GCC Healthcare Industry

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ALPEN CAPITAL

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Glossary

Average length of stay: The average number of days that a patient spends in a hospital. It is the ratio of the total number of days all inpatients spend at the hospital during a year and the number of admissions or discharges

Bed occupancy rate: The number of inpatient days of care divided by the number of bed days available during a year

Current healthcare expenditure (CHE): The spending on all health care goods and services used or consumed during a year, excluding capital expenditures. It is a sum of general government health expenditure and private health expenditure

Hospital bed density: The number of hospital beds per 1,000 people

Health inflation/Medical cost inflation: An index measuring the trend in cost of medical care based on a survey by Willis Towers Watson

Infant mortality rate: The number of deaths of infants, who are younger than one year, per 1,000 live births

Inpatient: A patient who is admitted to a hospital for treatment of more than 24 hours

Life expectancy at birth: Average number of years that a newborn is expected to live if the current mortality rates remain constant

Long-term care (LTC): Services that meet the medical and non-medical needs of patients with a chronic illness or disability that renders them incapable of taking care of themselves for long periods

Non-communicable diseases (NCDs): A medical condition or a disease that is non-transmissible or non-infectious. Also termed as chronic diseases, this condition progresses slowly and is prolonged

Other CHE (Others): Includes expenditure on goods and services, such as diagnostic, laboratory, imaging, ambulatory and pharmaceuticals that are not covered under inpatient and outpatient spending. The category also includes expenditure on governance and health system and financing administration and other services that are not classified anywhere else

Outpatient: A patient, who visits a hospital, clinic or related facility for diagnosis or treatment but is not hospitalized for more than a day

Post-acute care: Healthcare services that are aimed at continued recovery or management of a patient with chronic illness or disability

Prevalence rate: The proportion of people with a disease at a given point in time or over a specified time period

Primary healthcare center: A first point of contact for a person, who is ill or suffers injury. General practitioners, dentists, and physiotherapists are the common primary healthcare providers

Secondary care hospital: A hospital or clinic that offer the services of medical specialists and cater to patients, who visit directly or are referred by primary healthcare centers

"We are looking at GCC Healthcare Industry as a fast growing, developing, high potential business sector in the region. The multi-faceted growth opportunities are qualitatively challenging, quantitatively huge, looking at the raw potential; and enormous opportunities exist in the business verticals. GCC has evolved as a highly advanced vision for health strategy, which has opened up enormous opportunities for growth. In addition to hospitals and medical centers, all related businesses have opportunities for growth. Establishing Quality Standards has been the trend in the GCC. Healthcare providers are working towards standardized medical services and facilities in order to meet the raising expectations of patient trust and the need of patient safety and quality of care.

Availability of skilled manpower is one of the major challenges for the sector. Hospitals require a variety of skill sets among its workforce in addition to doctors, nurses and paramedics. Though major efforts are underway to provide educational and training facilities, in various skilled and technical fields, the shortage of suitably experienced professionals falls short of the requirements."

Dr. Sai Giridhar

Executive Director

Middle East Hospital & Medical Centers, Bahrain

"Private healthcare sector in the Middle East is witnessing a phase of major growth. The sector continues to be of very high interest to investors due to the reasonable returns and sustainable growth opportunities with major potential for social impact in the region.

The healthcare structure in the Middle East is rapidly transforming. We can witness increasing number of Public Private Partnerships in the coming year. The hospitals need to focus on providing superior value to patients and other stakeholders by improving operational efficiency, smart application of modern technology, and strategic collaboration with key suppliers and payer groups like medical insurance companies. There is also an increased awareness on Preventive care, and Wellness. The industry also faces a number of challenges, such as the increasing cost of healthcare delivery, attracting and retaining the diverse healthcare professionals, pressure on pricing etc. which the established healthcare players with robust internal systems and economies of scale are better positioned to address. New hospital infrastructure can grow more rapidly if the governments provide soft funding support for healthcare infrastructure projects.

Investors, leaders, and professionals in the Healthcare industry need to be driven by a higher level purpose, and not mere economic parameters. What helps me to get up each day with the same drive and energy levels that I had 40 years ago, is my passion and commitment to help relieve people's suffering."

Makarem Batterjee

Vice Chairman

Saudi German Hospitals Group, Saudi Arabia

"The GCC Healthcare sector has witnessed collaborative progress over the years and we foresee a very strong upward trend for the sector in the next three to four years. Public-private partnerships will play an important role in aiding the growth of the sector and help in improving healthcare standards across the GCC. Innovative medical solutions and favorable regulations will go hand in hand in developing the industry. The support from healthcare regulators and authorities in gathering feedback on existing systems and amending them to ease operations of healthcare providers and their partners is definitely a plus.

There are several trends driving the growth of the sector. There is marked change from curative care to preventive care by healthcare providers. The growing tech savvy population as well is taking to preventive measures and is keener on a healthy lifestyle. We are also seeing many initiatives in the area of health and safety of senior citizens. Use of robotics in medical procedures is a global trend to keep an eye on for healthcare providers in the region.

The pace of the Healthcare sector's development is swift and healthcare providers need to be on the move to get ahead and transform with the innovations and technological advances in the field. Finding and retaining expert medical professionals with modern day skills and abilities continues to be a challenge. With universal health coverage being implemented successfully which is a big plus; giving accessibility to communities with quicker and adequate approvals will add positivity to their care experience."

Taher Shams

Managing Director

Zulekha Healthcare Group, UAE

"We have a positive outlook for the GCC healthcare sector given the growing demand for healthcare services due to factors like rising and aging population, high incidence of lifestyle diseases and introduction of mandatory health insurance.

GCC healthcare sector is poised for a steady growth and continues to offer a whole gamut of opportunities for private sector investment. Even though regional governments continue to shoulder a sizeable part of the healthcare expenditure, over the recent years, the role of private sector in healthcare is increasing, encouraged by government incentives, mandatory health insurance and other reforms. We believe the sector offers interesting investment opportunities in areas of specialized care, technology, primary healthcare care and medical tourism. The opportunities coupled with a friendly business climate are boosting investor interest in the healthcare industry."

Rohit Walia

Executive Chairman

Alpen Capital (ME) Limited

1. Executive Summary

A changing demographic and epidemiologic structure is stimulating demand for healthcare services in the GCC. Regional governments played an instrumental role in strengthening the sector, however, shrinking oil revenues have slowed spending. At the same time, the role of private sector is increasing, encouraged by incentives, mandatory health insurance and other reforms. With current healthcare expenditure lower than 5% of GDP, much below other developed countries, the region offers immense scope for growth. Even though challenges like shortage of skilled healthcare professionals and medical inflation exist, private players are making inroads to capitalize on the growing demand, technological advancements and medical tourism.

1.1 Scope of the Report

This report provides a perspective of the GCC Healthcare Industry by presenting the current state of the industry and market dynamics. The report also covers the recent trends, growth drivers and challenges in the sector, along with the outlook until 2022. The report profiles some of the prominent healthcare companies in the region, while highlighting their financial and valuation metrics.

1.2 Sector Outlook

- CHE in the GCC is projected to reach US$ 104.6 billion in 2022 from an estimated US$ 76.1 billion in 2017, implying a CAGR of 6.6%. Expanding population, high prevalence of NCDs, rising cost of treatment and increasing penetration of health insurance are the factors auguring growth.
- Between 2017 and 2022, CHE on outpatient services is predicted to grow at an annualized average rate of 7.4% to US$ 32.0 billion, faster than an anticipated CAGR of 6.9% on inpatient services to US$ 45.4 billion. The inpatient market will remain the largest segment with a contribution of 43.4% in 2022. CHE on 'Others' category is expected to grow at a CAGR of 5.2%.
- The annual average growth rates of CHE in the GCC countries are projected to range between 2.6% and 9.6% during the forecast period. The UAE and Oman are likely to witness growth rates of above 9%, in anticipation of a fast-growing population, implementation of mandatory health insurance and above regional average medical inflation rates.
- Consequently, the share of UAE and Oman in the GCC CHE is likely to expand vis-a-vis other countries. Saudi Arabia and the UAE will continue to dominate the sector with a combined share of over 80% in 2022.
- In view of the anticipated rise in the number of patients, the GCC may require a collective bed capacity of 118,295 by 2022, indicating a demand for 12,358 new beds. Saudi Arabia is likely to witness the largest requirement at over 7,500 new beds, followed by the UAE at more than 2,000 new beds.

1.3 Key Growth Drivers

- The GCC population size is projected to increase by 6.6 million individuals to 61.6 million by 2022, of which nearly 17% will be people aged 50 years and above. The expanding size of population and the ageing factor is set to exert pressure on the healthcare system.
- The GCC countries have been observing a swift transition to non-communicable diseases, a major cause of most of the deaths and disability in the region. Considering the high cost and length of treating such lifestyle ailments, the healthcare expenditure in the region will rise.
- The gradual rollout of compulsory health covers across the region will increase the utilization of medical services at private healthcare facilities.
- Regional governments have framed long-term strategies aimed at capacity expansion, enhancing the effectiveness of the delivery system, encouraging

public-private-partnership (PPP) models, developing medical education and digitization. Such strategies will upgrade the capacity and quality of care.

- The GCC has over 700 healthcare projects worth US$ 60.9 billion under various stages of development. Such massive project pipeline is likely to augment the scale of healthcare services in the region.
- Medical tourism is an integral part of economic diversification plans of the GCC countries and subsequently, has been receiving stimulus from the governments. Dubai and Abu Dhabi are at the forefront amongst the GCC nations in attracting medical tourists.

1.4 Key Challenges

- Being largely hydrocarbon-dependent, the fall in oil prices has widened fiscal deficits of the GCC countries, compelling the governments to curtail expenses. With the government shouldering a large part of the CHE, a low-price oil environment has been constraining the expansion of healthcare sector.
- A major challenge faced by the healthcare providers is the limited availability of skilled healthcare professionals. Shortage of medical workforce locally, nationalization of jobs, high attrition and rising staff cost are hindering growth.
- The cost of healthcare has been increasing due to growing incidence of NCDs, technological advancements and limited availability of specialized care. Gross medical inflation rates ranged between 5.0% and 12.0% in the GCC countries during 2017, with the UAE witnessing the highest rate.
- The GCC healthcare system has limited capacity and technology to treat ailments such as cancers, neurological disorders and cardiovascular diseases. This has led to locals traveling overseas for medical treatments.
- Some of the hospitals and clinics in the region lack reporting methods related to quality, patient experience and leading international practices, resulting in an inconsistent quality of services.

1.5 Key Trends

- The importance of private sector participation is being widely discussed across the GCC nations in the backdrop of budget deficits. Even though private participation is expanding at a slow pace, measures such as mandatory health insurance and privatization are likely to provide a boost.
- With increasing opportunities for the private sector, the healthcare industry is witnessing a spurt in mergers and acquisitions. The inorganic route is being adopted by new players to enter the market and by existing providers to expand market share, physician practices and medical capabilities.
- The rapidly growing lifestyle diseases and an ageing population are also prompting investments in long-term and post-acute care rehabilitation (LTPAC), specialized clinics and home healthcare providers.
- To reduce the prevalence of chronic ailments and associated costs, the regional governments are devising ways to encourage preventive care. People in the region are also turning health conscious and proactively conducting annual medical checkups. This is leading to a systemic change from curative care to preventive care.
- Technology will remain the core factor in upgrading the GCC healthcare sector over the coming years. Technologies such as electronic health records, e-visits, telemedicine, connected medical devices, robotic procedures, health monitoring wearables and health analytics are gaining acceptance in the region.

Ageing population, high occurrence of NCDs, focus on preventive care and quality enhancing reforms are reshaping and strengthening the GCC healthcare industry. Consequently, the sector is offering immense potential in the areas of specialized care, technology, primary healthcare care and medical tourism. The opportunities coupled with a friendly business climate are encouraging investor interest.

2. The GCC Healthcare Industry Overview

With the present healthcare system insufficient to support the growing demand, the need for related infrastructure and resources is becoming inevitable

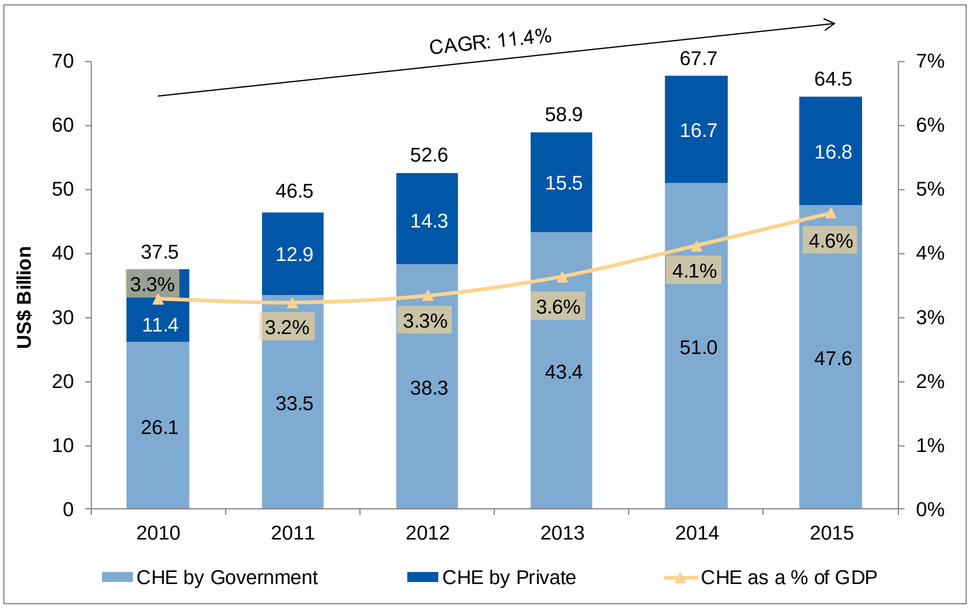
The GCC healthcare sector continues to offer a gamut of investment opportunities, given the demographic shifts, high incidence of NCDs, mandatory insurance and technological advancements. Each stakeholder in the healthcare ecosystem is working towards increasing its market share efficiently. Despite the present economic hardships, regional governments continue to shoulder a sizeable part of the healthcare expenditure, while encouraging private sector participation. With the present healthcare system insufficient to support the growing demand, the need for investments in related infrastructure and resources is becoming inevitable.

Current healthcare expenditure as a proportion of GDP expands, despite a drop in spending amid budget cutbacks

Between 2010 and 2015, CHE in the GCC grew at a robust CAGR of 11.4% to US$ 64.5 billion

Between 2010 and 2015, CHE in the GCC grew at a robust CAGR of 11.4% to US$ 64.5 billion[1] (see Exhibit 1). The growth was supported by a 12.8% annualized increase in spending by the governments and 8.1% by the private sector. Expanding population and prevalence of lifestyle diseases have been propelling the need for healthcare services. With nearly three-fourths of the expenditure being financed by regional governments, the constrained fiscal budgets amidst fall in oil prices have suppressed healthcare spending in 2015. Nevertheless, the governments are committed to developing the sector with the help of private investments and technology. CHE by the private sector grew in 2015 while that by the governments declined. Although the overall spending on healthcare dropped in 2015, CHE as a percentage of GDP increased to 4.6%[2], underlining the willingness of regional governments to expand and upgrade healthcare services.

Exhibit 1: Current Healthcare Expenditure in the GCC



Source: WHO, IMF

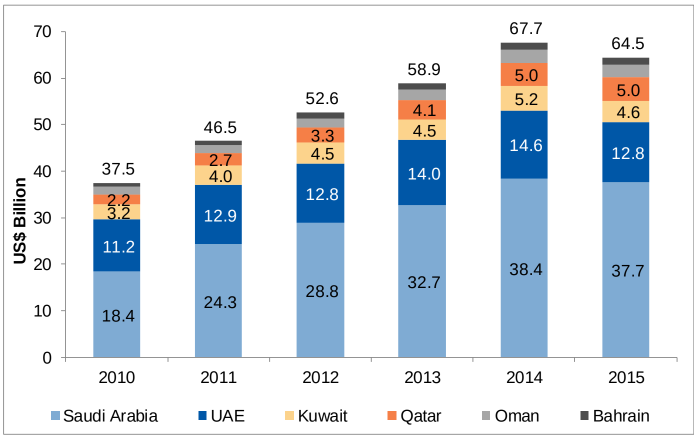
[1] Source: "Global Health Expenditure Database", World Health Organization (WHO)
[2] Source: WHO; "World Economic Outlook Database", International Monetary Fund (IMF), October 2017

Saudi Arabia dominates the healthcare industry, but Qatar outperformed in terms of growth and per capita spending

Saudi Arabia represented 58.5% of the region's healthcare market with CHE of US$ 37.7 billion in 2015

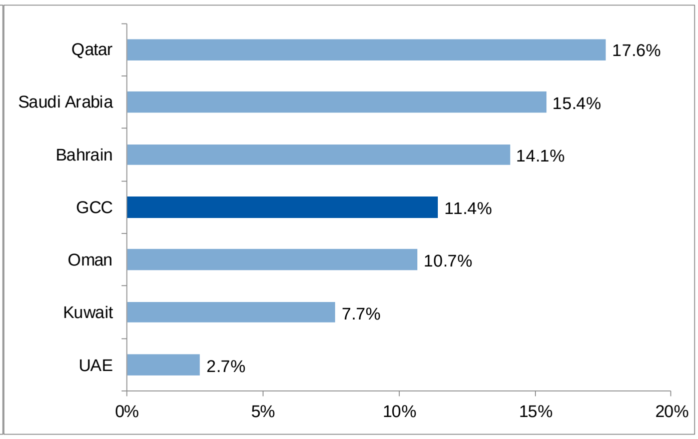
Saudi Arabia represented 58.5% of the region's healthcare market with CHE of US$ 37.7 billion in 2015[3] (see Exhibit 2). The spending proportion corresponds to the population concentration in the Kingdom. Healthcare spending in the country has increased at a rapid annualized average rate of 15.4% between 2010 and 2015 (see Exhibit 3) to provide free medical services to nationals and fund expensive treatments of chronic diseases. On the other hand, spending in the UAE, the second largest market in the GCC, grew at a slow CAGR of 2.7% to US$ 12.8 billion in 2015. The slowdown is largely attributed to fall in government as well as private sector spending in 2015, in line with the drop in final consumption of households. The country witnessed the highest annual drop in spending during 2015, followed by Kuwait, Oman and Saudi Arabia. In contrast, CHE in Qatar and Bahrain grew during the year. Excluding the UAE, the five-year annualized growth rates in CHE of the other countries stood in the range of 7.7% to 17.6%, with the highest being recorded by Qatar. The accelerated growth in Qatar is mainly attributed to the influx of expatriates, resulting in the country spending the most on healthcare per person at US$ 2,066[4] in 2015.

Exhibit 2: Country wise CHE



Source: WHO

Exhibit 3: Country wise CHE Growth (CAGR: 2010-2015)



Source: WHO

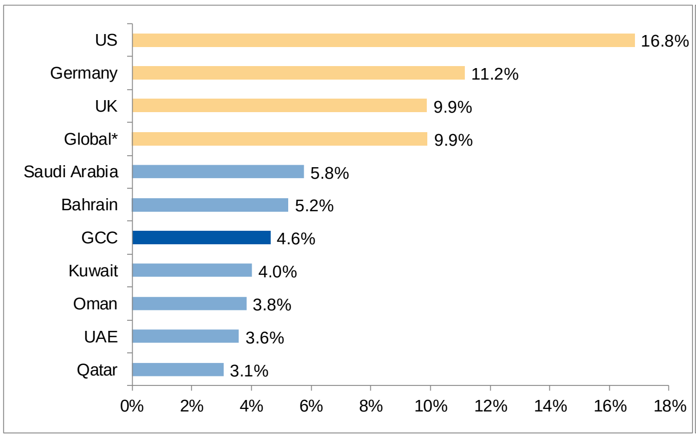
Low per capita spending compared to the developed countries

The average annual spend on healthcare in the region was US$ 1,234, higher than the global average, but much below that in the UK, the US and Germany

The GCC region's CHE per capita at US$ 1,234 and the proportion of GDP at 4.6% is substantially lower than the other developed countries (see Exhibits 4 and 5). The CHE per capita in the region is higher than the global average, but much below the annual spends in the UK, the US and Germany[5]. The low spending depicts ample scope for healthcare service providers to penetrate in the region, given the demand potential. The rising proportion of CHE to GDP (from 3.3% in 2010 to 4.6% in 2015) is a testament to the growing demand. In terms of healthcare expenditure per capita, Qatar spent more than US$ 2,000 per person in 2015, the highest in the region, while Oman spent the least at US$ 708. Despite the high per capita spending by Qatar – the richest country in the world – the proportionate spending to GDP remains the lowest in the GCC. The healthcare markets of Oman and Kuwait appear underdeveloped in view of the low spending per capita and as a percentage of GDP.

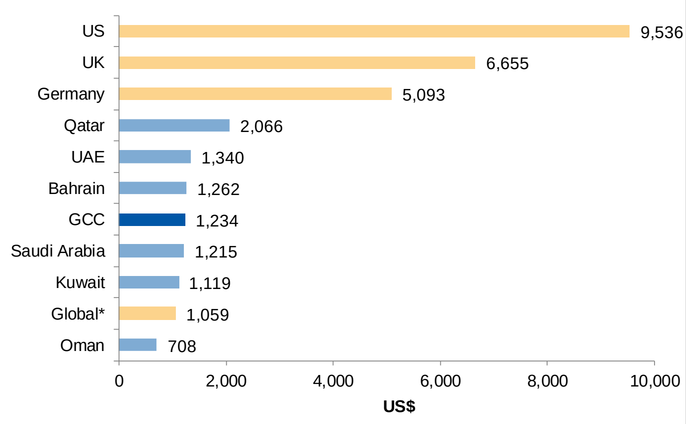
[3] Source: WHO
[4] Source: WHO, World Bank, IMF
[5] Source: World Bank

Exhibit 4: CHE as a % of GDP (2015)



*Source: WHO, World Bank, IMF; *Global data is for 2014*

Exhibit 5: CHE Per Capita (2015)



*Source: WHO, World Bank, IMF; *Global data is for 2014*

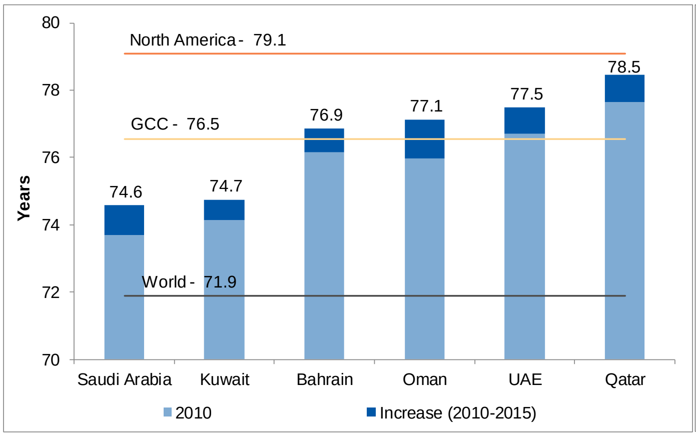
2.1 Demand for Care Continues to Soar

Changing demographic and epidemiological trends auguring demand

The rapidly growing population, owing to the rise in number of expatriates and improving life expectancy, are pushing the need for healthcare services

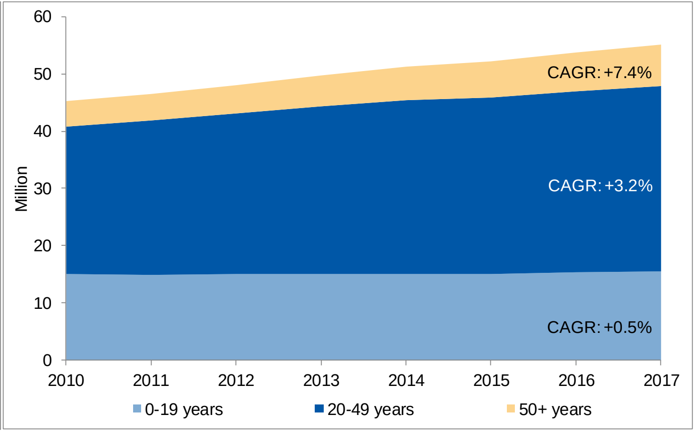
Population in the GCC reached nearly 54 million in 2016, with the average annualized growth in the countries since 2011 ranging between 2.0% and 8.6% – amongst the fastest in the world[6]. The rapidly growing population, owing to rise in the number of expatriates and improving life expectancy, are pushing the need for healthcare services. The average life expectancy in the GCC stood at 76.5 years in 2015[7], continuing its rising momentum (see Exhibit 6). Although the credit for improvement goes to the advancing healthcare system, a rising longevity indicates growing need for medical support over the increased lifespan of an individual. Moreover, increase in the life expectancy is expanding the size of ageing population, which grew at a CAGR of 7.4% during the decade to 2017 (see Exhibit 7) to account for 13.2% of the GCC population[8]. With elderly people requiring more medical attention due to age-related illness, demand for healthcare services is expected to intensify. Adding to the demand are the young and working people, who are susceptible to lifestyle ailments due to limited physical activity and unhealthy dietary habits.

Exhibit 6: Life Expectancy at Birth (2015)



Source: World Bank

Exhibit 7: GCC Population, by Age



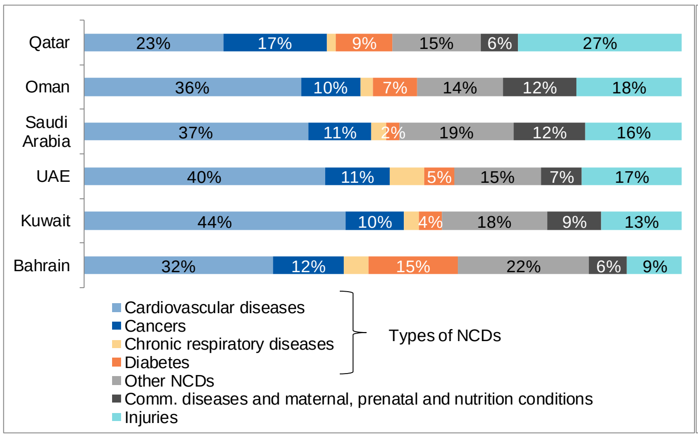
Source: UNPD, IMF

[6] Source: "World Economic Outlook Database", IMF, October 2017
[7] Source: World Bank
[8] Source: "World Population Prospects 2017", United National Population Division (UNPD)

The GCC countries have one of the highest prevalence of diabetes and obesity in the world, given the sedentary lifestyles

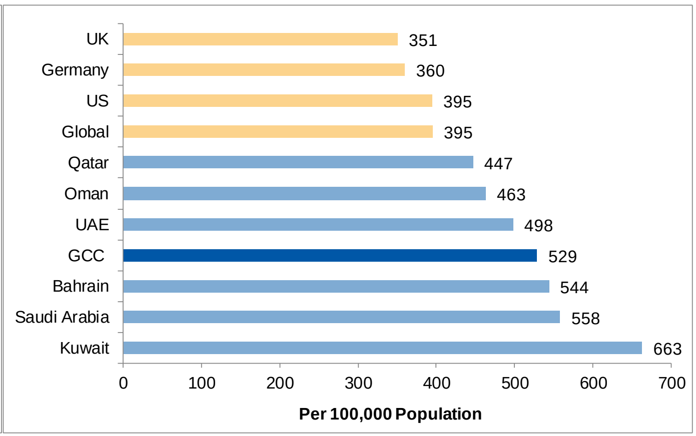
The GCC countries have one of the highest prevalence of diabetes and obesity in the world[9], given the sedentary lifestyles and increased consumption of foods that are high in calories and sugar. Of the 149.6 thousand deaths in the GCC during 2015, nearly 73% were due to NCDs[10]. The four major NCDs – cardiovascular diseases, cancer, respiratory diseases and diabetes – accounted for more than half of the deaths in each GCC country (see Exhibit 8). Measured by age-standardized mortality rate, Kuwait had the highest NCD-related deaths at 663 per 100,000 population (see Exhibit 9). The regional average rate stood at 529 per 100,000 population, significantly higher than the global average of 395. The presence of NCDs, treatment of which is lengthy as well as costly, has inflated the healthcare budgets of governments as well as companies covering employees' medical expenses. Nonetheless, a growing awareness of such diseases is making people health-conscious, thus encouraging a preventive care model.

