has gradually improved over the past many years, the accessibility to the public health-care system, together with the growing (and ageing) population base presents a challenge to meet the healthcare needs of the population. Going further, stable economic growth and Government support will drive the overall development of the healthcare sector in Kuwait.

2.4 Oman

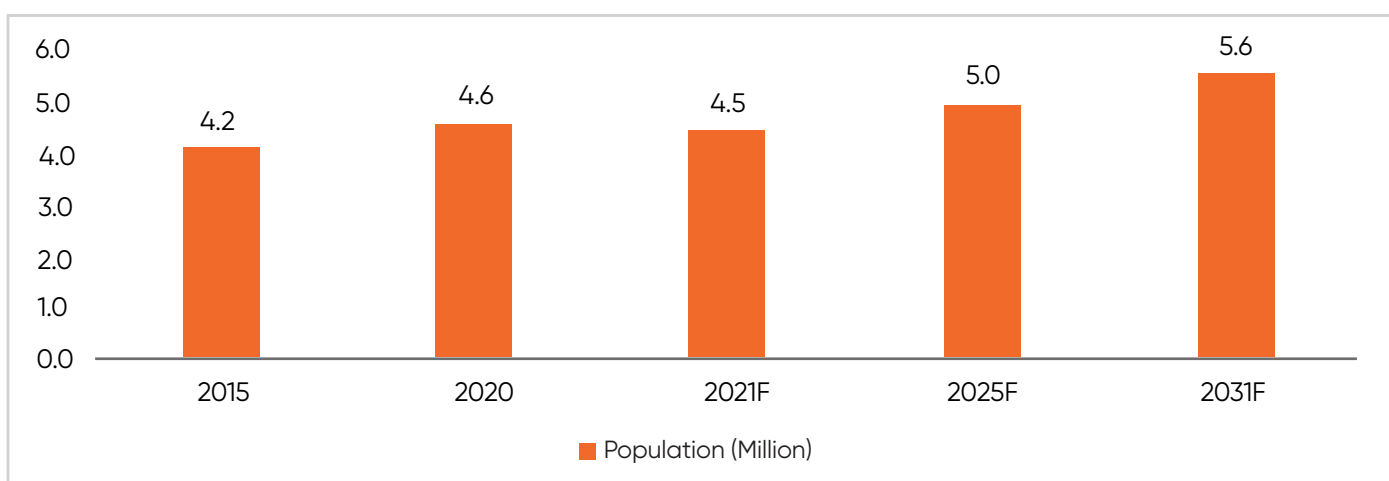
Oman's economy is forecast to rebound after the COVID-19 related impact of the previous year. As its infrastructure investment programme gains momentum, it is expected to further boost the economy, along with the recovery in oil market.

2.4.1 Demographic Analysis

• Population and growth:

Oman's population is estimated to grow at a CAGR of 2.2% over 2021-2031, from 4.5 million in 2021 to 5.6 million. The annual growth rate has been high due to a huge influx of immigrants, with a large share of population residing in the Muscat region. Expatriates constituted about 38.8% in early 2021. Growth in population will generate greater demand for healthcare services. This will create more opportunities for existing players to expand and for new entrants to invest in the healthcare market.

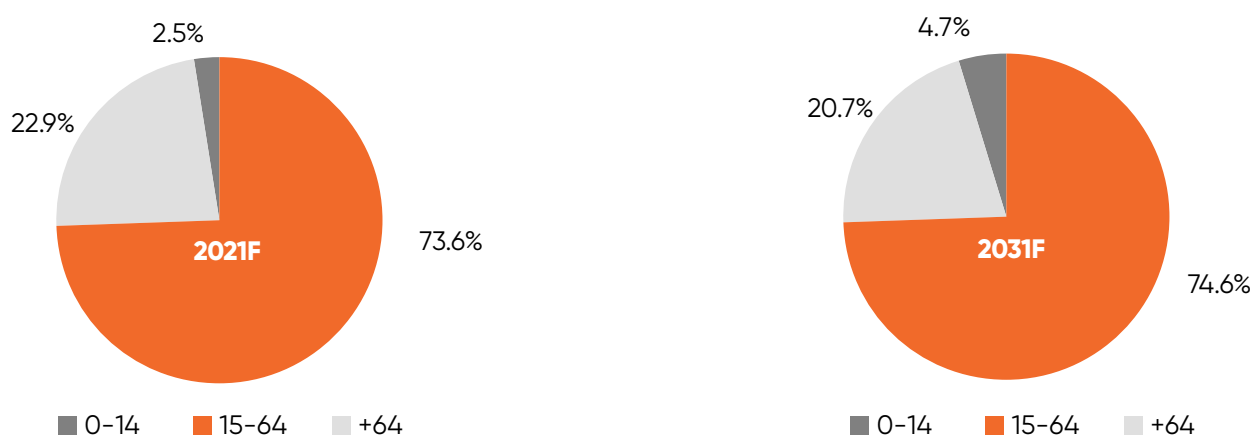
Exhibit 30: Total Population of Oman (2015-2031F)



• Growing Share of Ageing Population:

Young and mid-age population (aged 15-64 years) forms a majority share in Oman in 2021. While the ageing population comprising people aged 64 years and above formed around 2.5% of the total in the same year. By 2031, this segment is expected to comprise about 4.7% of the total population.

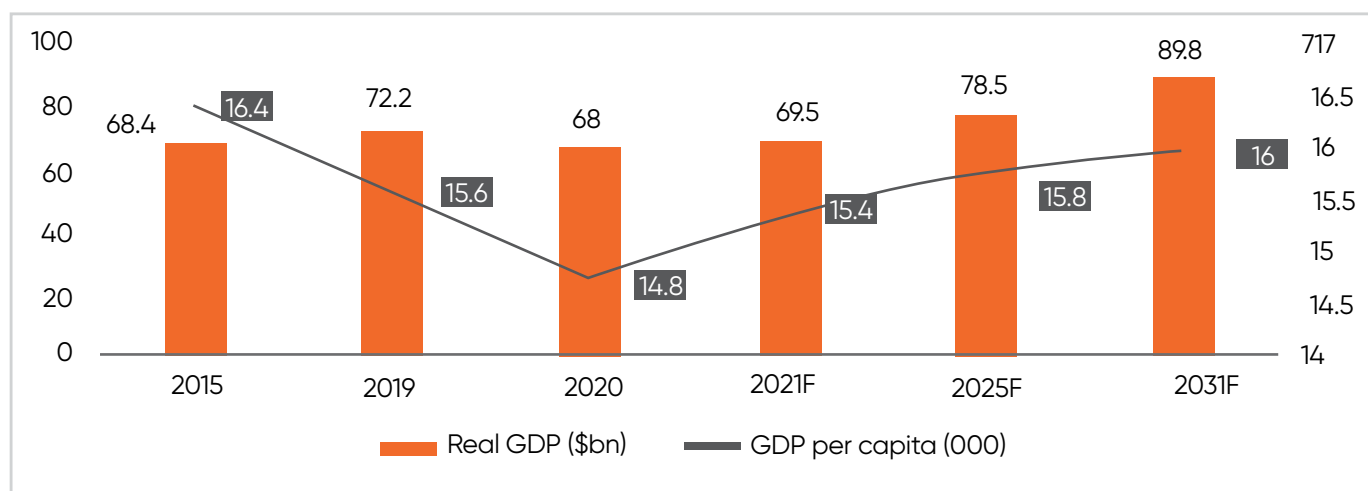
Exhibit 31: Age Group Demographics of Oman (2021 vs. 2031F)



2.4.2 GDP and growth:

The economy of Oman contracted by about 6% in 2020 compared to 2019 due to the COVID-19 crisis. The Oman Government has adopted various fiscal measures during COVID-19 to support the economy including interest-free emergency loans, tax and fee reductions and waivers, the flexibility to pay taxes in instalments and a job security fund to support citizens who lost their jobs. As per IMF, Oman's economy is expected to recover with non-hydrocarbon GDP growth as vaccine roll-out gradually restores domestic activity along with the recovery of external demand. Therefore, the economy is expected to grow at a CAGR of 2.6% over the 2021-2031 period. The GDP per capita is expected to stay stable over the same period.

Exhibit 32: Real GDP (USD Bn) and GDP per Capita (in '000) of Oman (2015-2031F)

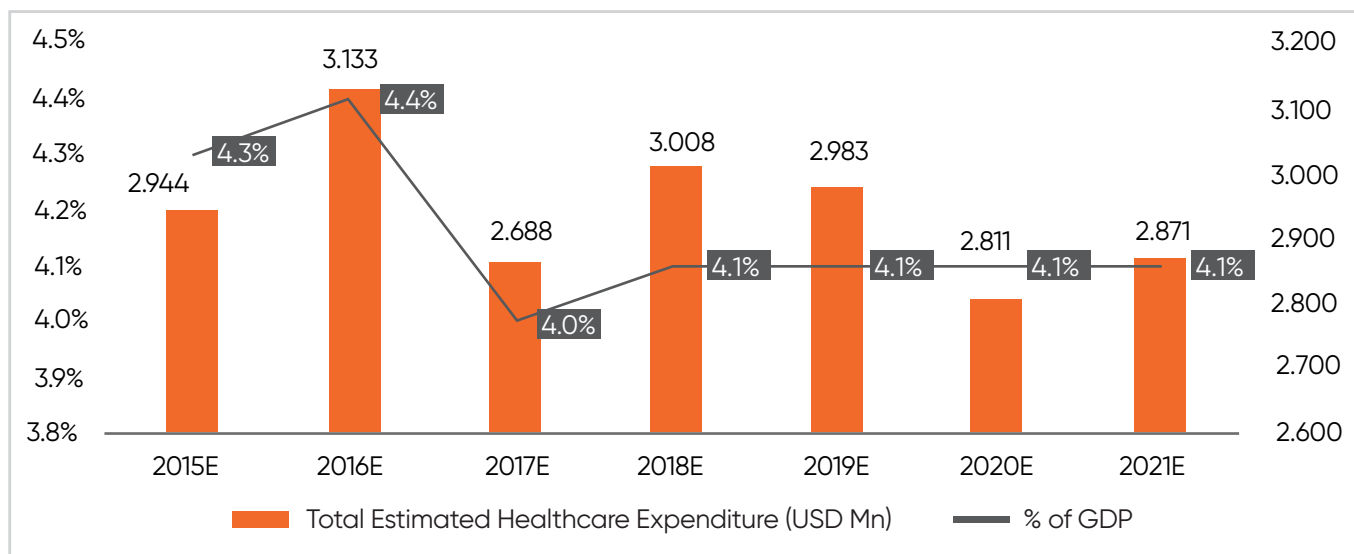


A strong roll-out of vaccinations, higher oil prices and continued implementation of structural reforms are expected to considerably improve Oman's economic outlook.

2.4.3 Healthcare market size:

Total healthcare expenditure was about 4.1% of GDP in 2018, which is the latest available data. Assuming that the same proportion of GDP would be spent on healthcare, total expenditure has been estimated below:

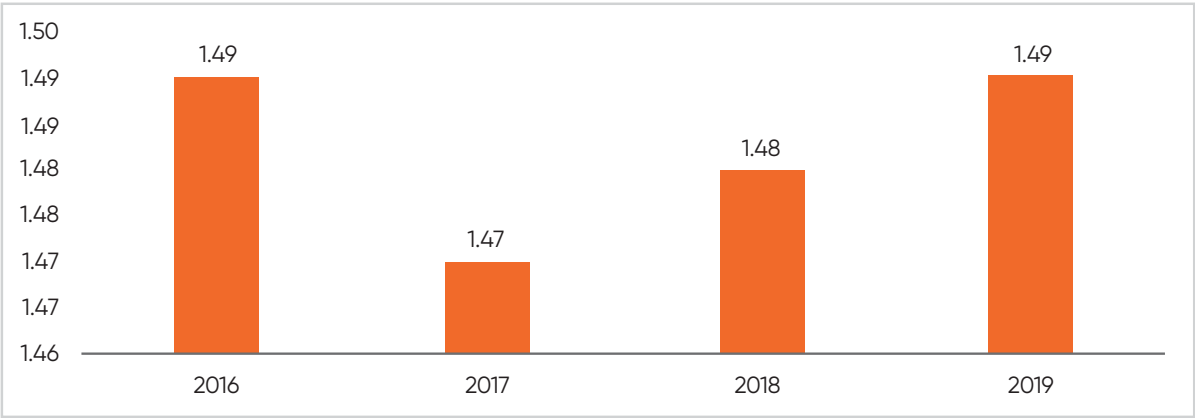
Exhibit 33: Total Estimated Healthcare Expenditure (USD Mn) of Oman and as % of GDP



2.4.4 Hospital bed density:

Oman’s bed density has remained stable through 2016–2019. However, hospitals beds are still lower per 1,000 population when compared to developed economies like US and the UK. With the forecast increase in population, additional beds are needed to improve bed density. The density was also lower than regional counterparts such as KSA and Kuwait.

Exhibit 34: Hospital Bed Density per 1,000 Population



2.4.5 Bed Gap in 2021 and additional beds needed by 2031:

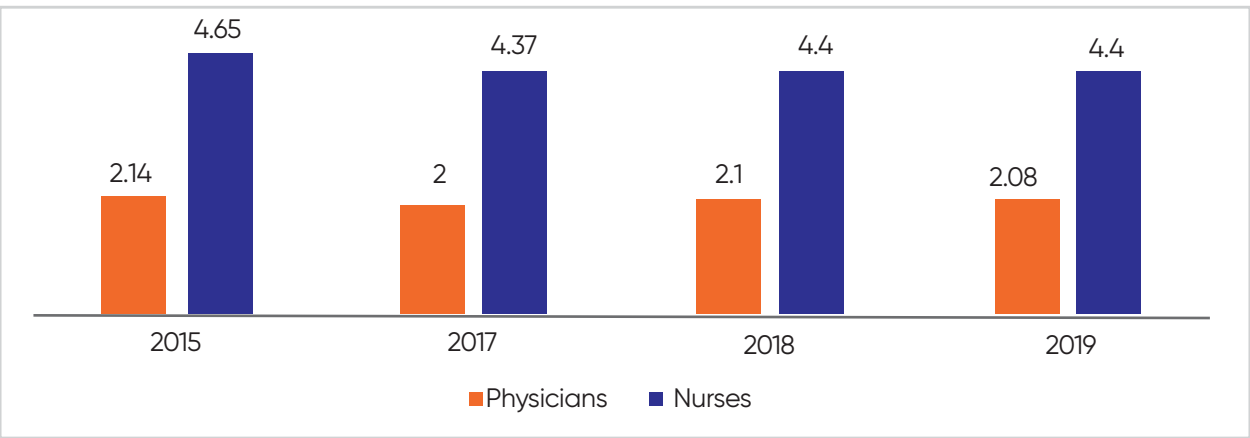
population, Oman’s bed numbers fell short and an additional ~5,600 beds are needed by 2021 over 2018 numbers. Similarly, an additional 8,300 beds would be required by 2031, indicating significant investment opportunity in the healthcare sector.



2.4.6 Demand for Manpower to Increase:

Average physician density in Oman ranges around 2.1 per 1,000 population.

Exhibit 35: Healthcare Manpower Density per 1,000 Population



Oman is heavily dependent on expatriate population for the same due to deficiency of home-grown talent in the health sector. There is a trend towards ‘Omaniisation’ of workforce in the health sector. This means greater percentages of Omani nationals are being accommodated in the domestic workforce. Also, there is still need for specialised physicians across various specialities.

