



Sustainable and Profitable Healthcare Investment in the Middle East

Background and opportunities

Part I: United Arab Emirates (UAE)

Santeum Partners presents the first in a series of reports for investors and health sector stakeholders identifying and debating key challenges and opportunities

The Middle East and North Africa (MENA) healthcare sector presents attractive investment opportunities. The estimated value of the healthcare sector in the countries of the Gulf Cooperation Council (GCC) alone is approximately USD12 billion and is estimated to grow to USD60 billion by 2025.

The UAE is one of the most developed healthcare markets in the region

The UAE healthcare market is expected to grow by more than 14% annually between 2005 and 2015, from USD3.2 billion to USD11.9 billion. This growth is supported by a favourable political backdrop, a positive regulatory environment, increasing private sector participation and developments in reimbursement and insurance.

Timely and accurate healthcare sector data are needed to guide investment decisions

Current healthcare sector investment decisions are hampered by a lack of data. This investment report uniquely examines the situation from the “ground-up” (burden of poor health, health determinants, demographics and healthcare system evolution).

Investors should look to new business models that meet the challenge of chronic and lifestyle-related diseases, contribute to improving health status and support the positive transformation of the healthcare sector

Emerging opportunities exist in payment, capitation and insurance services; disease management systems; technologies for information management and healthcare decision support; centralized services including laboratories and hospital management; services to better deploy, utilize and manage medical technologies for diagnosis and treatment; health promotion and wellness services; rehabilitation and care services for special groups such as the elderly and the development of a vibrant, locally focused pharmaceutical and medical device industry.

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www.santeumpartners.com

Leonard Lerer, MD MBA

leonard.lerer@santeumpartners.com

Peter Albinsson, CFA

peter.albinsson@santeumpartners.com

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About Santeum Partners

Santeum Partners is an independent financial advisory boutique dedicated to value creation in the healthcare sector. Based in Switzerland, the Santeum Partners team works at the interface between industrialized and emerging markets. Santeum Partners supports investors, entrepreneurs, top academic institutions, research centers, healthcare companies and the public sector in developing opportunities and building successful, sustainable leading companies. Santeum Partners aims to contribute to global growth, innovation and health.

Introduction

Identifying healthcare investment opportunities requires an excellent understanding of the public health challenges and sector evolution

The “Sustainable and Profitable Healthcare Investment in the Middle East” report series explores the opportunities that lie at the interface between health status and health determinants, the investment environment for healthcare infrastructure and services and the public and private sectors. Santeum Partners’ view is that there are a wide range of profitable healthcare investment opportunities across the region that can make a major contribution in promoting health, improving care, better managing and containing costs and in supporting the creation of a sustainable, high-quality healthcare system.

Overview of the UAE Healthcare Sector

Key elements of the Emirate’s vision for the development of social and human resources describe a society characterized by the provision of world-class healthcare, education and other services, where individuals (both national and expatriate) are valued and their unique skills and contributions are ethically leveraged toward achieving a better quality of life for all.

(Emirate of Abu Dhabi, Executive Council Policy Agenda, 2007-2008, p. 23).

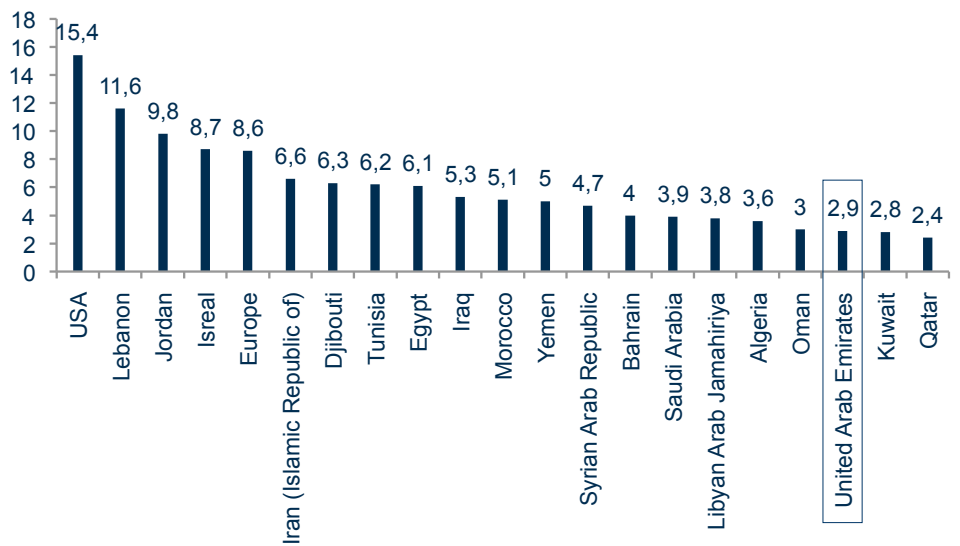
Table 1: UAE Basic Demographic Indicators