Exhibit 8: Mortality Proportion by Types of Diseases (2015)



Source: WHO

Exhibit 9: NCD-related Mortality Rate (2015)



Source: WHO

2.2 Supply Growing Steadily

The region is home to over 700 hospitals accommodating more than 103,000 beds

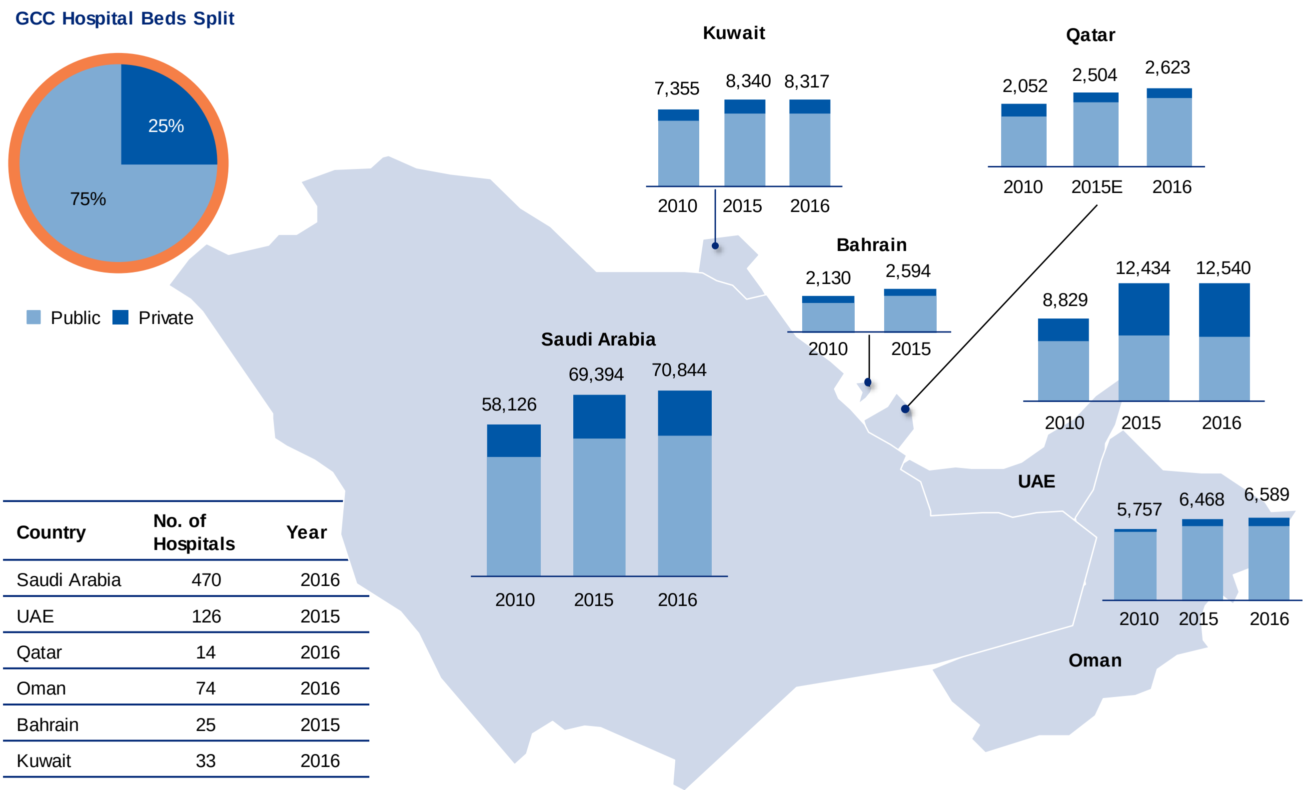
Healthcare infrastructure in the GCC countries has expanded over the years, largely enabled by investments of regional governments to improve public health. Significant investments have been channeled in the past to build hospitals, clinics, research centers and huge medical cities and complexes. Consequently, the region is home to over 700 hospitals accommodating more than 103,000 beds[11]. Additionally, there are several primary healthcare centers/clinics and laboratories catering to the day care patients. The public sector dominated the industry with a share of 75% in the region's bed capacity (see Exhibit 10). The public health facilities in the region offer free healthcare to its citizens, while the private sector caters largely to expatriates.

Saudi Arabia had 470 hospitals with 70,844 beds by end-2016, representing nearly 70% of the region's bed capacity. The UAE followed with a capacity of 12,540 beds, of which nearly 55% is held by the private sector. On the other hand, the public sector share ranges between 75% to 90% of the hospital beds in the other GCC countries. With the dramatic fall in oil prices, the governments are encouraging the private sector to play a greater role in addressing the rising demand for healthcare services. Financial incentives and

[9] Source: International Diabetes Federation, WHO
[10] Source: "Global Health Observatory data repository", WHO
[11] Source: Health Ministries of Bahrain, Oman and Saudi Arabia, Federal Competitiveness and Statistical Authority (FCSA) of the UAE, Kuwait Central Bureau of Statistics (CBS), Ministry of Development Planning and Statistics of Qatar (MDPS)

infrastructure support are being provided to attract private players. Given such measures, the share of private sector in the healthcare supply is likely to increase in the future.

Exhibit 10: Healthcare Infrastructure Capacity in the GCC



Country	No. of Hospitals	Year
Saudi Arabia	470	2016
UAE	126	2015
Qatar	14	2016
Oman	74	2016
Bahrain	25	2015
Kuwait	33	2016

Source: Health Ministries of Bahrain, Oman and Saudi Arabia, FCSA of the UAE, CBS of Kuwait, MDPS of Qatar

Note: The hospital beds during 2016 in Bahrain is not available

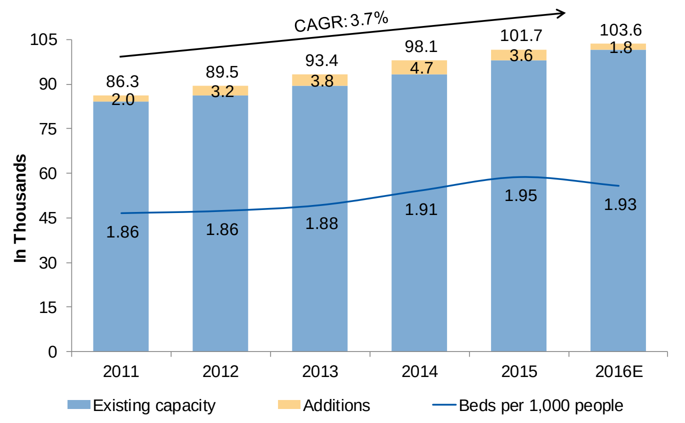
Bed density still below the developed countries, but improving

The GCC bed density at 1.9 beds per 1,000 people is lower than that in the other developed countries like the US, the UK and Singapore

In the five years to 2016, the region's overall bed capacity increased at a CAGR of 3.7% with an addition of nearly 17,271 new beds (see Exhibit 11). Translating into an availability of 1.9 beds per 1,000 people, the bed density is lower than that in the US, the UK and Singapore (see Exhibit 12). Moreover, it is considerably below the OECD average of 4.7 beds per 1,000 people[12]. Qatar has the lowest bed density, while Bahrain, Kuwait and Saudi Arabia have density rates above the regional average. The average bed density in the region has been rising aided by the unprecedented investments made by governments. The capacities in Oman and Qatar have not been able to keep pace with their rapidly growing population, resulting in a fall in the availability of beds per capita. Limited capacity, particularly for specialized care hospitals and clinics, has been one of the factors compelling locals to travel abroad for medical treatments.

[12] Source: "Health at a Glance 2017", OECD

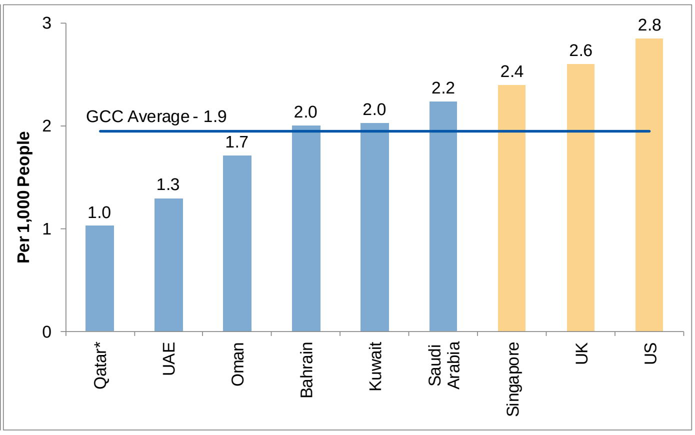
Exhibit 11: Hospital Beds in the GCC



Source: Health Ministries of Bahrain, Oman, Qatar and Saudi Arabia, FCSA, CSB, MDPS, Health Planning & Assessment Department of Qatar, Alpen Capital

Note: The 2016 figures are estimates, as the bed capacity of Bahrain is not available

Exhibit 12: Hospital Bed Density (2015)



Source: Health Ministries of Bahrain, Oman, Qatar and Saudi Arabia, FCSA, CSB, MDPS, Health Planning & Assessment Department of Qatar, Department of Statistics Singapore, OECD, IMF, Alpen Capital

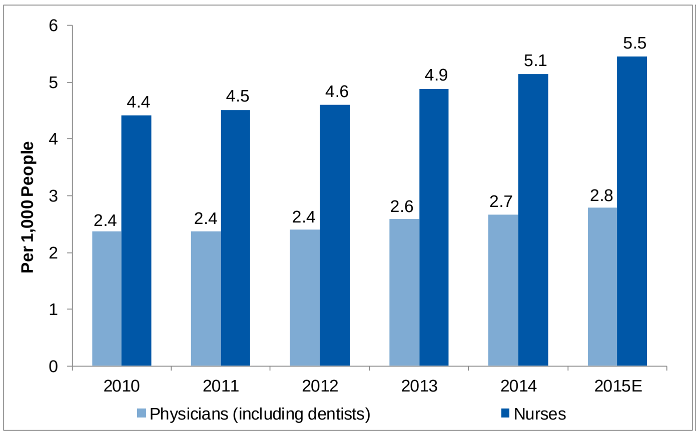
*Note: *Estimated*

Adding to the supply woes is the shortage of healthcare professionals

On an average, the GCC has nearly 5.5 nurses and 2.8 physicians and dentists per 1,000 persons

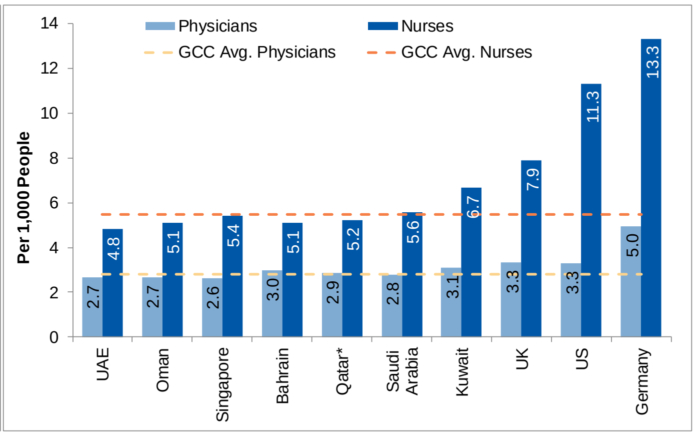
Large dependence on expatriates and inherent scarcity of skilled and experienced physicians and nurses has been one of the major factors hindering the growth of the healthcare sector. On an average, the GCC had 5.5 nurses and 2.8 physicians and dentists per 1,000 persons in 2015 (see Exhibit 13). While the physicians (including dentists) to population ratio is close to that in the other developed countries, the region faces a dearth of nursing staff (see Exhibit 14). To meet the growing need, the regional governments are investing in education and expansion of medical colleges. The number of physicians and nurses are estimated to have increased at annualized average rates of 6.4% and 7.4%, respectively, between 2010 and 2015. Within the region, medical workforce to population ratio was the highest in Kuwait and lowest in the UAE. Given such a scenario, the healthcare providers, especially new clinics/hospitals, are facing stiff competition to hire staff, which is inflating their cost of operations.

Exhibit 13: Physicians and Nurses Density in the GCC



Source: Health Ministries of Bahrain, Oman, Qatar and Saudi Arabia, FCSA, CSB, MDPS, IMF, Alpen Capital

Exhibit 14: Physicians and Nurses Density (2015)



Source: Health Ministries of Bahrain, Oman, Qatar and Saudi Arabia, FCSA, CSB, MDPS, IMF, OECD, WHO, Alpen Capital

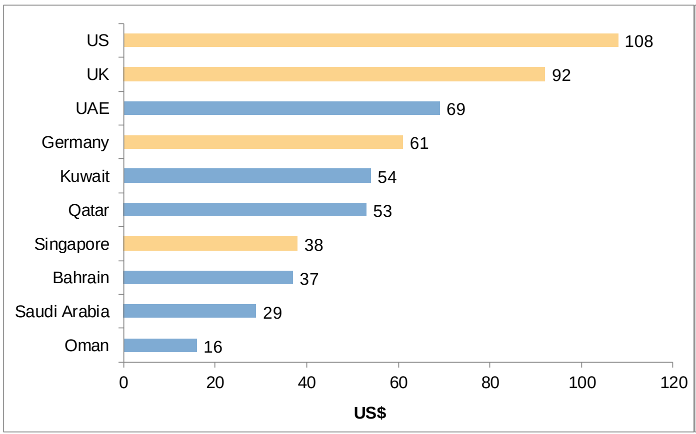
*Note: Physician density include dentists; *Data during 2014*

A demand-supply imbalance has escalated the cost of healthcare

Medical cost inflation in the GCC countries averaged between 5% to 9% in the last five years to 2017, with the UAE witnessing the highest rate

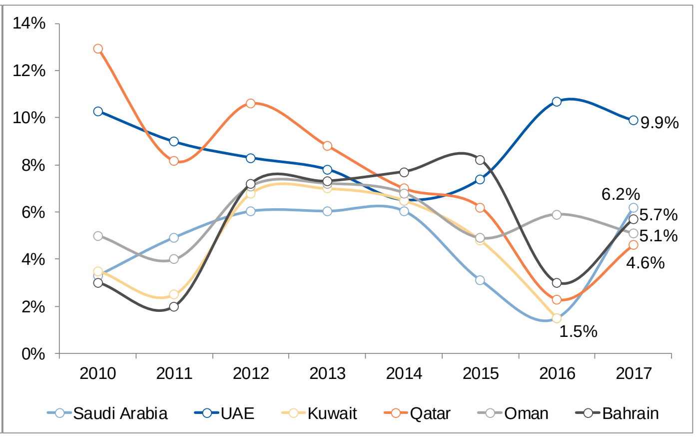
With demand for healthcare outpacing the supply of resources, the cost of care has been on a rising trend. The increase is further supported by advancements in technology and improving capabilities at hospitals/clinics. Within the region, there is a wide disparity in the costs, with the UAE considered as one of the expensive destinations in the Middle East for medical treatments. The average cost of a short visit to a doctor in the UAE is US$ 69, 80% higher than the cost in Singapore and 2.4 times of that in Saudi Arabia[13]. Similarly, the average cost of a bypass heart surgery in Dubai is US$ 21,800[14], higher than US$ 15,000 in Thailand, US$ 7,900 in India and US$ 12,100 in Malaysia[15] – some of the preferred destinations for medical treatments by the Emiratis. Excluding Kuwait, medical cost inflation in the GCC countries averaged between 5% to 9% in the last five years to 2017, with the UAE witnessing the highest rate[16]. During 2017, healthcare cost inflation in the UAE was 9.9% over and above the general inflation of 2.1%. The increasing cost of healthcare services is also attributed to limited availability of specialized care, making such treatments expensive. Resultantly, the health insurance premiums have also increased, thereby burdening the budgets of individuals, corporates and governments.

Exhibit 15: Average Cost of Visit to a Doctor



Source: Cost of Living Index – Expatistan (January 2018)
Note: The above costs are for visit to private doctors for 15 minutes

Exhibit 16: Medical Costs Trend (Net of General Inflation)



Source: Willis Towers Watson
Note: Data on Kuwait is not available for 2017

[13] Source: Cost of Living Index – Expatistan (Last updated January 2018)
[14] Source: "Dubai Health Insurance Financial and Economic Activities – 2014", Dubai Health Authority
[15] Source: Medical Tourism Association
[16] Source: "2018 Global Medical Trends Survey Report", Willis Towers Watson

3. The GCC CHE Outlook

3.1 Forecasting Methodology

We have forecasted the size of the healthcare industry in each GCC country in terms of CHE on inpatient, outpatient and other services, through 2022. The requirement of additional hospital beds across the constituent countries is also projected, based on various socio-economic and healthcare indicators.

The data points considered for the forecasts include:

- Historic data on CHE – WHO Global Health Expenditure Database (available until 2015)
- Population – IMF World Economic Outlook Database (October 2017)
- Health inflation from Willis Towers Watson's (WTW) Global Medical Trends Survey Report (last available 2018)
- Healthcare indicators such as the number of hospital beds, outpatient visits, inpatient admissions, bed occupancy rate, average length of stay and average visits per individual are sourced from the health ministries and statistical organizations of the GCC countries.

The formula used for forecasting total CHE is –

CHE = Outpatient + Inpatient + Others*,* where

- Outpatient market size = Average number of visits per individual per year x Population estimate x Cost per outpatient visit

- Inpatient market size = Prevalence rate of diseases x Population estimate x Average length of stay x Cost per inpatient day
  (Prevalence rate of diseases is derived using the inpatient admissions, and has a considerable impact on the inpatient market size)

- 'Others' market size includes expenditure on all the other medical and administrative expenses that are not covered under inpatient and outpatient care. The major items include medical goods and diagnostics.

These classifications of CHE are as defined by WHO's System of Health Accounts (SHA). The market segments during the historic years are based on the national health accounts provided by the GCC countries based on WHO SHA standards. Further, the cost of inpatient and outpatient services was arrived at using the historic CHE and has been forecasted accordingly using medical inflation.

The formula used for forecasting the number of hospital beds required is –

Total hospital beds requirement = Number of inpatient days / (365 x Bed occupancy rate[17]), where

- Number of inpatient days = Prevalence rate of diseases x Population estimate x Average length of stay

Note: In this report, we have significantly modified our approach and methodology to have a broader market outlook by projecting CHE and hence, our forecasts are not directly comparable to Alpen Capital's GCC Healthcare Industry report dated February 16, 2016.

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[17] In case of countries for which bed occupancy rate is not available, it has been calculated as (Inpatient admissions x Average length of stay) / (Number of beds x 365)

3.2 Key Assumptions

Macro assumptions

- The GCC population is projected to grow at a CAGR of 2.3% to reach 61.6 million in 2022 from 55.1 million in 2017.
- The average health inflation in the GCC was 5.5% in 2017 and is estimated to remain at around 4.0% through 2022.

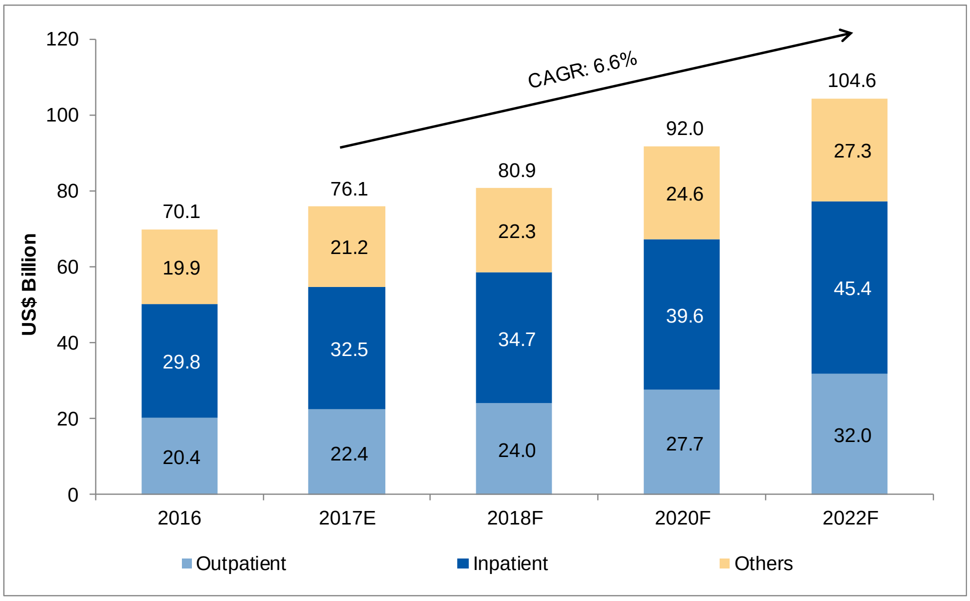
3.3 Current Healthcare Expenditure Forecast

CHE in the GCC is projected to reach US$ 104.6 billion in 2022, registering a CAGR of 6.6% from 2017

Current healthcare expenditure in the GCC is projected to reach US$ 104.6 billion in 2022, registering a CAGR of 6.6% from an estimated US$ 76.1 billion in 2017 (see Exhibit 17). Expanding population, high incidence of NCDs, rising cost of treatment and increasing penetration of health insurance are the factors auguring growth.

In view of the growing focus on preventive care practices, the prevalence rate of diseases, although high at present, is assumed to remain constant over the forecast period. Given the ageing population and an expected increase in the frequency of visits to clinics for treatment and preventive care, the demand for outpatient care is set to expand swiftly. Consequently, the outpatient market size in the region is predicted to grow at an annualized average rate of 7.4% to US$ 32.0 billion between 2017 and 2022. The growth is likely to be faster than an anticipated CAGR of 6.9% in the inpatient market. At US$ 45.4 billion, the inpatient market will continue to remain the largest segment of the healthcare expenditure with a projected contribution of 43.4% in 2022. CHE on 'Others' is expected to grow at a compounded annual average rate of 5.2% during the forecast period. Growing size of population and rising cost of medicine and ancillary services will be the forces driving the spending on other healthcare services.

Exhibit 17: Forecast of CHE in the GCC



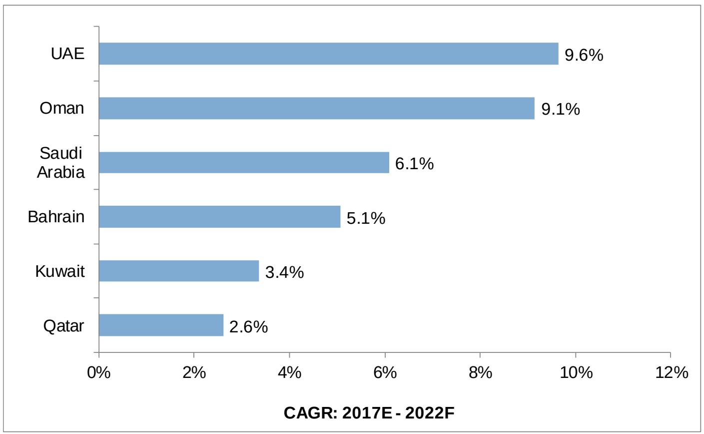
Source: Alpen Capital, WHO, IMF, WTW, MOH and Statistical organizations in the GCC

Note: E – Estimate, F – Forecast; The market size during 2016 is based on actual healthcare indicators and inflation

Between 2017 and 2022, CHE in the GCC countries is anticipated to expand at annual average growth rates of 2.6% to 9.6%

Between 2017 and 2022, CHE in the GCC countries is anticipated to expand at annual average growth rates of 2.6% to 9.6% (see Exhibit 18). The growth range is wide due to country-specific projections of population, cost of healthcare and other factors. The UAE and Oman are likely to witness growth rates of above 9%, in anticipation of a fast-growing population (CAGRs of more than 3.0%), implementation of mandatory health insurance and above regional average medical inflation rates. Subsequently, the share of UAE and Oman in the GCC CHE is expected to expand vis-à-vis other countries. However, the market rankings would continue to remain unchanged, with Saudi Arabia and the UAE dominating the region's CHE with a combined share of over 80% in 2022.

Exhibit 18: Country wise CHE Growth (CAGR: 2017–2022)



Source: Alpen Capital, WHO, IMF, WTW, MOH and Statistical organizations
Note: E – Estimate, F – Forecast

Exhibit 19: Country wise CHE Contribution

Country	2017E	2018F	2020F	2022F
Saudi Arabia	58.2%	58.0%	57.5%	56.9%
UAE	21.2%	21.8%	23.1%	24.4%
Qatar	7.6%	7.3%	6.8%	6.3%
Kuwait	6.4%	6.2%	5.9%	5.5%
Oman	4.2%	4.3%	4.5%	4.7%
Bahrain	2.4%	2.4%	2.3%	2.3%
GCC Total	**100%**	**100%**	**100%**	**100%**

Source: Alpen Capital, WHO, IMF, WTW, MOH and Statistical organizations
Note: E – Estimate, F – Forecast

Forecast of Hospital Beds

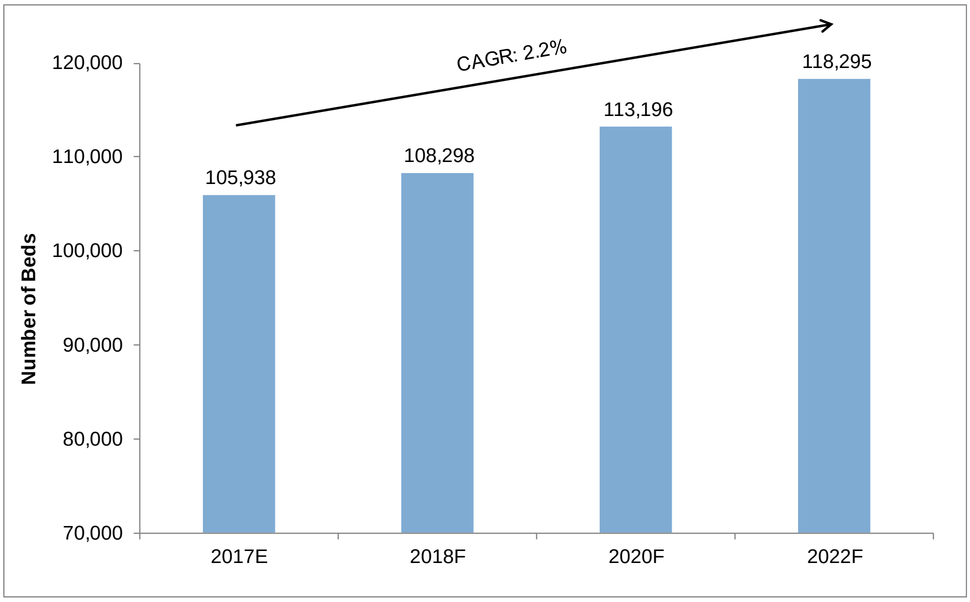
In view of the anticipated rise in number of patients, the region is expected to require 12,358 new hospital beds by 2022

In view of the anticipated rise in number of patients, the region is expected to require 12,358 new hospital beds by 2022. This translates into an estimated annual average growth of 2.2% from 2017 to reach a collective bed capacity of 118,295 (see Exhibit 20). The high incidence of chronic cases has led to an increase in demand for beds. Although the general hospitals are not running at optimal capacity, the need for beds is rising particularly in areas of specialized care, long-term care and rehabilitation care, among others.

Saudi Arabia is likely to witness the largest bed requirement in the region at over 7,500 new beds to cater to its large and expanding base of population. Demand in the UAE is anticipated at more than 2,000 new beds during the forecast period. While most of the GCC countries are likely to experience a strong demand, the requirement of new beds in Qatar is expected to drop in view of stagnant population size, as anticipated by IMF.

All the GCC countries have laid down long-term capacity expansion plans to meet the rising demand. As regional governments had restricted spending amidst fiscal deficits, they have opened doors for the private sector to play an instrumental role in supporting the expansion of the healthcare sector. A gradual roll-out of mandatory health insurance across the region would attract private sector investments in the sector.