2.4.7 Transformation Strategies – Oman

The Oman Government has been involved in implementing a long-term health policy in the country, known as Health Vision 2050, the document for which was first completed in 2012. Key functional areas established in the document are the need to provide quality services, be patient-focused, focus on measurable outcomes, emphasise disease prevention, and adopt emerging technologies. Also, private sector participation has been encouraged by investing in healthcare through the PPP model. The MOH is also planning to improve the healthcare infrastructure by renovating PHCs and improve the referral system which opens an opportunity to increase service utilisation of secondary and tertiary services in the future. Also, one of the major aims is to improve universal coverage by increasing accessibility to hospital beds. In addition, the MOH is planning to have a clear description of the services offered in public institutions to allow the private sector to properly plan for services delivery. To achieve the targets of Oman Vision 2050, key actions in system transformation have been taken towards improving the healthcare infrastructure, as mentioned below:

Exhibit 36: Health Vision 2050, MOH Oman

Program	Description	Action
Primary Healthcare Centre	<ul style="list-style-type: none"> Strengthen primary healthcare centres as the main entry point and backbone for healthcare 	<ul style="list-style-type: none"> Review the functions of PHCs Enhance community participation Incentivise and budget PHC facilities Introduce speciality care in PHC Introduce geriatric care in PHC Ensure sufficient investments in PHC Review the norm for establishing a PHC Develop a proper referral system
Tertiary Care Services	<ul style="list-style-type: none"> Establish state-of-the-art tertiary care services through medical cities 	<ul style="list-style-type: none"> Build medical cities to provide tertiary care Develop a world class pre-hospital care system
Types of Healthcare Facilities	<ul style="list-style-type: none"> Redefine types and construction plan of healthcare facilities according to new roles 	<ul style="list-style-type: none"> Redefine PHC to two types: Type A with beds and type B without beds Redefine hospitals based on number of beds, 300, 150 and 50-bed hospitals
Universal Coverage	<ul style="list-style-type: none"> Expand the umbrella of health facilities to parallel population growth 	<ul style="list-style-type: none"> Renovate HC to act as PHCs Renovate hospitals to provide secondary and tertiary care services

2.4.7 Transformation Strategies – Oman

In 2020, there was a mandated health insurance law in the Sultanate of Oman. As per this law, residents in Oman will be required to have in place a minimum level of medical insurance coverage with minimum benefits. The consumption of health services especially inpatient services is likely to rise as the penetration of health insurance goes up.

Also, Oman Government recently announced some healthcare PPP projects like the procurement of haemodialysis services; a drug rehabilitation centre planned at Suhar etc.

Insight:

With increased efforts to enhance private sector participation in the healthcare sector, the PPP model and new mandatory health insurance law present a significant opportunity for providers and insurers to expand their presence in the Oman healthcare market.

2.5 Qatar

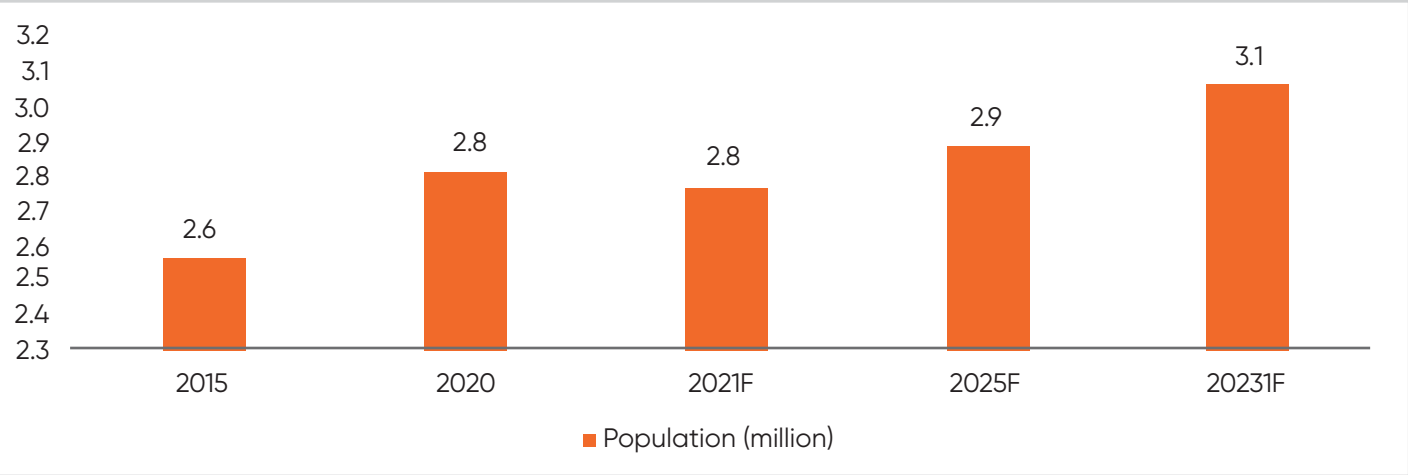
The beginning of 2021 saw the lifting of the regional embargo on Qatar. Its economy is expected to rebound from the pandemic with a strong demand for LNG in South Asia as well as other countries.

2.5.1 Demographic Analysis

• Population and growth:

Growing population is expected to continue generating demand for healthcare services. The population of Qatar is estimated to grow by 1% by 2031, from 2.8 million in 2021 to 3.1 million. Expatriates form the majority of the population at about 85%. Growth in population will in turn entail demand for healthcare services.

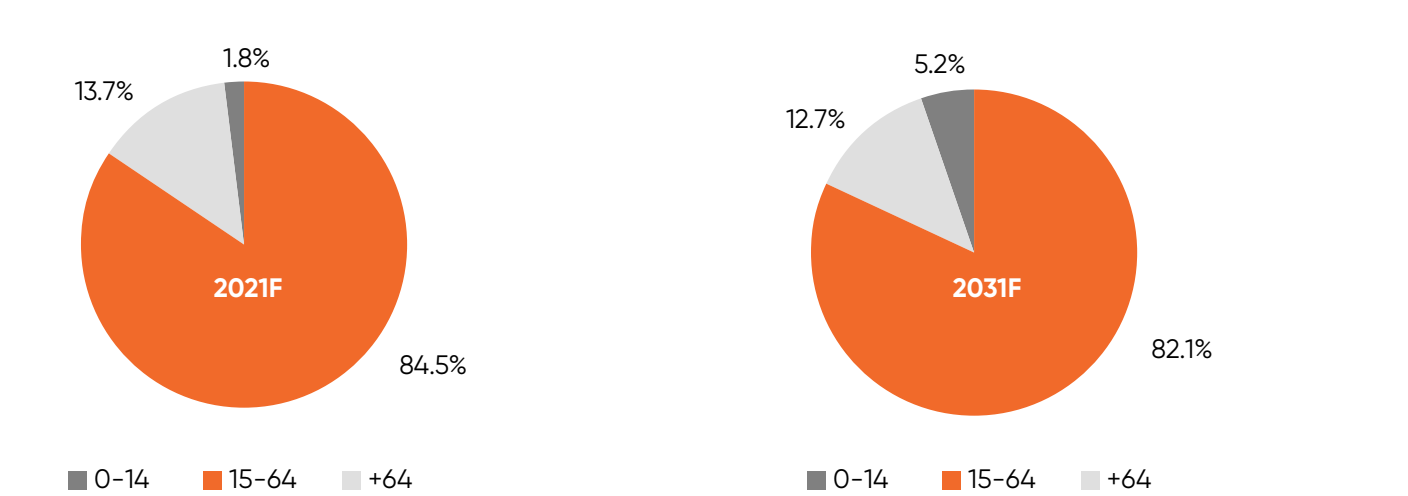
Exhibit 37: Total Population of Qatar (2015-2031F)



• Growing share of ageing population:

The ageing population comprising people aged 64 years and above formed only 1.8% of the total in the same year, by 2031, this segment is expected to comprise about 5.2% of the total population.

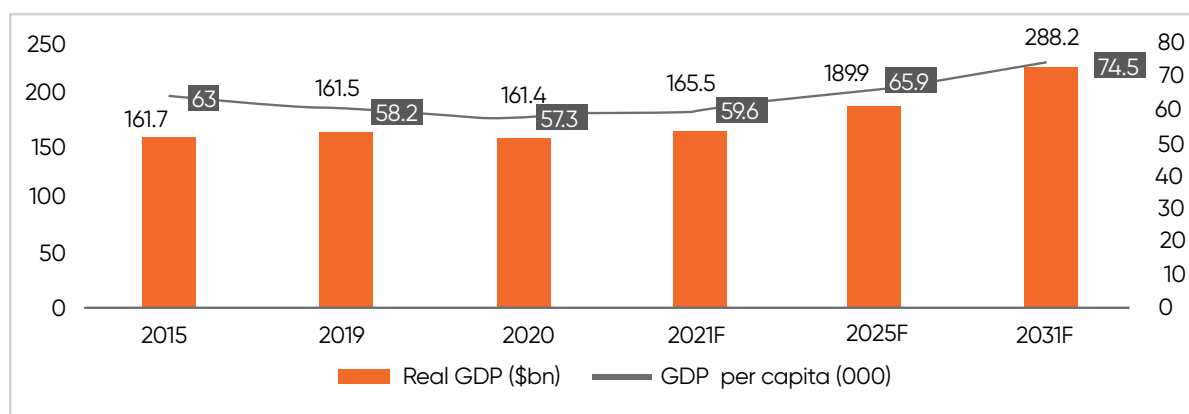
Exhibit 38: Age Group Demographics of Qatar (2021 vs. 2031F)



2.5.2 GDP and growth:

Qatar's economy is one of the region's strongest and one of the world's most promising economies with a significantly high GDP per capita. Although its economy contracted by about 4% in 2020 compared to 2019 due to the COVID-19 crisis, it is forecast to grow at 2.5% between 2020 and 2021. Further, the economy is expected to grow at a CAGR of 3.3% over the 2021–2031 period. Also, Qatar's GDP per capita is expected to grow at a CAGR of 2.2% over the same period.

Exhibit 39: Real GDP (USD Bn) and GDP per Capita (in '000) of Qatar (2015–2031F)

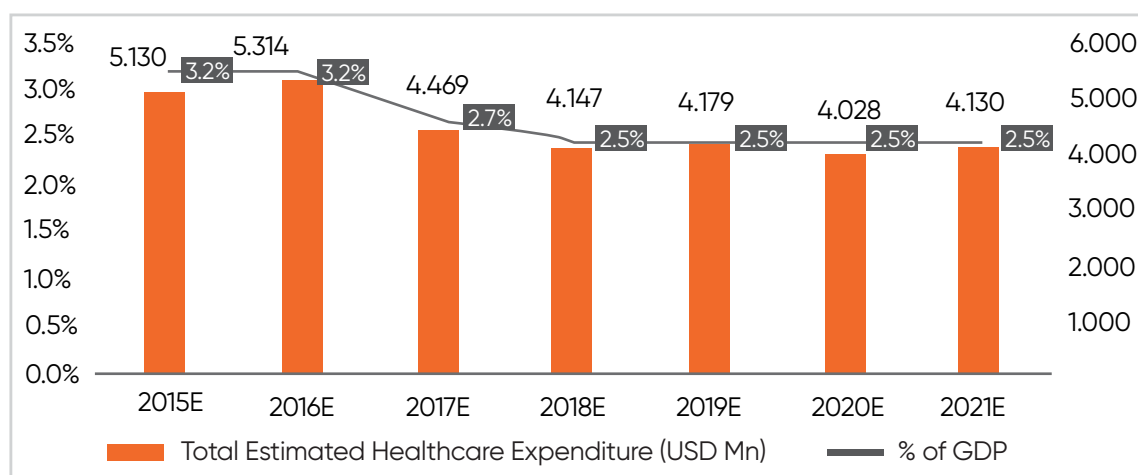


Over the past few years, Qatar has succeeded in reinforcing its economic standing on the world map, in accordance with Government policies, and in line with the Qatar National Vision 2030, which aims to lay the foundations for a diversified and competitive knowledge-based economy. Also, Qatar is expecting to add USD 20 Billion to its economy by hosting the Soccer World Cup in 2022, as per the Committee for Delivery and Legacy, that is building the infrastructure behind the 2022 World Cup; construction and tourism industries are expected to be sectors that will majorly benefit.

2.5.3 Healthcare market size:

Through a healthy stream of public investment and support, modern facilities and innovative medical technology, Qatar has established itself as a strong leader for healthcare. Total healthcare expenditure was about 2.5% of GDP in 2018, which is the latest available data. Assuming that the same proportion of GDP would be spent on healthcare, total expenditure has been estimated below.

Exhibit 40: Total Estimated Healthcare Expenditure (USD Mn) and as % of GDP

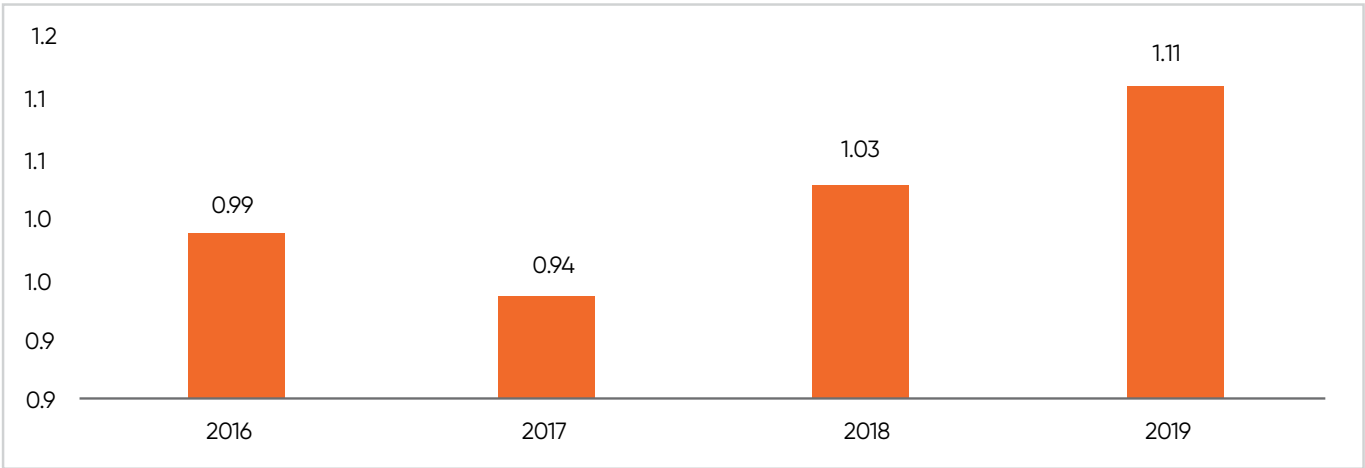


Also, the country's per capita health spending is also among the highest in the GCC (~USD 1,720 in 2018), second only to the UAE (~USD 1,820 in 2018).

2.5.4 Hospital bed density:

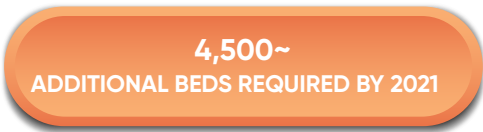
Qatar’s hospital beds were the lowest per 1,000 population in 2019, when compared to other GCCE countries. This indicates significant gap in healthcare infrastructure in the country.

Exhibit 41: Hospital Bed Density per 1,000 Population



2.5.5 Bed Gap in 2021 and additional beds needed by 2031:

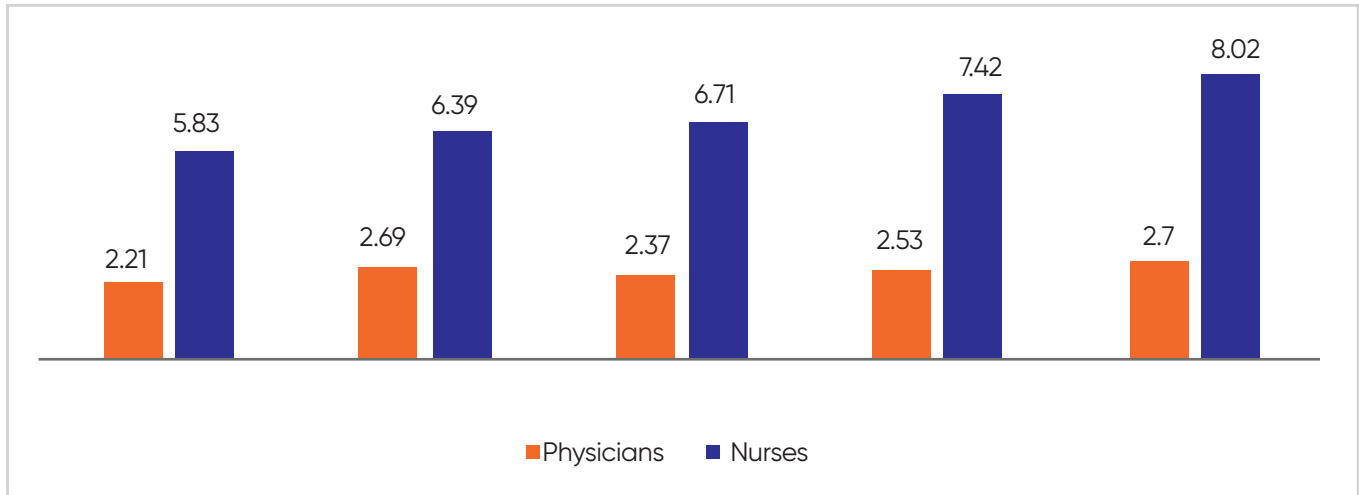
population, Qatar’s bed numbers fell short and an additional ~4,500 beds are needed by 2021 over 2018 numbers. Similarly, an additional 5,000 beds would be required by 2031, indicating significant investment opportunity in the healthcare sector.