Population (2006)	4.2 million
Annual Population Growth (2006)	3.5%
Surface Area	83,600 sq. km
Current GDP (2005)	USD 129.7 billion
Annual GDP Growth (2005)	8.5%
Annual Inflation, GDP Deflator (2005)	14.3%
Market Capitalization of listed companies (% of GDP, 2005)	173.9%

Source: The World Bank Group, 2008

The UAE healthcare sector is one of the most developed in the Middle East with a strong demand for best-in-class healthcare. Total expenditure on healthcare at USD711 per-capita in 2004 is among the highest in the region. However, at 2.9% of GDP, healthcare expenditure is still low when compared to Europe and the USA which spend 15.4% and 8.6% of GDP on healthcare respectively. From a macro-economic perspective the market still has considerable growth potential in order to reach the scale of major OECD countries. In terms of value, the UAE healthcare sector represented approximately USD3.2 billion in 2005 and is expected to grow to USD11.9 billion in 2015.

Chart 1: Total Expenditure on Healthcare as a % of GDP



Source: The World Health Organization, World Health Statistics 2007

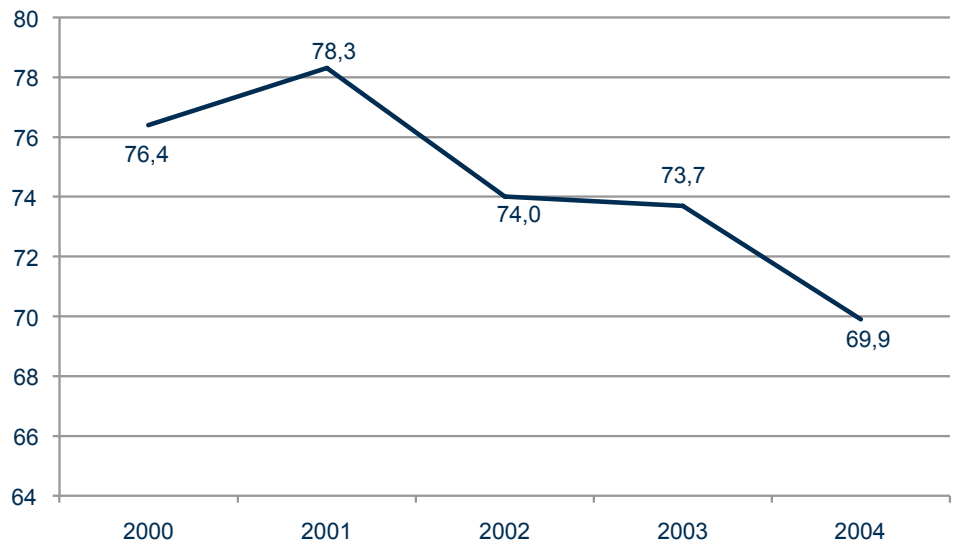
Demand and expenditure projections indicate that a transformation in health system development is required if the UAE is to continue to provide the type of healthcare infrastructure required to maintain a healthy and globally competitive society. The rapidly increasing burden of chronic and lifestyle-related disease has begun to manifest in an increased demand for medical care.

The Role of the Private Sector

The private sector has become an important partner in providing comprehensive healthcare. It is now contributing effectively to curative, preventive and health promotion services through hospitals, diagnostic and medical centers and clinics. The shift towards private sector participation in the healthcare sector has been accelerated by the introduction of compulsory health insurance coverage in the Emirate of Abu Dhabi by the Health Authority of Abu Dhabi. A unified health insurance system is also under development in Dubai.