Exhibit 20: Forecast of Demand for Hospital Beds in the GCC



Source: Alpen Capital, WHO, IMF, WTW, MOH and Statistical organizations
Note: E – Estimate, F – Forecast

3.4 Country-wise CHE Forecast

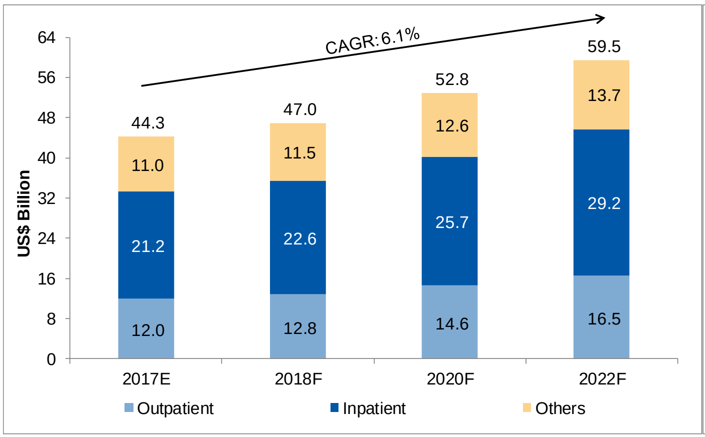
Saudi Arabia

From an estimated US$ 44.3 billion in 2017, CHE in Saudi Arabia is projected to grow at a CAGR of 6.1% to US$ 59.5 billion in 2022

From an estimated US$ 44.3 billion in 2017, CHE in Saudi Arabia is projected to grow at a CAGR of 6.1% to US$ 59.5 billion in 2022 (see Exhibit 21). The growth is likely to be driven by a compounded annual growth of 2.0% in population, rise in the cost of treatment and increase in health insurance coverage. With an anticipated addition of 1.7 million elderly people (+50 years), demand for long-term care centers and outpatient treatments is set to rise. The outpatient and inpatient markets are projected at US$ 16.5 billion and US$ 29.2 billion, respectively, in 2022. The country has a large inpatient market size (nearly half of the total CHE), given the size of population, occurrence of NCDs and free medical services offered to nationals. Such factors support the utilization of services at public hospitals. Expenditure on other healthcare services is expected to increase at a CAGR of 4.5%.

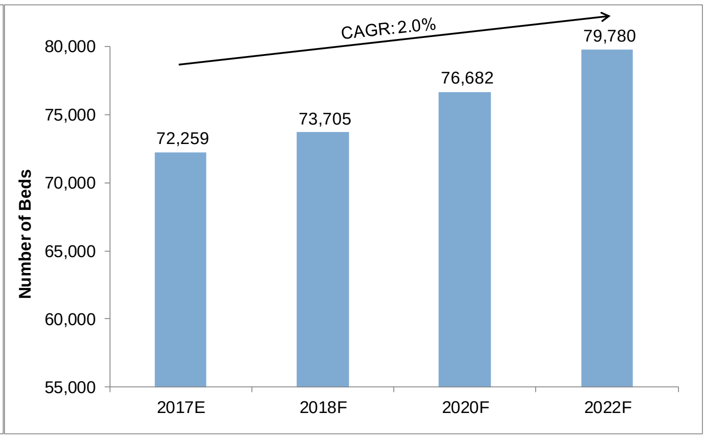
To accommodate the growing number of patient base, the country would need a total bed capacity of 79,780 by 2022, signifying an additional requirement of 7,521 beds (see Exhibit 22). The government is encouraging the private sector to meet the growing demand while building large medical complexes like King Faisal Medical City and King Abdulaziz Medical City. The decision to privatize several public hospitals and introduction of comprehensive insurance coverage will encourage private investments in the sector.

Exhibit 21: Forecast of CHE in Saudi Arabia



Source: Alpen Capital, WHO, WTW, IMF, MOH
Note: E – Estimate, F – Forecast

Exhibit 22: Demand for Hospital Beds in Saudi Arabia



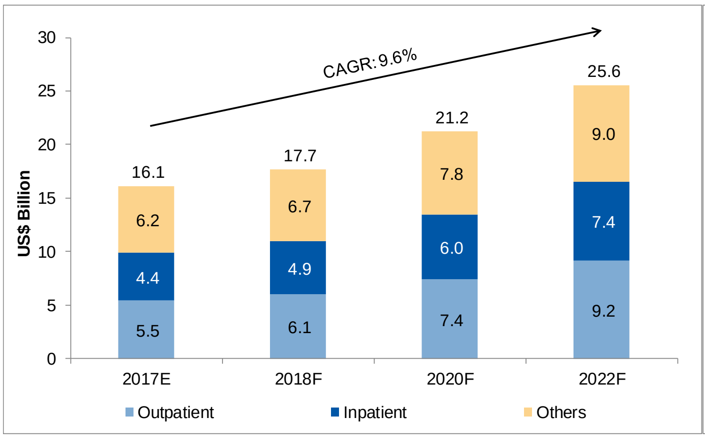
Source: Alpen Capital, WHO, WTW, IMF, MOH
Note: E – Estimate, F – Forecast

UAE

CHE in the UAE is projected to grow at a CAGR of 9.6% to US$ 25.6 billion in 2022, from an estimated US$ 16.1 billion in 2017

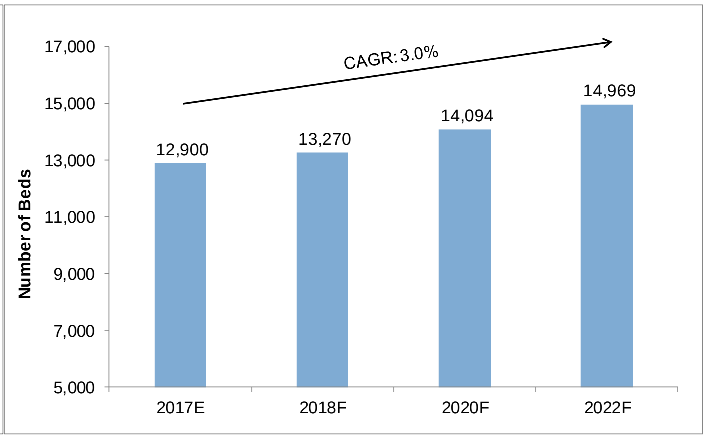
CHE in the UAE is projected to grow at a CAGR of 9.6% to US$ 25.6 billion in 2022, from an estimated US$ 16.1 billion in 2017 (see Exhibit 23). The country is expected to witness the fastest growth in the region, supported by the full roll-out of mandatory insurance in Dubai, expanding medical tourism industry, increasing population and medical inflation. With increasing utilization of services and preventive care practices, the country's outpatient and inpatient markets are projected to grow at an annual average rate of 10.8% to reach US$ 9.2 billion and US$ 7.4 billion, respectively, in 2022. The country's expenditure proportion on 'Others' category is estimated at nearly 40% in 2017. The spending on diagnostics and drugs is substantial due to the out of pocket expenditures on medical checks and drug consumption to treat obesity and diabetes, the prevalence of which is high in the country. The government is also spending much to educate and spread awareness on the benefits of adopting a healthy lifestyle. Spending on such services is expected to grow at an annual average rate of 7.5% over the forecast period. In view of the rising need for care, the requirement of beds in the country is projected at 14,969 in 2022, representing an additional demand for 2,069 new beds (see Exhibit 24).

Exhibit 23: Forecast of CHE in the UAE



Source: Alpen Capital, WHO, WTW, IMF, MOH
Note: E – Estimate, F – Forecast

Exhibit 24: Demand for Hospital Beds in the UAE



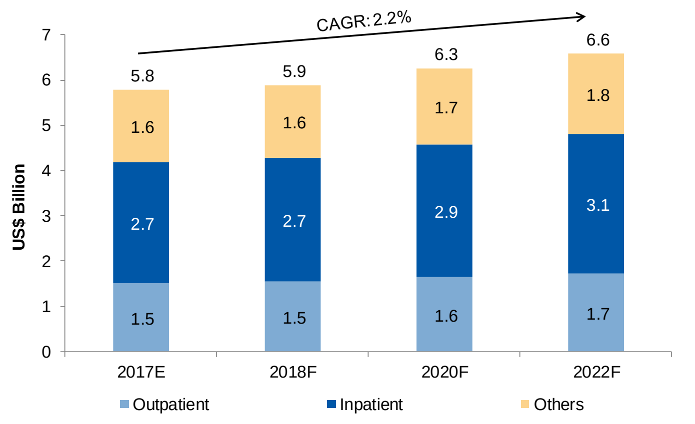
Source: Alpen Capital, WHO, WTW, IMF, MOH
Note: E – Estimate, F – Forecast

Qatar

CHE in Qatar is expected to grow at an annual average rate of 2.2% to US$ 6.6 billion in 2022

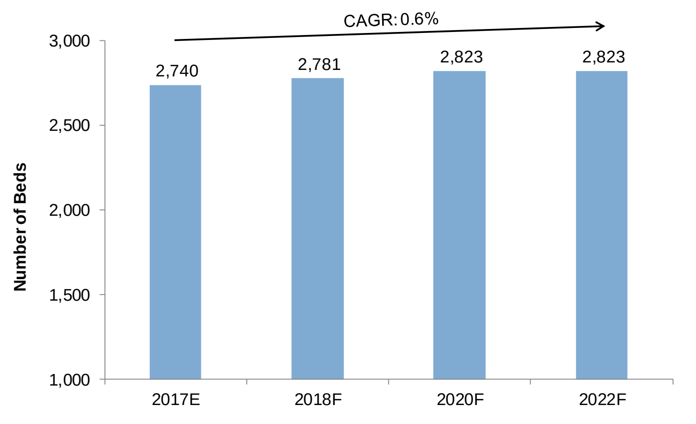
CHE in Qatar is expected to grow at an annual average rate of 2.2% from US$ 5.8 billion in 2017 to US$ 6.6 billion in 2022 (see Exhibit 25). The slow growth is in anticipation of a meager increase in population size, due to political uncertainty. Consequently, the expenditure on outpatient and inpatient care is projected to grow at a CAGR of 2.8% to reach US$ 1.7 billion and US$ 3.1 billion, respectively, in 2022. Spending on other healthcare services is also expected to grow at a slow annualized average of 2.2%. The inpatient market accounts for nearly half of the healthcare spending. The country's hospital bed requirement is likely to grow at a CAGR of 0.6% between 2017 and 2022 to nearly 2,823 beds (see Exhibit 26).

Exhibit 25: Forecast of CHE in Qatar



Source: Alpen Capital, WHO, WTW, IMF, MOH, MDPS
Note: E – Estimate, F – Forecast

Exhibit 26: Demand for Hospital Beds in Qatar



Source: Alpen Capital, WHO, WTW, IMF, MOH, MDPS
Note: E – Estimate, F – Forecast

Kuwait

CHE in Kuwait is projected to reach US$ 5.8 billion in 2022, translating into an annualized average growth of 3.4% from 2017

CHE in Kuwait is projected to reach US$ 5.8 billion in 2022, translating into an annualized average growth of 3.4% from 2017 (see Exhibit 27). The increase is driven primarily by the expanding as well as aging population and the highest prevalence of NCDs in the GCC. Although medical inflation in the country is amongst the lowest in the region, the costs are rising and hence is the expenditure. Consequently, CHE on outpatient services is likely to grow from an estimated US$ 1.9 billion in 2017 to US$ 2.4 billion in 2022, while that on inpatient services is expected to expand from US$ 1.6 billion to US$ 1.9 billion. During the forecast period, spending growth in the 'Others' healthcare segment is anticipated to be slow at 1.3%. In view of the growing size of the healthcare market, the country is likely to witness a requirement of 9,807 beds in 2022 (see Exhibit 28), implying an additional demand for over 1,200 beds from 2017. Although the inpatient market size is growing at a slow pace, the increase in demand for beds is linked to the high bed occupancy ratio at hospitals in Kuwait compared to the regional average.

Exhibit 27: Forecast of CHE in Kuwait

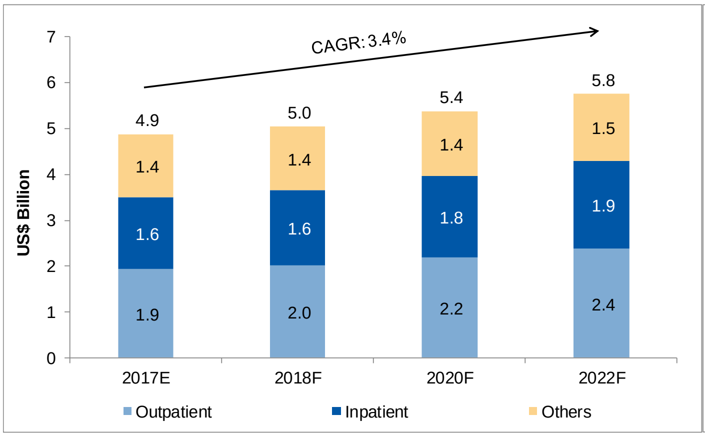
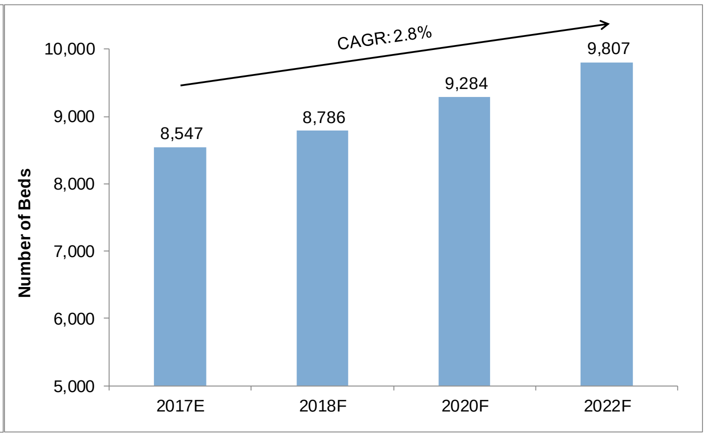


Exhibit 28: Demand for Hospital Beds in Kuwait



Source: Alpen Capital, WHO, WTW, IMF, CSB of Kuwait
Note: E – Estimate, F – Forecast

Source: Alpen Capital, WHO, WTW, IMF, CSB of Kuwait
Note: E – Estimate, F – Forecast

Oman

From an estimated US$ 3.2 billion in 2017, CHE in Oman is expected to grow at a CAGR of 9.1% to US$ 4.9 billion in 2022

From an estimated US$ 3.2 billion in 2017, CHE in Oman is expected to grow at a CAGR of 9.1% to US$ 4.9 billion in 2022 (see Exhibit 29). The second-fastest growth in the region is attributable to rapidly rising population (+3.2% CAGR), the roll-out of mandatory insurance during the year and rising cost of care. Further, treatment of NCDs and preventive care measures are accounting for a large portion of the healthcare expenditure. Consequently, CHE on outpatient and inpatient services in the country is projected to grow at an annualized average rate of 10.0% to US$ 1.5 billion and US$ 2.3 billion, respectively, by 2022. Expenditure on other healthcare services is expected to grow at a compounded annual average rate of 6.6% during the projected years. To accommodate the growing base of patients, the bed requirement in Oman is anticipated to grow at a CAGR of 3.2% through 2022, translating into a demand for more than 1,100 new beds to reach a capacity of 7,937 beds (see Exhibit 30).

Exhibit 29: Forecast of CHE in Oman

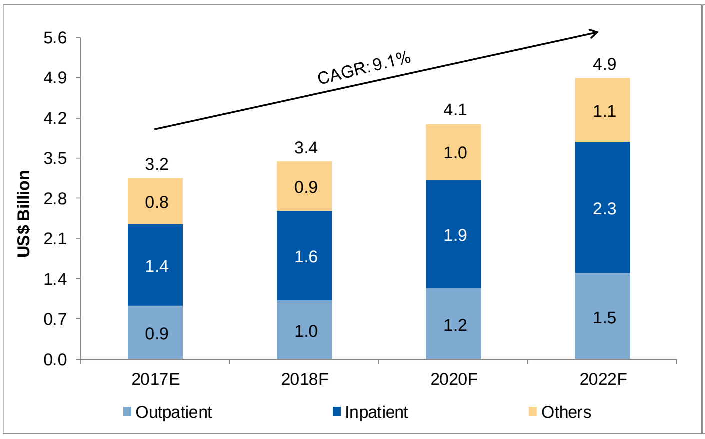
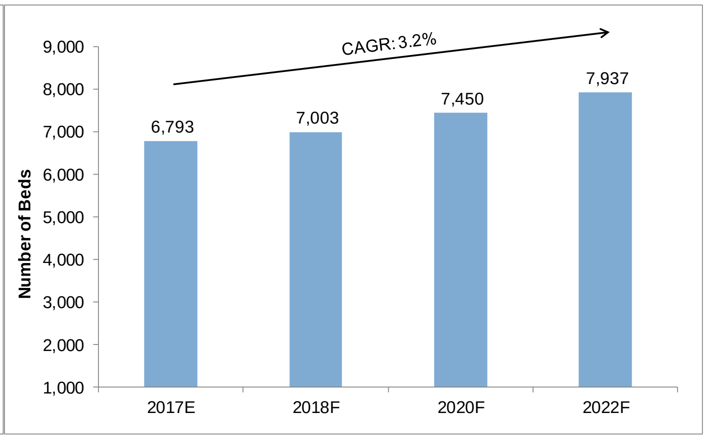


Exhibit 30: Demand for Hospital Beds in Oman



Source: Alpen Capital, WHO, WTW, IMF, MOH
Note: E – Estimate, F – Forecast

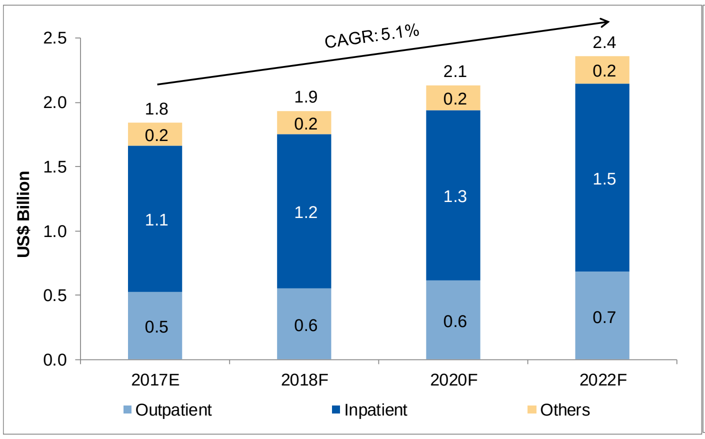
Source: Alpen Capital, WHO, WTW, IMF, MOH
Note: E – Estimate, F – Forecast

Bahrain

CHE in Bahrain is anticipated at US$ 2.4 billion in 2022, signifying an annual average growth of 5.1% from an estimated US$ 1.8 billion in 2017

CHE in Bahrain is anticipated at US$ 2.4 billion in 2022, signifying an annual average growth of 5.1% from an estimated US$ 1.8 billion in 2017 (see Exhibit 31). During the period, the spending on outpatient and inpatient care is expected to grow at a CAGR of 5.3% and that on medical goods and ancillary services at 3.2%. The inpatient market dominates the healthcare industry, with a contribution of over 60%. Growing size of population, proposed mandatory health insurance, lifestyle ailments and rising cost of care are the factors aiding growth. The country's hospital bed requirement is projected at 2,979 in 2022, suggesting an annual average growth of 2.0% from 2017 (see Exhibit 32). Liberalization of the sector, with foreign companies being allowed to own 100% in private healthcare facilities, will lend a push to the development of the sector.

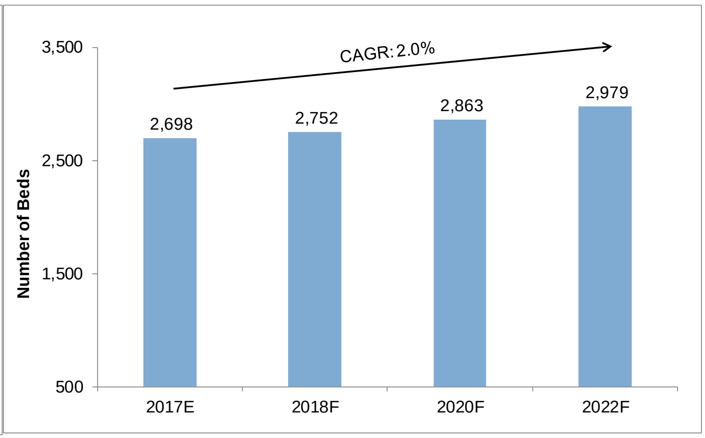
Exhibit 31: Forecast of CHE in Bahrain



Source: Alpen Capital, WHO, WTW, IMF, MOH

Note: E – Estimate, F – Forecast

Exhibit 32: Demand for Hospital Beds in Bahrain



Source: Alpen Capital, WHO, WTW, IMF, MOH

Note: E – Estimate, F – Forecast

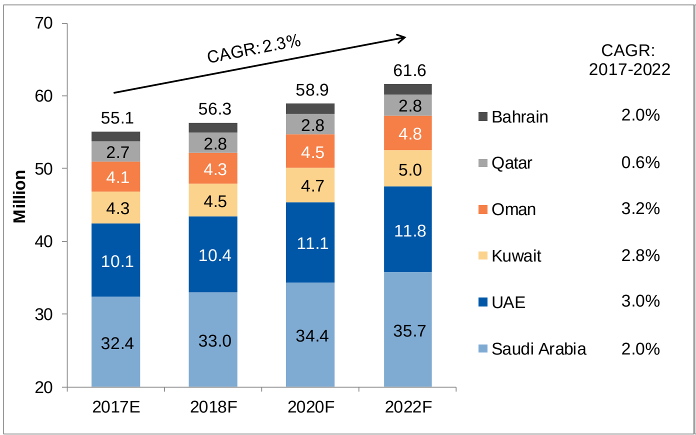
4. Growth Drivers

Favorable Demographics

Rising and ageing population, increase in life expectancy and low infant mortality rate are the key demographics driving the region's healthcare system

Rising and ageing population, increase in life expectancy and low infant mortality rate are the key demographics driving the region's healthcare system. The GCC population size is anticipated to increase by 6.6 million individuals to 61.6 million by 2022, of which nearly 17% will be people aged 50 years and above[18] (see Exhibits 33 and 34). The expanding size of population and age factor may exert immense pressure on the healthcare system. With the number of older people expected to increase at an annualized average rate of 6.5% between 2017 and 2022, demand for long-term care centers and services will rise. On the other hand, the large chunk of digital-friendly millennials and working people is encouraging technological innovations in healthcare. Mobile health (m-health), smart wearables (devices tracking personal health) and telemedicine are being increasingly used by people to manage health. Adoption of such tools is advancing the healthcare industry by promoting effective and preventive care.

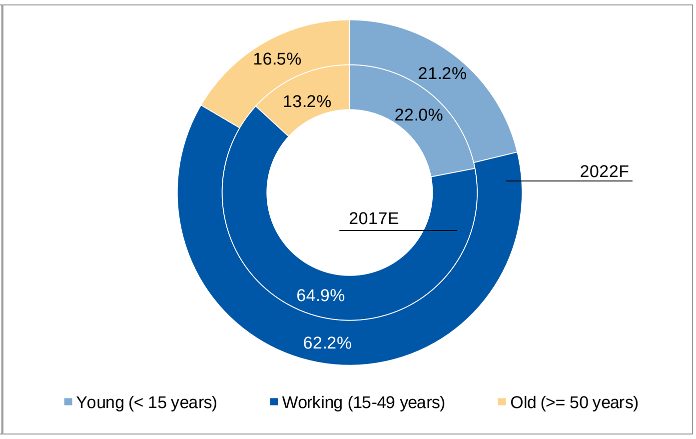
Exhibit 33: GCC Population Forecast



Source: IMF – October 2017

Note: E – Estimate, F – Forecast

Exhibit 34: Population Age Distribution



Source: UNPD

Note: E – Estimate, F – Forecast

High Prevalence of NCDs

Barring Oman, all the GCC countries featured amongst the top 25 countries in the world for having a high prevalence of diabetes and obesity

The GCC countries are observing a swift transition in its epidemiological profile to non-communicable diseases, a major cause of most of the deaths and disability in the region. Improper diet, high blood pressure and high body mass index are the factors that have increased the incidence of heart strokes, diabetes, hypertension and cancer. Barring Oman, all the GCC countries featured amongst the top 25 countries in the world for having a high prevalence of diabetes and obesity[19]. The number of diabetic adults (aged 20-79 years) in the Middle East and North Africa region is expected to grow at a CAGR of 2.7% between 2017 and 2045. Considering the high cost and length of treating such lifestyle ailments, the healthcare expenditure in the GCC countries is set to inflate. Moreover, the rise in such chronic ailments is augmenting the need for specialized healthcare centers and physicians.

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[18] Source: "World Population Prospects: The 2017 Revision", United Nations Population Division; IMF
[19] Source: "IDF Diabetes Atlas 8th Edition", International Diabetes Federation; World Atlas

Mandatory Health Insurance

The gradual rollout of compulsory health covers across the region will increase the utilization of medical services at private healthcare facilities

Governments across the region have either made health insurance mandatory or are in the process of doing so. Dubai, Abu Dhabi and Saudi Arabia have mandatory health insurance schemes in place, wherein Dubai was the recent most to complete the full rollout. Oman is set to implement mandatory health insurance for all private sector employees in phases from 2018[20]. In Qatar, the ministries of public health and finance along with the Central Bank have formed a committee to study the possibility of introducing a new mandatory health insurance scheme. In Kuwait, mandatory health cover is being proposed for visitors[21]. Bahrain is also discussing the implementation of mandatory health insurance[22]. The gradual rollout of compulsory health covers across the region will increase the utilization of medical services at private healthcare facilities.

Long-term Plans to Strengthen Healthcare System

Privatization is one of the key focus areas of the regional governments to reduce its financial burden and concentrate on regulatory reforms

The regional governments have framed national healthcare strategies primarily aimed at improving the quality of and access to care. In addition to capacity expansion plans, the strategies are aimed at enhancing the effectiveness of the delivery system, encouraging PPP models, developing medical education and digitization. Privatization is one of the key focus areas of the regional governments to reduce its financial burden and concentrate on regulatory reforms. Below are the long-term plans of some of the GCC countries to strengthen the healthcare system.

Exhibit 35: Long-term Healthcare Strategies

Strategies	Projected Requirement	Key Objectives
Oman – Health Vision 2050	Between 2017 and 2050 the country will require an addition of 7,950 beds, 13,404 physicians (including dentists) and 26,056 nurses	Establishment of a well-organized, equitable, efficient and responsive health system
Dubai Health Strategy 2016 - 2021 & Dubai Clinical Services Capacity Plan 2015 - 2025	Between 2017 and 2025, the city will require an addition of over 3,800 beds, nearly 8,300 physicians and 8,800 nurses	• Position the city as a global medical destination by adopting a value-based and integrated care system • Promote PPP projects • Encourage innovation
Abu Dhabi Healthcare Strategic Plan 2015-2020 & HAAD Capacity Master Plan	By 2025, the city will require an addition of over 1,200 acute care beds, 1,789 doctors and 16,158 nurses	• Reducing capacity gaps • Improving the quality of care • Human resources development • Encouraging PPP models • Introducing e-Health
Saudi Arabia National Transformation Plan 2020	By 2020, the Ministry of Health targets to increase private sector participation in spending to 35% and reach 73,292 MOH hospital beds and 2,750 primary healthcare centers	• Enhancing accessibility and quality of care • Develop an integrated and comprehensive health care system • Privatization of public healthcare facilities

Source: Health Ministries of the respective countries

[20] Source: "Health insurance mandatory for private sector in Oman from next year", Times of Oman, September 26, 2017
[21] Source: "Kuwait MPs propose mandatory health insurance for visitors", Gulf News, June 15, 2017
[22] Source: "Bahrain: National health insurance scheme to start in 2019", Middle East Insurance Review, June 8, 2016

Qatar has accomplished most of the projects stated in the National Health Strategy 2011-2016 and is in the process of scoping out the future plans to 2022. The new five-year strategy will focus mainly on preventive measures to achieve good health. These short-term strategies support the country's National Vision 2030, that aims to build a world-class healthcare system by focusing on workforce integration and quality, research and policy regulation. Similarly, Bahrain and Kuwait are also determined in developing the healthcare system with a focus on improving the health of its people.

