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RESEARCH REQUEST

This report addresses the request received from Virginia Economic Development Partnership to do an industry report on the United Arab Emirates (UAE) healthcare industry.

RESEARCH FINDINGS

UAE HEALTHCARE SECTOR

With its vision to develop world-class healthcare infrastructure, expertise, and services, the UAE government is extensively expanding and upgrading its healthcare systems to match international standards. High birth rates, rise in life expectancy, growing incidence of NCDs, and medical tourism are driving the demand for healthcare in the UAE. Healthcare spending in the country grew at an 8.9 percent compound annual growth rate (CAGR) from $8.4 billion in 2008 to $12.9 billion in 2013. The per capita healthcare spending in the UAE was at $1,569 in 2013, the second highest in the GCC region.

UAE VISION 2021

The UAE strategic plan, Vision 2021, identifies healthcare as one of the main pillars of their development agenda. Based on this plan, the national Ministry of Health and the related emirate-specific healthcare authorities create policy and related action plans. To understand the healthcare needs of the UAE, it is wise to consider the most challenging healthcare issues faced by the national population.

CARDIOVASCULAR DISEASE

Cardiovascular disease is the leading cause of death in the UAE, where it accounts for 41 percent of all mortalities. Treatment for cardiovascular disease is expected to account for 24 percent of the total healthcare expenditure in 2025, compared to less than 12 percent of the total expenditure today.

Alarmingly, the age of cardiovascular disease/heart attack occurrence is dropping dramatically. Lifestyle choices are leading to an increase in heart conditions in patients under the age of 40 attributed to widespread smoking, a sedentary lifestyle, high blood pressure, high cholesterol, obesity, stress, and a family (genetic) disposition. Whereas the global average age of a heart attack is 50 to 65 years old, the UAE average is 45 to 55 years old.

CHILDHOOD OBESITY

A UAE Ministry of Health supported study assessing the national prevalence of obesity among schoolchildren in the UAE revealed startling statistics. While there were children from about 30 countries involved in the study, more than 90 percent were UAE nationals. Of those in the 15 to 18 year old age category, 10.3 percent of boys were extremely obese compared with three percent of girls in the same age category. Childhood obesity is interlinked with two other major UAE healthcare issues; the prevalence of diabetes and cardiovascular disease. Along with diabetes, there has also been an increase in hypertension among teenagers, as well as anemia, cystic ovarian disease in girls and joint problems resulting from difficulties to support the extra weight. UAE recognizes that family education is critical in tackling the epidemic of childhood obesity. Lifestyle trends such as lack of physical activity, and consumption of fast food and pre-packaged foods are major casual contributors to this growing statistic. Eating is also seen as a
recreational activity in this part of the world, and a way to socialize with others. Food equals love is very much a cultural norm.

**DIABETES**

Seven of the top twenty countries most prevalent with diabetes are in the Middle East, predominantly in the GCC. Nineteen percent, or one in five people in the UAE have diabetes, with the expectation of an 80 percent increase by 2035. One million new cases of diabetes were recorded in the UAE in 2015 and its national healthcare will reflect the added disease burden with increasing health expenditures to keep pace with the increase in disease. Medical costs attributable to diabetes and prediabetes in the UAE are forecast to increase to $1.04 billion by 2020, representing a 58 percent increase from an estimated $657 million in 2010. The more troubling cost is morbidity and mortality in addition to lost productivity and a steep burden placed on the healthcare system in general.

The UAE has one of the highest rates of Type 2 diabetes in the world, which is completely preventable, yet often goes undiagnosed. A sedentary lifestyle, bad eating habits, and general obesity are cited as the main causes of the increasing prevalence of Type 2 diabetes.

The UAE Ministry of Health is aware that the toll of diabetes can be reduced and managed with early intervention. Screening of at risk individuals, lifestyle interventions, effective disease management to delay progression and prevent complications are all areas of focus by the Ministry. Working in collaboration through public private partnerships (PPP) has been identified as essential to curbing the epidemic of diabetes and prediabetes. Public health agencies are open to non-profit organizations and the private sector to develop strategies for culturally-appropriate, community-based initiatives for diabetes control and prevention in the UAE, making it a top healthcare agenda item.

An example of this collaboration is the Rashid Center for Diabetes and Research (RCDR), a PPP between the UAE Ministry of Health, Global Health Partner, and the Swedish public Skane University Hospital. RCDR’s multidisciplinary team offers most of the treatment modalities relevant for diabetes and its related complications, divided into six different departments.