UAE healthcare sector is growing fast and the challenge is identifying the “tipping point” between under- and over-capacity in the hospital space

Chart 2: Government Healthcare Expenditure as a % of Total Healthcare Expenditure in the UAE



Source: The World Health Organization, World Health Statistics 2007

Despite a growing sector with attractive fundamentals, there are to date only two pure-play listed healthcare sector companies in the UAE, both listed on the Abu Dhabi Securities Market (ADSM); Gulf Medical Projects Co. (GMPC; ADSM) and Gulf Pharmaceutical Industries (JULPHAR; ADSM). With a combined market capitalization of AED16.4 million they represent 0.4% of the total market market capitalization of 63 companies. By comparison, in the USA, the healthcare sector represents 12% of the S&P500 Index. On the Dubai Financial Market (DFM), there are currently no pure-play local listed healthcare sector companies. A number of listed conglomerates are significant players in the healthcare sector, e.g. Emaar Properties (EMAAR; DFM).

Hospital Market Overview

There are 69 hospitals in the UAE, with a total of 8,390 beds: 38 public hospitals with 6,870 beds (average 181 beds/hospital) and 31 private hospitals with 1,520 beds (average 49 beds/hospital). The number of beds per 1,000 people in the UAE is 2, below the international average of 3 (DHCC, 2007). The number of beds is estimated to reach 19,000 by 2015 with the need to add approximately 1,000 beds/year. Industry experts predict a USD10 billion wave in hospital building projects (excluding medical equipment) in the GCC, to meet the hospital bed demand (162,000 more beds needed), USD6.5 billion will be invested in Saudi Arabia and USD1.5 billion in Qatar. The UAE currently has nine major hospital projects underway with an approximate value of USD596 million. Dubai Healthcare City is a paradigmatic project that plans to cluster over 300 healthcare providers, 10 hospitals with 1,300 beds and a range of related businesses in a “healthcare free zone”. The partnership between an internationally recognized “name” in healthcare with a local property development company is a model that has become largely standard in the UAE. The hospital sector is facing substantial human resource challenges, as it becomes more and more difficult to recruit the nurses, physicians and other healthcare professionals to staff the growing number of institutions.

Epidemiological Backdrop

The UAE faces an epidemiological transition with a growing burden of chronic and lifestyle-related diseases, injuries mainly due to road traffic accidents and the continuing presence infectious diseases. Healthcare delivery is undergoing a significant transition with substantial investments in hospital infrastructure and innovations in health insurance. The imperative for the health authorities is to (i) improve the quality and performance of the healthcare system as a whole through the application of rigorous service standards and targets, (ii) expand access to services through public-private partnerships based on risk sharing and appropriate competition to develop a world-class healthcare system and, (iii) implement financing models and a health insurance system to promote quality and inevitably deal with rising healthcare costs.

Chronic and lifestyle-related diseases (including diabetes, heart disease and cancer) are on the increase, as they arise not only from genetic predisposition but also from too little exercise, poor nutrition and smoking. The situation is exacerbated by rapid urbanization and the inexorable move towards a sedentary lifestyle. As many of these conditions affect people of working age, they impact on the national economy. Although chronic and lifestyle-related diseases and injuries make considerable demands on healthcare services, current planning may have underestimated the resources required.

Table 2: UAE Summary Health Statistics

UAE	
Indicator	Value (Year)
Life expectancy	
Life expectancy at birth (years) males	76.0 (2005)
Life expectancy at birth (years) females	79.0 (2005)
Mortality	
Infant mortality rate (per 1 000 live births)	8.0 (2005)
Maternal mortality ratio (per 100 000 live births)	54 (2000)
Age-standardized mortality rate for cardiovascular diseases (per 100 000 population)	369.0 (2002)
Age-standardized mortality rate for cancer (per 100 000 population)	100.0 (2002)
Age-standardized mortality rate for injuries (per 100 000 population)	72.0 (2002)
Years of life lost to non-communicable diseases (%)	59.0 (2002)
Years of life lost to injuries (%)	28.0 (2002)