2.5.6 Demand for Manpower to Increase:

Qatar’s density of physicians, nurses and midwives falls short when compared to global benchmarks such as the UK and USA.

Exhibit 42: Healthcare Manpower Density per 1,000 Population



2.5.7 Transformation Strategies – Qatar

In line with the Qatar National Vision 2030 officially launched in October 2008, the Government is working towards achieving a comprehensive healthcare system through encouraging the private sector to invest in the country. The role of the private sector in the provision of healthcare is a significant opportunity area and will be a stepping-stone going forward. Qatar has committed to providing sufficient funds for improving public health in accordance with the principle of partnership in bearing the costs of healthcare. To achieve the targets of Vision 2030, key initiatives taken by the Government are stated below :

Exhibit 43: Vision 2030, Qatar

Initiative	Description
PPP Law	<p>In 2020, Law No. 12 on the Regulation of PPP ('PPP Law') was issued which aimed at:</p> <ul style="list-style-type: none"> Developing Qatar's private sector Encouraging competition to boost the role and participation of the private sector in developing the local economy. Strengthening the public sector through managing national projects to enhance their proficiency, productivity and sustainability and operating them in a cost-efficient manner.
Developing a Comprehensive Healthcare System	<p>In line with Vision 2030, the Government of Qatar has been implementing key strategies:</p> <ul style="list-style-type: none"> National Primary Care Strategy 2013-2018 National Continuing Care Design Strategy 2015 Qatar National Mental Health Strategy 2013-2018 Configuration of Hospital Services Qatar National Diabetes Strategy 2016-2022 Urgent Care Model of Care National Cancer Strategy 2011-2016 Review, & National Cancer Framework 2017-2022 National Oral Health Strategy Road Map Community Pharmacies Strategy 2011-2016
Health Service Performance Agreements (HSPAs)	<ul style="list-style-type: none"> Implementation of HSPAs to monitor the quality of outcomes in healthcare organisations Establishment of 30 national clinical guidelines and associated pathways by the National Clinical Guidelines and Pathways Committee Development of National E-Health and Data Management Strategy to identify standards, data sets, policies and requirements related to e-health Development of National Laboratory Integration and Standardisation Strategy (2013-2018)
National Health Policy	<ul style="list-style-type: none"> Issuance of Qatar Council for Health Practitioners (QCHP) with 5-year plan (2017-2022) focusing on sustainable growth, excellence and quality, partnership, and engagement, and ensuring a high performing organisation as operating healthcare institutions will be monitored under the national health policy. Development of healthcare facility licensing protocols and accreditation standards. Implementation of Qatar National Formulary
Skilled National Workforce	<ul style="list-style-type: none"> Qatar Health Workforce Plan (2014-2022) contains seven strategic themes with short-, medium- and long-term actions. Hence, workforce capacity and capability initiatives addressed planning, optimising skill-mix, recruitment, and retention.
Skilled National Workforce	<ul style="list-style-type: none"> Qatar Health Workforce Plan (2014-2022) contains seven strategic themes with short-, medium- and long-term actions. Hence, workforce capacity and capability initiatives addressed planning, optimising skill-mix, recruitment, and retention.
Health-Quality Research	<ul style="list-style-type: none"> Establishment of a sustainable model for International Review Board (IRB) registration and research institution assurance by the Qatar National Research Ethics Committee. Development of Qatar National Genomic Medicine Policy.
Effective and Affordable Healthcare Services, Partnership in the Bearing of Healthcare Cost	<ul style="list-style-type: none"> Establishment of new hospitals and health centres in addition to expanding and transforming key clinical services. Development of Qatar Health Facilities Master Plan 2013-2033 with 5-years action plan. Introduction of a performance-based budgeting system
Preventive Care Projects	<p>Development of health projects that focus on proactive health promotion, disease prevention and early detection of ill health, while strengthening national public health governance. Some of the established projects includes:</p> <ul style="list-style-type: none"> Qatar Public Health Strategy 2017-2022 Qatar National Nutrition and Physical Activity Action Plan 2017-2022 The National Screening Framework and Operating Model (draft) Tobacco Action Plan Qatar National Health Emergency Management Plan

In addition, the FIFA world cup 2022 is expected to boost the country's economy including its healthcare sector. The World Cup is expected to cause a temporary surge in demand for private healthcare services as more people will visit the country.

Insight:

High GDP per capita and lower bed density indicates significant opportunity in the Qatar Healthcare sector.

2.6 Bahrain

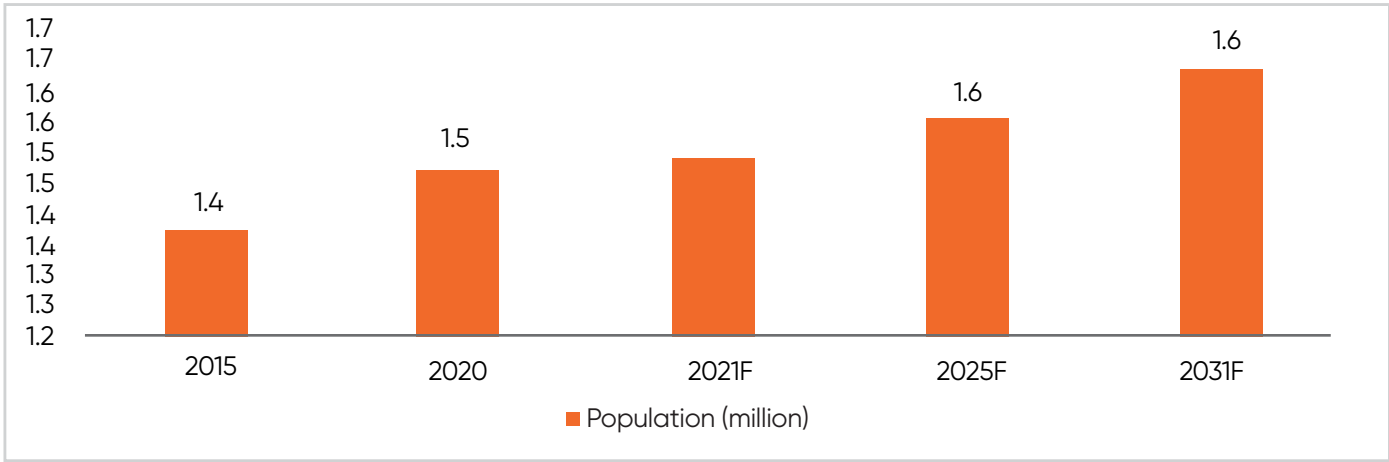
S&P Global Ratings revised Bahrain’s outlook from negative to stable in November 2021, as the country implements fiscal reforms to strengthen its economy. The new measures, including the doubling of VAT, are expected to support the country’s economy.

2.6.1 Demographic Analysis

• Population and growth:

The population of Bahrain is estimated to grow at a rate of about 1% by 2031, from 1.5 million in 2021 to 1.6 million. Growth in population will in turn create higher demand for healthcare services. This will create more opportunities for existing players to expand and for new entrants to invest in the healthcare market.

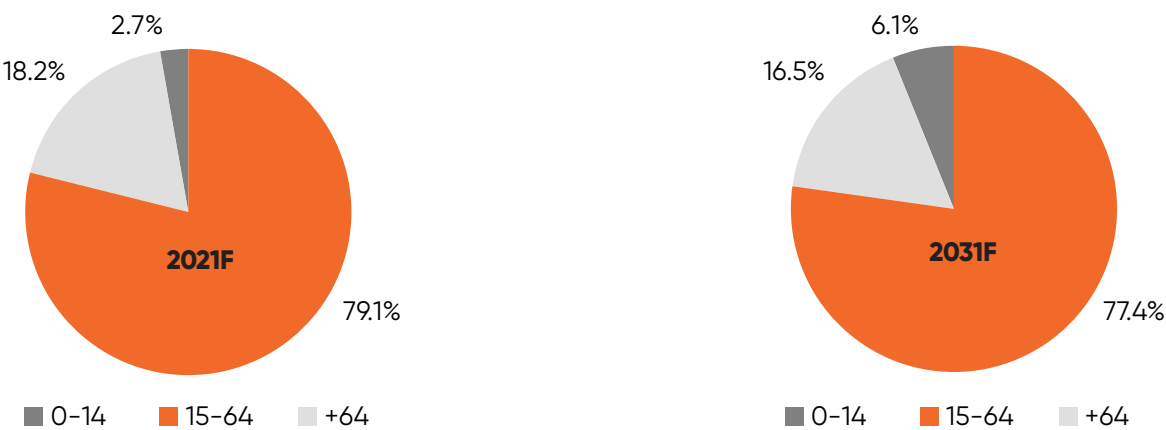
Exhibit 42: Healthcare Manpower Density per 1,000 Population



• Growing share of ageing population:

The ageing population comprising people aged 64 years and above formed only 2.7% of the total in the same year, by 2031, this segment is expected to comprise about 6.1% of the total population.

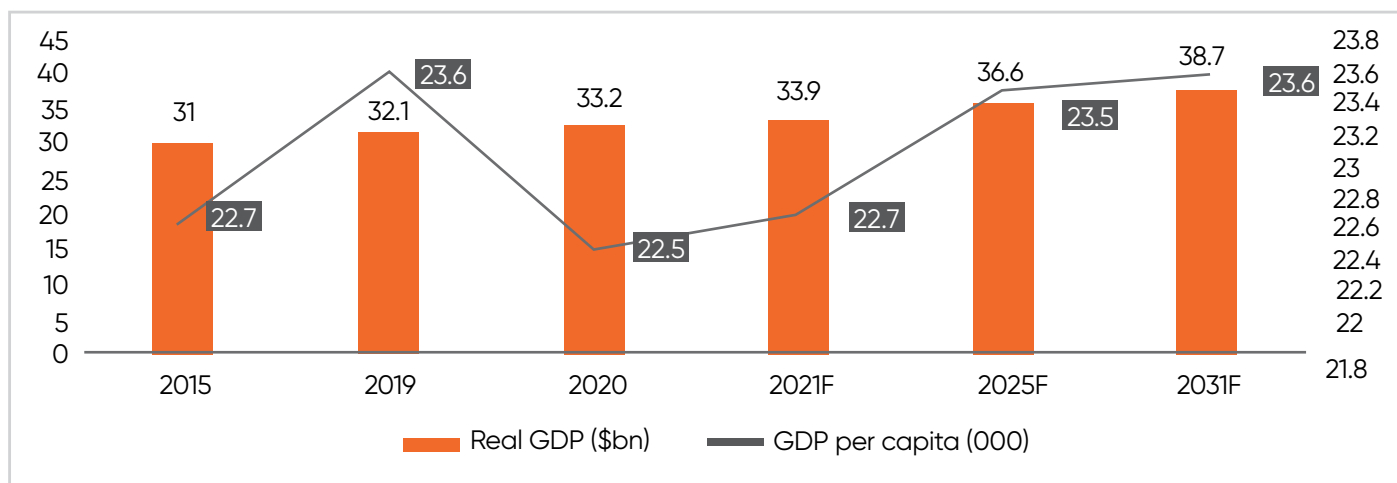
Exhibit 45: Age Group Demographics of Bahrain (2021 vs. 2031F)



2.6.2 GDP and growth:

Although the economy of Bahrain contracted by about 5% in 2020 compared to 2019 due to the COVID-19 crisis, it is forecast to grow at 2.2% between 2020 and 2021. Further, the economy is expected to grow at a CAGR of 1.3% over the 2021-2031 period. The GDP per capita is expected to remain stable with a slight growth of 0.4% CAGR over the same period.

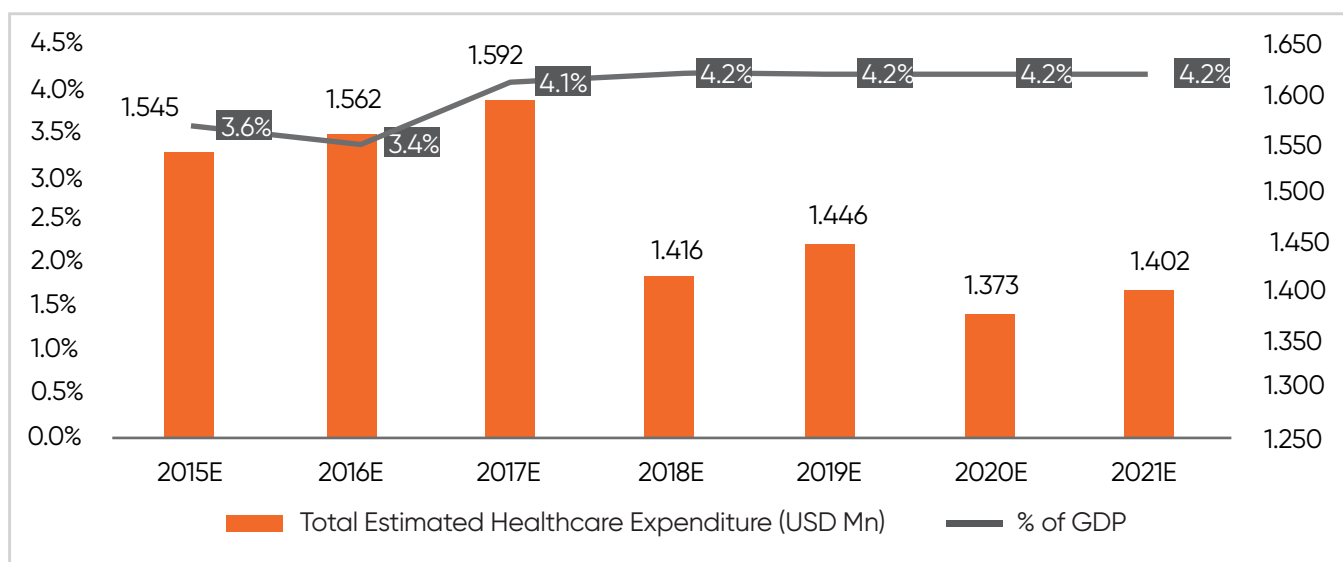
Exhibit 46: Real GDP (USD Bn) and GDP per Capita (in '000) of Bahrain (2015-2031F)



2.6.3 Healthcare market size:

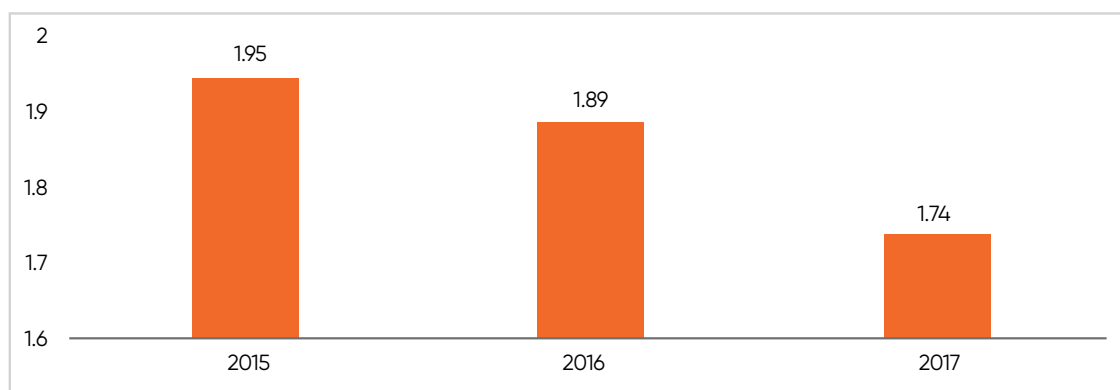
Bahrain's total healthcare expenditure was about 4.2% of GDP in 2017 and 2018, which is the latest available data. Assuming that the same proportion of GDP would be spent on healthcare, total expenditure has been estimated below

Exhibit 47: Total Estimated Healthcare Expenditure (USD Mn) and as % of GDP



2.6.4 Hospital bed density:

Hospitals beds density is on lower side in Bahrain and has been decreasing over last few years. This signifies that healthcare infrastructure addition is not at par with growing population requirements.