Robust Project Pipeline

The region has over 700 healthcare projects worth US$ 60.9 billion in various stages of development

Driven by the rising demand for healthcare services, governments and private providers have laid down robust plans to develop related infrastructure. The region has over 700 healthcare projects worth US$ 60.9 billion under various stages of development[23]. More than 85% of the projects, by value, are hospital projects and rest are clinics and research centers. Of the total, 264 projects worth US$ 24.7 billion are under the construction stage. Some of the large projects underway in the region include US$ 7.2 billion Military Medical Complex (4,000 beds) in Saudi Arabia, US$ 1.3 billion New Al Jahra Hospital (1,200 beds) in Kuwait, US$ 1.2 billion Al Ain Hospital expansion (719 beds) in Abu Dhabi and Royal Oman Hospital in Oman. Many of the new projects are focusing on the provision of specialized treatments. The development of such massive infrastructure is likely to augment the scale as well as the quality of healthcare services in the region.

Inbound Medical Tourism

Medical tourism is an integral part of the economic diversification plans of the GCC countries and subsequently has been receiving stimulus from the governments

Medical tourism is an integral part of the economic diversification plans of the GCC countries and subsequently has been receiving stimulus from the governments. Dubai and Abu Dhabi are at the forefront amongst the GCC nations in attracting medical tourists. The cities were ranked as the 16th and 25th popular medical tourism destinations in the world during 2016[24]. During the year, medical tourist arrivals in Dubai grew by 9.5% y-o-y to 326,649, generating revenues of US$ 390 million[25]. Of the medical tourists, 37% were from Asia, 31% from the Arabian continent and 17% from Europe. The tourists mainly undertook services in the areas of orthopedic, dermatology and ophthalmology. The average cost of hip replacement in Dubai is US$ 14,987, lower than US$ 17,000 in Thailand, US$ 19,722 in Switzerland and US$ 26,489 in the US[26]. Although some of the treatments are expensive in Dubai, it is becoming a preferred destination due to relaxed processes, less waiting period and strategic geographic location. Dubai aims to attract over 500,000 medical tourists by 2020. The city also hosts Dubai Healthcare City – a healthcare free trade zone – attracting several medical tourists to the international advanced healthcare providers. The Health Authority of Abu Dhabi and Abu Dhabi Tourism & Culture Authority have entered into an agreement to form a medical tourism network to attract and serve patients from Russia, China and India, with a focus on cardiology, ophthalmology and diabetes treatment[27]. The average spending by a medical tourist in the city is estimated between US$ 800 – US$ 2,500 per day, much higher than US$ 500 by a general tourist. Also, the average length of stay of a medical tourist is 7-10 days. Such strong prospects present significant earnings potential for the private players.

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[23] Source: "Current GCC healthcare projects worth over $60bn", Arabian Business, February 3, 2018
[24] Source: Medical Tourism Index 2016
[25] Source: Dubai Health Authority
[26] Source: "Dubai Health Insurance Financial and Economic Activities - 2014", Dubai Health Authority; Medical Tourism Association
[27] Source: "Push to promote Abu Dhabi as medical tourism destination", The National, April 26, 2017

Looking at the growth in the Emirates, the other GCC countries are also working towards building world-class infrastructure and state-of-the-art technologies to appeal international medical tourists. Bahrain is developing Dilmunia Health District on a man-made island and Oman is constructing International Medical City. Both the projects will accommodate hospitals, wellness centers, serviced apartments and leisure centers. With improving infrastructure and quality of services, the region will not only experience a rise in medical tourists but also may witness a drop in outbound medical tourism.

5. Challenges

Economic Slowdown

With more than 70% of the healthcare expenditure in the region being financed by the governments, the sector's development has slowed down

The major challenge inhibiting the growth of the GCC healthcare sector is the slowdown in economy post the persistent weakness in oil prices since mid-2014. Being largely hydrocarbon-dependent, the oil price meltdown has widened fiscal deficits of the GCC countries, compelling the governments to curtail expenditures. With more than 70% of the healthcare expenditure in the region being financed by the governments, the sector's development has slowed down. To some extent, the demand is also likely to contract, as job losses ensuing out of the economic slowdown may turn expatriates to other destinations. Although the impact on the sector has not been severe until now, any further economic adversities may derail the healthcare sector capacity expansion plans.

Shortage of Medical Professionals

With new hospital developments underway, the need for experienced and skilled healthcare professionals is set to intensify

The expansion of GCC healthcare sector is dependent on the availability of skilled healthcare professionals, given the inherent shortage and growing nationalization of jobs. Moreover, the large dependence on expatriates is a cause of worry, as the world's medical ecosystem also encounters a shortage of professionals. With new hospital developments underway, the competition to hire experienced and skilled physicians, nurses and allied workforce is set to intensify. Thus, the cost of retention as well as recruitment is rising, alongside high attrition rates. The governments are building healthcare education resources to strengthen the domestic workforce. While the efforts may reap benefits during the long run, the present supply imbalance and high costs remain a glaring challenge.

Rising Cost of Healthcare

Gross medical inflation rates ranged between 5.0% and 12.0% in the GCC countries during 2017, with the UAE witnessing the highest rate

Cost of healthcare has been rising due to growing incidence of lifestyle diseases, technological advancements and limited availability of specialized care. Barring Kuwait, gross medical inflation rates ranged between 5.0% and 12.0% in the GCC countries during 2017, with the UAE witnessing the highest rate[28]. The rates are expected to remain high in 2018, thus exerting pressure on budgets of governments as well as citizens. The rising and high cost of treatments in the region has been one of the factors driving patients out of the region for medical treatments. While the expatriate population prefers to seek affordable treatments at their home countries, the GCC nationals benefit from the government-sponsored overseas treatments. In Dubai, the health authority is implementing a new healthcare billing practice of International Refined Diagnosis-Related Group (IR DRG), which is set to regulate the inpatient and outpatient treatment costs[29]. The practice will be first rolled out at outpatient facilities during 2018 and cover the entire system by 2019. The move may rein in the rising cost of care and set an example for the other countries to follow.

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[28] Data for Kuwait is not available; Source: "2018 Global Medical Trends Survey Report", Willis Towers Watson
[29] Source: "DHA looks set to transform healthcare billing and health insurance with IR DRG", UAE Medical Insurance, September 14, 2017

Limited Specialized Care Centers

The GCC healthcare system has limited capacity and technology to treat patients suffering from cancers, neurological disorders and cardio surgeries

The GCC healthcare system has limited capacity and technology to treat patients suffering from cancers, neurological disorders and cardio surgeries. Even though the UAE is establishing its ground as a popular medical tourism destination, most of the treatments undertaken are related to reconstructive, cosmetic and wellness procedures. For specialized treatments in areas like oncology, cardiology and neurology, the people of Middle East travel to Germany, the UK, Thailand and India. During 2016, Dubai Health Authority spent AED 622.8 million (US$ 169.6 million[30]) on overseas medical treatments, more than double of the cost incurred last year[31]. Nearly 21.8% of the patients sent abroad sought oncology treatments, followed by 17.2% for neurology & neurosurgeries and 16.5% for cardiology and orthopedic procedures.

Lack of Standardized Patient Experience Metrics

The quality of healthcare system at primary, secondary and tertiary facilities in the GCC is inconsistent with uneven patient outcomes and satisfaction levels

The quality of healthcare system at primary, secondary and tertiary facilities in the GCC is inconsistent with uneven patient outcomes and satisfaction levels. This is mainly because the hospitals and clinics have lack of reporting methods related to quality, patient experience and leading international practices. According to a survey on patient experience amongst healthcare professionals and people in the GCC, 51% of the professionals rated the overall quality of care in the region as inconsistent and only 40% of the people were satisfied with the present healthcare system[32]. The satisfaction levels were least in Qatar and Saudi Arabia. The governments may need to establish standards for monitoring patient experience and outcomes and move the healthcare practice towards patient-centered care.

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[30] Converted at an exchange rate of 0.272
[31] Source: Dubai Annual Health Statistics Report 2016", Dubai Health Authority
[32] Source: "What is the cure for a better patient experience in the GCC?", EY; The survey was conducted amongst 72 healthcare professionals and 425 people across the GCC

6. Trends

Increasing Emphasis on PPP Models

The governments are encouraging the PPP model largely in the healthcare sector to meet the rising medical needs while reducing the burden of financing

The importance of private sector participation is being discussed across the GCC nations in the backdrop of budget deficits. The governments are encouraging the PPP model largely in the healthcare sector to meet the rising medical needs while reducing the burden of financing. The involvement of private players is also looked at as a step to enhance the quality of delivery in the region, with established foreign players bringing in their international best practices. Even though private participation is expanding at a slow pace, measures such as mandatory health insurance and privatization strategies are likely to provide a boost.

The Ministry of Health in Saudi Arabia aims to increase private sector contribution in total healthcare spending to 35% by 2020[33]. Subsequently, the government has allowed 100% foreign ownership in healthcare companies and plans to privatize several public healthcare facilities. The Dubai Health Authority expects PPPs to increase in ambulatory care, home care, long-term stay and day-surgery centers, driven by its health strategy[34]. The authority has entered into eight Memorandum of Understandings with private hospitals to exchange expertise with public hospitals to deliver quality healthcare[35]. Private participation has been on the rise in Abu Dhabi, with 67% of outpatient consultation rooms, 73% non-acute care beds and 37% acute overnight beds being provided by private players[36]. International hospitals such as Johns Hopkins, Cleveland Clinic, Varned and Bumrungrad are the existing PPPs in the Emirate. Kuwait has formed an organization, Kuwait Authority for Partnership Projects, to implement PPP projects in the country. The other GCC countries are in the process of drafting or strengthening the PPP laws. Such developments are creating immense opportunities for the private healthcare providers in the GCC. The implementation of mandatory insurance is one of the chief drivers attracting private healthcare providers to the sector.

Surge in Deal Flows

With increasing opportunities for the private sector in GCC healthcare, the industry is witnessing a spurt in mergers and acquisitions

With increasing opportunities for the private sector in the GCC healthcare, the industry is witnessing a spurt in mergers and acquisitions. The inorganic route is being adopted by new players to enter the market and by existing providers to expand market share, physician practices and medical capabilities. Amid growing competition and high operating costs, small and medium-sized clinics with low bed capacity utilization are finding it difficult to maintain profitability. The deal activity is happening largely in the UAE and Saudi Arabia, given the presence of several players and government's privatization strategy. One of the largest mergers in the sector was the acquisition of Al Noor Hospitals by Mediclinic International for US$ 2.2 billion in 2015. This acquisition was one of the largest amongst Mediclinic International's other transactions in the GCC healthcare space. NMC Health Plc has acquired several small hospitals and clinics in a bid to expand its regional presence and portfolio of services. The company plans to invest US$ 800 million from 2018 to expand its business in the Gulf and other markets [37]. Private equities like Middle East Venture Partners, Alkhabeer Healthcare and TVM Capital Healthcare Partners are making inroads in the industry to take a slice of the growing market. TVM Capital Healthcare

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[33] Source: "National Transformation Program 2020", Saudi Arabia Vision 2030
[34] Source: "Dubai plans more public-private healthcare partnerships", The National, January 28, 2016
[35] Source: "DHA signs eight MOUs with private hospitals in Dubai", Dubai Health Authority, May 9, 2016
[36] Source: "Capacity Master Plan", Health Authority of Abu Dhabi, August 2016
[37] Source: "UAE's NMC Healthcare plans $800 mln in investments from 2018", Thomson Reuters, December 19, 2017

Partners has created a US$ 250 million fund to invest in healthcare markets in the Gulf and other regions[38]. Privatization, implementation of mandatory insurance and openness to foreign investments are likely to lend a push to competition in the region.

Growing Focus on Preventive Care

To reduce the incidence of lifestyle diseases and associated costs, the regional governments are devising ways to encourage preventive care

To reduce the incidence of lifestyle diseases and associated costs, the regional governments are devising ways to encourage preventive care. In many other developed countries, early diagnosis and other preemptive steps have proved to be successful in reducing healthcare costs and improving health. Countries such as Germany, France and the Netherlands spend about US$ 400 – US$ 500 per capita annually on preventive care, which is way higher than US$ 31 – US$ 131 per capita spent in the GCC countries[39].

In the Vision 2030 plan, Saudi Arabia aims to increase the proportion of people exercising at least once a week from 13% to 40% and the Ministry of Health plans to spend up to SAR 23 billion by 2020 to reform primary health care[40]. Subsequently, the government has been promoting a healthy lifestyle through online campaigns, creating walking areas and conducting preliminary screening/health checks. The UAE has also taken similar steps, as the country is committed to reducing NCDs in its Vision 2021. Some of the GCC countries have imposed heavy taxes of up to 100% on tobacco and sugary drinks. People in the region are also turning health conscious and proactively conducting annual medical checks/screening. With a growing focus on prevention, the region is presenting enormous opportunities for private players in the areas of preventive care. Demand for technology-enabled clinics, diagnostic centers and laboratories are likely to spruce up to support the transition to a preventive healthcare model.

Rising Investments in Specialized Centers

The GCC faces a shortage of healthcare formats such as long-term and post-acute care rehabilitation, specialized clinics and home healthcare providers. The rapidly growing lifestyle diseases has prompted investments in specialized hospitals and clinics. Such centers are being built with a focus on few specializations, state-of-the-art technology, patient-centric care and high-quality standards. Some of the existing specialized centers witnessing high patient volumes include Burjeel Hospital for Advanced Surgery, Wooridul Spine Center, Cleveland Clinic and Diabetes Center of Imperial College of London in the UAE and Sidra Medical & Research Center and Aspetar in Qatar. Upcoming projects include King Faisal Medical City in Saudi Arabia, expansion of Al Ain Hospital and Rashid Hospital in the UAE.

The number of LTPAC facilities are also increasing in view of the rising ageing population, use of technology and disabilities due to road accidents

The number of LTPAC facilities are also increasing in view of the rising ageing population, use of technology and disabilities due to road accidents. The type of LTPAC facilities includes home care services, inpatient/outpatient rehabilitation services, long-term care hospitals and nursing homes. At present such facilities are limited in comparison to the requirement, resulting in nearly 20-30% of the beds at public hospitals being utilized by LTPAC patients. Nevertheless, this segment is witnessing a series of construction and M&A activity. In Dubai's Clinical Services Capacity Plan 2015-2025, rehabilitation and long-term patient services are considered a priority area for investments. Some of the

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[38] Source: "Dubai-based private equity business launches $250 mln healthcare fund", Thomson Reuters Eikon, December 28, 2017
[39] Source: "Investment big bets: Health care and life sciences in the GCC", 2016
[40] Source: "Public Healthcare in the Kingdom of Saudi Arabia: Plans for Private Sector Participation", Shearman & Sterling LLP, July 2017

deals witnessed in the LTPAC segment include the acquisition of Rochester Wellness Center in Dubai by Al Noor Hospital Group, Beverly Hills Home Health Care in Dubai by Al Masah Capital and ProVita International Medical Center and Americare Home Health Services in Abu Dhabi by NMC Health Plc. Within the segment, the market for home healthcare services is gaining much attention and is estimated to be worth nearly US$ 5 billion by 2020[41]. Manzil Home Services in Abu Dhabi and Home Care Center in Qatar are a couple of home care facilities in the region. Bahrain is going to build an integrated medical city complex that will include an elderly-care facility, in addition to maternity and sclerosis centers[42]. Increase in such facilities is likely to free up the capacity at acute-care hospitals.

Technological Transformations

The proliferation of internet and mobile devices coupled with constantly evolving technology advancements is altering the GCC healthcare landscape

Technology will remain the core factor in upgrading the GCC healthcare sector over the coming years. The proliferation of internet and mobile devices coupled with constantly evolving technology advancements is altering the GCC healthcare landscape. Technologies such as the digitization of patient records (electronic health records), e-visits, telemedicine, connected medical devices, robotic procedures, health monitoring wearables and health analytics are gaining acceptance in the region. Information technology is playing a key role in achieving key healthcare objectives of the region including enabling preventive care, building workforce capacity and improving access to care. Thus, the adoption of technology is emerging as a solution to most of the present challenges related to cost, quality, access and resources.

Acknowledging this potential, the governments and private healthcare providers are investing heavily in technology implementation and up-gradation. Most of the governments are working on electronic medical records (EMR) to monitor and improve health outcomes. Dubai Health Authority launched unified electronic system project in February 2016 to cover all hospitals across the Emirate for access to electronic patient records[43]. The project was fully implemented by end-2017. According to a survey in hospitals across Qatar, Saudi Arabia and the UAE, nearly half of them agreed to be using Internet of Things-based solutions[44]. The evolution of new technologies will promote the use of innovative practices and upgrade the standards of healthcare delivery in the region.

[41] Source: "Investment big bets: Health care and life sciences in the GCC", 2016
[42] Source: "Bahrain to develop new hi-tech medical city", Thomson Reuters Eikon, February 1, 2018
[43] Source: "Dubai's unified medical e-system rolls out final stage", Thomson Reuters Eikon, November 19, 2017
[44] Source: "Internet of Things Set to Go Mainstream in GCC Hospitals", IDC, December 8, 2016

The London-listed NMC Health Plc ruled the M&A arena in the last two years, with eight strategic acquisitions

7. Merger and Acquisition (M&A) Activities

The M&A activity in the GCC healthcare sector continues to gather steam, as large domestic players acquire hospitals and clinics to expand their services and geographic reach. The London-listed NMC Health Plc ruled the M&A arena in the last two years, with eight strategic acquisitions (see Exhibit 36). A couple of them were intended towards the purchase of remaining equity interest and rest to penetrate the healthcare market in Saudi Arabia and expand in the UAE. Most of the deals during the period took place in these two countries, underlining their market potential. The largest deal, based on disclosed deal value, was the US$ 560 million acquisition of Al Zahra Private Hospital in Sharjah by NMC Health Plc from Gulf Medical Projects Co. Amanat Holdings, Mediclinic Middle East Management Services and Aster DM Healthcare also completed meaningful acquisitions during the period. The deal activity is likely to intensify in the backdrop of increasing privatization, competition and demand for specialized care.

Exhibit 36: Major M&A Deals in the GCC Healthcare Industry

Acquirer	Acquirer's Country	Target	Target's Country	Year	Consideration (US$ Million)	Percent Sought (%)
NMC Health Plc	UAE	Al Zahra Private Hospital Sharjah	UAE	2016	560	100%
NMC Health Plc	UAE	Fakih IVF Group	UAE	2018	205	49%
NMC Health Plc	UAE	Cosmesurge*	UAE	2018	170	70%
VPS Healthcare	UAE	3 hospitals of Rockland Hospitals Ltd.	India	2016	149	100%
Amanat Holdings PJSC	UAE	International Medical Center	Saudi Arabia	2017	97	13.2%
Kuwait Finance House KSCP	Kuwait	Al Salam International Hospital Co.	Kuwait	2017	65	20.9%
NMC Health Plc	UAE	Al Rashid Hospital	Saudi Arabia	2017	40	100%
NMC Health Plc	UAE	Al Qadhi Hospital	Saudi Arabia	2017		60%
NMC Health Plc	UAE	Al Salam Medical Group*	Saudi Arabia	2018	37	80%
Saudi Pharmaceutical Industries & Medical Appliances Corp. SJSC	Saudi Arabia	Al Qassim Medical Services Co.	Saudi Arabia	2016	36	27.3%
Investor Group	NA	NMC Health Plc	UAE	2017	30	4.9%
NMC Health Plc	UAE	As Salama Hospital	Saudi Arabia	2016	28	70%
Saudi Pharmaceutical Industries & Medical Appliances Corp. SJSC	Saudi Arabia	Al Qassim Medical Services Co.	Saudi Arabia	2016	18	13.2%
NMC Health Plc	UAE	As Salama Hospital	Saudi Arabia	2018	13	30%
Al Hammadi Co. for Development & Investment	Saudi Arabia	Medical Support Services Co.*	Saudi Arabia	2017	13	100%
PT Kimia Farma (Persero) Tbk	Indonesia	Dawaa Medical Ltd. Co.	Saudi Arabia	2018	10	60%
Kaya Middle East DMCC	UAE	Minal Medical Centre, Minal Specialized Clinic Dermatology	UAE	2016	6	75%
Undisclosed Acquirer	NA	Asnan Tower*	Kuwait	2018	1	N/A
Mediclinic Middle East Management Services FZ LLC	UAE	Al Madar Medical Center LLC	UAE	2016	N/A	100%
		Aspetar Medical Center LLC	Qatar			
		Manchester Medical Clinic LLC	UK			
Emirates Hospital LLC	UAE	Mobile Doctors 24-7	UAE	2017	N/A	60%
Aster DM Healthcare LLC	UAE	Harley Street Medical Centre	UAE	2016	N/A	60%

Source: Thomson Reuters Eikon

*Note: *Deals pending completion (as on March 16, 2018)*

8. Financial and Valuation Analysis

8.1 Financial Performance

In this section, we have analyzed the latest three-year[45] financial performance of nine listed healthcare companies in the GCC (see Exhibit 37). On an average, the selected set of companies posted consolidated revenue growth of 16.4%, EBITDA margin of 22.7% and return on assets (ROA) of 9.9% in the last three years.

Exhibit 37: Financial Performance of the Selected Healthcare Companies in the GCC

Company Name	Country	Market Cap (US$ Million)	Revenue (US$ Million)	Revenue Growth (2-YR CAGR %)	EBITDA Margin (3-yr avg. %)	ROA (3-yr avg. %)	Capex (US$ Million)
Al Hammadi Co. for Development and Investment	KSA	1,166.5	189.0[a]	12.4%	28.5%	5.2%	52.4
Aster DM Healthcare	UAE	1,310.9	884.7[b]	18.1%	9.2%	1.9%	139.0
Dallah Healthcare Holding Co.	KSA	1,655.2	323.2[a]	10.9%	26.1%	10.6%	115.0
Gulf Medical Projects Co. (GMPC)	UAE	342.5	119.3[a]	(22.2%)	21.0%	5.4%	3.7
Medicare Group	Qatar	599.2	128.6[a]	(11.4%)	25.3%	9.1%	16.7
Middle East Healthcare Co. (MEHCO)	KSA	1,337.7	431.3[c]	2.7%	25.4%	16.1%	27.6
Mouwasat Medical Services Co.	KSA	2,333.5	382.6[c]	19.8%	29.6%	13.1%	71.8
National Medical Care Co.	KSA	724.8	227.5[a]	(1.5%)	18.9%	6.6%	19.5
NMC Health Plc*	UAE	9,919.9	1,146.2[a]	49.8%	29.1%	15.2%	58.2
Consolidated			*3,832.4*	*16.4%*	*22.7%*	*9.9%*	*504.0*
Average				*7.3%[#]*	*23.7%*	*9.3%*	
High				*49.8%*	*29.6%*	*16.1%*	
Low				*(22.2%)*	*9.2%*	*1.9%*	

Source: Thomson Reuters Eikon, Bloomberg

*Notes: Last updated March 20, 2018; * All the financials of NMC Health Plc belong to its healthcare segment; [#]GMPC and NMC are excluded from average revenue growth as they are outliers; [a] The financials are based on annual results for the year ended December 2017; [b] Based on annual results for the year ended March 2017; [c] Since the annual results are not available, we have used LTM September 2017 financials and their EBITDA margin and ROA is based on average of LTM and years ended 2016 and 2015*

[45] Since a couple of companies have not announced their full-year results, we have compared their LTM financials with previous two full-year results

Revenue Analysis

The combined revenue of select healthcare companies stood at US$ 3.8 billion during LTM 2017

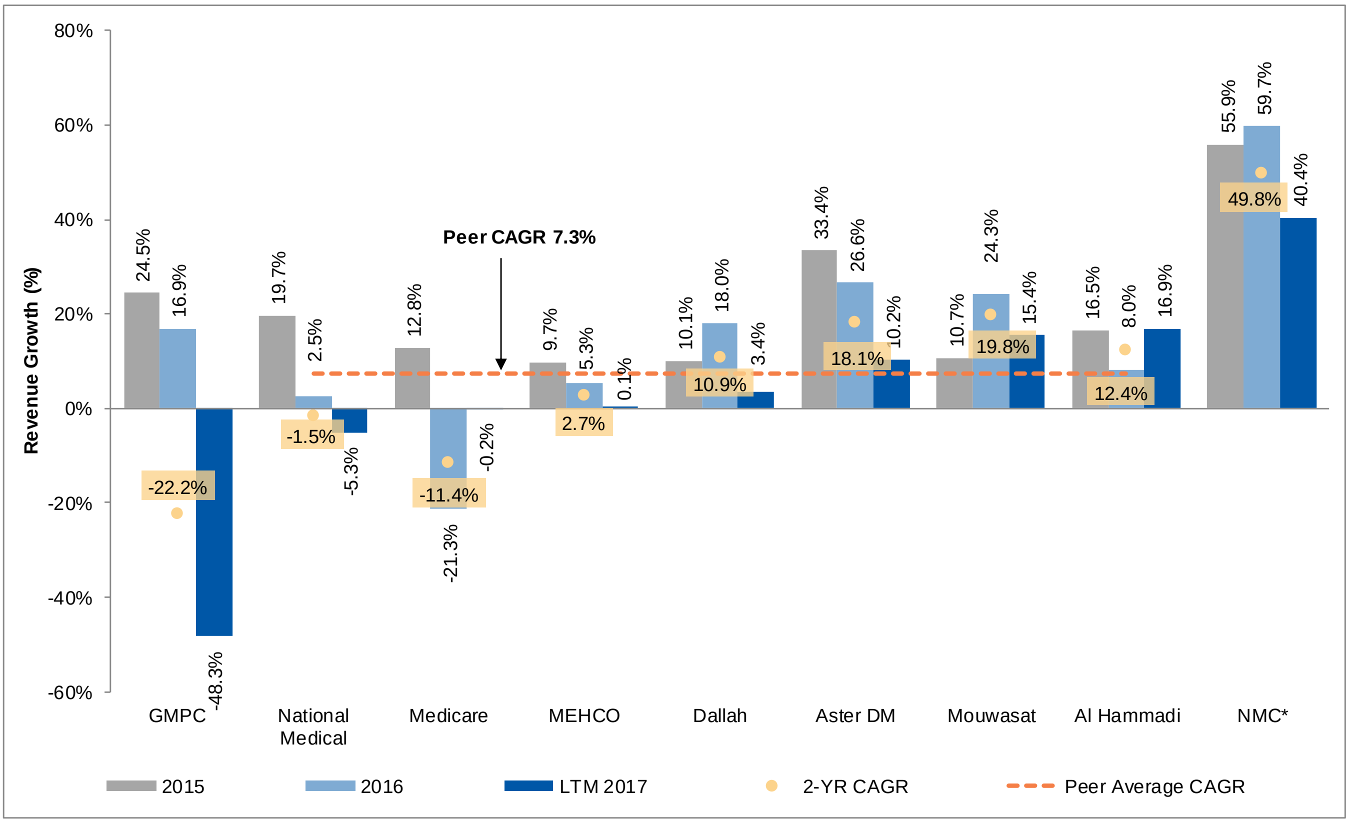
The combined revenue of select healthcare companies in the GCC stood at US$ 3.8 billion during LTM 2017. Excluding the outliers GMPC and NMC Health Plc, the companies' revenues on an average grew at a CAGR of 7.3% since 2015 (see Exhibit 38), with the recent year witnessing a growth of 5.8%.