Source: *The World Health Organization, Statistical Database*

World Health Organization (WHO) data indicate that the UAE's health profile compares favourably with that of most industrialized countries. However, when looking at the disaggregated data, it is apparent that chronic and lifestyle-related disease prevention is an urgent priority. For example, cardiovascular disease causes twice as many deaths as in Canada. Changes in lifestyle have resulted in an increase in cardiovascular disease with an average age for heart attacks of 50 years as compared to 65 years in industrialized countries. The UAE has the second highest diabetes prevalence in the world, whereas diabetes is ranked 8th among burden of disease priorities in high-income countries. About a quarter of nationals and over 17% of expatriates have diabetes, with a higher prevalence among the elderly. Diabetes is highly correlated to obesity, mainly due to sedentary lifestyles and unhealthy diets. Hypertension is very prevalent, having a strong genetic basis in the region. Cancer is the third leading cause of both mortality and morbidity. Unsurprisingly, this has been linked to the alarming level of smoking where over 40% of males are regular smokers by the age of 17 years. Other health issues include the high prevalence of allergy, genetic diseases, disability and kidney disease.

As injuries usually affect young people, they have a disproportionate impact on the national economy and average life expectancy. Injuries still account for 18% of all mortality according to official estimates, despite indications that injury-related deaths due to accidents, poisoning and violence have decreased from a peak of 33 in 1997 to 25 per 100,000 population in 2004. This proportion exceeds the global average of between 10-12% of all mortality (Ministry of Health, 2007). There is every reason to believe that injury rates may be even higher and set to rise with the expanding road network. In a recent study, injuries were found to account for 30% of mortality in children. Of these, some 68% were road traffic-related. Another neglected area is the field of occupational health and safety.

Diabetes, high blood pressure, heart disease, cancer and road traffic accidents are major causes of morbidity and mortality

Health Determinants and the Healthcare System

Risk factors related to diseases of lifestyle feature prominently in global comparative risk studies and include: smoking (ranked 4th), high cholesterol (6th), overweight and obesity (8th), low fruit and vegetable intake (10th) and physical inactivity (12th) (Ezzati et al, 2006). A skewed healthcare focus on curative services results in health promotion remaining an underutilized intervention for addressing many of these risk factors. According to the WHO, over a quarter of males and about 40% of females in the UAE are overweight or obese. These relatively high rates are compounded by the increasingly sedentary lifestyle that invariably accompanies urbanization and the lack of exercise among the younger population. Smoking, a cross-cutting risk factor for many chronic diseases, is highly prevalent in the UAE. About 20% of adolescents between 13 – 15 years currently use tobacco and 32% of adult males are smokers (WHO, 2007). An increasing proportion of women are smokers with profound implications for longer-term cancer rates. A number of studies have aimed to determine the risk factors involved in the growing number of road traffic accidents. Seatbelt legislation was only implemented in the UAE in January 1999. Estimates of seatbelt use show that only 17% of a study sample reported using a seatbelt regularly (El-Sadig, 2004). Women's and child health are vital priorities, and while the UAE has world-class obstetric and perinatal facilities, challenges such as obesity and genetic diseases require considerable resource allocation.

The absence of a coordinated primary health care system in the UAE has resulted in many patients relying on hospital facilities rather than seeing a GP in the first instance or during the early stages of a disease. According to recent studies, 85% of all breast cancer cases are diagnosed and first treated at a very late stage, when the chances of long-term survival are lower, compared to 20% in the USA and 30% in Europe. The UAE still has considerable needs in terms of primary health care services, prevention and health promotion, services for special groups (adolescents, disabled, mental health and substance abuse, rehabilitation), care for the elderly and disease management services.

Much more needs to be done to promote health through reducing smoking, obesity and accidents

Investment Implications

(i) Healthcare Information Management

Good healthcare sector decision-making is dependent upon accurate and timely health statistics and the private sector can make an important contribution to the development of world-class health information systems in the UAE. In Abu Dhabi, the Health Authority has developed detailed healthcare data guidelines and is driving a transition towards electronic health data exchange and insurance reimbursement. There is strong justification for the prioritisation of health surveillance and monitoring, as it is extremely difficult to contemplate large scale investment in a world-class healthcare system without accurate data and the means to monitor the results of such investments. Health information systems work hand-in-hand with vital statistics and public health data collection. Health insurance, reimbursement, quality and outcomes management, health education and training and resource allocation all require good health data, as do the pharmaceutical and medical device industries.