Exhibit 48: Hospital Bed Density per 1,000 Population**2.6.5 Bed Gap in 2021 and additional beds needed by 2031:**

As per the benchmark of 2.7 beds per 1,000 population, Bahrain's bed numbers fell short and an additional 1,400 beds are needed by 2021 over 2018 numbers. Similarly, an additional 1,800 beds would be required by 2031, indicating significant investment opportunity in the healthcare sector

1,400~
ADDITIONAL BEDS REQUIRED BY 2021

1,800~
ADDITIONAL BEDS REQUIRED BY 2031

2.6.6 Demand for Manpower to Increase:

Physician density in Bahrain has been very low (0.93 per 1,000 population) in 2015, as per World Bank estimates (latest available). Similarly, nurse density has been low with only 2.50 nurses available per 1,000 population. Although latest data was not available at the country level, demand for physicians and nurses, especially since the onset of the pandemic, has only increased.

2.6.7 Transformation Strategies – Bahrain

Aligned with Economic Vision 2030 released in 2008, the MOH Bahrain is committed to work as a unified governmental system to ensure sustainability, competitiveness, and justice in providing healthcare services. MOH has been adopting various measures to increase investment in the health sector. Also, Bahrain has a special emphasis on establishing major health projects to strengthen community partnership between public and private sectors. The MOH relies on latest technologies in the medical device industry to develop key health strategies and policies to achieve the targets of Vision 2030. Key initiatives and projects are stated below :

Project	Description
National Health Information System (I-Seha)	I-Seha aims to implement National Health Information Systems to ensure the delivery of efficient and high-quality healthcare services. The project aims to implement a Unified National Electronic Health Record (EHR), which will facilitate work and ensure easy diagnosis, prevention, and treatment of disease.
Bahrain Genome Project	The MOH has developed a specialised centre for genetic analysis that uses latest scientific innovations. The centre will have a database of the Bahraini population's DNA that will be analysed and studied to identify opportunities that contribute to improvements in disease diagnosis, early detection, prevention, and treatment.
Business Intelligence (BI) Dashboards	The MOH has adopted BI to create statistics dashboards which provide real time indicators for e-services. These are accessible through interactive website pages e.g., Open Health data.
Environmental Protection - Go Green Initiative	In accordance with the MOH's commitment to the implementation of Green Information Technology, the Go Green Initiative was developed to be implemented by HC organisations.

Insight:

Growing population in Bahrain is an added burden on its existing healthcare infrastructure as the country strives to provide quality healthcare to its population.

2.7 Egypt

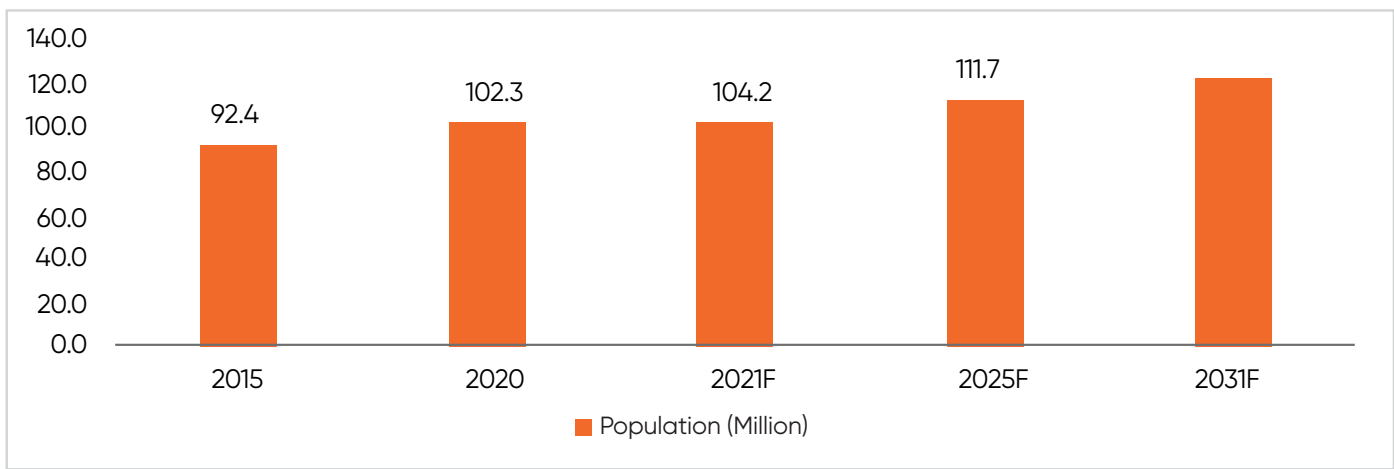
Egypt’s macroeconomic reforms had helped stabilize its economy in recent years. Egypt was the only economy in the GCC and North Africa that continued to grow in 2020 amid disruptions caused by the COVID-19 pandemic. Egypt’s economy is expected to rebound to pre-pandemic growth rates in 2021, as tourism recovers and effects of the pandemic wane.

2.7.1 Demographic Analysis

• Population and growth:

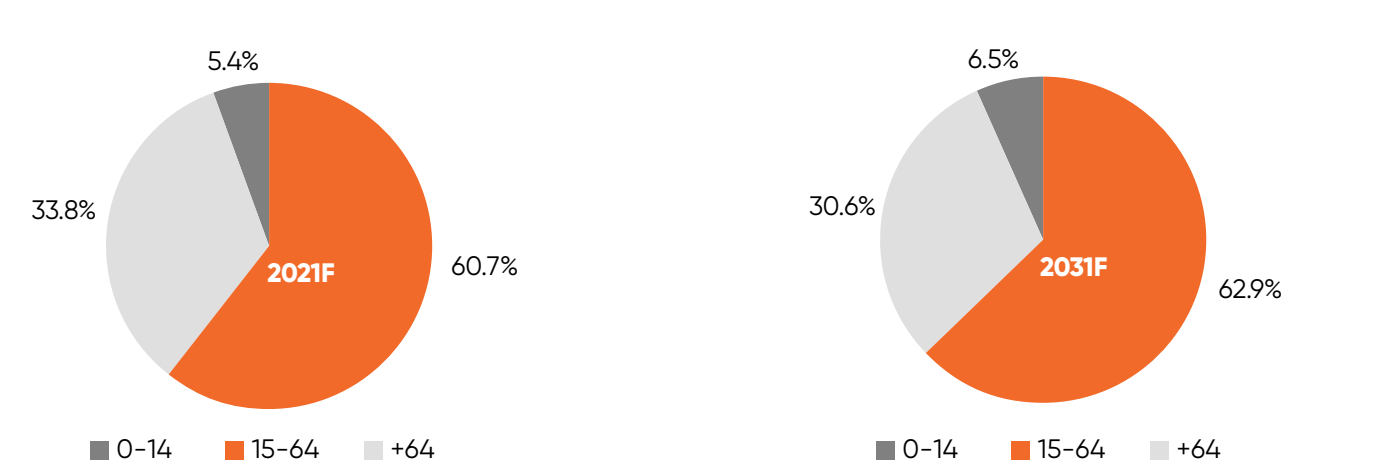
Egypt has the largest population base, with its population comprising ~64% of the total GCCE population in 2021. The population of Egypt is estimated to grow by 1.6% by 2031, from 104.2 million in 2021 to 122.7 million. Growth in population will in turn create higher demand for healthcare services.

Exhibit 50: Total Population of Egypt (2015–2031F)



• Growing share of ageing population:

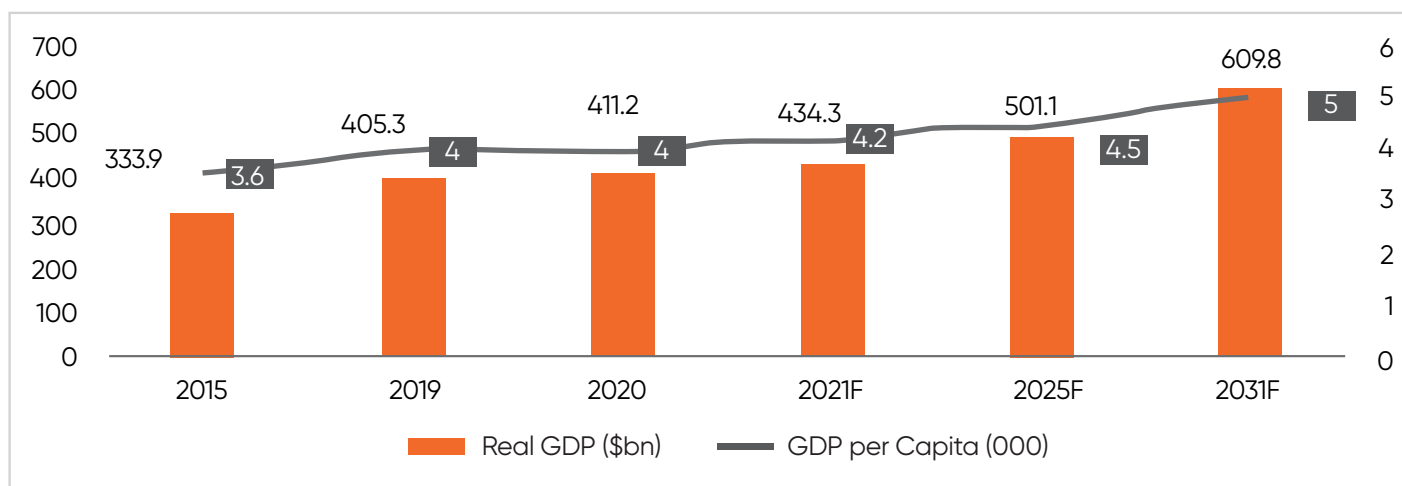
While the ageing population comprising people aged 64 years and above formed 5.4% of the total in the same year, by 2031, this segment is expected to comprise about 6.5% of the total population.



2.7.2 GDP and growth:

Unlike other GCCE countries, Egypt's economy did not witness negative growth due to the COVID-19 crisis but grew at a moderate rate of 1.5% in 2020 compared to 2019. It is forecast to grow at 5.6% between 2020 and 2021. Further, the economy is expected to grow at a CAGR of 3.5% over the 2021-2031 period. The GDP per capita is expected to grow at a CAGR of 1.8% over the same period.

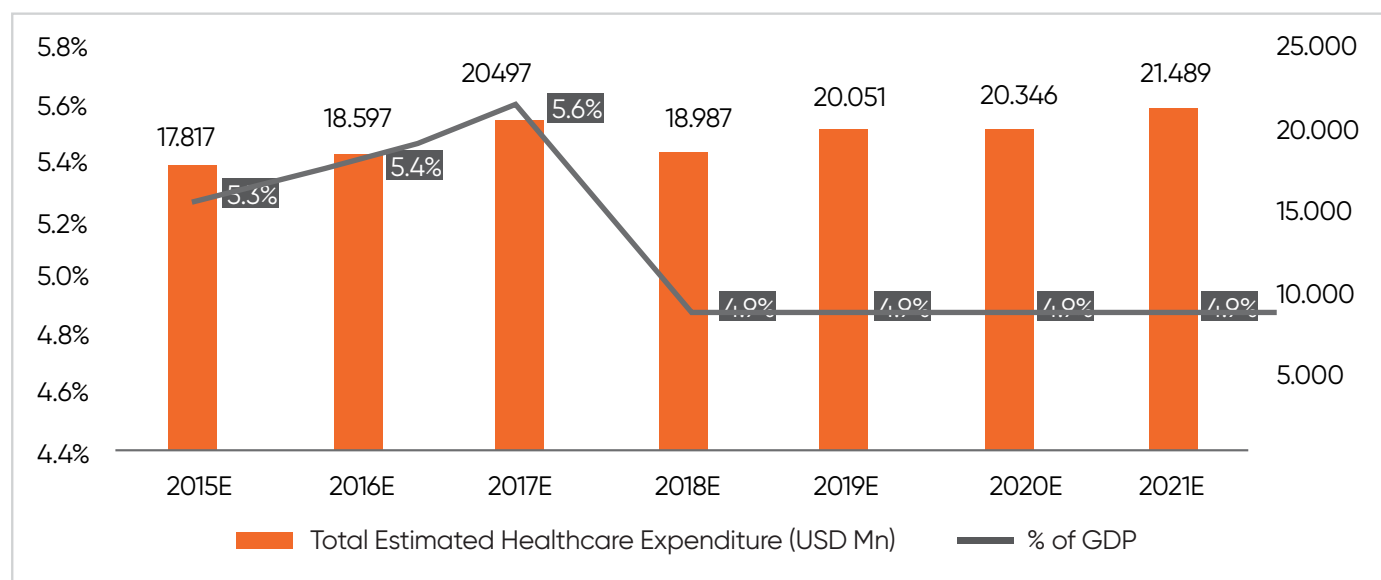
Exhibit 52: Real GDP (USD Bn) and GDP per Capita (in '000) of Egypt (2015-2031F)



2.7.3 Healthcare market size:

Egypt's total healthcare expenditure dropped to 4.9% of GDP in 2018, which is the latest available data. Assuming that the same proportion of GDP would be spent on healthcare, total expenditure has been estimated below.

Exhibit 53: Total Estimated Healthcare Expenditure (USD Mn) and as % of GDP

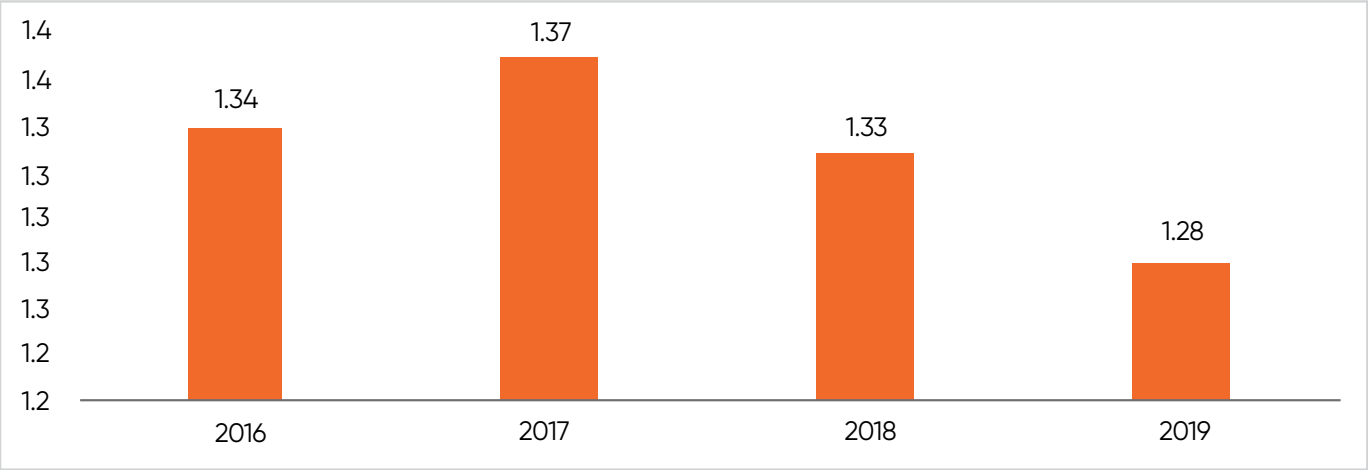


The healthcare sector in Egypt is anticipated to grow due to forecast economic growth, increase in metabolic diseases, and an expected increase in burden of diseases across the country. The Government has allocated EGP 124.9 billion for healthcare for FY2019/20; however, the allocated budget may not be sufficient to provide basic healthcare needs for the entire population. Therefore, there exists an opportunity for the private sector to invest and build capabilities in line with its growing economy.