UAE-based NMC Health Plc, the largest listed healthcare provider in the GCC by revenue (~30% of LTM 2017 peer group revenue), witnessed the highest growth. The healthy growth is primarily attributed to the company's aggressive inorganic expansion mainly in specialized healthcare areas[46]. Additionally, the company benefited from the ramp-up of newly opened hospitals and the roll out of mandatory insurance in Dubai. Saudi Arabia-based Al Hammadi Co. for Development and Investments (Al Hammadi) and Mouwasat Medical Services (Mouwasat) reported over 15% y-o-y growth during LTM 2017 led by an increase in the number of patients and expansion in sub-specialty clinics, respectively[47]. Aster DM Healthcare (Aster DM), accounting for 23.1% of peer group revenue, reported a 10.2% growth in 2017 driven by a rise in inpatient volumes, acquisition of a chain of multispecialty hospitals in India and attaining a hospital management agreement.

GMPC's revenue halved after the sale of Al Zahra Hospital in Sharjah

GMPC, National Medical Care and Medicare reported a decline in revenue during LTM 2017. GMPC's revenue almost halved after the sale of Al Zahra Hospital in Sharjah to NMC Health Plc.

Exhibit 38: Revenue Growth of the Selected Healthcare Companies in the GCC



Source: Thomson Reuters Eikon, GMPC, NMC

** Revenue growth of the healthcare segment; Peer average excludes outliers GMPC and NMC*

[46] Source: NMC Health Plc financial reports
[47] Source: Tadawul

ALPEN CAPITAL

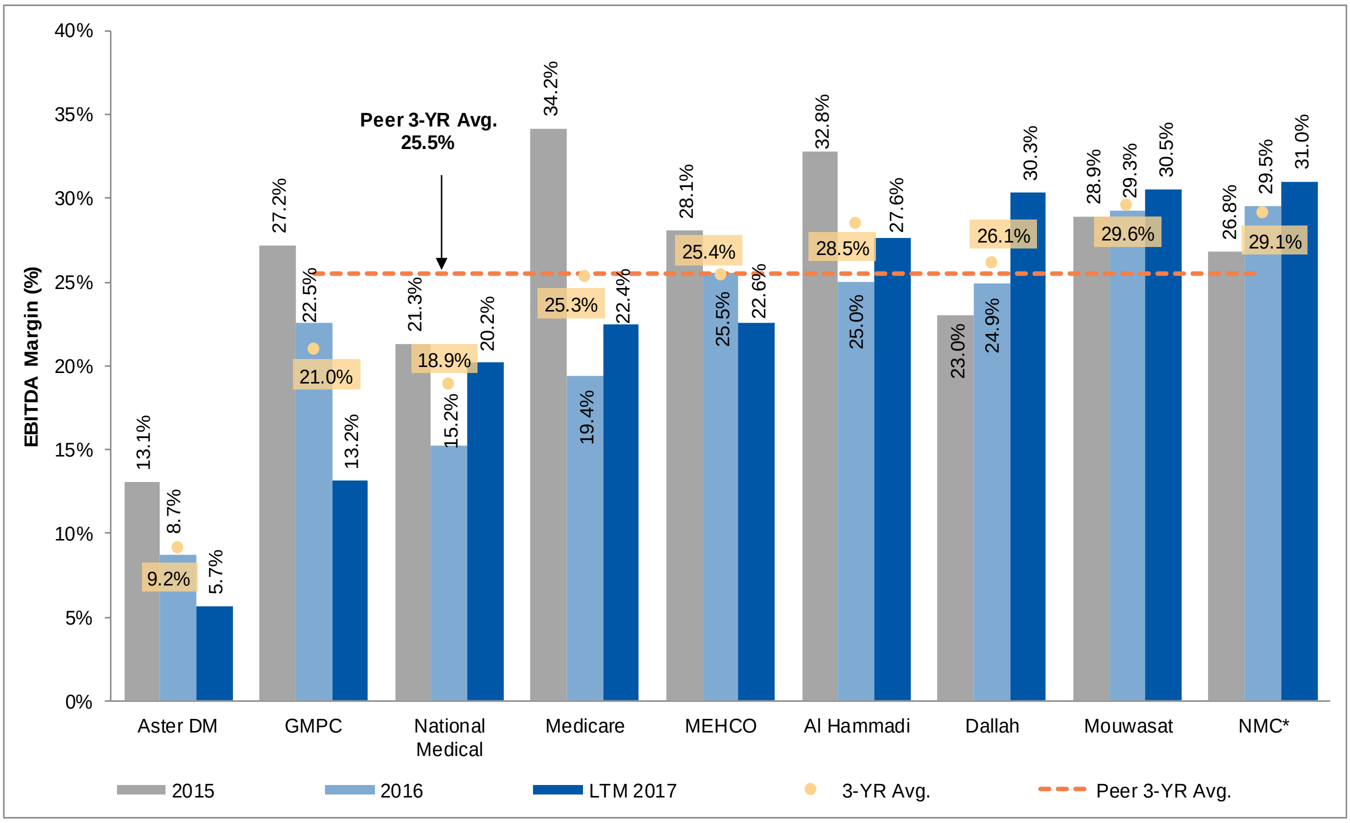
Profitability Analysis

During the last three years, EBITDA margin of the selected GCC healthcare providers averaged 25.5%

During the last three years, EBITDA margin of the selected GCC healthcare providers averaged 25.5% (see Exhibit 39). Most of the companies' margins remained volatile with a drop in 2016 before recovering slightly in LTM 2017. NMC, Mouwasat and Dallah Healthcare (Dallah) were the exceptions, with their margins following an increasing trend during the period. These companies outperformed its peers with EBITDA margin of above 30% during LTM 2017. NMC had the strongest EBITDA margin amongst the peers which was driven by high-margins from value-added services of acquired businesses. The increase in EBITDA margin of Dallah was attributed to improved contractual terms for managed healthcare services and decline in operating costs. Mouwasat also sighted an improvement in contractual terms with customers and effective utilization of resources as the factors enhancing EBITDA margin.

Middle East Healthcare Company (MEHCO), GMPC and Aster DM saw a drop in EBITDA margin during the three-year period. In case of MEHCO, the drop was due to increase in staff salaries and other operating expenses towards the newly commissioned Hail hospital. The EBITDA margin of GMPC was affected by the sale of Sharjah-based hospital. Aster DM had the lowest margin among the peers due to a loss in Sanad Hospital, which derived revenue largely from government reimbursements[48]. However, the company has changed its strategy to increase the volume of private insurance patients and walk-in cash patients, in a bid to reduce reliance on the government.

Exhibit 39: EBITDA Margin of the Selected Healthcare Companies in the GCC



Source: Thomson Reuters Eikon, GMPC

** EBITDA margin of the healthcare segment; Peer average excludes Aster DM, as it is an outlier*

[48] Source: Company Prospectus

The three-year average ROA of the selected healthcare companies stood at 9.3%

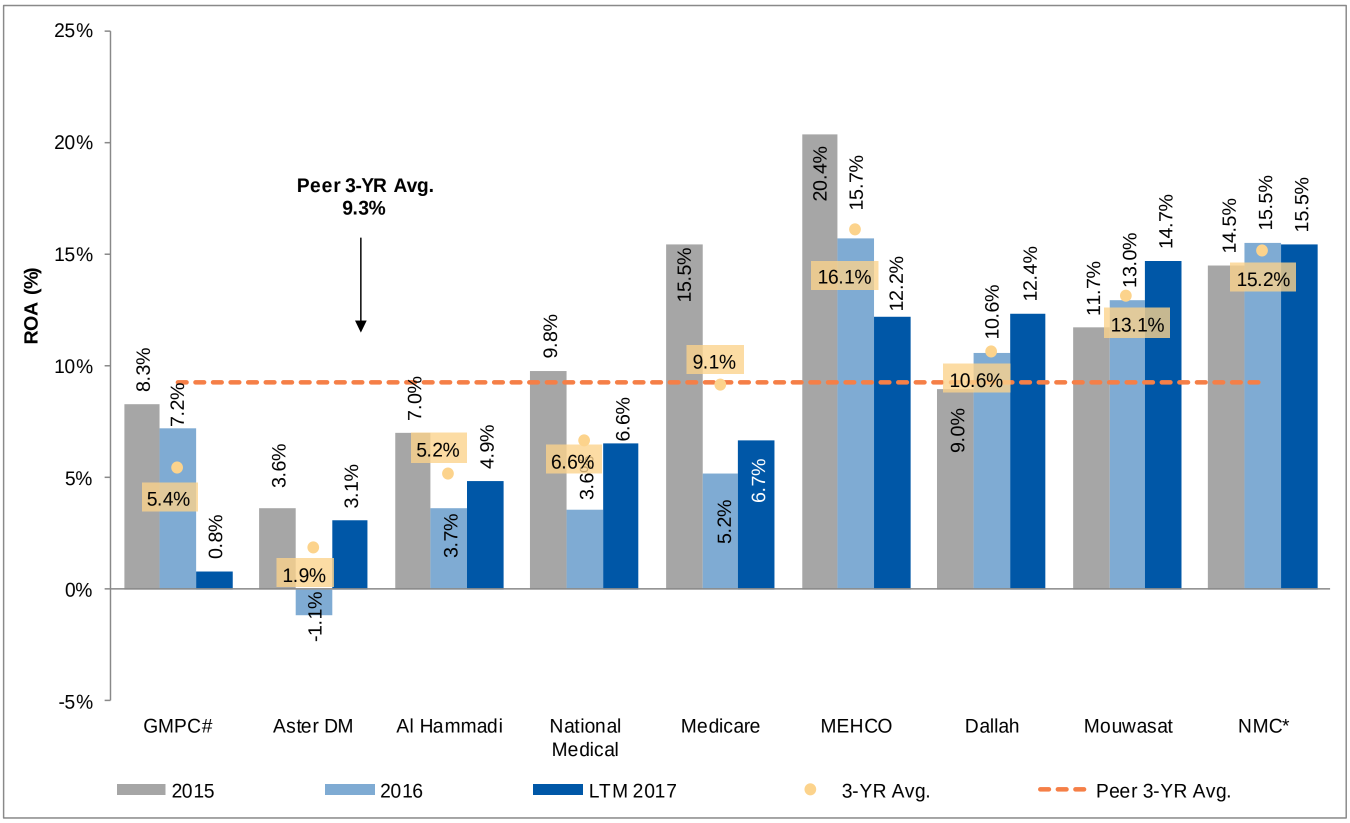
The three-year average ROA of the selected healthcare companies stood at 9.3% (see Exhibit 40). The industry-wide average return has fallen since 2015 from 11.1% to 8.5% during LTM 2017. The fall is mainly due to the drop in normalized returns of GMPC during 2017. The company's actual ROA including an exceptional gain from the sale of the Sharjah-based hospital stood at 73.3%. However, for comparison purpose, we have used the normalized ROA of the company. Excluding GMPC's return, the peer average ROA stood at 9.5%, an improvement of 1.2 percentage points over the last year.

NMC, Mouwasat, Dallah and MEHCO reported strong average returns amongst the peers

NMC, Mouwasat, Dallah and MEHCO reported strong average returns amongst the peers. NMC posted the highest return at 15.5% during 2017 led by its inorganic business expansion. Mouwasat gave an ROA of 14.7% during LTM 2017 on the back of revenue growth and EBITDA margin, contributed in particular by its hospital in Riyadh and expansion into sub-specialty clinics. The profitability of MEHCO dropped from 20.4% in 2015 to 12.2% during LTM 2017 due to increase in operating costs, provisioning for rejections and bad/doubtful debts and interest expense.

Aster DM Healthcare reported a turnaround in 2017 mainly led by an exceptional gain of US$ 88.9 million from the extinguishment of financial liabilities and write back of contingent considerations, excluding which it reported a loss.

Exhibit 40: ROA of the Selected Healthcare Companies in the GCC



Source: Thomson Reuters Eikon, GMPC

*# ROA is normalized excluding exceptional gains; * ROA of the healthcare segment*

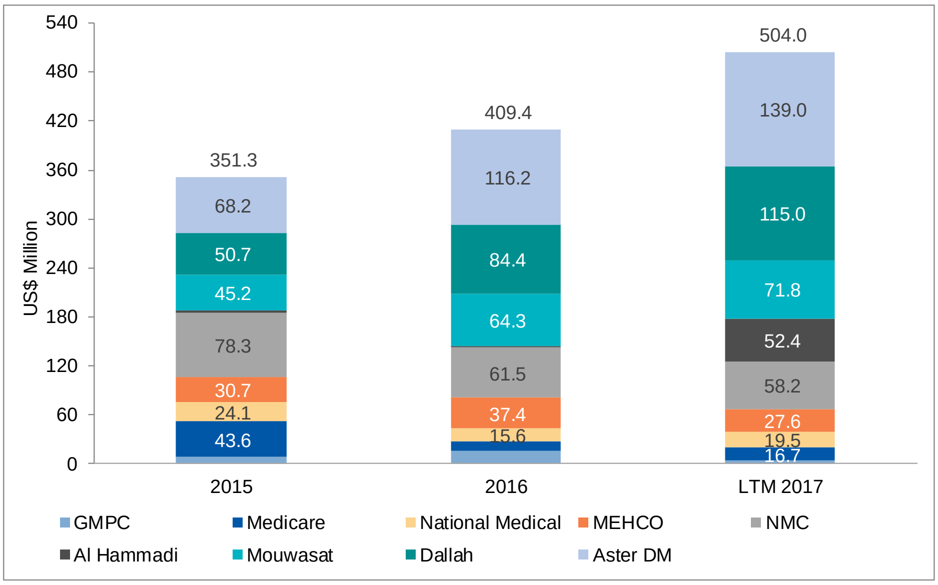
Capital Expenditure

The overall capital expenditure of the selected healthcare companies increased by 23.1% y-o-y to US$ 504.0 million during LTM 2017

The overall capital expenditure of the selected healthcare companies increased by 23.1% y-o-y to US$ 504.0 million during LTM 2017 (see Exhibit 41). Aster DM, Al Hammadi and Dallah were the major contributors to the increase, with respective capex of US$ 139.0 million, US$ 52.4 million and US$ 115.0 million. Aster DM Healthcare has a strong project pipeline, including 4 new hospitals and one brownfield project in the GCC and 2 new hospitals and two expansions in India, which on a consolidated basis will increase the company's capacity by 1,700 beds by 2021. Al Hammadi's expenditure was channeled towards the building of a new 650-bed hospital at Nuzha in Riyadh. Dallah has been making large capital outlays to fund its expansion activities. The company is expanding capacity at its Riyadh hospital (+150 beds), building Namar Hospital in Riyadh (+150 beds) and developing one unnamed project in Jeddah. Completion of such projects will augment revenues of these companies.

On the other hand, capital expenditure of GMPC, NMC and MEHCO dropped during LTM 2017. NMC focused more on acquisitions, while the asset sale by GMPC trimmed down its capital requirement.

Exhibit 41: Total Capital Expenditure of the Healthcare Companies in the GCC



Source: Thomson Reuters Eikon, GMPC, NMC

Note: The above figures include NMC Health Plc's capital expenditure under its healthcare segment only

8.2 Valuation Analysis

In this section, we have analyzed the valuation ratios of the selected healthcare companies in the GCC. We have used the P/E, EV/EBITDA, P/B and EV/Sales multiples to gauge the attractiveness of the stocks.

The GCC-based healthcare companies are currently trading at an average P/E multiple of 27.3x and EV/EBITDA multiple of 21.1x

The GCC-based healthcare companies are currently trading at an average P/E multiple of 27.3x and EV/EBITDA multiple of 21.1x (see Exhibits 42 and 43). NMC continued to command the highest valuation multiples amongst its peers, on the back of its accretive acquisitions. Al Hammadi also posted multiples above the peer average. The peer average P/E multiple was to some extent diluted by the low valuation of GMPC, excluding which the multiple stood at 31.1x.

Most of the companies are trading at a premium to the average P/E multiples in the healthcare markets of the US and Europe, but below that in the Asian continent. In terms of EV/EBITDA multiple, the GCC healthcare providers are mostly available at a premium to the average in the US, Europe and Asia. This is a testimony to growing investor interest in the GCC healthcare companies to capitalize on the industry's underlying growth potential. Although the valuations appear high, there is further room for growth in view of the increasing population and need for specialized care centers, among others.

Exhibit 42: LTM P/E Relative Valuation

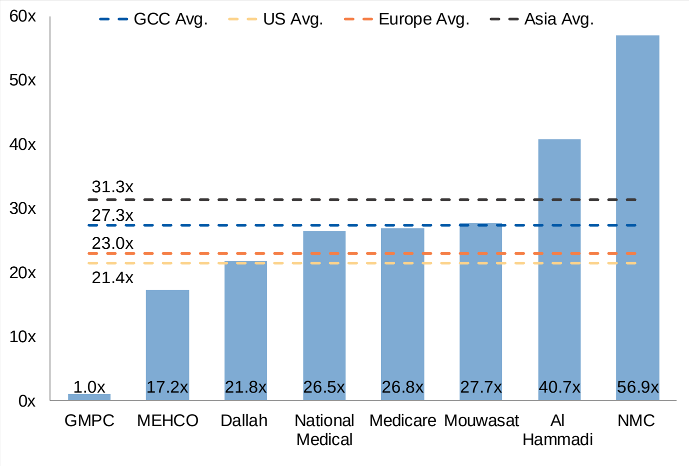
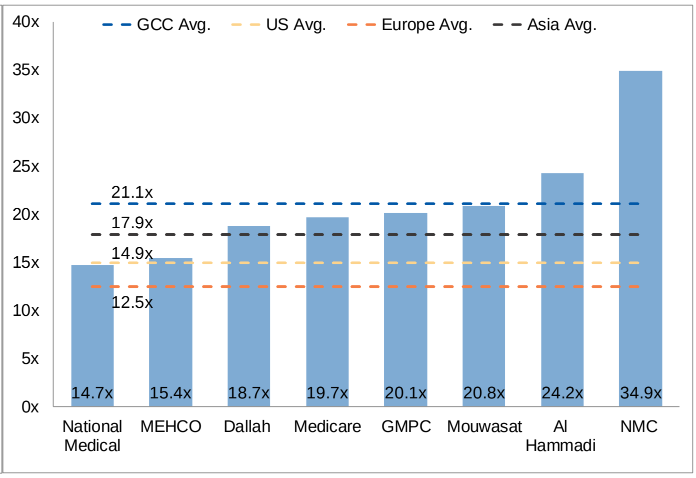


Exhibit 43: LTM EV/EBITDA Relative Valuation



Source: Thomson Reuters Eikon, Bloomberg (as on March 7, 2018)

Notes: The average multiples of the healthcare companies in the US, Europe and Asia are as per MSCI Healthcare Index of the respective regions

The P/B and EV/LTM Sales multiples of the GCC healthcare companies averaged at 4.0x and 5.0x, respectively

The P/B and EV/LTM Sales multiples of the GCC healthcare companies averaged at 4.0x and 5.0x, respectively (see Exhibits 44 and 45). Measured by P/B ratio, the domestic players are valued a little higher to the average of companies in Europe and Asia and on par with those in the US. Whereas, the domestic average EV/LTM Sales multiple at 5.0x is significantly higher than that in the other regions, highlighting the investor optimism on the revenue generation potential of the GCC healthcare companies.

Exhibit 44: P/B Relative Valuation

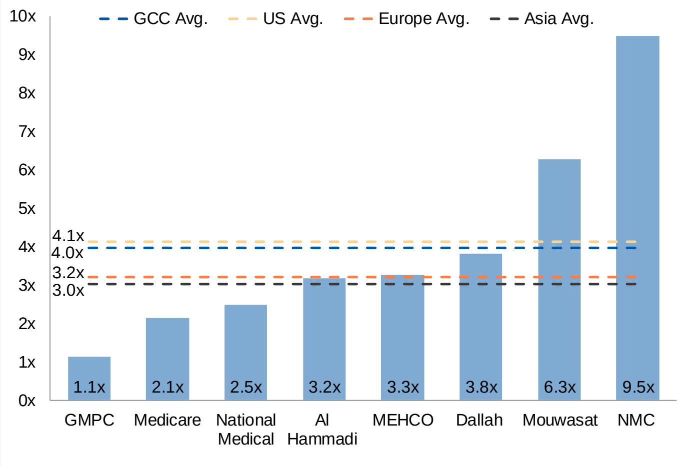
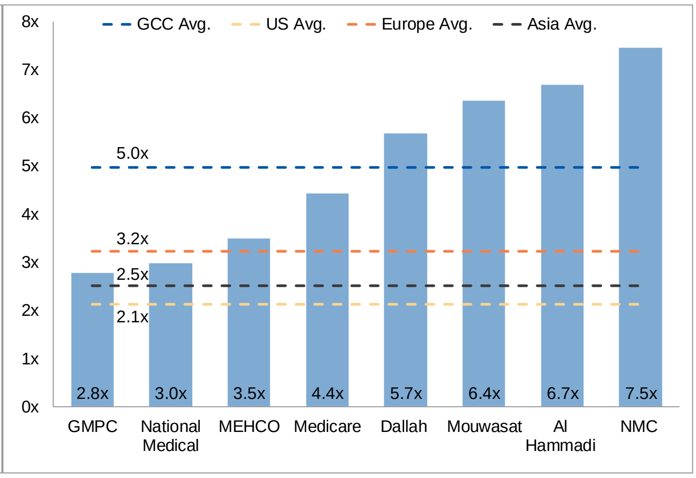


Exhibit 45: EV/LTM Sales Relative Valuation



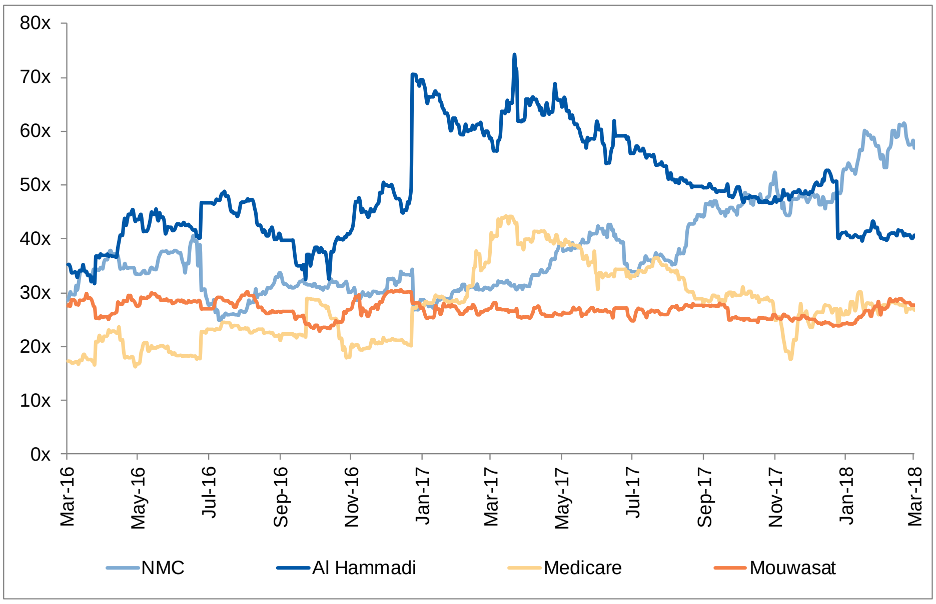
Source: Thomson Reuters Eikon, Bloomberg (as on March 7, 2018)

Notes: The average multiples of the healthcare companies in the US, Europe and Asia are as per MSCI Healthcare Index of the respective regions

The median P/E multiple of the healthcare companies that are trading above the industry average has increased from 28.6x in 2016 to 34.4x in 2017

The median P/E multiple of the healthcare companies that are trading above or close to the industry average has increased from 28.6x in 2016 to 34.4x in 2017. In the last two years to March 7, 2018, the P/E multiple of NMC and Medicare has grown by about 100% and 54.6%, respectively. The rapid growth in NMC is attributed to its strategic acquisition spree, which has bolstered the company's financial and business strength. The company's share price zoomed up by about 270% during the period under review. On the other hand, the multiple of Medicare has been declining post a high during the first quarter of 2017 (see Exhibit 46). Similarly, the P/E multiple of Al Hammadi is also falling. In mid-2017, the company was in news for a potential merger with National Medical Care. If the deal goes through, the merged entity would have an estimated market value of US$ 1.9 billion.

Exhibit 46: P/E Relative Valuation Trend of the Healthcare Companies



Source: Thomson Reuters Eikon (as on March 7, 2018)

Country Profiles

Saudi Arabia

Key Growth Drivers

- **Demography:** Healthcare needs will continue to rise, as the country is likely to reach a population size of 35.7 million by 2022, of which ~18% will be aged over 50 years.
- **Pilgrims:** The country issued 6.8 million visas for Hajj and Umrah pilgrims by June 2017 and plans to welcome 30 million pilgrims by 2030. There are 25 hospitals and 158 health clinics across the holy cities. Further, the country is building a US$ 400 million King Abdulaziz Specialist Hospital in Madinah to cater to the medical needs of the pilgrims.
- **Incidence of NCDs:** The country ranks 13th in the world for the age-adjusted prevalence of diabetes and 14th for obesity. This has become the cause of other major diseases, giving rise to spending on routine medical visits, related diagnostics, drugs and inpatient care. Specialized hospitals, polyclinics and labs are set to grow in the country to meet the demand.
- **Privatization:** The Ministry of Health plans to privatize 295 hospitals and 2,259 healthcare centers by 2030 and increase the share of private sector in healthcare spending to 35% by 2020. Such plans are likely to attract private investors and enhance the quality and efficiency of healthcare services.
- **Health Insurance:** The government implemented the last phase of unified health insurance in 2017 to cover nationals, and their dependents, working in private sector. Expansion of the coverage would increase utilization of healthcare services.

Recent Industry Developments

- In February 2018, Diagnos Inc. entered into a three-year agreement with Saudi Arabia-based Kanhoor Medical Co. to screen diabetic patients in the country. This is an extension to the existing diabetes screening projects conducted in the Kingdom with an objective to cover every diabetic person.
- In February 2018, Al Hammadi Co. for Dev. and Investment entered into a share purchase agreement to fully acquire Medical Support Services Co. for a sum of US$ 13 million.
- In November 2017, Dallah Healthcare and AWJ Investment Co. (AWJ) formed a joint venture to build and operate a hospital. Dallah Healthcare, with a 56% stake, will invest SAR 350 million (US$ 93.3 million*) for the construction of the hospital, while the land will be provided by AWJ.

* Converted at the exchange rate during November 14, 2017

Source: Thomson Reuters Eikon, UNDP, IMF, IDF, World Atlas

Macro-economic Indicators

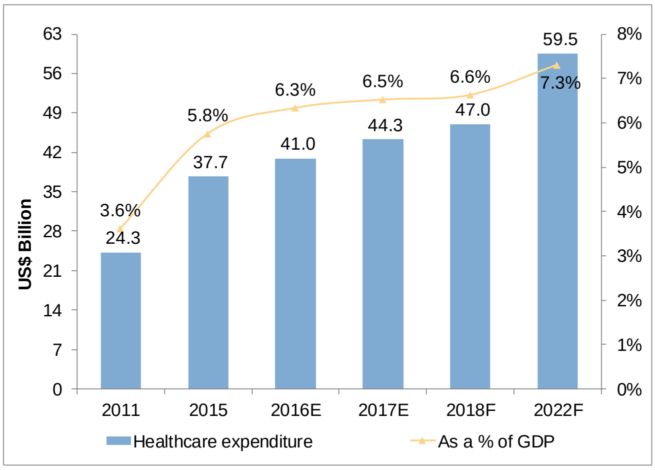
Indicators	Unit	2017E	2018F	2022F
GDP growth at current prices	%	5.0	4.4	2.6
GDP per capita, at current prices	US$	20,957.2	21,453.1	22,763.8
Population	mn	32.4	33.0	35.7
Medical Inflation	%	6.2	4.5	4.5
Hospital Beds	no.	72,259	73,705	79,780
Inpatient Admissions	'000	3,520.3	3,590.8	3,886.7
Outpatient Visits	mn	142.5	145.3	157.3

Source: IMF – October 2017, WHO, MOH, WTW, Alpen Capital
Note: E – Estimate; F – Forecast

Key Players

Company	Type
Al Hammadi Co. for Development and Investment	Gen. Medical & Surgical Hosp.
Dallah Healthcare Co.	Gen. Medical & Surgical Hosp.
Dr. Soliman Fakeeh Hospital	Gen. Medical & Surgical Hosp.
Dr. Sulaiman Al Habib Medical Group	Gen. Medical & Surgical Hosp.
Elaj Medical Services Co. Ltd.	Clinics
Magrabi Hospitals & Centers	Specialized Hospitals
National Medical Care Co.	Gen. Medical & Surgical Hosp.
Middle East Healthcare Co.	Gen. Medical & Surgical Hosp.
Olaya Medical Centre	Clinics

Current Healthcare Expenditure in Saudi Arabia



Source: WHO, Alpen Capital

UAE

Key Growth Drivers

- **Demography & NCDs:** IMF has projected population to grow at a CAGR of 3.0% between 2017 and 2022. Growing population, of which ~15% would be above 50 years of age, is fueling demand for healthcare services. Moreover, adoption of sedentary lifestyles has given rise to diseases like diabetes, hypertension and cardiovascular problems. Lengthy treatment of such diseases is boosting the healthcare sector revenue.
- **Mandatory Health Insurance:** Following the success of compulsory health insurance in Abu Dhabi, Dubai completed the phased-implementation of medical insurance in 2017. The other Emirates may also follow the practice, thus increasing the utilization of medical facilities in the country.
- **Medical Tourism:** The UAE is one of the fastest growing medical tourism hubs globally. Dubai hosted 326,649 medical tourists in 2016, an increase of 9.5% y-o-y, and aims to receive 500,000 tourists by 2020 by relaxing visa procedures and holding promotions. Abu Dhabi is establishing a medical tourism network to attract and serve patients from Russia, China and India. The growth of medical tourism bodes well for the expansion of healthcare sector.