Health information service providers, extending from medical records management to hospital information systems to educational and public policy and public health research institutions have a fertile market in the UAE.

(ii) Health Promotion and Prevention

There is more than sufficient evidence that over-focusing on expensive, technology intensive hospital services, often at the expense of primary health care, does not ensure optimal healthcare for the community as a whole. The model of either delivering basic health services exclusively through the public sector or through independent general practitioners who are not linked into the health system will inevitably be superseded by a more coordinated approach. Here opportunities exist for primary health care systems to be managed by groups on a capitation or HMO basis with strong incentives to keep the community healthy. This strategy should place an emphasis on modifying risk factors for chronic and lifestyle-related diseases. It is unlikely that any country can sustain an uncoordinated, expensive, hospital-based health-care system in the long-term and financial models will have to be developed through private-public partnerships if a sustainable financing solution is to be developed. One of the objectives of this strategy is the incentivization of partners through “shared-risk, shared-return” models and closer provider integration in an efficient and transparent reimbursement process.

(iii) Health Services

Investing in comprehensive health services (such as an integrated health system extending from primary care and prevention, across curative care to rehabilitation) requires a multi-sectoral, co-ordinated public health strategy. New service models will support a move away from keeping patients in a hospital setting, rather transitioning to outpatient centers, home-based care and telemedicine. Providers of integrated out-of-hospital care have the opportunity to combine electronic medical records, disease management programmes and tailored personal services. Health services opportunities exist to cater for the growing elderly population and in integrating with wellness, fitness, nutrition and other health promotion activities. Educating the range of health professionals required for an integrated health system presents attractive investment opportunities, especially as the drive to improve safety and quality makes continuing education a priority.

Appendix: Investment Opportunities Overview

High Potential Investment Areas

Payment, capitation, disease management and insurance systems that promote quality and reduce costs

Business opportunities to incentivize providers to improve care and service efficiency including case management for specific conditions (for example, diabetes and disability); disease and condition management services; HMO systems; grouped primary care practices; occupational health and safety services, services for the elderly population.

Technologies for healthcare decision support, healthcare information management, effectiveness review and medical device assessment

Electronic medical records; health data management systems; technology assessment and procurement and management services; health data integration and data analysis services.

Centralized services to improve quality and safety

Diagnostic laboratories; pharmaceutical benefit management and central pharmaceutical services for hospitals; centralized administration services; remote monitoring and biometry, radiology and telemedicine services; legal and regulatory services.

Health promotion and wellness

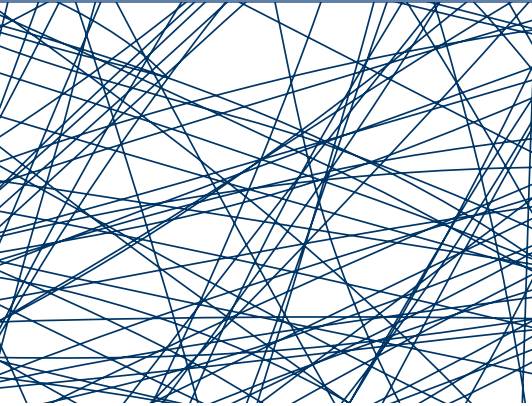
Providers of specific health promotion in areas such as smoking, obesity and substance abuse; tailored and personalized services; diet and nutrition including nutraceuticals, cosmeceuticals; fitness and wellbeing (gyms, spas, training); public health promotion offerings such as awareness campaigns and web-based support services.

Pharmaceutical and medical device industry

Generics and specialty pharmaceuticals; drug delivery; infant and special nutrition; drug delivery devices; medical technologies for special groups such as the disabled and elderly, treatment for neglected conditions with high regional prevalence.

Based on Morgan et al, New England Journal of Medicine, 2008

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Contact details and Disclaimer**Santeum Partners**

Binzallee 35 | 8055 Zurich | Switzerland

T +41 (0)43 811 57 61

F +41 (0)43 541 39 00

www.santeumpartners.cominfo@santeumpartners.com

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