2.7.4 Hospital bed density:

Egypt's number of hospital beds per 1,000 population was lower than that of the GCC countries except Qatar. With a growing population and ageing demographic, more beds are required to meet healthcare demand

Exhibit 54: Hospital Bed Density per 1,000 Population



2.7.5 Bed Gap in 2021 and additional beds needed by 2031:

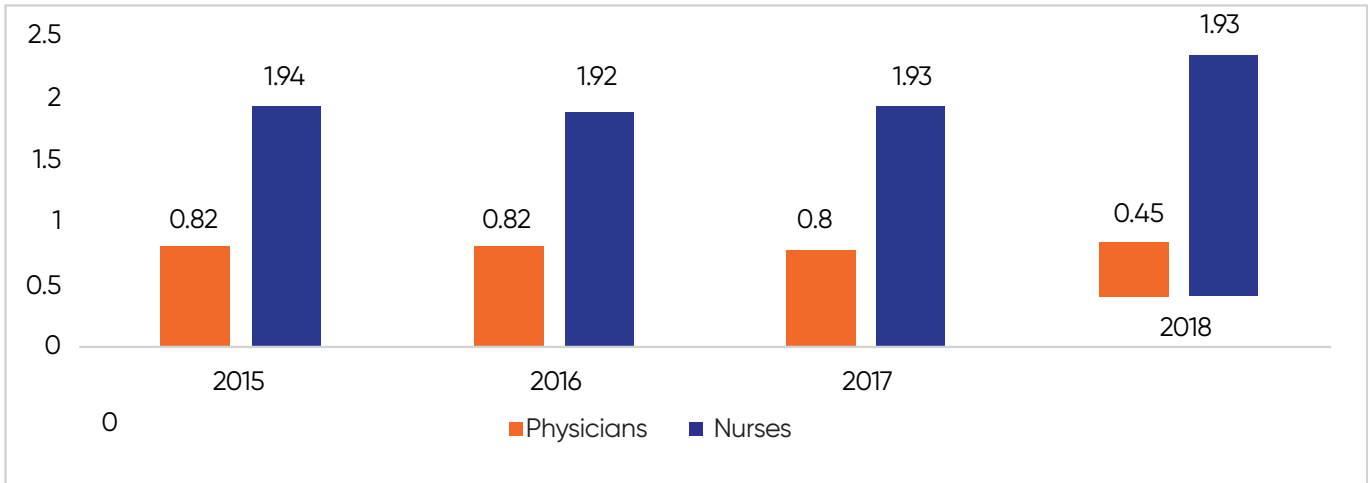
As per the benchmark of 2.7 beds per 1,000 population, Egypt's bed numbers fell short and an additional 143,000 beds are needed by 2021 over 2018 numbers. Similarly, an additional 203,000 beds would be required by 2031, indicating significant investment opportunity in the healthcare sector.



2.7.6 Demand for Manpower to Increase:

There is great demand for specialised physicians across various specialities in Egypt. This density of nurses and midwives in 2018 also fell short at 1.93 in Egypt in 2018.

Exhibit 55: Healthcare Manpower Density per 1,000 Population



Egypt has faced a falling Physicians and Nurses per 1,000 population indicators, showing that there has been a chronic shortage of qualified health workforce in the country. A large number of healthcare professionals from Egypt tend to work abroad in search of better compensation and work conditions.

To address the shortage in healthcare professionals to serve the growing population of Egypt, the Government in late 2018 rolled out a reform to the medical education system whereby medical students would complete their basic medical education coursework in five years (instead of the previous six years) and would receive two years of clinical training (instead of the previous one year). The new system aims to integrate practical and theoretical courses throughout the first five years, so that students would get trained in hospitals during their first academic year. This change is expected to improve the quality of training for future medical professionals within Egypt over the coming years.

Medical professionals have been required to undergo the takleef programme, which is to work as general practitioners in one of the country's primary care centres, many of which are in rural areas, for two years before getting specialist training. In 2019, the MoHP announced that it would merge the takleef with a Fellowship programme. This initiative is expected to expedite and increase the number of specialist doctors entering the workforce annually in coming years.

2.7.7 Transformation Strategies – Egypt

Healthcare in Egypt is regulated and governed by the Ministry of Health and Population, which has been putting forth various initiatives in the past couple of years to enhance its healthcare system. Ministry of Health and Population (MoHP) is the main governing entity in Egypt, responsible for regulating the healthcare system. The main aim of the MoHP is to provide adequate healthcare to all citizens, improve healthcare facilities, services, and treatments. The main role of the key organisations is as follows:

- Egyptian Drug Authority (EDA) is the pharmaceutical regulatory body of the Egyptian Ministry of Health and Population (MoHP)
- National Training Institute (NTI) is main centre for the introduction of the most updated means of training for healthcare staff. The institute offers theoretical and practical training to familiarise healthcare staff with state-of-the-art medical technology
- VACSERA is the only producer of vaccines and sera in Egypt and is considered one of the main blood banks in the country
- Egyptian Ambulance Organisation (EAO) is an integral part of the MoHP system, responsible for pre-hospital care. EAO aims at providing responsive, high quality clinical care for patient transport, rescue, and retrieval services
- Health Insurance Organisation (HIO) is Egypt's main provider of public health insurance. The goal of HIO is to provide sustainable and universal coverage of health insurance to employees, students, and widows through its own network of hospitals and medical centres
- Curative Care Organisation (CCO) is a financially independent governmental organisation that contracts with individuals and companies to provide inpatient and outpatient medical care

In 2014, the Egypt Constitution affirmed the universal right to healthcare, where Article 18 states that each citizen has the right to enjoy a healthy life and to receive comprehensive healthcare in line with quality standards. The strategic Visions for Health to 2030 launched in February 2016 by the Egyptian Government aims that all Egyptians should enjoy a healthy, safe, and secure life through an integrated, accessible, high quality, and universal healthcare system capable of improving health conditions through early intervention, and preventive coverage, ensuring protection for the vulnerable, and achieving satisfaction for citizens and health sector employees. This Strategic Vision for 2030 identifies the most important factors affecting the health of Egyptians, and the optimal mechanism to apply universal healthcare coverage for all. It also delineates a future management system for the health sector, the roles of various stakeholders, and health sector in achieving the goals of sustainable development. The strategic vision for health focuses on the achievement of three key objectives until 2030, as follows:

Exhibit 56: Strategic Initiatives for Healthcare Transformation in Egypt

Objective	Description
Improvement in the health of citizens within a framework of justice and equity	Study all factors affecting the health of Egyptians including social factors, sector resources, general awareness, and lifestyle.
Study all factors affecting the health of Egyptians including social factors, sector resources, general awareness, and lifestyle	Ensure the availability and affordability of preventive and curative services of high quality to all Egyptians.
Improve health sector governance	Ensure the availability of accurate data that leads to sound decision-making in a timely manner, while improving efficiency, accountability, transparency, and resource management of the health sector.

To meet the targets laid down in Vision 2030, the Ministry of Health and Population (MOHP) has identified the following key health programmes to improve the healthcare sector in Egypt :

Exhibit 57: Strategic Programmes for Healthcare Transformation in Egypt

Health Programmes until 2030
• Adopting inclusive healthcare coverage
• Improving the quality of healthcare service provision
• Enhancing preventive and health programmes
• Improving health sector governance
• Decentralise health services provision
• Developing information and technological infrastructure to support healthcare systems
• Developing human resource management in the health sector
• Developing the pharmaceutical sector

2.7.8 Medical Insurance - Egypt

In Egypt, public health insurance is covered through the MOHP, in collaboration with the Health Insurance Organisation (HIO) and the Curative Care Organisation. According to HIO, ~60% of the Egyptian population is covered by public health insurance. Based on World Bank Data, ~72% of the national health expenditure is out of pocket. However, the Egyptian Government introduced a new healthcare insurance system – “Universal Health Insurance Act” in 2018, which aims at extending insurance coverage to all Egyptian citizens, residents as well as Egyptians living abroad. The new system is expected to cover all medical services for beneficiaries, from medical consultation to surgical interventions. Although the new insurance system is based on subscriptions, the Egyptian Government is expected to absorb the financial burden of subscriptions of underprivileged families. The new system has already been implemented in Port Said and is expected to cover all Egyptian governorates by 2032.

Insight:

Large population base along with limited healthcare infrastructure signifies huge opportunity in the Egyptian healthcare market.

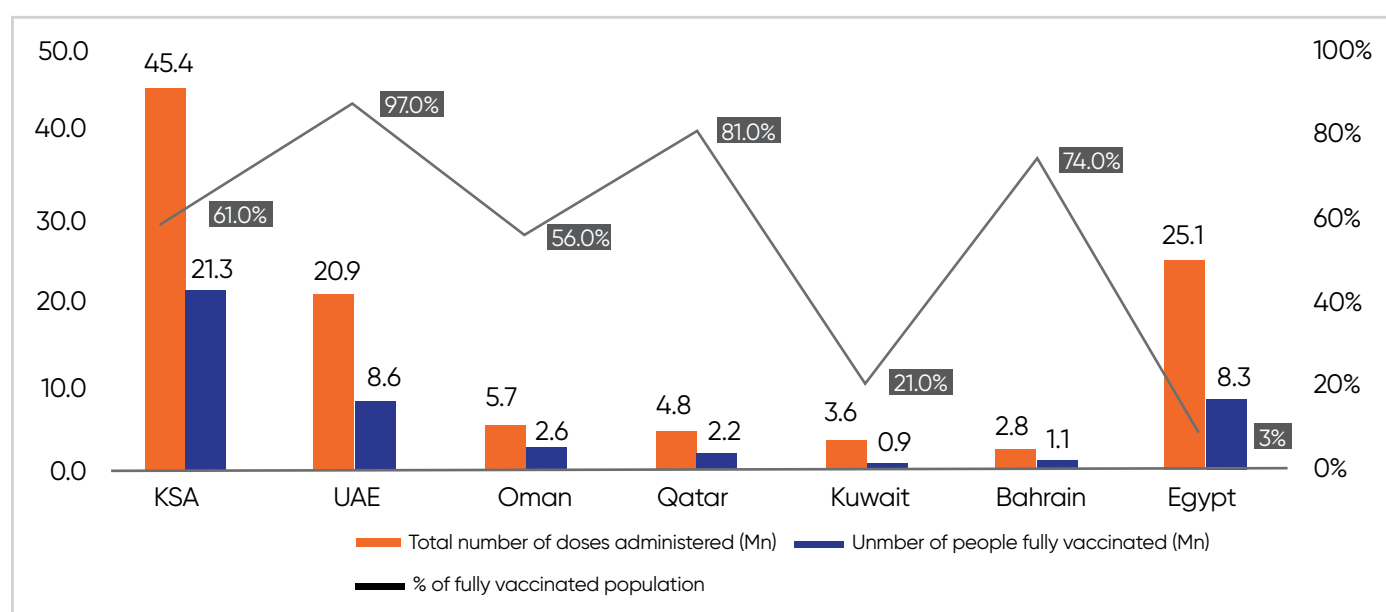
Section 3: Post-COVID-19 Recovery of Healthcare Delivery Sector

GCCE has undertaken exceptional efforts to absorb the implications of the pandemic and is now looking for future opportunities to advance the healthcare system into the post COVID-19 period.

• COVID-19 Vaccination Status in GCCE

As countries increasingly progress towards vaccinating most of their populations, they have started to reduce restrictions for mandatory mask and sanitation and gathering sizes as well as travel restrictions. Also, the fact that positive COVID-19 cases are dropping is also a positive indication towards return to life close to that before the pandemic. It is also an indicator of potential growth for business including transactions in the sector.

Exhibit 58: COVID-19 Vaccination Status in GCCE by Country, October 2021



• Recovery in Volumes of Hospital Visits

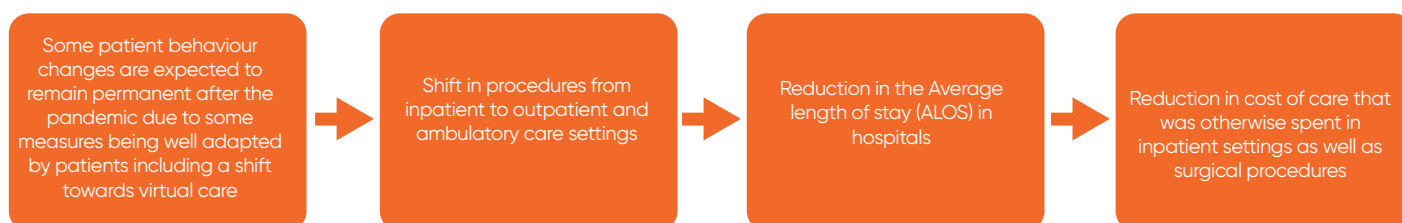
With the declaration of COVID-19 as a global pandemic in 2020, many patients with acute and chronic medical illness, whether life threatening or not, did not seek hospital care because of concerns of going to hospitals, movement restrictions, postponement of non-COVID-19 care by healthcare providers due to capacity constraints, outside the hospital setting care (through increased homecare, tele-consultation services) etc. Therefore, hospital visits and admissions for non-COVID-19 care decreased compared to predicted levels. A significant proportion of this decrease was among patients who typically would have been admitted to the hospital, suggesting substantial deferment of care. The promotion of telehealth and home care during the pandemic compensated for some hospital visits and helped to pre-empt some chronic disease exacerbations. However, this unprecedented scenario led to many potential health consequences for patients deferring care even for life-threatening conditions, and impacted hospital finances with many small hospitals being at the risk of closing or merging etc.

With the declining severity of the pandemic along with widespread vaccine rolls out, service utilisation has been recovering in the region. Patients' decisions to return to the hospital in the short- and long-terms may also be influenced by patients' age, race, nationality, insurance status, and income – factors often related to trust in or access to the healthcare system, and to the hospitals themselves being safe for COVID-19. Several factors strengthened the move back to hospitals:



As the severity of COVID-19 pandemic began to wane, hospitals started witnessing a slow yet steady improvement in patient volumes across all specialities. Therefore, healthcare facilities are bouncing back from the lower volumes seen during the pandemic.

Overall, patient volumes and hospital revenues have made substantial recovery. Larger hospitals have recovered more robustly than smaller facilities. As per industry experts, majority of the healthcare market is expected to reach pre-COVID-19 levels by 2022 with the following implications:

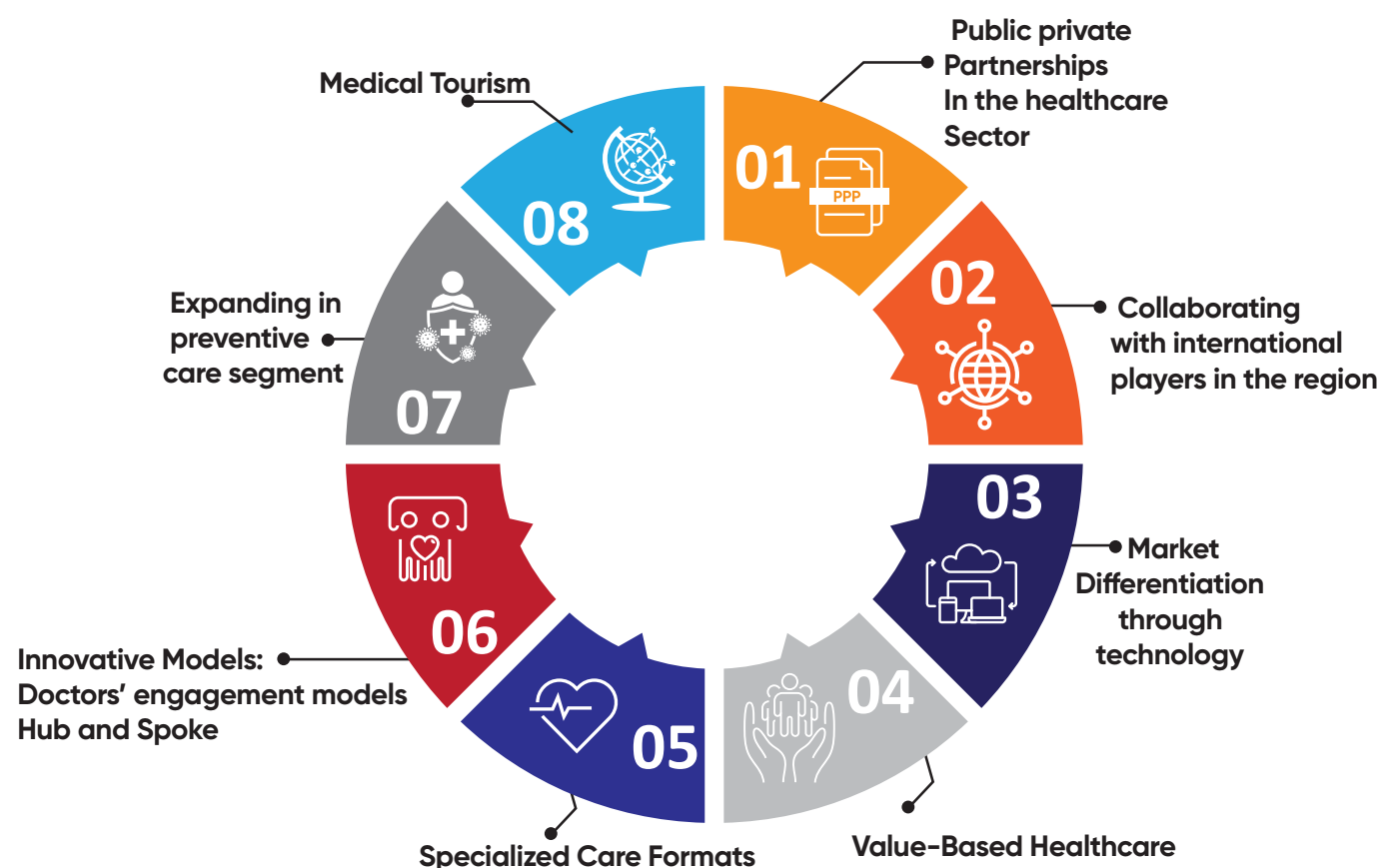
**Insight:**

Majority segments of the healthcare market are expected to reach pre-COVID-19 levels by 2022

Section 4: Private Healthcare Delivery Sector in GCCE: Key Market Strategies

During 2021, several private healthcare facilities across the GCCE thrived by capitalising on current market opportunities, by employing several key market strategies. The below exhibit details the key strategies and opportunities that were dominant within the healthcare sector in the region.