Recent Industry Developments

- In January 2018, VPS Healthcare signed a multi-year agreement with Royal Philips to install Philips Tasy Electronic Medical Records across its hospitals.
- On February 26, 2018, the equity shares of Aster DM Healthcare began trading on the Indian stock exchange. The company came out with a US$ 153.3 million initial public offer to reduce its debt and fund business development.
- In January 2018, Zulekha Healthcare announced its plans to build a 150-bed hospital in Sharjah and add 60 inpatient beds, operation theaters, emergency services and labor rooms to its existing hospital in Dubai.
- In April 2017, a senior official of DHA divulged plans to implement a Refined Diagnostic Related Group payment model in Dubai from 2018. The model is a new billing system to ensure easy and transparent payments at healthcare facilities. It will also stipulate a fixed fee for every procedure across hospitals and medical centers.

Macro-economic Indicators

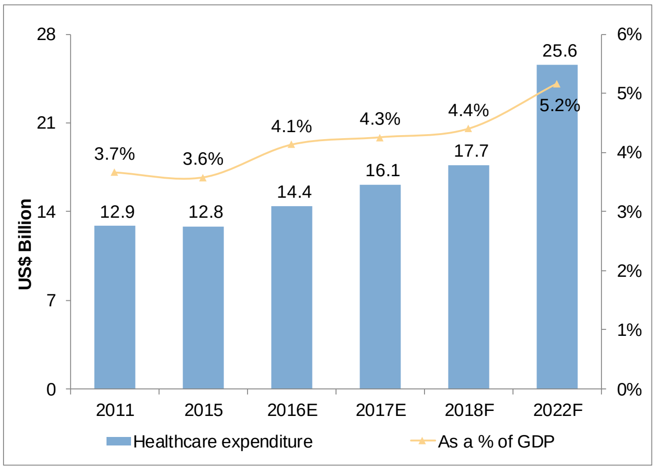
Indicators	Unit	2017E	2018F	2022F
GDP growth at current prices	%	8.6	5.9	5.2
GDP per capita, at current prices	US$	37,346.1	38,436.1	42,034.9
Population	mn	10.1	10.4	11.8
Medical Inflation	%	9.9	7.6	7.6
Hospital Beds	no.	12,900	13,270	14,969
Inpatient Admissions	'000	660.3	679.2	766.2
Outpatient Visits	mn	36.9	38.0	42.8

Source: IMF – October 2017, WHO, WTW, MOH, HAAD, DSC, Alpen Capital
Note: E – Estimate; F – Forecast

Key Players

Company	Type
American Hospital Dubai	Gen. Medical & Surgical Hosp.
Aster DM Healthcare	Gen. Medical & Surgical Hosp.
AVIVO Group	Gen. Medical & Surgical Hosp.
Gulf Medical Projects Co.	Gen. Medical & Surgical Hosp.
KBBO Group (NMC Health Plc and Emirates Healthcare)	Gen. Medical & Surgical Hosp.
Mediclinic Middle East	Gen. Medical & Surgical Hosp.
Prime HealthCare Group	Gen. Medical & Surgical Hosp.
VPS Healthcare	Gen. Medical & Surgical Hosp.
Zulekha Healthcare Group	Gen. Medical & Surgical Hosp.

Current Healthcare Expenditure in the UAE



Source: WHO, Alpen Capital
Note: E – Estimate; F – Forecast

Source: Thomson Reuters Eikon, UAE Insurance Authority, BNC Network

Qatar

Key Growth Drivers

- **Demography:** The country's population has grown at a fast-annualized average rate of 8.3% in the last five years to 2017, thus, increasing the need for healthcare services. Although the population growth is expected to slow down in the coming years, the increase in size of population and ageing people will continue to augur demand for care.
- **Prevalence of NCDs:** A high standard of living and increasing number of international food retailers have led to high intake of sugary and calorie-rich fast and packaged foods. A resultant rise in incidence of lifestyle ailments has increased the per capita spending on healthcare. Long duration and high cost of treating such diseases are likely to augment healthcare sector spending.
- **Regulations**: The country is redrafting the PPP framework to make it more effective and follow international best practices. Once implemented, the law will attract foreign investments in the country and support development of sectors, including healthcare. Ashghal, the Public Works Authority, may explore this route to develop healthcare projects. The authority plans to develop 60-70 healthcare centers over the next 10 years.

Recent Industry Developments

- In November 2017, Astro AD Cayman Ltd., a subsidiary of Qatar First Bank, sold its stake in UAE-based Amanat Holdings – a healthcare and education investment company – for US$ 40.8 million. This event occurred in the backdrop of unwinding business and economic ties between the countries.
- In February 2017, the Ministry of Public Health of Qatar announced that more than 80% of the works under the National Health Strategy 2011-2016 has been completed. The projects were aimed at improving health system levels, encouraging healthy lifestyles, addressing the shortage of healthcare professionals and developing preventive care mechanisms. The Ministry opened six new healthcare centers during the period and plans to open 10 more between 2018 and 2021.

Macro-economic Indicators

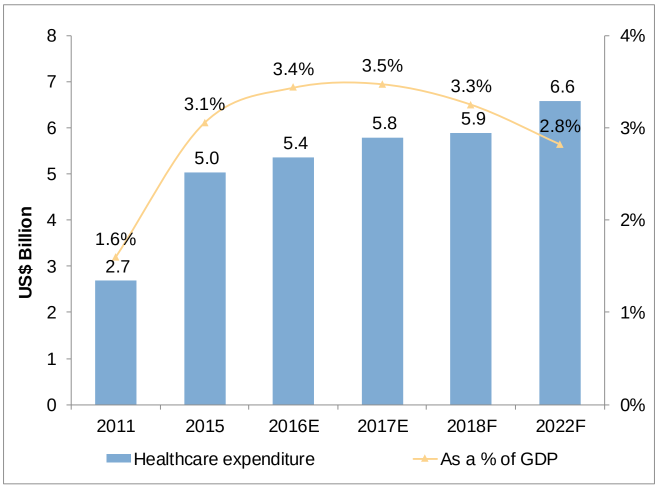
Indicators	Unit	2017E	2018F	2022F
GDP growth at current prices	%	6.8	8.8	6.9
GDP per capita, at current prices	US$	60,811.9	65,158.6	82,666.0
Population	mn	2.7	2.8	2.8
Medical Inflation	%	4.6	0.7	2.5
Hospital Beds	no.	2,740	2,781	2,823
Inpatient Admissions	'000	115.3	117.0	118.8
Outpatient Visits	mn	14.7	14.9	15.1

Source: IMF – October 2017, WHO, MDPS, WTW, Alpen Capital
Note: E – Estimate; F – Forecast

Key Players

Company	Type
Al Abeer Medical Center Qatar	Clinics
Al Emadi Hospital	Gen. Medical & Surgical Hosp.
Feto Maternal Center	Clinics
Hamad Medical Corporation	Gen. Medical & Surgical Hosp.
Medicare Group Q.S.C.	Gen. Medical & Surgical Hosp.
Sidra Medical and Research Center	Gen. Medical & Surgical Hosp.

Current Healthcare Expenditure in Qatar



Source: WHO, Alpen Capital
Note: E – Estimate; F – Forecast

Source: Thomson Reuters Eikon, Qatar Re, Qatar Central Bank, Media Reports

Kuwait

Key Growth Drivers

- **Demography:** Population in Kuwait is expected to grow at a CAGR of 2.8% between 2017 and 2022. Nearly 20% of the projected population will be aged over 50 years. Growing number of people is likely to support demand for healthcare services and the ageing population will spur the need for long-term care centers.
- **Prevalence of NCDs:** Kuwait ranks 11th in the world for prevalence of obesity, giving rise to chances of getting cardiovascular diseases and diabetes. Given such health profile, the patients have to undergo treatment for a prolonged period and incur high costs. This has translated into a need for more specialized clinics and hospitals in the country.
- **Regulations:** The government has proposed the introduction of mandatory health insurance for visitors, in a move to reduce its financial burden. The government has also established Kuwait Health Assurance Co. (KHAC), a private health management company, to refinance healthcare costs of expatriates and Kuwait Authority for Partnership Projects for encouraging PPP projects in the sector. Currently, KHAC is building a US$ 765 million hospital encompassing 250 beds and 10 primary healthcare clinics. Such developments are likely to support the expansion of the healthcare sector.

Recent Industry Developments

- Effective October 1, 2017, the Health Ministry in Kuwait increased the fees for expatriates and visitors for using healthcare services at public hospitals and clinics. Some of the revisions for expatriates with medical insurance include fee for treatment at a polyclinic doubled to KWD 2, fee for outpatient clinics at public hospitals increased from KWD 2 to KWD 10 and for a stay in public wards will be charged KWD 10 per day compared to free services earlier.
- In December 2017, Nafais Holding Co. raised its stake in Al Mowasat Healthcare Co. from 49.4% to 57.4% by purchasing 8.2 million shares for a total consideration of KWD 3.1 million (US$ 10.2 million*).

Macro-economic Indicators

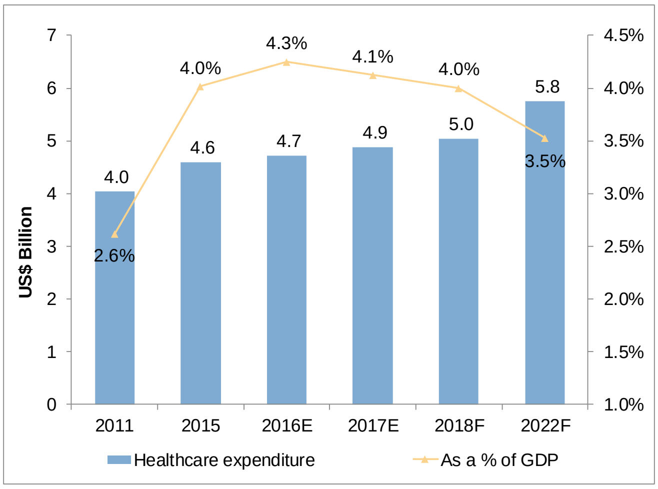
Indicators	Unit	2017E	2018F	2022F
GDP growth at current prices	%	6.7	6.4	6.8
GDP per capita, at current prices	US$	27,236.7	28,199.2	32,734.0
Population	mn	4.3	4.5	5.0
Medical Inflation	%	1.4	1.3	1.3
Hospital Beds	no.	8,547	8,786	9,807
Inpatient Admissions	'000	325.1	334.1	373.0
Outpatient Visits	mn	19.4	19.9	22.2

Source: IMF – October 2017, WHO, WTW, CSB, Alpen Capital
Note: E – Estimate; F – Forecast

Key Players

Company	Type
Al-Mowasat Healthcare Co.	Gen. Medical & Surgical Hosp.
Al Maidan Clinic for Oral Health Services	Clinics
Al Salam International Hospital	Gen. Medical & Surgical Hosp.
Dar Al Shifa Hospital	Gen. Medical & Surgical Hosp.
Fawzia Sultan Rehabilitation Institute	Specialized Hospitals
Kuwait Medical Services Co.	Clinics

Current Healthcare Expenditure in Kuwait



Source: WHO, Alpen Capital
Note: E – Estimate; F – Forecast

* Converted at exchange rate on December 27, 2017
Source: Thomson Reuters Eikon

Oman

Key Growth Drivers

- **Demography & NCDs:** Population in Oman is anticipated to grow at the region's fastest CAGR of 3.2% between 2017 and 2022. Moreover, the age-adjusted prevalence of diabetes is likely to increase from 12.6% in 2017 to 15.4% in 2040. Given such factors, healthcare expenditure in the country is set to rise.
- **Mandatory Health Insurance:** Starting January 2018, Oman has started the phase-wise implementation of mandatory health insurance for the private sector. The resulting increase in expenditure on healthcare services would enable more private players to set up clinics in the country.
- **Upcoming Projects:** In view of the rising demand for healthcare services, the country is witnessing development of several healthcare facilities. Construction of US$ 1.5 billion Sultan Qaboos Medical City Complex and US$ 1 billion International Medical City are the largest projects. Others include Muscat General Hospital, Duqm Multi-Specialty Hospital, Masirah Hospital and three more hospitals and 13 medical centers across the Sultanate. Construction of such facilities will augment the scale of healthcare services in the country.

Recent Industry Developments

- In January 2018, the project manager of Elixir United Investment LLC disclosed the company's partnership with an Italian investment fund to build a 300-bed specialty hospital in Muscat. To be built at a cost of OMR 100 million (US$ 259.4 million*), the project is expected to complete in 2020 and Elixir United Investment LLC will hold a 30% stake in the project
- In November 2017, Carillion Alawi, a 50:50 joint venture between Carillion and Zawawi family, bagged two hospital design and construction contracts worth £ 360 million (US$ 473.8 million#) in Oman. One of the contracts worth £ 240 million (US$ 315.9 million) was for the construction of New Sultan Qaboos Hospital in Salalah by the Oman Ministry of Health. The second was for the construction of a new hospital in Khasab.

Macro-economic Indicators

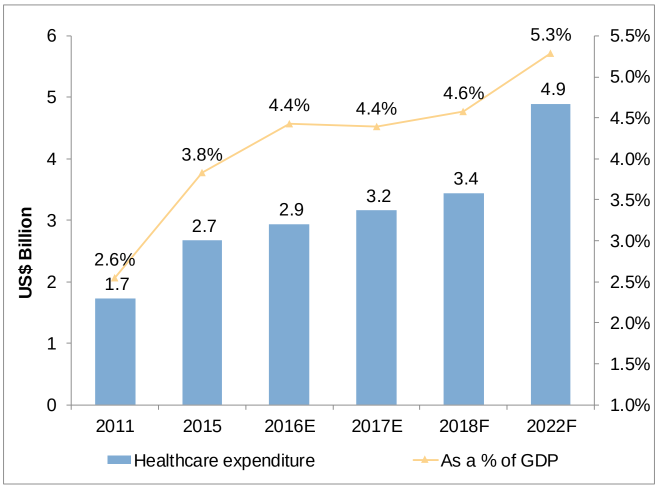
Indicators	Unit	2017E	2018F	2022F
GDP growth at current prices	%	8.5	4.6	5.0
GDP per capita, at current prices	US$	17,406.0	17,664.2	19,149.5
Population	mn	4.1	4.3	4.8
Medical Inflation	%	5.1	6.6	6.6
Hospital Beds	no.	6,793	7,003	7,937
Inpatient Admissions	'000	475.6	490.3	555.7
Outpatient Visits	mn	22.2	22.9	26.0

Source: IMF – October 2017, WHO, WTW, MOH, Alpen Capital
Note: E – Estimate; F – Forecast

Key Players

Company	Type
Al Hayat International Hospital	Gen. Medical & Surgical Hosp.
Apollo Medical Centre	Gen. Medical & Surgical Hosp.
Badr Al Samaa Group of Hospitals and Polyclinics	Gen. Medical & Surgical Hosp.
Madinat Qaboos Medical Centre	Clinics
Muscat Private Hospital	Gen. Medical & Surgical Hosp.
Starcare Hospital	Specialized Hospitals

Current Healthcare Expenditure in Oman



Source: WHO, Alpen Capital
Note: E – Estimate; F – Forecast

* Converted at exchange rate of 2.594; # Converted at exchange rate of 1.316
Source: IMF, IDF, Thomson Reuters Eikon, Times of Oman

Bahrain

Key Growth Drivers

- **Demography:** The population in Bahrain is expected to grow at a CAGR of 2.0% between 2017 and 2022. Rising population, more than 13% of which are aged 50 years and above, is creating demand for healthcare services.
- **Prevalence of NCDs:** Like its other GCC counterparts, the country has a high incidence of NCDs. Prolonged treatment of such diseases is likely to increase healthcare expenditure and need for highly specialized medical centers.
- **Mandatory Health Insurance:** The country is considering a proposal to implement compulsory national health insurance scheme. If implemented, the move will encourage expatriates to use private as well as public healthcare facilities in the country and curb outbound medical tourism.
- **Liberalization:** Bahrain passed a new law in July 2016 to allow 100% foreign direct investments across various sectors, including healthcare. This is likely to stimulate development of the sector, as new foreign players seek opportunities to capitalize on the country's rising demand for care.

Recent Industry Developments

- In February 2018, the government announced plans to develop a new integrated medical city complex to the north of Muharraq governorate. The complex will include a maternity hospital, a sclerosis therapy center and an elderly care center. It will be part of the government's Saada project to develop the Muharraq waterfront.
- In December 2016, the construction of US$ 1 billion King Abdullah Medical City was reported to start in June 2017. To be constructed in phases, the first phase will include a 288-bed hospital, an outpatient clinic and a building with support services. The first phase is expected to complete by end-2019.
- In August 2016, Mumtalakat Holding, a sovereign wealth fund, acquired an undisclosed stake in KOS Group, a European healthcare group providing long-term care and rehabilitation services. The target has 76 facilities comprising 7,200 beds in areas of nursing homes, rehabilitation, hospitals and mental health.

Source: Thomson Reuters Eikon, Arabian Business

Macro-economic Indicators

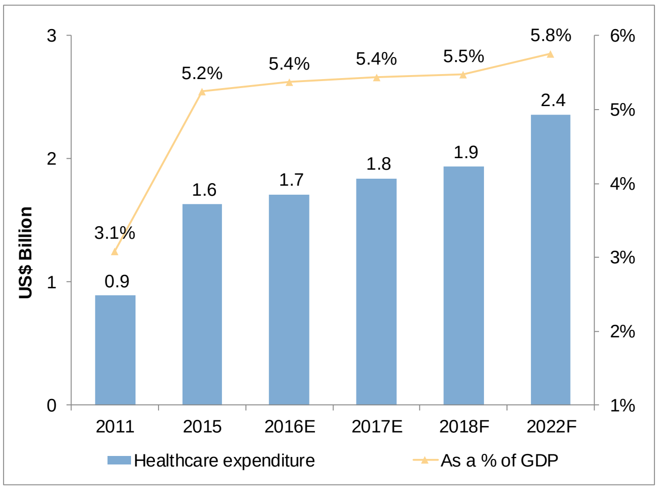
Indicators	Unit	2017E	2018F	2022F
GDP growth at current prices	%	6.3	4.4	3.8
GDP per capita, at current prices	US$	25,169.6	25,764.4	27,565.0
Population	mn	1.3	1.4	1.5
Medical Inflation	%	5.7	3.2	3.2
Hospital Beds	no.	2,698	2,752	2,979
Inpatient Admissions	'000	135.1	137.8	149.2
Outpatient Visits	mn	7.7	7.8	8.5

Source: IMF – October 2017, Swiss Re, Alpen Capital
Note: E – Estimate; F – Forecast

Key Players

Company	Type
American Mission Hospital	Specialized Hospitals
Bahrain Specialist Hospital	Gen. Medical & Surgical Hosp.
Ibn Al Nafees Hospital	Gen. Medical & Surgical Hosp.
Middle East Hospital	Gen. Medical & Surgical Hosp.
KIMS Group	Gen. Medical & Surgical Hosp.
Seef Dental Hospital	Clinics

Current Healthcare Expenditure in Bahrain



Source: WHO, Alpen Capital
Note: E – Estimate; F – Forecast

Company Profiles

Al Hayat International Hospital (Privately Owned) Oman

Company Description

Started in 1995, Al Hayat International Hospital is a multi-specialty hospital in Oman and is part of the Al Hayat Group (AHG). AHG also operates four polyclinics in the Sultanate under the brand – Al Hayat Polyclinic. Founded by Dr. K. P. Raman – a cardiologist trained in the UK, the 50-bed hospital provides various healthcare services across medical specializations.

Business Segments/Services Portfolio

- **Cardiology**: This department offers services in treating and preventing diseases of the heart and blood vessels and uncontrolled hypertension. They have a state-of-the-art intensive coronary care unit, inpatient rooms and advanced equipment. The treatments offered under this department include angioplasty and stenting, pacemaker implantation, Holter monitor, carotid doppler, invasive coronary angiogram, CT coronary angiogram and tilt table testing, among others.
- **Diabetology**: This department provides treatment and monitoring of diabetes. Treatments offered include diabetic heart and kidney checkup, diabetic foot study, real-time continuous glucose monitoring, regular blood tests and diabetic neuropathy screening.
- **Other Specializations**: Apart from the above departments, the hospital offers treatment and diagnostic in the areas of cosmetic surgery, anesthesiology, dermatology, dental, ENT, endocrinology, emergency medicine, gastroenterology, gynecology, genetics, radiology, general and laparoscopic, neurology, oncology, nephrology, neurology, internal medicine, ophthalmology, orthopedics, pediatrics, physiotherapy, sleep medicine, pathology and urology.

Recent Developments/Future Plans

- In September 2017, AGH opened its fourth medical center at Al Ghubra in Muscat. The new polyclinic is spread over an area of 600 square meters (sq m) and provides primary healthcare services in the areas of dermatology, ENT, orthopedics, gynecology, pediatrics and dentistry. The clinic will also act as a specialized satellite center to the hospital.

Source: Company website, Times of Oman

Al-Mowasat Healthcare Co. K.S.C.P. (Privately owned) — Kuwait

Company Description

Established in 1998, Al-Mowasat Healthcare Co. K.S.C.P. (MHC) owns, develops and manages hospitals in Kuwait. The company operates New Mowasat Hospital, which is spread over an area of 27,000 sq m and has a capacity of over 100 beds. In May 2009, the company started New Mowasat Clinics, a polyclinic, to provide care in various medical areas under one roof. MHC is a subsidiary of Nafais Holding Co., which is engaged in education and investment businesses.

Business Segments/Services Portfolio

- **Healthcare Services:** This is the principal business segment accounting for around 97% of MHC's topline in H1 2017. The segment derives revenue from provision of medical care, sale of pharmacy products and other related services provided through its hospital and polyclinic. The hospital offers various outpatient and inpatient services in areas of anesthesiology, cardiology, general surgery, endocrinology, nephrology, endoscopy, ophthalmology, neonatology, reproductive medicine, rheumatology and urology, among others. The hospital is equipped with patient rooms, operation theater, pharmacy, endoscopy room, emergency care, rehabilitation center, radiology and laboratory. New Mowasat Clinics encompasses nine medical departments of general medicine, gastroenterology & liver, obstetrics & gynecology, pediatrics & neonatology, dermatology & cosmetology, dentistry, physical medicine, radiology and ENT (ear, nose, throat).
- **Investment and Others:** This segment is mainly engaged in real estate activities and other investments through a subsidiary.

Recent Developments/Future Plans

- Effective October 1, 2017, MHC was voluntarily delisted from the Kuwait Stock Exchange.
- During the half year ended June 2017, the company reported an operating revenue of KWD 14.9 million (US$ 49.0 million*), translating into a 13.0% y-o-y growth. Further, a gain from the sale of available for sale investments led to a 49.5% y-o-y growth in net profit to KWD 3.5 million (US$ 11.5 million) during the period.
- Based on the company's FY 2016 annual report, MHC has exited from its insignificant subsidiaries in Kuwait and Lebanon.

* Converted at the exchange rate on June 30, 2017

Source: Company website, Kuwait Boursa, Thomson Reuters Eikon

American Hospital Dubai (Privately Owned) UAE

Company Description

American Hospital Dubai (AHD) is an acute care private hospital with services across medical specializations. It was the first hospital in the Middle East to be accredited by Joint Commission International in May 2000. In addition to operating a 254-bed hospital in Dubai, AHD runs a clinic in Dubai Media City offering services in areas of primary care, pediatric, obstetrics and gynecology, pediatric endocrinology, orthopedics, dermatology, cardiology, physiotherapy, plastic surgery and urology. AHD is also a member of Mayo Clinic Care, a non-profit group providing comprehensive medical care services.

Business Segments/Services Portfolio

- **Medical Services**: The hospital provides various medical services in areas of audiology, cancer, colorectal surgery, dermatology, endocrinology, gastroenterology, general surgery, heart and vascular center, kidney dialysis, neurology, nephrology, orthopedics, palliative care, pediatrics, radiation oncology, urology and sports medicine.
- **Health Packages**: The hospital provides various health packages for plastic surgery, prostate screening, maternity, cardiology, dermatology, bariatric/weight loss, knee replacement and others.
- **Life Supporting Training Center**: The center offers training courses in advanced cardiovascular life support, basic life support, neonatal resuscitation program, pediatric advanced life support, airway management, pharmacology and heart saver programs. It is an international center of American Heart Association.

Recent Developments/Future Plans

- In November 2017, AHD's laboratory received the accreditation by the College of American Pathologists for the ninth consecutive time.
- In September 2017, AHD acquired Crisalix Virtual Aesthetics 3D imaging suite, an advanced cosmetic surgery simulation software that helps patients to see the before and after results using a virtual reality glass.

Source: Company website

Aster DM Healthcare Ltd. (Publicly Listed) UAE

Company Description

Incorporated in 1987 by India-based Dr. Azad Moopen, Aster DM Healthcare (ADMH) provides a range of healthcare services through its network of 19 hospitals, 98 clinics and 206 retail pharmacies across 7 countries, as of September 30, 2017. These facilities are operated under the brands Aster, Access, MIMS, Medcare and Medcity in the GCC, India and Philippines.

Business Segments/Services Portfolio

- **GCC States:** ADMH operates hospitals, clinics and pharmacies in Oman, the UAE, Qatar, Bahrain and Saudi Arabia. It runs 9 hospitals in the GCC (5 in the UAE, 2 in Oman, one each in Qatar and Saudi Arabia) with a total capacity of 867 beds. Additionally, the company operates a network of 89 clinics and over 200 retail pharmacies, largely in the UAE. Overall, the GCC operations accounted for 81.4% of ADMH's revenue during the half year ended September 2017.
- **India:** ADMH operates 10 multi-specialty hospitals in India with a combined capacity of 3,887 beds in the cities of Calicut, Kotakkal, Kochi, Wayanad, Guntur, Kolhapur, Vijayawada, Bengaluru and Hyderabad. Additionally, it runs 6 clinics, few pharmacies and DM Wayanad Institute of Medical Sciences (WIMS) College. The India business accounted for ~19% of the revenue during H1 2018.
- **Far East:** ADMH operates one clinic in the Philippines and plans to build five ambulatory clinics in the country with an investment of US$ 5.3 million.