Exhibit 59: Key Healthcare Market Strategies Trending in GCCE, (2021)



Each of these opportunities and strategies have been explained in detail below

1. Public Private Partnerships in the Healthcare Sector

While majority healthcare spending has been historically borne by governments, there have been constraints on government spending. Governments aim to offset this by encouraging private sector investment in healthcare through PPPs.

World Bank definition of Public-Private Partnership (PPP)

A long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance."

Although the PPP concept started off with building infrastructure related to healthcare, it has evolved to include providing quality care services and policy development also. Several avenues of PPP and privatisation opportunities exist. Some mentioned below are already in the pipeline:

Exhibit 60: Key avenues of PPP and privatisation opportunities

Format	Definition
Investment in medical cities	Governments aim at addressing demand for rapidly growing hospital beds capacity with the help of private sector players. In the KSA, currently public sector dominates supply of healthcare services with ~79% of bed capacity. But there has been a wave of privatisation, guided by Vision 2030 with large demand for foreign private operators to enter the region. Furthermore, the KSA Government plans to increase private sector contribution in total healthcare spending. PPP models for healthcare in KSA are emerging as a vital solution to provide required infrastructure and increase efficiencies and reduce burden of cost.
Investments in clinical training	As is the case globally, GCCE is facing a challenge in shortage of trained healthcare professionals, especially during the COVID-19 crisis. An opportunity exists for medical schools and colleges of health sciences to enter PPP arrangements. An example of this already exists in the KSA with King's College Hospital in London providing nurse training for its King Fahad Medical City (MOH)
Managing chronic diseases:	To face the growing prevalence of cardiovascular diseases in the UAE, DHA started implementing its first PPP project for a CoE in Cardiac sciences. The private-sector partner will be responsible for designing, building, financing, maintaining, operating, and managing the Cardiology CoE for a period of 25 years. This centre will be transferred to DHA at the end of the contract term.
Long Term Care	DHA is evaluating a Concession Model or Operator Agreement for a managed services model for LTC services for patients in Dubai. This arrangement is expected to free up beds and critical care units in Rashid and Dubai Hospitals. Other proposed PPP projects that are likely are within areas like imaging diagnostics, dialysis, spine, and diabetes
PPP in Hospitals	KSA's MOH along with the National Centre for Privatisation and PPP have announced the launch of 244-bed Alansar Hospital in Medina. The PPP project includes BMT (design, build, equipment procurement, operations, and maintenance) model. Alansar hospital project is expected to be the start of a series of PPP projects in the KSA's healthcare space.
Clinical Service Provision:	Oman's Ministry of Finance has announced the launch of new PPP initiatives and has outlined plans for the procurement of services in drug rehabilitation and the renal dialysis space. This aims at reducing cost for the ministry and expanding coverage for patients.

PPPs are relatively new to the region. Only by 2017, most countries in the region were in the process of drafting legislation and building models to enable PPPs. Egypt with its large population and high prevalence of chronic diseases is a market in need of extensive healthcare services where opportunities exist at multiple levels. The adoption of this model has been somewhat slow in all the GCCE countries due to the complex and long-term nature of PPPs. There is a need for thorough research and planning in structuring these projects to ensure they are sustainable and can withstand the long-term nature of the contracts. Hence, it is too early to predict the levels of risk private providers are willing to take, and to assess performance of PPPs in the region.

2. Collaborating with International Players in the Region

Several private healthcare providers in the region have chosen to partner, create joint ventures and other kinds of collaborations with international operators. This is to leverage their expertise in healthcare to achieve highest clinical outcomes. Examples of recent affiliations are mentioned below:

- **Mayo Clinic Care Network:** In 2016, American Hospital in Dubai became the first healthcare organisation in the Middle East to join the Mayo Clinic Care Network. Other hospitals in the GCCE in this network are International Medical Centre (Saudi Arabia) and Saudi German Hospital (Cairo and Riyadh). The Mayo Clinic Care Network is a select group of independent health systems that are granted special access to Mayo Clinic's extensive knowledge and world-leading medical expertise.
- **Mediclinic Middle East joins the UK headquartered TriNetX global network:** Mediclinic Middle East joined the TriNetX network to help grow the hospital group's overall research portfolio and expand its clinical trial opportunities. TriNetX and Mediclinic Middle East agreed to collaborate in research in areas such as Oncology and Cardiology.
- **Aster DM Healthcare's collaboration with Roche Diagnostics:** Aster DM Healthcare has collaborated with Roche Diagnostics, one of the leading players in biotechnology, as the strategic partner across the UAE, Saudi Arabia, Qatar, and Oman. The partnership will enable Aster DM Healthcare's hospitals, clinics, and laboratories across the region to adopt the latest diagnostic innovations and solutions along with boosting capabilities to drive operational efficiency essential to meet the rising demand for diagnostics.
- **Burjeel Hospital and University Hospital Brussels:** The University Hospital Brussels manages the Reproductive Medicine Programme at Burjeel Hospital, Abu Dhabi.
- **Al Murjan Group and Mediclinic Middle East to jointly establish a private hospital in Jeddah, KSA:** UK's Mediclinic Middle East will manage the new 200-bed hospital and support Al Murjan Group, a Saudi family business group with expertise and advisory services in planning, design, and construction with the commissioning of the hospital expected by the second quarter of 2022.
- **Al Seef Hospital and Healthcare Belgium:** Al Seef Hospital in Kuwait has developed a Centre of Excellence in partnership with Healthcare Belgium member hospitals.
- **Bahrain Specialist Hospital partners with Apollo Hospitals:** The Bahraini and Indian hospitals partnered to provide Cardiac related services in Bahrain.

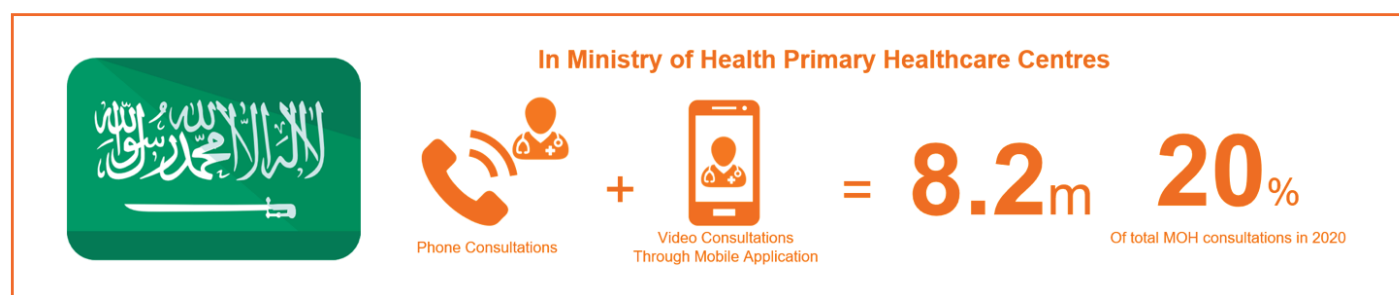
In future, many more collaborations are expected to take place.

3. Market Differentiation Through Technology

The view of digital health post the advent of COVID-19 has drastically changed as compared to pre-COVID-19 times. The rapid and wide spread of the disease has forced the need for alternative solutions to meet continuing demand for healthcare. COVID-19 has accelerated the otherwise much slower processes of approval and deployment of new innovations in healthcare, and digital solutions are one example. Investments already made in digital infrastructure enabled GCCE countries to quickly meet this huge increase in demand. Concerns over data privacy made way for necessity for governments to put regulatory guidelines for data privacy and storage, leading to fast adoption of the relatively new concept of telehealth in local markets. Other pre-existing barriers to entry for these technologies such as payor and insurance reimbursement and regulatory approvals have lowered as healthcare systems in the region had to adapt to the new situation quickly. Telemedicine provided a more accessible option for patients with lower tier insurance classes due to its relatively lower cost.

The market has also witnessed an increase in volumes of teleconsultations which were also reimbursed by insurance providers. KSA's MOH alone has reported that 8.6 million teleconsultations were done in its primary healthcare centres through phone and mobile applications during 2020, which makes up 20% of total primary care consultations in that year.

Exhibit 61: MOH Primary Healthcare Centres Volumes of Telemedicine Consultations in KSA, 2020



Healthcare providers who adopted technologies in their value propositions have stayed on top of competition and were able to continue serving their patients despite reduced access to hospitals during lockdowns.

Online pharmacies and home delivery of medication were on a growth trajectory even before the pandemic, driven mainly by increased use of mobile devices and internet. The pandemic further accelerated growth in this segment as people's movements were restricted. Successful examples in the KSA are Nahdi, Al-Dawaa, and others.

Remote monitoring and similar solutions which are based on accessing health data remotely without the need to visit hospitals encountered an increased rate of use; providers entered the field with greater focus to address their patient base needs adequately. The same was also applicable for use of these solutions in home care and utilisation of tablets and mobile devices for communicating patient care. A rich variety of other solutions have come into play and were accelerated by COVID-19. Among these are population health platforms, diagnostics, remote patient monitoring and other big data and AI solutions.

In addition, governments have utilised emerging technologies like big data and artificial intelligence in controlling the spread of COVID-19 and to track vaccination status of residents and nationals of their countries; examples are Tawakkalna in Saudi Arabia, COVID-1919-DXB in Dubai, EHTEAZ in Qatar and others.

- Artificial Intelligence (AI) can be used in healthcare to improve the speed and accuracy of diagnoses and disease detection, assist in clinical care, improve health research, medicine development, and support a variety of public health programmes.
- Precision Medicine (PM) is care that is specifically designed to optimise efficiency for a particular group of patients with predefined characteristics. This is achieved through collecting, analysing, and inferring results from data of clinical outcomes in specific patient groups. Outcomes are then analysed, and clinical evidence is created to arrive at personalised treatment guidelines. To achieve this, a country must have a structured health record system and artificial intelligence technologies. Applications in this field are many, and opportunities for long term investments are present. PM is currently used in preventive wellness, weight management, cancer treatments and a few other care areas.
- American Hospital Dubai launched the region's first health AI research centre in 2020 in partnership with Cerner, a global health informatics company. This initiative aimed to leverage Cerner's electronic health records (EHR) data as well as its clinical AI and advanced data analytics tools to create centres of excellence in a range of treatment fields. The hospital hopes to fully integrate AI into medical services to minimise the burden of chronic diseases.
- The Dubai Health Authority (DHA) deployed a fitness screening service for expatriate workers called Smart Salem, which uses AI to improve and streamline its procedures, allowing the centre to conduct medical checks in just 30 minutes, with a capacity of 150 appointments daily. Each appointment includes a blood test, and chest X-rays with AI-powered analysis that can detect tuberculosis in seconds.

Starting from the early outbreak of the pandemic, GCC countries started using AI tools to limit the spread of the virus. Technology was used to ensure that people movement was limited, and social distancing was followed, using speed cameras, drones, and robots. Governments used location-based contact tracing to monitor those who tested positive for coronavirus and help isolate them from the rest of the population. AI enabled crunching these large volumes of data.

With AI and machine learning, datasets related to COVID-19 could be shared in real-time across essential stakeholders such as clinicians, public health professionals, scientists, and researchers worldwide. These technologies were also effective in detecting COVID-19 through chest x-rays and computerised tomography (CT) scans since they could differentiate between the virus and community-acquired pneumonia.



Case in Point

The Saudi Data and Artificial Intelligence Authority (SDAIA) partnered with Dutch health technology company Royal Philips to advance its AI healthcare capabilities. SDAIA has formed partnerships with various companies such as IBM and Dell and China's Alibaba and Huawei to build advanced capabilities in the fields of AI and smart cities.



Case in Point

Case: UAE, with its vision to become a leading global healthcare centre, has several AI and digital technology initiatives. Two UAE-based health companies launched the world's first AI-powered rapid COVID-19 test. A UAE-based pharmaceutical company signed an agreement with a local AI and cloud computing company to produce millions of Sinopharm vaccine doses for the region.

4. Value-Based Healthcare

Emergence of digital health technologies has also enabled the healthcare market to introduce value-based healthcare. As opposed to fee-for-service model, value-based healthcare is defined as the care that is paid for based on health outcomes. Patients are to pay for care once they reach the desired health outcome aimed for by the treatment planned by their physicians. The concept has emerged to tackle the pressing issues of increasing cost, and difficulty in maintaining quality standards for healthcare services. In value-based healthcare, there is a mandate on providers to assure that only the most appropriate care is given to patients while maintaining high quality standards to achieve most favourable clinical outcomes.

As utilisation of healthcare services has increased, the focus on providing high quality and efficient services has also increased. COVID-19 has also accelerated this need for value-based healthcare in the region. It is a great opportunity for providers to start implementing value-based healthcare models which is preceded by having pre-existing data analytics platforms and population health dashboards which will provide insights about areas of care where opportunities exist, as well as areas where cost and quality can be further controlled and improved.

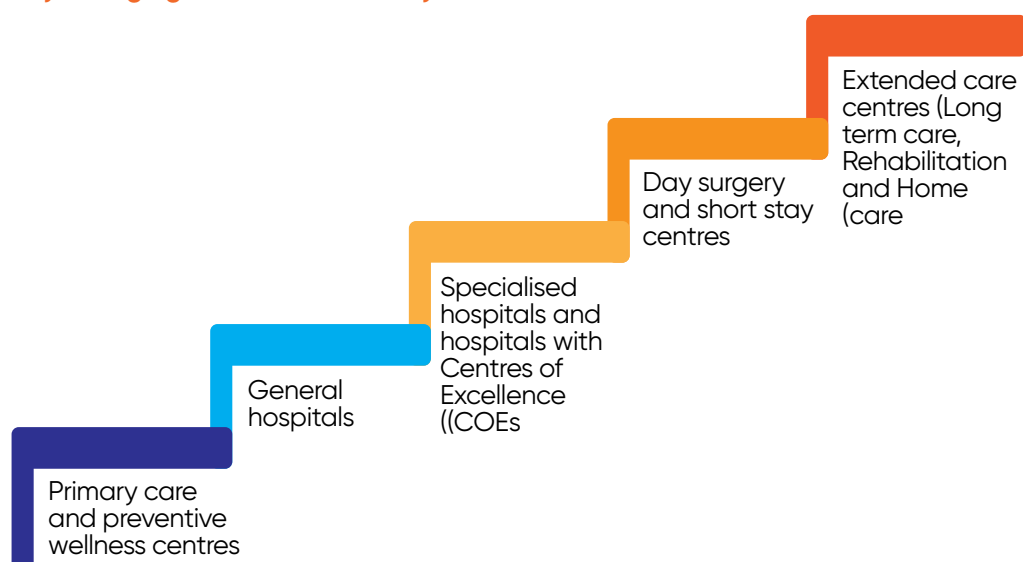
The concept of value-based healthcare has started to be discussed and planned for in the GCCE. Being part of healthcare transformation strategies, cost, and quality of care and subsequently access are issues for which value-based healthcare offers potential solutions.

5. Specialised Care Formats

Throughout the years, healthcare was mainly provided within hospitals (secondary and tertiary care). But provision of care within hospitals leads to higher cost of treatment, risk of infections, etc. Therefore, the concept of decentralising care was introduced to separate cases that can be easily treated outside hospitals in specialised facilities. The focus is to assure continuity of care while saving unnecessary costs and assuring better quality. There has been realignment of healthcare delivery towards newer formats in the GCCE.

To augment services and raise standards of care, some GCCE governments have also encouraged internationally renowned healthcare institutions to set up newer formats of healthcare delivery in their countries. In the recent past, various players in the GCC have forayed into newer and specialised healthcare delivery formats to increase healthcare service delivery across various stages of patient care. GCCE governments and private players are adapting to this change in the healthcare system by introducing new initiatives to improve primary and preventive care, day surgery, extended care which includes long term care, rehabilitation, and home care.

Exhibit 62: Key Emerging Healthcare Delivery Formats



6. Innovative Models

• Engagement Models of Doctors to Attract Patient Volumes

Healthcare providers have long used a 'star' doctor to attract new patients to facilities. The 'star' doctor is generally a highly specialised and sought-after doctor attached to different hospitals. New and upcoming hospitals that do not have the revenues to support an expensive doctor on their payroll, would invite this 'star' doctor to visit their facility on certain days to attract patients and build reputation. The doctor generally has a revenue sharing pay structure with the hospital, depending on the business the doctor brings to the facility. Even established healthcare facilities benefit from such arrangements. These 'star' doctors who are not tied to one facility are able to attract patients to the facilities at which they practice.

This concept is popular in Dubai with many hospitals having Community Based Doctors (CBDs) attached to their facility. A recent change in regulation in Dubai allows healthcare professionals to work at up to three clinical facilities at the Dubai Health Care City (DHCC). Highly reputed public sector doctors in Saudi Arabia and Kuwait make their services available to the expatriate population by practicing in the private sector as well. Going forward, this engagement model is expected to be more prevalent.

• Hub and Spoke Healthcare Delivery Models to Acquire Larger Share of Patients

The hub and spoke design of healthcare provider networks is a model which consists of a network of facilities consisting of a central hub, which offers a full array of specialised health services, and widely distributed spoke facilities which mainly offer diagnostic, outpatient, and referral services. Spokes act as referral sources routing patients who need more intensive services to the hub for treatment.

Successful examples are Mediclinic Middle East, HMG, Aster DM, American Hospital Dubai, and King's College Hospital Dubai which adapted this model of care. A few hubs and specialised facilities exist, along with multiple feeder clinics where initial diagnosis and simple procedures take place. Smaller standalone clinics that do not have facilities for specialised treatment also resort to referring relevant patients to a hub facility. In that case, referral-based agreements are potential ways to maintain this model. Hospital chains with a hub that has specialised departments are at an advantage to provide uninterrupted care for patients especially with the presence of unified health record systems.

7. Expansion in Preventive Care Segment

The GCCE has a high prevalence of obesity and chronic health conditions such as diabetes and heart disease, which are often associated with preventable unhealthy lifestyle risks.

Governments had rolled out initiatives to combat chronic disease growth. Quality of Life 2020 in the KSA, to address increased burden of non-communicable diseases (NCD), focused on fitness and preventive care. UAE is focusing on reducing NCDs prevalence through integration of smart technologies and expanding urban amenities for people to pursue more physical activities. Corporates are partnering with healthcare and insurance providers to offer comprehensive health check-ups and corporate wellness programmes for their employees.

This is a step forward from traditional approaches to healthcare where individuals went to hospitals only when they had symptoms. Preventive wellness is focused on the wellbeing of people at an earlier stage in their lives, as a pre-emptive measure, even in the absence of illnesses.

8. Medical Tourism

Generally, countries including GCCE aim at reducing outbound medical tourism, and grow inbound flow of patients to their countries. GCCE countries are working on covering services for which patients choose to travel abroad. Medical tourism has always been a focus for a few countries in the GCCE. Two of GCCE cities, Dubai and Abu Dhabi are in the top 10 destinations for medical tourism globally. Muscat and Egypt are at 13 and 26, respectively. This is according to the Medical Tourism Index (MTI) 2020-2021 by the Medical Tourism Association, a global non-profit for the industry. It evaluates destinations through 41 criteria to rank destinations in areas of environment, costs and facilities and services.

The UAE Government is seeking to improve inbound medical tourism especially in Dubai and aiming to make the Emirate a medical tourism hub. This will increase opportunity for investors to establish new business in the country. There is also focus on reducing outbound medical tourism from Dubai.

The Government of Egypt provides state sponsorship for outbound medical treatment for some of its citizens, for special cases only. In 2018, 31 patients were treated abroad at the state's expense, and roughly 2.6 million patients were treated within Egypt at the state's expense. During the same year, funds expensed for the sponsorship of patients abroad and in within Egypt were EGP 7.6 million and EGP 8.4 billion, respectively. Between 2010 and 2018, the number of patients treated at the Government's expense within Egypt almost doubled. These patients represent an opportunity that can be captured by private hospitals in Egypt.

Insight:

Insight: Based on key market strategies being undertaken by the private healthcare sector, further expansion of the sector is expected in future

Section 5: Recent Transactions in Healthcare Delivery within GCCE

Over the last few years, the GCC has witnessed significant growth in the healthcare sector including higher merger and acquisition (M&A) activity. International players have chosen to enter key GCC markets by acquiring existing smaller players. Moreover, established players have continued to expand their networks. Key targets have been mainly specialised service providers, e.g., cosmetology, fertility services, rehabilitation, and long-term healthcare etc. Details of key healthcare deals are mentioned in the exhibit below:

Exhibit 63: Recent M&A transactions in the GCCE region (2018-2021)

GCC country	Investor	Target Company	Type of facility	Deal Value (USD Million)	Share Acquired (%)	EBITDA Multiple	Description of the deal
2018							
UAE	NMC Health	Fakih IVF Group	Specialised healthcare format	205	49%	NA	This deal allowed NMC to accelerate and expand growth globally within its fertility business.
UAE	NMC Health	Cosmesurge	Specialised healthcare format	170	70%	10.6	The transaction included a chain of 17 operational clinics, enhancing NMC's cosmetics services portfolio.
KSA	NMC Health	As Salama Hospital	Multi-speciality hospital	13	30%	NA	This deal was in line with NMC's strategy to expand services provided as well as geographical reach.
KSA	NMC Health	Al Salam Medical Group	Multi-speciality hospital	37	80%	7	This deal extended NMC's foothold in KSA with a 100-bed hospital and 2 clinics in the attractive Riyadh market
2019							
KSA	NMC Health	Hassana Investment Company	Insurance	NA	NA	NA	Hassana is the investment arm of the General Organisation for Social Insurance (GOSI) in the KSA. NMC and GOSI agreed to a well-defined long-term sustainable growth plan for the JV
UAE	Mubadala Healthcare	Amana Healthcare	Specialised healthcare format	NA	100%	NA	Mubadala Healthcare acquired the region's leading provider of specialised rehabilitation and long-term care.
UAE	Dubai Investments PJSC	Globalpharma	Pharmaceutical	NA	66%	NA	Investing in Globalpharma will support the rapid growth of Dubai Investments PJSC in the pharmaceutical sector in the region.
UAE	Gulf Capital	Medica Holding	Medical Devices	NA	70%	NA	The deal aimed to expand Gulf Capital to new geographies and complement portfolio offerings with leading technologies across all aesthetic verticals.
Egypt	Al Tayseer Healthcare Group (THG)	Hassab Laboratories	Medical diagnostics	NA	80%	NA	THG aims to set up new branches of Hassab Laboratories, the high-profile medical labs operator it acquired, raising the total number of branches.
Kuwait	Mezzan Holding	Kuwait Saudi Pharmaceutical Industries Company (KSPICO)	Pharmaceuticals	69	67%	NA	Mezzan Holding, one of the Arabian Gulf's largest manufacturers and distributors of food, beverage, FMCG and healthcare products, has bought majority stake in KSPICO.

GCC country	Investor	Target Company	Type of facility	Deal Value (USD Million)	Share Acquired (%)	EBITDA Multiple	Description of the deal
2020							
KSA	Dallah Health-care	Makkah Medical Centre	Specialised healthcare format	43	78.6%	NA	The acquisition of the majority stake is part of Dallah's expansion strategy in Makkah region.
UAE	Yas Holding	Wellpharma Medical Solutions	Pharmaceutica	29	100%	10.6	The target was the portfolio company of Abu Dhabi-based investment firm.
KSA	Dr. Sulaiman Al Habib Medical Group (HMG)	NA	Multi-speciality hospital	NA	NA	NA	HMG issued its initial public offering (IPO) on the Saudi Stock Exchange (Tadawul). The medical group planned to float 52.50 million shares, or 15% of its capital in the planned IPO
Oman	Oman Insurance Company	Dubai Starr Sigorta	Health Insurance		100%	NA	Oman Insurance Company completed acquisition of its subsidiary, Dubai Starr Sigorta by obtaining an additional 49% of issued and outstanding share capital
2021							
UAE	Amanat Holdings	Cambridge Medical and Rehabilitation Centre (CMRC)	Specialised healthcare format	232	100%	10.5	The acquisition of CMRC is one of the biggest healthcare deals in the GCC to date.
UAE	ADQ	To merge its healthcare entities Rafed and Union71 with Dubai-based Pure Health	Specialised healthcare format	NA	Merger	NA	This deal aims to create a robust and synergetic healthcare organisation thereby elevating the UAE's global position in healthcare.
UAE	Yas Holding dedicated healthcare investment group, Global One Healthcare Holding LLC	Geltec Healthcare FZE (part of a renowned pharma and nutraceutical group)	Pharmaceutica	NA	100%	NA	The acquisition is in line with YAS' strategy of becoming a significant player in the region's healthcare industry.
UAE	International Holding Company (IHC)	Response Plus Medical Services (RPM)	Specialised healthcare format	NA	40%	NA	This deal is expected to allow IHC to expand its reach, scale and expertise as RPM is a unit of VPS Healthcare.
UAE	SEHA	Salma Children's Rehabilitation Hospital	Specialised healthcare format	NA	100%	NA	SEHA's acquisition of one of the leading integrated long-term care and post-acute rehabilitation hospitals in the region is expected to further strengthen its extensive pediatric services offering.
Egypt	ADQ	Amoun Pharmaceutical Company	Pharmaceutical	740	100%	NA	The investment in Amoun will further enhance ADQ's pharma strategy with the ultimate aim of ensuring access to critical medicines, lowering the cost of medication for the general population, and advancing new and innovative treatments.
UAE	ADQ	Pharmax Pharmaceuticals	Pharmaceutical	NA	NA	NA	The investment in Amoun will further enhance ADQ's pharma strategy with the ultimate aim of ensuring access to critical medicines, lowering the cost of medication for the general population, and advancing new and innovative treatments.

GCC country	Investor	Target Company	Type of facility	Deal Value (USD Million)	Share Acquired (%)	EBITDA Multiple	Description of the deal
2021							
UAE & KSA	Mubadala Health	United Eastern Medical Services (UEMedical)	Multiple hospitals of multiple specialized healthcare formats	NA	60%	NA	The Mubadala Health network adds multiple speciality hospitals and the new services added to its network includes fertility & IVF, obstetrics, neonatology, and pediatric subspecialties.
UAE & KSA	Olive Rock Partners	United Eastern Medical Services (UEMedical)	Multiple hospitals of multiple specialized healthcare formats	NA	NA	NA	Through its partnership with private equity firm Olive Rock Partners, UEMedical will be well-positioned to serve existing and new patients through the addition of complementary service offerings and a broader geographical reach.
UAE	Healian (GFH Financial Group)	Multi-Specialty Healthcare (MSH) Partner Holding Ltd.	Diversified multi-speciality healthcare chain	Exceeding 100	60%	NA	Healian's strategy focuses on buying, building, and consolidating healthcare businesses, like MSH, which benefit from growing demand as well as specialized healthcare centers of excellence and expanding their activities in main cities in the GCC with high margin and high growth healthcare businesses.

There were many deals in 2017 and 2018, including multiple NMC Health acquisitions (Fakih IVF, Cosmesurge etc.), with an EBITDA multiple in the range of 10–11. It also forayed into the KSA healthcare market with acquisition of multi-speciality hospital targets e.g., 30% stake in As Salama Hospital and 80% stake in Al Salam Medical Group. The latter had an EBITDA multiple in the range of 7.

In 2019, Abu Dhabi based Mubadala Healthcare acquired the region's leading provider of specialised rehabilitation and long-term care, Amana Healthcare. The deal value remains undisclosed, but it was one of the biggest healthcare deals in the region. The trend of investing into specialised healthcare formats continued with UAE based players Dubai Investments PJSC and Gulf Capital acquiring majority stakes in Globalpharma and Medica Holding. Other key deals included NMC Health and Hassana Investment, which is the investment arm of the General Organisation for Social Insurance (GOSI) in the KSA.

Year 2020 witnessed a few lower value deals, majorly due to the ongoing pandemic. In KSA, Dallah Healthcare acquiring a majority stake in Makkah Medical Centre hospital is part of the group's expansion strategy in Makkah. But 2020 witnessed one of the largest healthcare players in the GCC, Dr. Sulaiman Al Habib Medical Group (HMG) issuing its initial public offering (IPO) on the Saudi Stock Exchange (Tadawul). The medical group planned to float ~15% of its capital in the planned IPO.

The current year has started on a positive trend with the Dubai-listed investment company Amanat Holdings acquiring Cambridge Medical and Rehabilitation Centre (CMRC); this is one of the biggest healthcare deals in the region to date. The USD 232 million deal was closed with a significant EBITDA multiple of 10.5. Other key deals include ADQ's merger of its healthcare entities Rafed and Union71 with Dubai-based Pure Health, Yas Holding's acquisition of Geltec Healthcare FZE (part of a renowned pharma and nutraceutical group), International Holding Company (IHC) acquiring a 40% stake in Response Plus Medical Services (RPM), a unit of VPS Healthcare and more recently, SEHA acquiring the Salma Children's Rehabilitation Hospital in Abu Dhabi.

Recently, Mubadala Health acquired a 60% stake in United Eastern Medical Services (UEMedical). Through this acquisition, Mubadala added many specialised healthcare formats to its business, like Danat Al Emarat Women and Children Hospital, Moorfield's Eye Hospitals, HealthPlus Fertility Centres, HealthPlus Diabetes and Endocrinology Centre, Family Health centres etc. Also, Cleopatra Group in Egypt is foraying into specialised formats by setting up a maternity hospital.

Majority of the mentioned deals were in specialised healthcare formats where healthcare facilities are aiming to expand their capacity, capabilities, and geographical reach along with the ongoing pricing pressure-driven consolidation in these segments. Also, EBITDA multiples remain in the range of 7-10. Going further, increased M&A activities have been projected as the market moves towards consolidation with large healthcare groups looking to expand into various specialised healthcare formats. Therefore, investors are anticipated to find attractive opportunities while addressing market demand through long-term, cost-effective synergies and healthcare would be on a positive trajectory for further growth in 2021.

Insight:

There has been an increase in number of deals in the healthcare sector in last few years. Healthcare players in the GCCE are likely to see some consolidation post-COVID-19, as bigger players seek more market share

Section 6: Industry Challenges

There are many challenges being faced by the transforming healthcare industry in the GCCE, key ones are listed below:-
Details of key healthcare deals are mentioned in the exhibit below:

• Continuingly Increasing Cost of Care

The GCCE healthcare delivery sector aims to provide increased accessibility to services, high-quality of care and affordable treatment for patients. Employers are facing significant challenges in terms of balancing the cost of providing healthcare along with maintaining quality services.