Recent Developments/Future Plans

- ADMH made its listing debut on the Bombay Stock Exchange on February 26, 2018. The company made a US$ 153.3 million public offer during February 12-15 at an offer price of INR 190 (US$ 2.9*) per share. A large portion of the net proceeds will be utilized for repayment of debt and remaining on the purchase of medical equipment and corporate functions.
- The company is in the process of expanding its capacity at 10 hospitals to add more than 1,700 beds, of which 355 are under various stages of development in the GCC.
- In June 2017, the Managing Director of ADMH disclosed that the company is seeking acquisition opportunities in Saudi Arabia.
- In April 2017, ADMH secured a US$ 295 million credit facility from India-based Axis Bank.

Current Price (US$)	2.60

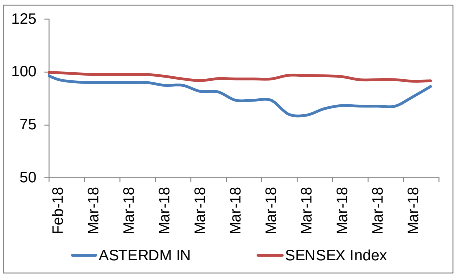
Price as on March 20, 2018

Stock Details	
Bloomberg ticker	ASTERDM IN
52 week high/ low	N/A
Market Cap (US$ mn)	1,310.9
Enterprise value (US$ mn)	1,690.4
Shares outstanding (mn)	505.2

Source: Bloomberg

Note: Average turnover for 3M and 6M is not available, as the company was listed on 26th February 2018

Share Price Chart



Source: Bloomberg

Valuation Multiples	
	LTM 2017
P/E (x)	39.8
P/B (x)	4.4
EV/S (x)	1.9
Dividend yield (%)	N/A

Source: Bloomberg

Shareholding Structure	
Union Investments Pvt. Ltd.	37.35%
Others	62.65%
Total	**100.00%**

Source: BSE Ltd.

* At the exchange rate on September 29, 2017

Source: Company website, Thomson Reuters Eikon, IPO Prospectus

Financial Performance				
US$ Million	**2015 YE Mar**	**2016 YE Mar**	**2017 YE Mar**	***Change (%)***
Revenue	634.1	802.7	884.7	*10.2*
COGS	199.9	248.2	281.5	*13.4*
Operating Income	63.0	34.8	6.9	*-80.2*
Operating Margin (%)	9.9	4.3	0.8	
Net Income	21.7	(9.0)	29.6	*428.5*
Net Income Margin (%)	3.4	-1.1	3.4	
Return on Equity (%)	11.1	-6.0	16.8	
Return on Assets (%)	3.6	-1.1	3.1	

Key Comments

- *During the year ended March 2017, ADMH's revenue grew by 10.2% y-o-y to US$ 884.7 million led by organic growth, acquisition of Dr. Ramesh Cardiac and Multispecialty Hospital and signing of operation & management agreement with WIMS.*
- *Further, operating expenses as a proportion of revenue increased during the year with rise in number of employees, salary hikes, depreciation and amortization and rental costs for new clinics. Consequently, operating profit declined by 80.2% y-o-y to US$ 6.9 million in FY 2017.*
- *The company also witnessed a substantial rise in finance costs owing to a 50% y-o-y increase in borrowings.*
- *Nevertheless, an exceptional gain of US$ 88.9 million from the extinguishment of financial liabilities and write back of contingent considerations helped the company achieve a net profit of US$ 29.6 million in FY 2017 compared to a loss of US$ 9.0 million in the previous year.*

Source: Thomson Reuters Eikon, Company Prospectus

AVIVO Group (Privately Owned) UAE

Company Description

Established in 2011, AVIVO Group owns and operates 2 hospitals, 29 clinics, 10 dental centers, 6 pharmacies, 6 distribution centers and 2 diagnostic facilities in the UAE and Kuwait. Through these facilities and over 220 doctors and 1,200 employees, the group caters to around 1 million patients in a year. The hospitals and clinics offer services across medical areas such as general surgery, dermatology, gynaecology, neurology, pediatrics, psychology, urology and homeopathy.

Business Segments/Services Portfolio

- **AVIVO Hospitals**: Under this brand, the group operates the below three hospitals in the UAE.
  - **National Hospital:** Started in 1994, this is a 22-bed multi-specialty hospital in Abu Dhabi and offers inpatient and outpatient services across 13 specialties. The hospital is also equipped with support services like laboratory, operation theaters, radiology and pharmacy.
  - **Conceive – The Gynaecology and Fertility Hospital:** Launched in 2004, the group operates two hospitals under this name in Sharjah and Dubai. The hospitals offer a range of state-of-the-art reproductive treatments and technologies.
  - **AVIVO Clinics**: The group operates a chain of super-specialized clinics under the names Avivo, Dr. Michael's, Tijan International and Conceive. The clinics in Dubai include Avivo Clinics – German Medical Centre, Avivo Clinics – Beverly Hills Home Healthcare, Conceive – The Gynaecology Centre, Dr. Michael's Dental Clinic (Jumeirah and Umm Suqeim) and Dr. Michael's Children's Dental Center. In Kuwait, the group operates Avivo Clinics – Dr. Alia Medical Centre, Tijan International Dental Center and Dental Lab in Salmiya and Tijan International Dental Center in Farwaniya, Fahaheel and Jahra.
- **PRIMACARE Clinics**: Under this brand, the group runs three clinics in Dubai (Speciality Clinics – Burdubai, Doctor's Clinic and Al Musalla Medical Centre), two in Sharjah (Reem Specialists Medical Centre and Reem Al Nanda Medical Diagnostic Centre) and New National Medical Centre in Abu Dhabi. The clinics offer specialized healthcare services.
- **PRIMACARE Pharmacy:** The group runs 5 pharmacies in the UAE and one in Kuwait under this brand.
- **Other Services**: Apart from above, the group operates two diagnostic centers one each in Kuwait and Sharjah, three Aesthetica Clinics in the UAE and a Dermalase Clinic in the UAE.
- **Kalium Drug Store:** Started in 2006, Kalium is a distributor of advanced medical equipment, skin care products and aesthetic devices in the Middle East region.
- **Institute of Medical Aesthetics:** The group runs this fully accredited educational institute providing training programs for medical professionals in aesthetic medicine.

Recent Developments/Future Plans

- In February 2017, Al Masah Capital, a significant investor in AVIVO group, announced plans to exit this investment through a public offering or sale to a strategic investor.
- In August 2016, AVIVO Group disclosed its intention to come up with a US$ 500 million public offering on the London Stock Exchange.
- In July 2016, AVIVO Group acquired a majority stake in Kalium Group, which operates four medical aesthetic clinics in Dubai under the Aesthetica & Dermalase brands. Additionally, the Kalium Group is a distributor of medical equipment and skin care products in the Middle East. The deal value was estimated to range between US$ 90 – 100 million.

Source: Company website, Media Reports

Badr Al Samaa Group of Hospitals and Polyclinics (Privately Owned) Oman

Company Description

Badr Al Samaa Group of Hospitals and Polyclinics (BASG) is a healthcare provider with operations in Oman, Qatar, the UAE and Bahrain. The company operates 9 healthcare facilities in Oman, Al Hilal Hospital in Bahrain and one medical center each in Dubai, Kuwait and Qatar.

Business Segments/Services Portfolio

- **Specialties**: The hospitals and medical centers provide services across various medical areas including urology, cardiology, neurology, nephrology, pulmonology, diabetology, general surgery, ENT, gynaecology and obstetrics, pediatrics, anesthesiology, radiology, dermatology, pathology, dentistry, dietetics, physiotherapy, gastroenterology, internal medicine, psychiatry, orthopedics and trauma, ophthalmology and orthodontics.
- **Facilities**: Apart from the above medical treatments, the company provides support services such as emergency medical services, pharmacy, radiology, laboratory, ambulance and health checkups.

Recent Developments/Future Plans

- In January 2018, BASG relocated its medical center in Dubai to Bank Street, Bur Dubai.
- In March 2017, BASG opened its first medical center in Kuwait in Farwaniya. Over the next three years, the company intends to open five new medical centers in the country.

Source: Company website, Media Reports

ALPEN CAPITAL

Dallah Healthcare Holding Co. (Publicly Listed) | Saudi Arabia

Company Description

Founded in 1995, Dallah Healthcare Holding Co. (Dallah) is engaged in the provision of healthcare services and manufacture and sale of herbal and cosmetic products. Through its hospital in Riyadh, Dallah served more than 39,000 inpatients and 932,000 outpatients during 2015. The company also manages and operates third-party hospitals.

Business Segments/Services Portfolio

- **Hospitals:** Presently, the company runs Dallah Hospital Complex – Al Nakheel in Riyadh with 448 beds and 220 outpatient clinics. The hospital provides services in areas of cardiology, plastic surgery, pulmonology, obstetrics, ophthalmology, diabetes, rheumatology and neurology, among others. This segment accounts for 97% of the company's revenue.
- **Pharmaceutical:** Through its 100% subsidiary Dallah Pharma Co., the company manufactures and distributes pharmaceutical, herbal and cosmetic products to retail pharmacies, hospitals, health and beauty stores and government agencies. The company has exclusive rights to distribute 45 pharmaceutical products, 12 herbal products and 8 cosmetic products in Saudi Arabia.
- **Operation and Management**: Dallah earns fee income from the operation and management of Al-Khafji Hospital (owned by Aramco) and Mahayel Hospital (capacity of 100 beds and 25 outpatient clinics) in the Kingdom.
- **Support Services**: Since January 2015, Dallah has been providing support services such as establishment and maintenance of hospitals and medical centers through Afyaa Al-Nakheel for Supporting Services Co. Ltd.
- **Investments:** The company has invested in healthcare projects of Makkah Medical Center, Aseer Co., Al-Ahsa Medical Services Co. and Jordanian Pharmaceutical Manufacturing Co.

Recent Developments/Future Plans

- In January 2018, Dallah gave a SAR 130.7 million (US$ 34.8 million*) contract to Youssef Marroun Contracting Co. for carrying out mechanical, electrical and plumbing works for the west expansion project of Dallah Hospital Al-Nakheel. Expected to be completed by end-2019, the expansion will add 150 beds and 30 clinics.
- In January 2017, the company established Dallah Namar Hospital Health Co. to develop, operate and manage hospitals and polyclinics. The 100% subsidiary is developing Dallah Hospital – Namar with a capacity of 400 beds and 200 clinics at a cost of SAR 920 million (US$ 245.3 million#).

Current Price (US$)	28.02

Price as on March 20, 2018

Stock Details	
Bloomberg ticker	DALLAH AB
52 week high/ low	30.93/25.07
Market Cap (US$ mn)	1,655.2
Enterprise value (US$ mn)	1,774.0
Shares outstanding (mn)	59.0

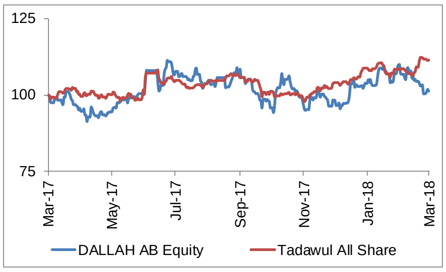
Source: Bloomberg

Average Daily Turnover ('000)

	SAR	US$
3M	5,685.1	1,516.0
6M	6,546.5	1,847.0

Source: Bloomberg

Share Price Chart



Source: Bloomberg

Valuation Multiples

	2016	2017	2018E
P/E (x)	24.9	20.2	21.7
P/B (x)	3.7	3.5	3.5
EV/S (x)	5.1	5.3	5.3
Dividend yield (%)	1.6	2.0	2.2

Source: Bloomberg

Shareholding Structure	
Saleh Abdulla Mohammed	54.61%
Al Faqeeh (Mohammed Rashid Mohammed)	5.24%
Others	40.15%
Total	**100.00%**

Source: Thomson Reuters Eikon

* At the exchange rate on January 29, 2018; # At the exchange rate on January 8, 2017

Source: Company website, Tadawul

Financial Performance				
US$ Million	**2015 YE Dec**	**2016 YE Dec**	**2017 YE Dec**	***Change y-o-y (%)***
Revenue	262.7	310.1	323.2	*4.2*
COGS	154.2	167.2	174.1	*4.1*
Operating Income	45.4	58.6	82.1	*40.0*
Operating Margin (%)	17.3	18.9	25.4	
Net Income	44.0	59.9	78.7	*31.3*
Net Income Margin (%)	16.7	19.3	24.3	
Return on Equity (%)	12.4	15.4	18.4	
Return on Assets (%)	9.0	10.6	12.4	

Key Comments

- *During the year ended December 2017, Dallah's revenue grew by 4.2% y-o-y to US$ 323.2 million supported by an increase in number of outpatients.*
- *Further, the company improved its contractual terms for services and restructured medicine distribution in Dallah Pharma. Such efforts helped reduce operating costs, resulting in a 40.0% y-o-y increase in operating income to US$ 82.1 million during the year.*
- *Moreover, finance costs also dropped on account of capitalization of interest costs related to projects under construction. Consequently, the net profit during FY 2017 grew by 31.3% y-o-y to US$ 78.7 million.*

Source: Thomson Reuters Eikon, Tadawul

Dr. Soliman Fakeeh Hospital (Privately Owned) Saudi Arabia

Company Description

Started in 1978 by Dr. Soliman Fakeeh in Jeddah, Dr. Soliman Fakeeh Hospital (DSFH) is a multi-specialty hospital with a capacity of 500 beds. The company is a part of Fakeeh care group, a healthcare and related-education provider in Saudi Arabia. The other group companies under patient care include The Academic Medical Centre, Aman Home Healthcare, Kaust Health, Family Medical Center, The Executive Clinic, Fakeeh Medical Home and Dr. Soliman Fakeeh Medical Center. The group provides healthcare education through Fakeeh College for Medical Services, The Academic Medical Centre and Khadija Attar Center. Additionally, the group operates cohesive businesses through Fakeeh International (medical tourism and medical projects), Olympia (a rehabilitation/fitness center), Kameda Arabia (provider of integrated healthcare IT solutions) and Fakeeh Complementary (distributor of medical supplies).

Business Segments/Services Portfolio

- **Clinical Departments:** DSFH offers medical treatment and diagnostics under the areas of internal medicine, obstetrics & gynecology, pediatrics, physical medicine & rehabilitation, plastic surgery, palliative care, orthopedic and spine diseases, rheumatology, urology, renal dialysis, thoracic surgery, vascular surgery, chiropractic medicine, adult intensive care, gastroenterology, general surgery, hyperbaric oxygen therapy, assisted reproductive care, neurosurgery, oncology/hematology and radiology.
- **Pharmacy:** DSFH provides outpatient, inpatient and clinical pharmacy services. Apart from this, DSFH also organizes training programs for pharmacy and clinical pharmacy students.
- **Elite Center:** This center provides premium and personalized services, with access to the advanced diagnostic tools and healthcare resources. Some of the exclusive services provided include assistance in appointment, executive health program, medication dispensing by clinical pharmacist, lounge area, waiting area with free Wi-Fi service.

Recent Developments/Future Plans

- DSFH is developing a Fakeeh University Hospital in Dubai Silicon Oasis. To be developed in phases, the project includes construction of four interconnected buildings spanning an area of 72,000 sq m covering hospitals and a medical university. The first phase comprising three hospital buildings with a combined capacity of 150 beds is expected to complete in 2018.

Source: Company website

Dr. Sulaiman Al-Habib Medical Group (Privately Owned) Saudi Arabia

Company Description

Established in 1995, Dr. Sulaiman Al Habib Medical Group (HMG) is a healthcare provider with hospitals, clinics, centers of excellence and pharmacies in Saudi Arabia, the UAE and Bahrain. The company operates a network of 8 general and specialized hospitals and is developing a medical city and multiple hospitals in Saudi Arabia. HMG has strategic partnerships with international companies such as General Electric, Draeger, Stryker, and Herman Miller to deploy the latest technologies at its hospitals.

Business Segments/Services Portfolio

- **Hospitals**: The group provides a range of medical services along with diagnostics, radiology and laboratory services across its hospitals.
    - **Olaya Medical Complex:** An integrated medical complex with multiple specializations and clinics in Riyadh.
    - **Rayan Hospital:** A multi-specialty hospital in Riyadh with 360 beds, of which 50 are for emergency and 118 for intensive care.
    - **AL-Takhassusi Hospital:** A 150-bed advanced healthcare hospital in Riyadh with a large center dedicated to cardiac surgeries and catheterization.
    - **AL-Qassim Hospital:** A 220 bed multi-specialty hospital in Al Qassim.
    - **Dubai Hospital:** A medical center in Dubai Medical City including an integrated center for cardiology.
    - **AL-Sweidi Hospital:** An integrated hospital with 300 beds and 240 clinics.
    - **Maternity Hospital:** Provides comprehensive services for women’s health through a range of health programs.
    - **Orthopedic and Spinal Surgeries Hospital:** A 200-bed specialized healthcare facility focusing on diagnosis and surgeries of bone, joints and spinal cords.
    - **University Medical Center:** Based in Bahrain, this center is run by HMG in cooperation with King Abdullah Medical City.
    - **Dr. Sulaiman Al-Habib Medical City:** An under construction medical city to be spread over an area of 3.4 million sq ft in Riyadh. It will include 13 towers comprising 700 beds, 400 clinics and 170 beds of emergency and intensive care.
    - **AL-Khobar Hospital:** An under construction fully integrated digital health project that will comprise 290 clinics and 400 beds over an area of 290,000 sq m.
- **Centers of Excellence (CoE)**: HMG runs CoEs for various therapeutic areas such as dermatology & skin care, plastic surgery, ophthalmology, obesity, fertility, orthopedic and maternity.
- **Pharmacy**: HMG operates several pharmacies, adjacent to its hospitals, offering over 40,000 medical products.

Recent Developments/Future Plans

- In February 2018, HMG’s Chief Executive disclosed plans to invest about SAR 3 billion (US$ 798.9 million*) for the construction of two hospitals in Jeddah. The company has completed the initial designs of the project and obtained license from Jeddah Municipality. Additionally, the executive mentioned that the work on hospital in Al-Khobar is 75% complete and the company also has plans to invest SAR 1.3 billion (US$ 346.2 million*) on building a hospital in Jubail city.

* At the exchange rate on February 25, 2018

Source: Company website, Argaam

Gulf Healthcare International (Privately Owned) UAE

Company Description

Gulf Healthcare International (GHI) is a provider of premier healthcare services in the UAE and Kuwait. The company operates 19 business units, comprising diagnostic and medical centers, through brands like Medsol Diagnostic Laboratories, Amber Clinics, Dr. Joseph's Polyclinic and Al Noor Polyclinic.

Business Segments/Services Portfolio

- **Clinics:** GHI offers a range of outpatient care solutions through its network of clinics under the brands Amber Clinics (two centers), Al Noor Polyclinic (two centers) and Dr. Joseph's Polyclinic (three centers) in the UAE and British Medical Care Center and German Medical Care in Kuwait.
- **Medsol Diagnostics:** A network of diagnostic centers providing laboratory and radiology services. GHI presently operates 8 such centers in the UAE and 6 in Kuwait.
- **Occupational Health International:** In collaboration with Texas-based Occucare International, GHI provides occupational medical services to clients from sectors such as oil & gas, manufacturing, energy and food services. Some of the services offered include medical examination, internal travel medicine, employee wellness and awareness programs, medical advisory and injury management support for employees. The services are provided through a center in Dubai, in addition to onsite support.
- **JV & Acquisitions:** The company continuously seeks acquisition, licensing and partnership opportunities to develop their healthcare business.

Source: Company website

ALPEN CAPITAL

Gulf Medical Projects Co. (Publicly Listed) UAE

Company Description

Founded in 1979, Gulf Medical Projects Co. (GMPC) is engaged in the operation and management of a hospital and a clinic in Dubai under the brand 'Al-Zahra'. Additionally, the company is involved in the trading of medical equipment and construction of medicine factories.

Business Segments/Services Portfolio

- **Al Zahra (Pvt.) Hospital Dubai LLC**: Under this 68.4% subsidiary, GMPC runs a general hospital in Dubai. The hospital was established in July 2005 and has a capacity of 187 beds. It provides healthcare services in the areas of anesthesia, cardiology, general surgery, pathology, physiotherapy, ENT, family medicine, out-patient dietary clinic, gynecology, radiology and urology.
- **Al-Zahra Private Medical Centre**: Established in September 1993, this medical center in Dubai acts as a support and referral center for the Al-Zahra Hospital. It offers outpatient services across medical areas, dentistry services and ancillary services like physiotherapy, radiology and laboratory.

Recent Developments/Future Plans

- In September 2017, the company dissolved a 51% owned subsidiary – Al Zahra Neurosciences International (LLC) – in consultation with its business partners. The subsidiary was under the formation stage.
- On January 8, 2017, GMPC sold its major subsidiary – Al Zahra Pvt. Hospital Co. – owning and operating a hospital in Sharjah to NMC Healthcare LLC for a sum of US$ 560.4 million. GMPC made a profit of AED 1,422.3 million (US$ 387.3 million*) from the sale. Additionally, the company will earn a fee of AED 12.0 million (US$ 3.3 million) for the use of trademark 'Al-Zahra Hospital' until 2021.

Current Price (US$)	0.49

Price as on March 20, 2018

Stock Details	
Bloomberg ticker	GMPC UH
52 week high/ low	1.43/0.42
Market Cap (US$ mn)	342.5
Enterprise value (US$ mn)	275.7
Shares outstanding (mn)	698.9

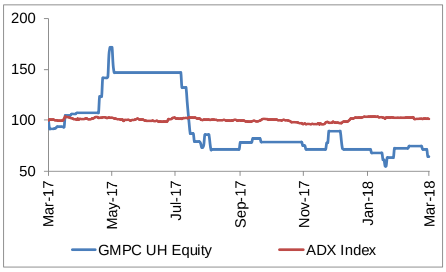
Source: Bloomberg

Average Daily Turnover ('000)

	AED	US$
3M	204.7	55.7
6M	173.3	47.2

Source: Bloomberg

Share Price Chart



Source: Bloomberg

Valuation Multiples

	2016	2017
P/E (x)	16.0	1.0
P/B (x)	1.7	1.1
EV/S (x)	2.6	1.6
Dividend yield (%)	1.6	N/A

Source: Bloomberg

Shareholding Structure	
Al Hosani (Salem Abdulla Salem)	24.31%
Alqasmi (Al Sheikh Mohamed Faisal Khalid Khalid)	17.77%
Alqasmi (Al Sheikh Majed Faisal Khalid Khalid)	15.31%
Al Salem Co., Ltd.	10.29%
Others	32.32%
Total	**100.00%**

Source: Thomson Reuters Eikon

* At the exchange rate on January 8, 2017

Source: Company website, Annual Report

Financial Performance				
US$ Million	**2015 YE Dec**	**2016 YE Dec**	**2017 YE Dec**	***Change (%)***
Revenue	197.2	230.6	119.3	*-48.3*
COGS	142.7	170.9	98.6	*-42.3*
Operating Income	42.4	40.2	5.8	*-85.5*
Operating Margin (%)	21.5	17.4	4.9	
Net Income	41.9	38.2	391.7	*926.1*
Net Income Margin (%)	21.2	16.6	328.4	
Return on Equity (%)	13.3	11.2	109.4	
Return on Assets (%)	8.3	7.2	73.3	

Key Comments

- *During the year ended December 2017, GMPC's results were largely influenced by the sale of Al-Zahra Hospital in Sharjah. Subsequently, the company reported a 48.3% y-o-y decline in revenue.*
- *Net profit jumped from US$ 38.2 million in 2016 to US$ 391.7 million in 2017, owing to an exceptional gain from the sale of all assets and business of Al-Zahra Hospital in Sharjah.*

Source: Thomson Reuters Eikon, Company Filings

KBBO Group (Privately Owned) UAE

Company Description

KBBO Group is a large investment holding company with operations spanning across diverse sectors such as healthcare, education, food & retail, information technology, investment & financial services and real estate & property management. The group's operations are spread across the Middle East and few international locations.

Business Segments/Services Portfolio

In the healthcare sector, the group has investments in NMC Health Plc and Emirates Healthcare.

- **NMC Health Plc:** Started in 1975 and listed on the London Stock Exchange, NMC Health Plc is an integrated healthcare service provider, with operations in the Middle East, Europe and South America. It is also engaged in the wholesale distribution of pharmaceutical goods, medical equipment, cosmetics, food, IT products and services. The company owns and operates 16 multi-specialty hospitals in the UAE; 16 maternity and fertility clinics under the brands Fakih IVF and Clinica Eugin (4 in the GCC, 5 in Latin America and 7 in Europe); three long-term care and home care facilities in the UAE and two in Saudi Arabia. NMC collectively holds a capacity of 1,365 beds. Additionally, the company manages two hospitals in the UAE and one in Yemen as well as owns nine warehouses and sales centers in the UAE.
- **Emirates Healthcare:** The Emirates Healthcare group assets are managed by NMC Health Plc.
  - **Emirates Hospitals & Clinics:** The group owns and operates a 100-bed multi-specialty hospital in Dubai, four medical clinics in Dubai and one medical center each in Abu Dhabi, Fujairah and Ras Al Khaimah.
  - **Emirates Rehabilitation and Homecare Centre:** Established in 2006, this is an arm of Emirates Healthcare providing care for long-term recovery, elderly patients and home health. The company has centers in Dubai and Muscat.
- **CosmeSurge:** Owned by NMC Health and Emirates Healthcare in a ratio of 70:30, CosmeSurge is a provider of services in areas of cosmetology and aesthetic medicine. This subsidiary has nine centers in the UAE and one in Oman.

Recent Developments/Future Plans

- For the year ended December 2017, NMC Health Plc reported revenue of US$ 1,603.4 million, an increase of 31.3% over the previous year. Healthcare business accounted for 72.4% of the consolidated revenue and grew by 41.4% y-o-y during the year led by a 101% increase in operational bed capacity through organic and inorganic expansion. EBITDA margin expanded by 180 basis points to 22.0% driven by synergies from acquisitions and improved profitability in existing businesses. Consequently, the company's net profit grew by 38.2% y-o-y to US$ 209.2 million during FY 2017.
- In January 2018, NMC Health Plc acquired the remaining 49% interest in Fakih IVF and 30% in As Salama Hospital for a total consideration of US$ 218 million. The acquisitions were financed by the issuance of shares to Dr. Fakih and existing cash resources. On a proforma basis, these acquisitions will contribute US$ 22 million to the company's topline. During the month, NMC also disclosed completion of acquisitions of a 60% interest in Al Qadhi Hospital and 100% in Al Rashid Hospital in Hail for a sum of US$ 40 million. These two deals were aimed at expanding presence in Saudi Arabia.
- In January 2018, NMC Health Plc acquired a 70% interest in CosmeSurge, a cosmetic surgery and aesthetic medicine provider, from Emirates Healthcare Group for US$ 170 million.
- In March 2017, NMC Health Plc completed the acquisition of Al Zahra Hospital in Sharjah from Gulf Medical Projects Co. The deal, announced in December 2016, was concluded for a consideration of US$ 560.4 million. The target has a capacity of 154 inpatient beds treating about 400,000 outpatients and 23,000 inpatients annually.

Source: Company website, NMC Health Plc, Media Reports

Kerala Institute of Medical Science (Privately Owned) — Bahrain

Company Description

Kerala Institute of Medical Sciences, also known as KIMS Group, started its operations in India in 2002. The group entered the GCC market in 2004 with the opening of its first medical center in Bahrain and registration of KIMS Holding Co., an investment arm of KIMS Group in the GCC. Today, the group owns and operates two hospitals and six medical centers in the GCC and six hospitals and three medical centers in India. The hospitals are largely tertiary care facilities providing services across specialties such as anesthesiology, gynecology, internal medicine, pediatrics, ENT, dental, dermatology and general surgery. Apart from these, the company also provides support services of radiology, physiotherapy, pharmacy and diagnostics. The group has a total turnover of over INR 11 billion (~US$ 169 million*) with an 11.5% profit margin.

Business Segments/Services Portfolio

The company operates hospitals and medical centers in the GCC and India.