Healthcare costs are increasing in the region, key reasons:

- **(a)** Commercialisation of the hospital segment, together with the increasing availability of healthcare is driving an uptake in healthcare services and hence resulting costs. Absence of certain speciality services, or the quality of available treatment in the home country, leads to outbound travel. Treatment costs incurred abroad are mostly paid by healthcare authorities and other government agencies.
- **(b)** Under-use of primary care as higher cost is paid because of patients going to specialists for primary care type of conditions.
- **(c)** Over prescribing of low-value health tests and procedures.
- **(d)** High cost of pharmaceuticals with markets that have high insurance penetration resorting to over-prescription. As the expense of delivering healthcare continues to climb, providers and health systems must respond by looking towards preventive care and wellness initiatives to counter high costs. This, together with improved access to more user-friendly technology could play a wider role in cutting-out unnecessary tests, increasing efficiency of diagnosis process and eliminating expensive errors and has the potential to manage medical inflation.

• Increasing Infrastructure Cost

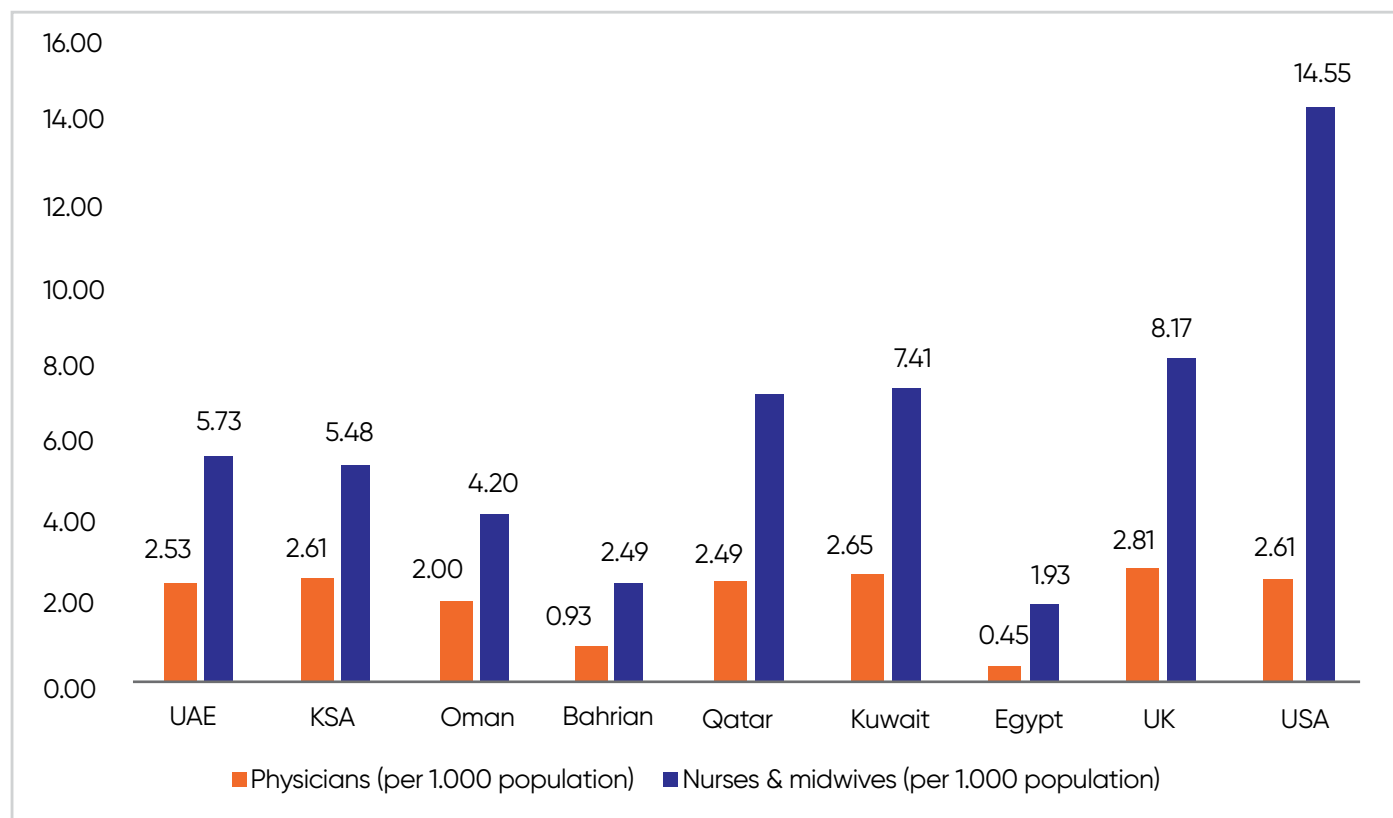
The healthcare sector demands high CAPEX and has a long gestation period along with comparatively lower operating margins. But in last few years, high-end infrastructure has been projected as being a key differentiator in the market and a value-added service for patients. Also, there is a paradigm shift in the way hospitals are constructed, designed, and managed today. This has led to increasing infrastructure costs due to the following reasons:

- **(a)** Providing hospital environments that are more comfortable and easily accessed
- **(b)** Regularly upgrading medical infrastructure
- **(c)** High investment in medical technology
- **(d)** Improving the patient experience by providing a wide range of amenities such as choice of retail shops, restaurants, IT facilities, telephone, TV access etc.
- **(e)** Increasing staff benefits such as childcare services
- **(f)** Use of high-end medical technology leading to increased cost for hospital and inpatient services

• Shortage of Manpower

The GCC has a comparatively lower healthcare staff density than other developed countries, as shown in the exhibit below:

Exhibit 58: COVID-19 Vaccination Status in GCCE by Country, October 2021



Note: All data is as per latest availability (2018) except some data e.g., Physician density of Bahrain & Kuwait (2015), USA (2017) and Nurses & midwives' density of Bahrain (2015) and USA (2017)

There is still a shortage in availability of trained physicians/nurses, especially local professionals in the GCCE and a high dependence on the expatriate workforce. Also, there are high attrition rates and retention issues. This poses a challenge for the healthcare delivery system. Even though governments are undertaking initiatives such as introducing post-graduate specialisation programmes, providing career advancement opportunities and varied training etc. for National staff, the dependence on expats is expected to continue for some time.

• Access: Fragmented Care

There are certain issues regarding equal access of care across the GCCE countries e.g., the Northern Emirates of UAE have comparatively lesser available infrastructure and, limited health insurance penetration. Similarly, in the KSA, certain provinces like Riyadh, Jeddah and Eastern have availability of various CoEs and are considered medical hubs. Whereas many other provinces have limited availability of medical infrastructure and CoEs.

Insight:

Making a healthcare system profitable is a challenge for every country around the world, but the GCCE is facing these challenges with government support and innovative measures by the private sector.

Section 7: Summary & Conclusion

In 2021, healthcare sector has been witnessing promising signs of recovery. Hospitals started to recover part of their pre-COVID-19 volumes. Demand for healthcare service continues to grow with drivers mainly being population growth, ageing population, and lifestyle related NCDs.

The environment for investing in healthcare in GCCE is promising. Opportunities exist in adapting successful strategies. In healthcare systems, there still are pressing issues related to specialised manpower availability, access, quality, and service provision. As governments in the region are identifying these issues and moving towards tackling them attractive opportunities emerge for the private sector through PPP. Growth is the main theme for coming years, with participation opportunities for private investors.

Exhibit 65: Summary Analysis – UAE

Parameters	Qualitative Analysis
GDP Growth	<ul style="list-style-type: none"> UAE has witnessed a growth in GDP, at a CAGR of 0.9% between 2015 and 2021. Going forward, it is forecast to grow at a rate of 2.9% to reach USD 500 Bn in 2031.
Investment environment (Ease of Doing Business Rank 2019)	<ul style="list-style-type: none"> #16 globally #1 in Middle East & North Africa
Healthcare expenditure (Overall growth)	<ul style="list-style-type: none"> Total healthcare expenditure is estimated to have grown by a CAGR of 3.7% during 2015–2021, with healthcare expenditure amounting to USD 15.9 Bn in 2021.
Bed density	<ul style="list-style-type: none"> Latest bed density in 2018 was 1.57 per 1,000 population. Based on this, there is gap of ~11,000 beds currently in 2021 and going forward a bed gap of ~14,000 by 2031.
Manpower density	<ul style="list-style-type: none"> The physicians per 1,000 population was 2.53 in 2018. Nurses per 1,000 population was 5.73 in the same year.
PPP opportunities	<ul style="list-style-type: none"> UAE Government has been promoting PPP opportunities in areas like CoE in specialised branches of medicine, LTC services for patients, projects in areas such as imaging diagnostics, dialysis, spine, and diabetes etc.

Exhibit 66: Summary Analysis – KSA

Parameters	Qualitative Analysis
GDP Growth	<ul style="list-style-type: none"> KSA recorded a GDP CAGR of 0.3% from 2015–2021. For the next decade from 2021–2031, it is forecast to grow at a CAGR of 2.4%. Its real GDP is expected to be USD 844 Bn in 2031.
Investment environment (Ease of Doing Business Rank 2019)	<ul style="list-style-type: none"> #62 globally #4 in Middle East & North Africa
Healthcare expenditure (Overall growth)	<ul style="list-style-type: none"> Overall healthcare expenditure is estimated to have grown at a CAGR of 1.3% over 2015–2021, amounting to USD 42.4 Bn in 2021.
Bed density	<ul style="list-style-type: none"> The latest bed density in 2020 was 2.24 per 1,000 population. Based on this, there is a gap of ~16,000 beds in 2021 and a gap of ~40,000 beds by 2031 projected requirements
Manpower density	<ul style="list-style-type: none"> Physician density was 2.61 and nurse density was 5.48 in 2018
PPP opportunities	<ul style="list-style-type: none"> KSA Government has been promoting the PPP model in healthcare with investment opportunities in medical city projects and large sized hospitals etc.

Exhibit 67: Summary Analysis – Oman

Parameters	Qualitative Analysis
GDP Growth	<ul style="list-style-type: none"> Oman's GDP grew at a CAGR of 0.3% between 2015–2021. Its economy is forecast to grow at a CAGR of 2.6% over the 2021–2031 period. Its real GDP is expected to reach USD 89.8 Bn in 2031
Investment environment (Ease of Doing Business Rank 2019)	<ul style="list-style-type: none"> #68 globally #5 in Middle East & North Africa
Healthcare expenditure (Overall growth)	<ul style="list-style-type: none"> Total healthcare expenditure is estimated to be USD 2.9 Bn in 2021, having grown at a CAGR of –0.4% over 2015–2021.
Bed density	<ul style="list-style-type: none"> Oman's latest bed density in 2019 was 1.49 per 1,000 population. Based on this, there is a gap of 5,600 beds in 2021. By 2031 this gap is expected to be 8,000 beds.
Manpower density	<ul style="list-style-type: none"> Physicians and nurses per 1,000 population were 2 and 4.2 respectively in 2018.
PPP opportunities	<ul style="list-style-type: none"> Moderate PPP opportunities

Exhibit 68: Summary Analysis – Bahrain

Parameters	Qualitative Analysis
GDP Growth	<ul style="list-style-type: none"> Bahrain has witnessed a growth in GDP, at a CAGR of 1.5% between 2015 and 2021. Going forward, it is forecast to grow at a rate of 1.3% to reach USD 38.7 Bn in 2031.
Investment environment (Ease of Doing Business Rank 2019)	<ul style="list-style-type: none"> #43 globally #2 in Middle East & North Africa
Healthcare expenditure (Overall growth)	<ul style="list-style-type: none"> Total healthcare expenditure is estimated to have grown by a CAGR of ~1.6% during 2015–2021, with healthcare expenditure amounting to USD 1.4 Bn in 2021.
Bed density	<ul style="list-style-type: none"> Bahrain's bed density in 2017 was 1.74 per 1,000 population. Based on this, there is a gap of ~1,400 beds in 2021. By 2031 this gap is expected to be 1,800 beds.
Manpower density	<ul style="list-style-type: none"> With only 0.93 physicians and 2.50 nurses per 1,000 population, Bahrain lags behind in availability of skilled healthcare manpower.
PPP opportunities	<ul style="list-style-type: none"> Prospects for investing in healthcare are substantial from wellness and prevention, specialised medical care, mental health, research, and development (R&D) or manufacturing

Exhibit 69: Summary Analysis – Qatar

Parameters	Qualitative Analysis
GDP Growth	<ul style="list-style-type: none"> Qatar recorded a GDP CAGR of 0.4% from 2015–2021. For the next decade from 2021–2031 it is forecast to grow at a CAGR of 3.3%. Its real GDP is expected to be USD 228.3 Bn in 2031.
Investment environment (Ease of Doing Business Rank 2019)	<ul style="list-style-type: none"> #77 globally #7 in Middle East & North Africa
Healthcare expenditure (Overall growth)	<ul style="list-style-type: none"> The overall healthcare expenditure is estimated to have grown at a CAGR of ~3.6% over 2015–2021, amounting to USD 4.1 Bn in 2021.
Bed density	<ul style="list-style-type: none"> The latest bed density in 2019 was 1.11 per 1,000 population. Based on this, there is a gap of 4,500 beds in 2021 and a gap of 5,100 beds by 2031 projected requirements.
Manpower density	<ul style="list-style-type: none"> The physicians per 1,000 population was 2.48 in 2018. Nurses per 1,000 population was 7.26 in the same year.
PPP opportunities	<ul style="list-style-type: none"> Moderate PPP opportunities

Exhibit 70: Summary Analysis – Kuwait

Parameters	Qualitative Analysis
GDP Growth	<ul style="list-style-type: none"> Kuwait's GDP contracted at a CAGR of 1% between 2015–2021. Its economy is forecast to grow at a CAGR of 2.4% over the 2021–2031 period. Its real GDP is expected to reach USD 135.6 Bn in 2031
Investment environment (Ease of Doing Business Rank 2019)	<ul style="list-style-type: none"> #83 globally #9 in Middle East & North Africa
Healthcare expenditure (Overall growth)	<ul style="list-style-type: none"> The total healthcare expenditure is estimated to be USD 5.3 Bn in 2021, having grown at a CAGR of 2.5% over 2015–2021.
Bed density	<ul style="list-style-type: none"> Kuwait's latest bed density in 2019 was 2.11 per 1,000 population. Based on this, there is a gap of 2,500 beds in 2021. By 2031 this gap is expected to be 4,200 beds.
Manpower density	<ul style="list-style-type: none"> Physician density was 3.4 in 2017 and nurse density was 7.4 in 2018
PPP opportunities	<ul style="list-style-type: none"> Moderate PPP opportunities

Exhibit 71: Summary Analysis – Egypt

Parameters	Qualitative Analysis
GDP Growth	<ul style="list-style-type: none"> Egypt has witnessed a growth in GDP, at a CAGR of 4.5% between 2015 and 2021. Going forward, it is forecast to grow at a rate of 3.5% to reach USD 609.8 Bn in 2031
Investment environment (Ease of Doing Business Rank 2019)	<ul style="list-style-type: none"> #114 globally #12 in Middle East & North Africa
Healthcare expenditure (Overall growth)	<ul style="list-style-type: none"> Total healthcare expenditure is estimated to have grown by a CAGR of 3.2% during 2015–2021, with healthcare expenditure amounting to USD 21.5 Bn in 2021
Bed density	<ul style="list-style-type: none"> Latest bed density in 2019 was 1.28 per 1,000 population. Based on this, there is gap of 143,000 beds currently in 2021 and going forward a bed gap of 203,000 by 2031.
Manpower density	<ul style="list-style-type: none"> Physicians and nurses per 1,000 population were 0.45 and 1.93 respectively in 2018.
PPP opportunities	<ul style="list-style-type: none"> Moderate PPP opportunities in healthcare infrastructure, CoEs, technology investments etc.

Governments in the GCCE have been adopting various strategies during the past decade. Although these strategies vary, they all aim at addressing pressing issues related to healthcare: improving access, controlling costs, and achieving favourable clinical outcomes which reflect on population health. To achieve these goals, various initiatives were launched across the GCCE. They include but are not limited to Public Private Partnerships (PPP), re-shifting focus to preventive and primary care, improving governance and regulatory aspects, improving access through insurance and privatisation, enhancing specialised services such as oncology and extended care, continuing to support new market entry or providers to meet growing demand, and deploying health technology initiatives to assure continuum of care (electronic health record, digital health, and telemedicine). Considering various mentioned factors, the GCCE region has significant investment opportunity in the healthcare sector