- **GCC:** It provides various types of medical services through its hospitals and medical centers in the GCC.
    - **Bahrain:** KIMS owns and operates Royal Bahrain Hospital (RBH), Royal Bahrain Medical Centre and KIMS Bahrain Medical Centre in the country. RBH is a multi-specialty facility with 60 beds and its medical center provides services in four specialties. The KIMS Bahrain Medical Centre offers services across 12 specializations.
    - **Oman**: KIMS owns and operates KIMS Oman Hospital in Muscat with a capacity of 50 beds. The hospital provides services across various specializations including cardiology, neurology, orthopedics, pediatrics, urology, family medicine and cosmetic surgery, among others.
    - **Saudi Arabia**: Branch Suncity Co. Ltd. Polyclinic in Jubail and KIMS Jarir Medical Center in Riyadh are the two multi-specialty outpatient clinics owned and operated by KIMS in the Kingdom.
    - **Qatar**: The company owns and operates KIMS Qatar Medical Center in Doha, which provides outpatient services across 11 specialties.
    - **UAE**: The company owns and operates the KIMS Medical Center Dubai, which provides outpatient multi-specialty services along with pharmacy and diagnostic facilities.
- **India**: The company runs six hospitals and three medical/wellness centers in India. The hospitals had a combined capacity of 1,775 beds as of end March 2016.

Recent Developments/Future Plans

- In March 2017, True North – an India-based private equity firm – invested US$ 200 million in KIMS Group for the purchase of a 40% stake from Ascent Capital Advisors India Pvt. Ltd. and OrbiMed Advisors LLC. and as capital outlay to fund the growth plans of the group.

Source: Company website, True North

Magrabi Hospitals & Centers (Privately Owned) — Saudi Arabia

Company Description

Founded in 1955, Magrabi Hospitals & Centers (Magrabi) is a chain of eye, ear and dental care hospitals in the Middle East and Africa region. The company owns and operates 28 hospitals/centers, of which 17 are in Saudi Arabia, 4 in the UAE, 4 in Egypt and one each in Oman, Qatar and Yemen. The company caters to over 1 million patients for eye care and performs sight-preserving surgeries on more than 100,000 patients on an annual basis.

Business Segments/Services Portfolio

- **Eye**: The company provides eye care services and surgeries. Treatments offered include refractive surgery, cataract, vitro-retina, glaucoma, cornea and external eye diseases, low vision aids, contact lenses, ophthalmic investigation, pediatric ophthalmology, ocular oncology and neuro-ophthalmology.
- **ENT**: Under this area, the hospital offers diagnosis of hearing loss and snoring as well as treatment of tonsils, adenoids, sore throat, sinusitis, tinnitus, hearing impairment of children, perforated eardrums, cholesteatoma and cochlear implants.
- **Dental**: The services offered under this segment include periodontics (diagnosis and treatment of gum diseases), implantology (permanent replacement of natural teeth), prosthodontics (restoration of normal functioning of teeth), pedodontics (diagnosis and treatment of children's teeth), endodontics (diagnosis and treatment of dental pulp diseases), orthodontics (correction of dental deformities and anomalies) and oral surgery.

Recent Developments/Future Plans

- In April 2016, Magrabi opened its first eye care center in Alexandria, Egypt.

Source: Company website, Zawya

ALPEN CAPITAL

Medicare Group Q.S.C. (Publicly Listed) — Qatar

Company Description

Incorporated in December 1996, Medicare Group Q.S.C. (MCGS) provides medical services through a specialized hospital in Qatar. The group runs Al-Ahli Hospital, a 250-bed hospital offering inpatient and outpatient services in various medical departments. The hospital also provides education opportunities for nurses through a nursing education unit in collaboration with Hammad International Training Center, North Atlantic College and Calgary University.

Business Segments/Services Portfolio

- **Medical Departments:** The hospital offers medical services in areas of anesthesiology, dentistry, dermatology, emergency, gastroenterology, general surgery, heart care center, internal medicine, neurology, women's clinic, ophthalmology, orthopedics & traumatology, pediatrics, psychiatry, pulmonary & chest, physical & rehabilitative medicine, urology, endocrinology, nephrology, rheumatology, ENT surgery, hearing and balance, fertility center and neurosurgery.
- **Ancillary Services and Units:** The hospital is equipped with other units providing supporting services such as dietary, ICU and coronary care unit, pharmacy, radiology and neonatal ICU, speech and language therapy, pathology and laboratory medicine.

Recent Developments/Future Plans

- In November 2017, MCGS opened a Heart Center within the Al-Ahli hospital.
- In December 2016, Al-Ahli Hospital organized a clinic at an exhibition event in Darb El Saai to provide emergency treatment and spread awareness on healthy lifestyle amongst the visitors.

Current Price (US$)	21.29

Price as on March 20, 2018

Stock Details	
Bloomberg ticker	MCGS QD
52 week high/ low	28.62/11.04
Market Cap (US$ mn)	599.2
Enterprise value (US$ mn)	580.6
Shares outstanding (mn)	28.1

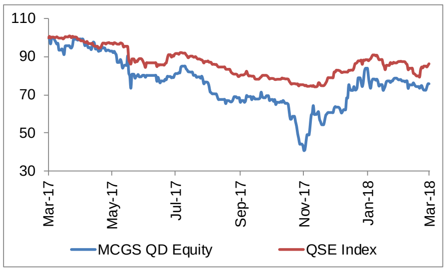
Source: Bloomberg

Average Daily Turnover ('000)

	QAR	US$
3M	7,853.7	2,145.6
6M	4,524.6	1,236.1

Source: Bloomberg

Share Price Chart



Source: Bloomberg

Valuation Multiples

	2016	2017
P/E (x)	27.2	24.6
P/B (x)	1.7	2.0
EV/S (x)	3.6	4.0
Dividend yield (%)	4.8	5.7

Source: Bloomberg

Shareholding Structure	
Al Tadawul Holding Group	10.00%
Others	90.00%
Total	**100.00%**

Source: Thomson Reuters Eikon

Source: Company website, Qatar Stock Exchange

Financial Performance				
US$ Million	**2015 YE Dec**	**2016 YE Dec**	**2017 YE Dec**	***Change (%)***
Revenue	163.7	128.8	128.6	*-0.2*
COGS	81.9	74.9	74.5	*-0.5*
Operating Income	50.0	18.6	22.3	*19.9*
Operating Margin (%)	30.5	14.4	17.3	
Net Income	49.5	17.9	21.9	*22.2*
Net Income Margin (%)	30.3	13.9	17.0	
Return on Equity (%)	17.8	6.2	7.9	
Return on Assets (%)	15.5	5.2	6.7	

Source: Thomson Reuters Eikon

Mediclinic Middle East (Privately Owned) UAE

Company Description

Mediclinic Middle East is a part of Mediclinic International, a private hospital group having 52 hospitals in Southern Africa, 17 in Switzerland and 6 in the UAE. Additionally, the parent holds a 29.9% stake in UK-based Spire Healthcare (operating 38 hospitals). Mediclinic International is listed on the stock exchanges of London and Johannesburg. With the acquisition of UAE-based Al Noor Hospital in 2016, Mediclinic Middle East owns and operates six hospitals and 24 clinics in the UAE, with a combined capacity of over 700 beds. They provide healthcare services across medical specializations.

Business Segments/Services Portfolio

- **Hospitals:** Mediclinic Middle East owns six hospitals, namely, Mediclinic Welcare Hospital (127 beds), Mediclinic City Hospital (280 beds), Mediclinic Al Noor Hospital (80 beds), Mediclinic Airport Road Hospital (130 beds), Mediclinic Al Ain Hospital (46 beds) and Mediclinic Al Jowhara Hospital located in Dubai, Abu Dhabi and Al Ain. These hospitals are equipped with accident and emergency unit, operation theatres, oncology unit, wound clinic, ambulance services and specialized outpatient clinics.
- **Clinics**: The company operates 24 clinics across the UAE. Some of the standalone clinics in the cities include,
  - **Dubai:** Comprehensive Cancer Centre in Mediclinic City hospital, Mediclinic Dubai Mall, Mediclinic IBM Battuta, Mediclinic Al Sufouh, Mediclinic Al Qusais, Mediclinic MIRDIF, Mediclinic Arabian Ranches, Mediclinic Meadows and Mediclinic Al Bahr.
  - **Abu Dhabi:** Mediclinic Mussafah, Mediclinic Al Mamora, Mediclinic Al Bateen, Mediclinic Baniyas and Mediclinic Khalifa City.
  - **Western Region:** Mediclinic Madinat Zayed, Mediclinic Ghayathi, Mediclinic Al Hili, Mediclinic Bawadi, Mediclinic Al Yahar, Mediclinic Al Madar, Mediclinic Aspetar and Mediclinic Zakher.

Recent Developments/Future Plans

- In January 2018, Mediclinic City Hospital in Dubai conducted the first Robotic-Assisted orthopedic surgery in the Middle East.
- During the half year ended September 2017, Mediclinic International reported revenue of US$ 1,817.4 million, of which 22% came from the Middle East business. During the period, Mediclinic Middle East reported revenue of AED 1,475 million (US$ 401.5 million*), a 5% y-o-y decline due to a fall in inpatient and outpatient numbers. Further, due to disposal of non-core assets in Abu Dhabi, the company's underlying EBITDA dropped by 26% y-o-y to AED 125 million (US$ 34.0 million).
- During H1 2018, Mediclinic Middle East invested AED 105 million (US$ 28.6 million*) on expansion activities and new equipment purchases and AED 28 million (US$ 7.6 million*) on replacement of existing equipment and upgrading of existing projects. The major portion of capex was on the construction of a new 188-bed Mediclinic Parkview Hospital in Dubai. The project is expected to complete in the last quarter of FY 2019.

* Converted at the exchange rate on September 30, 2017

Source: Company website

Middle East Healthcare Co. (Publicly Listed) — Saudi Arabia

Company Description

Founded in 1988, Middle East Healthcare Co. (MEHCO) operates a chain of hospitals under the brand Saudi German Hospitals (SGH). The company runs five multi-specialty tertiary hospitals in Saudi Arabia with a total capacity of 938 beds. Additionally, MEHCO manages third-party hospitals in Dubai-UAE, Sanna-Yemen and Cairo-Egypt under its brand.

Business Segments/Services Portfolio

MEHCO reports revenue under four segments – Inpatient, Outpatient, Pharmacy and Others. Inpatient and Outpatient are the major segments accounting for 57.0% and 24.6%, respectively, of the 9M 2017 revenue. Below are the hospitals owned and managed by MEHCO.

- **SGH – Riyadh:** Started in 2001, this is a multi-specialty tertiary care hospital spread over a built-up area of 35,188 sq m with 219 beds.
- **SGH – Jeddah:** Operational since 1988, this 191-bed hospital provides services across medical specialties, along with diagnostic and support services. The hospital comprises a main building (inpatient care) occupying a built-up area of 18,745 sq m and a medical tower spread over a built-up area of 10,902 sq m.
- **SGH – Aseer:** A 194-bed hospital, operating since 2000, offers tertiary care and encompasses an area of 35,893 sq m.
- **SGH – Madinah:** Operating since 2003, this is a 184-bed multi-specialty hospital spread over a built-up area of 34,751 sq m.
- **SGH – Hail:** A 150-bed hospital with 30 outpatient clinics that commenced operations in February 2017. The hospital is owned by National Healthcare Co., in which MEHCO has a 32.3% interest.
- **SGH – Dubai:** Started in 2012, this tertiary care hospital in Dubai is managed by MEHCO under its SGH brand. The hospital has a capacity of 315 beds.
- **SGH – Sanaa:** MEHCO manages a 300-bed hospital in Sanaa-Yemen, which is owned by Saudi Yemeni Healthcare Co.
- **SGH – Cairo:** A 300-bed hospital owned by Egyptian Saudi Healthcare Co. is managed by MEHCO under a management supervision agreement.

Recent Developments/Future Plans

- In February 2018, MEHCO opened an outpatient facility in Jeddah under the brand Beverly Clinics. The facility comprises 21 outpatient clinics constructed at a cost of SAR 22 million (US$ 5.9 million*).
- MEHCO is developing a new hospital in Dammam at a cost of SAR 336.5 million (US$ 89.7 million#), which is likely to complete by June 2019.

Current Price (US$)	14.52

Price as on March 20, 2018

Stock Details	
Bloomberg ticker	MEH AB
52 week high/ low	22.40/12.53
Market Cap (US$ mn)	1,337.7
Enterprise value (US$ mn)	1,413.5
Shares outstanding (mn)	92.0

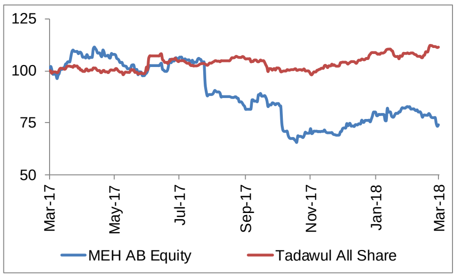
Source: Bloomberg

Average Daily Turnover ('000)

	SAR	US$
3M	8,976.7	2,393.7
6M	10,652.9	2,840.7

Source: Bloomberg

Share Price Chart



Source: Bloomberg

Valuation Multiples

	2016	LTM	2018E
P/E (x)	18.7	16.2	15.7
P/B (x)	4.4	3.1	N/A
EV/S (x)	4.3	3.3	3.1
Dividend yield (%)	N/A	N/A	N/A

Source: Bloomberg

Shareholding Structure	
Al Butterjee House Medical Co. Ltd.	54.69%
International Finance Corp.	8.42%
Others	36.89%
Total	**100.00%**

Source: Thomson Reuters Eikon

* At the exchange rate on February 14, 2018; # At the exchange rate on December 7, 2017
Source: Company website, Tadawul

Financial Performance						
US$ Million	**2015 YE Dec**	**2016 YE Dec**	***Change y-o-y (%)***	**9M 2016**	**9M 2017**	***Change y-o-y (%)***
Revenue	409.1	430.8	*5.3*	318.4	323.3	*1.5*
COGS	193.1	210.1	*8.8*	155.3	172.1	*10.8*
Operating Income	100.8	94.3	*-6.5*	67.6	55.2	*-18.3*
Operating Margin (%)	24.6	21.9		21.2	17.1	
Net Income	104.0	96.5	*-7.3*	69.7	59.3	*-15.0*
Net Income Margin (%)	25.4	22.4		21.9	18.3	
Return on Equity (%)	31.3	24.6		25.2	18.8	
Return on Assets (%)	20.3	15.7		15.7	11.7	

Key Comments

- *During the nine months ended September 2017, MEHCO reported a 15.0% y-o-y decline in net profit to US$ 59.3 million. The drop is attributed to increase in salaries, initial loss on operations of the new hospital in Hail and increase in tax.*

Source: Thomson Reuters Eikon, Tadawul

Middle East Hospital (Privately Owned) — Bahrain

Company Description

The Bahrain-based Middle East Hospital (MEH) is a healthcare venture of VKL Holding and Al Namal Group of Companies, a conglomerate with business interests in healthcare, real estate, construction, property management and hospitality. The group owns and operates the 86-bed Middle East Hospital in Segaya and two medical centers in Hidd and Salmabad.

Business Segments/Services Portfolio

- **Middle East Hospital**: Started in 2016, this is an acute general hospital spread over a built-up area of 80,000 sq ft. The hospital comprises five levels including 5 VIP suites, 25 single rooms, 16 semi-private beds, 7 emergency beds, 11 ICU beds and 25 consultation rooms, among others. The hospital provides inpatient and outpatient services in areas of pulmonology, diabetes mellitus, cosmetology, andrology, pediatrics, spinal surgery, orthopedic surgery, arthroscopic and joint replacement surgery, neurosurgery, obstetrics and gynecology, ENT, dental and maxillofacial, radiology and anesthesia.
- **Middle East Medical Center, Hidd:** This was the first healthcare establishment of the VKL Holding and Al Namal Group of Companies. This is a multi-specialty medical center equipped with laboratory, radiology, dental, physiotherapy and pharmacy units. The center provides healthcare services across departments of Ayurveda, cosmetology, internal medicine, ENT, dentistry, general medicine, general surgery, obstetrics, orthopedic, pediatrics, urology, ophthalmology and homeopathy.
- **Middle East Medical Center, Salmabad:** Located at Al Hayat Medical Complex, this polyclinic is equipped with a full-fledged laboratory, ultrasound, X-ray, ECG and dental departments. The center also conducts day care surgeries and provides ambulatory and home care services. It also facilitates specialized health services to corporate clients.

Recent Developments/Future Plans

- The group plans to open a new hospital in Muharraq to spread its healthcare business in Bahrain.

Source: Company website

National Medical Care Co. (Publicly Listed) — Saudi Arabia

Company Description

Established in 2003, National Medical Care Co. owns and manages Riyadh Care Hospital, Care National Hospital and Family Health Care Center in Saudi Arabia. The company is also involved in the distribution of medicines and medical supplies through Care Pharmaceutical & Medical Distribution.

Business Segments/Services Portfolio

- **Riyadh Care Hospital:** Operational since 1990 as Social Insurance Hospital, this is a multi-disciplinary hospital providing primary, secondary and tertiary care services. The hospital has a capacity of 320 beds.
- **Care National Hospital:** Established in 1966, Care National Hospital is a 300-bed hospital in Riyadh.
- **Family Health Care Center:** The company opened this new family health care center in 2017 in Riyadh.
- **Care Pharmaceutical & Medical Distribution:** Under this arm, the company undertakes wholesale distribution of medicines and medical equipment.

Recent Developments/Future Plans

- In February 2018, the company recommended a dividend distribution of SAR 44.8 million (US$ 11.9 million*) for the year ended December 31, 2017.
- In January 2018, the company received SAR 283.0 million (US$ 75.4 million#) from multiple clients during the month, bringing down its total receivables by 47.4%.

Current Price (US$)	16.12

Price as on March 20, 2018

Stock Details	
Bloomberg ticker	CARE AB
52 week high/ low	16.43/8.45
Market Cap (US$ mn)	724.8
Enterprise value (US$ mn)	745.4
Shares outstanding (mn)	44.9

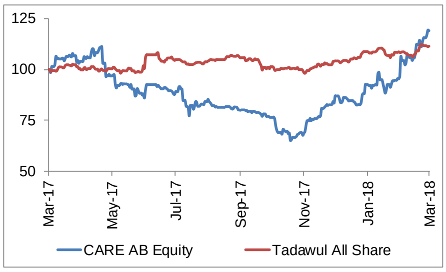
Source: Bloomberg

Average Daily Turnover ('000)

	SAR	US$
3M	16,447.8	4,385.9
6M	12,247.1	3,265.8

Source: Bloomberg

Share Price Chart



Source: Bloomberg

Valuation Multiples

	2016	2017	2018E
P/E (x)	59.9	21.0	20.6
P/B (x)	3.2	2.0	2.0
EV/S (x)	3.4	2.4	2.3
Dividend yield (%)	1.1	N/A	1.8

Source: Bloomberg

Shareholding Structure	
Government of Saudi Arabia	35.12%
Others	64.88%
Total	**100.00%**

Source: Thomson Reuters Eikon

* At the exchange rate on February 18, 2018; # At the exchange rate on January 30, 2018

Source: Company website

Financial Performance				
US$ Million	**2015 YE Dec**	**2016 YE Dec**	**2017 YE Dec**	***Change (%)***
Revenue	234.3	240.2	227.5	*-5.3*
COGS	175.6	185.0	175.9	*-4.9*
Operating Income	34.3	19.1	27.3	*43.5*
Operating Margin (%)	14.6	7.9	12.0	
Net Income	34.9	13.4	24.7	*84.4*
Net Income Margin (%)	14.9	5.6	10.9	
Return on Equity (%)	15.1	5.6	9.8	
Return on Assets (%)	9.8	3.6	6.6	

Source: Thomson Reuters Eikon

Prime HealthCare Group LLC (Privately Owned) UAE

Company Description

Started in 1999, Prime HealthCare Group LLC was founded by Dr. Jamil Ahmed, an orthopedic surgeon. The company provides healthcare services in the areas of ophthalmology, obstetrics and gynecology, internal medicine and general medicine with the support of over 350 physicians and 1,000 healthcare professionals. The company operates a network of hospitals, medical centers, pharmacies and diagnostic centers across the UAE.

Business Segments/Services Portfolio

- **Prime Hospital**: A 100-bed multi-specialty hospital in Dubai with a dedicated floor for mother and child care.
- **Prime Medical Centers:** Operates a network of 12 outpatient clinics in Dubai, Sharjah and Abu Dhabi. These are multi-specialty centers providing general medical practice to super specialty treatments along with diagnostic support. Around 2,500 patients are treated daily across these centers.
- **Premier Diagnostic Center:** Opened in 2011, this center in Dubai is a comprehensive diagnostic center equipped with radiology, laboratory, MRI, audiometry, multi-slice CT scan, mammography, densitometry, peripheral vision analysis & optometry and echocardiography, among others.
- **Medi Prime Pharmacies:** The company operates 8 pharmacies located adjacent to its healthcare facilities. The pharmacies supply medicals aids, first aid boxes, medicines, medical equipment, skin care products and cosmetics, etc.
- **Corporate Services:** The company provides medical services to corporates through 20 onsite clinics and over 25 corporate clinics within office premises in association with insurance companies. They also conduct pre-employment health screenings and pre-insurance medical examinations.
- **Prime Home Care:** Through this, the company serves patients who are homebound due to illness or disability. Services provided include doctor's visit, geriatric care, nursing, palliative care, physiotherapy, blood collection, education and counselling, medical equipment supplies, rehabilitation and patient escort.

Recent Developments/Future Plans

- In January 2018, the company launched its mobile application 'PRIME HEALTH ME', where patients can get access to an integrated portfolio of medical services including medical history, reports and results 24x7, appointments and reminders.
- In December 2017, Prime Medical Center opened a multi-specialty facility in BurJuman. This center will replace the existing clinic on Al Seef Road to cater to a higher number of patients.
- In October 2017, Prime HealthCare Group opened two new medical centers in Al Qusais, Dubai and Al Rashidiya, Ajman to expand its reach in the UAE.
- In July 2017, the Prime HealthCare Group entered into a strategic partnership with Dubai Airports to promote healthier lifestyle for the airport employees. As per the agreement, the company will manage operations of the Wellness Center located in the airport, while acting as its primary healthcare provider.
- In March 2017, the company opened a new medical center at Reef Mall in Dubai. It is a multi-specialty clinic with state-of-the-art healthcare facilities.

Source: Company website

VPS Healthcare Group (Privately Owned) UAE

Company Description

Founded in 2007, VPS Healthcare Group (VPS) is an integrated healthcare service provider operating a network of 22 hospitals and 125 healthcare centers, largely in the GCC and few in Europe and India. The company provides medical services to over 3.7 million patients through 15 brands, 1,700 doctors and other healthcare professionals.

Business Segments/Services Portfolio

- **Hospitals & Medical Centers:** VPS operates 9 hospitals and 10 medical centers in the UAE, three hospitals and two medical centers in Oman and four hospitals in India under the below brands.
    - **Burjeel:** VPS runs three premium care hospitals in Dubai, Abu Dhabi and Muscat. The Dubai-based hospital specializes in advanced orthopedic surgeries, while the other two are tertiary care multi-specialty hospitals. Additionally, VPS operates two medical centers in Abu Dhabi, one in Al Ain, one in Oman, a day surgery center in Al Reem Island, Neuro Rehabilitation and Physiotherapy Centre in Abu Dhabi and Marina Mall Health Promotion Centre in Abu Dhabi.
    - **Medeor 24x7:** Under this brand, VPS runs three multi-specialty family hospitals in Abu Dhabi, Dubai and Al Ain as well as three medical centers in Downtown (Dubai) and Yas Mall and Al Zeina in Abu Dhabi.
    - **LLH:** Under this brand, the company has two multi-specialty hospitals in Abu Dhabi and Musaffah and a clinic in Musaffah.
    - **Lifecare Hospital:** Located in Musaffah and Baniyas, the hospitals provide cost-effective specialized care services.
    - **Lifeline:** VPS operates two multi-specialty family hospitals in Salalah and Sohar and a medical center in Al Darsait, Oman.
    - **VPS Rockland Hospital:** VPS operates three multi-specialty hospitals under this brand in the NCR region of India.
    - **VPS Lakeshore Hospital:** A multi super-specialty hospital in Kochi, India.
- **Specialized Clinics & Services:**
    - **Tajmeel:** Under this brand, VPS owns and operates 4 clinics in the field of dentistry and cosmetology. Of these, three clinics are located in Al Dar, Al Shahama and Al Karama and one is a mobile dental clinic.
    - **Prince Medical Center and Home Care Services:** Located in Abu Dhabi, this clinic provides day care under various specializations and offers home care services.
    - **Response Plus Medical:** A provider of ambulatory services for onsite healthcare management, occupational health solutions and medical emergency transfers for remote work sites across the UAE.
    - **OccuMed Clinics:** A medical center, located in Musaffah, providing occupational medicine services related to audiometric tests, spirometer testing, ECG, treadmill test, ultrasound and ophthalmology.
    - **Educare Institute of Dental Sciences:** A dental college in Kochi, India.
    - **Mobile Clinics:** A fleet of mobile mammography unit, dental clinics and trucks equipped with examination rooms, laboratory services, X-ray, ultrasound, ECG and others to provide medical care at remote locations.
- **Pharmaceutical Services:**
    - **LifePharma FZE:** VPS owns an integrated pharmaceutical manufacturing unit in Jebel Ali, Dubai and is constructing a new factory in KIZAD, Abu Dhabi.
    - **Burjeel Retail Pharmacies:** A chain of 8 pharmacies in Abu Dhabi.

Recent Developments/Future Plans

- In February 2018, VPS entered into partnership agreement with Royal Philips to install Philips Tasy Electronic Medical Record solution across the company's hospitals and clinics.

Source: Company website

Zulekha Healthcare Group (Privately Owned) UAE

Company Description

Zulekha Healthcare Group (ZHG) was founded in 1992 by Dr. Zulekha Daud, an India-based doctor who moved to Sharjah in 1964 to provide healthcare services. The group owns and operates two multidisciplinary hospitals in Dubai and Sharjah, three medical centers, three pharmacies and one diagnostic center in the UAE. Additionally, ZHG operates Alexis Multispecialty Hospital in Nagpur, India. The hospitals specialize in joint replacement surgery, cardiac care and interventional cardiology, laparoscopy, weight loss surgery and pediatric orthopedics, among others.

Business Segments/Services Portfolio

- **Zulekha Hospital, Dubai:** This hospital commenced operations in 2004 and has a capacity of 79 beds. The hospital offers inpatient and outpatient services across a wide range of medical and surgical specialties.
- **Zulekha Hospital, Sharjah:** This is a multi-specialty hospital spread over an area of 240,000 sq ft encompassing 150 beds. The hospital provides treatment in areas such as obstetrics, gynaecology, pediatrics, audiology, neurology, oncology, physiotherapy, ENT, cardiology and urology.
- **Alexis Multispecialty Hospital, India:** Started in November 2016, this is a 200-bed hospital offering secondary and tertiary care services in areas of cancer, cardiology, orthopedic and neurology.
- **Pharmacy:** The group runs three pharmacies, of which one is in Al Rafea and others are within the premises of hospitals in Dubai and Sharjah.
- **Medical Centers**: The group's medical centers are located in Quasis – Dubai and Dhaid – Sharjah under the name Zulekha Medical Center and one in Baniyas Square – Dubai under the name Dr. Iqbal Daud Poly Clinic & New Zulekha.

Recent Developments/Future Plans

- During the Arab Health 2018 event held during January 2018, ZHG announced its plan to set up a 150-bed hospital in Sharjah and expand its hospital in Dubai. The new hospital will be built on the lines of Alexis Multispecialty Hospital in India to provide primary and secondary care and act as a referral for the group's tertiary hospitals. The Dubai hospital expansion will add 60 inpatient beds, new operation theatres, emergency services and labor rooms to take the total capacity to 179 beds. The expansion is mainly focused on offering comprehensive oncology care services.
- In November 2016, ZHG entered the Indian healthcare market, with the establishment of Alexis Multispecialty Hospital in Nagpur. The group invested US$ 43.7 million on the development of this hospital that is spread over an area of 225,000 sq ft and features medical and surgical oncology & radiotherapy, interventional radiology, preventive medicines and critical care services.

Source: Company website, Media Reports

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