**SMOKING/TOBACCO USE RELATED ILLNESSES**

A quarter of all smokers in the UAE had their first cigarette before the age of ten according to the UAE Ministry of Health. Tobacco use is growing in the country as younger individuals continue to adopt other forms of tobacco such as shisha (water pipes) and midwakh (pipe tobacco). About 28 percent of residents under eighteen smoke, and the number of young female smokers is increasing at an even greater rate.

Because alcohol consumption is prohibited under the Islamic faith, many young people adopt the habit of smoking as their rebellious act. Shisha is another “accepted” form of smoking not considered as damaging as cigarettes, which is a misconception. Shisha is a major social activity across the entire pan Middle East, woven into its cultural fabric.

Hard numbers on the trend among younger adults are not available but estimates suggest that nearly 25 to 30 percent of the UAE’s adult population already smoke some form of tobacco. This places the country second only to Qatar – where 37 percent of the people smoke – in the GCC region. The entire Middle East and North Africa region is also seeing an increase in tobacco use, even though the proportion of users in Western nations is on the decline.

While selling cigarettes to someone below the age of 18 is illegal as well as selling e-cigarettes, the low cost of cigarettes is certainly a contributing factor to the prevalence of smoking ($2.70 per pack). The price has recently been increased and there is talk of a health tax being added on as well.
In the past five years, the UAE government has enacted Public Smoking laws preventing smoking in restaurants, cafes and public areas, and implemented mandatory cigarette package warnings with vivid images.

CANCER PREVENTIONS AND TREATMENT

In the UAE, approximately 4,500 new cases of cancer are reported in a year, which means 12 new cancer cases a day. Cancer is the third leading cause of death in the UAE, behind cardiovascular disease and accidents, with Emiratis accounting for more than two-thirds of cancer patients, according to the UAE Ministry of Health. The leading cancers in the UAE are breast, thyroid, colorectal, lung, and cancer of the cervix. The World Health Organization (WHO) says there were 1,200 cancer-related deaths in the UAE in 2013, with trachea, bronchitis, and lung cancers recording the highest mortality rate for men (16.4 percent of cancer-related deaths), and breast cancer for women (25 percent of cancer-related deaths).

The Abu Dhabi Health Authority (HAAD) created its Cancer Control Plan to work with public, private, and community partners to create and implement strategies to help cancer patients and their families live with, through, and beyond cancer. The pillars of the program are prevention, early detection, diagnosis, treatment, and palliative care. This is an example of an emirate level public health authority creating strategy around a Vision 2021 goal and then providing engagement opportunities to private sector organizations to help achieve its targets that U.S. companies can capitalize upon.

ACCREDITED HEALTH FACILITIES/BEDS PER CAPITA

Demand for the number of hospital beds in the GCC countries is expected to grow from an estimated 101,797 in 2015 to 113,925 in 2020 due to many of the factors detailed above. Although 13,000 new hospital beds were added in the GCC between 2009 and 2013, the number of beds per capita remains lower than that in developed countries.

The UAE government is encouraging private investment groups to build hospitals and clinics, while it focuses on upgrading the existing infrastructure.

Driving the need for more beds per capita is the country’s growing population and a shift in the age-group distribution. In addition, hosting Expo 2020 in Dubai will put further burden on the medical facility capacity.

The UAE is planning a $680 million project called the New Medical Complex in Abu Dhabi’s Mohamed Bin Zayed City, with a 400-bed hospital as well as personnel housing. The Sheikh Khalifa Medical City at Abu Dhabi is another major project with a planned 838-bed hospital that will cover 279,000 m2. The hospital will be operational in 2018 and offer specialized trauma, gynecological, and pediatric centers along with general medical facilities.

At the same time, the federal government is demanding that all public and private hospitals be accredited to international standards of medical services and staff.

LIFE EXPECTANCY

Compared with fourteen other geographically or economically similar countries, including the United States, Qatar, and Kuwait, the UAE had the highest death rate at 615 per 100,000 people in 2010 and the lowest life expectancy at 76.3 years.

The main reason is death on the roads. It is often a lethal combination of driving styles and tempers of a disparate expatriate population that leads to road fatalities. There are many care accidents among the younger population as driving without a license and the extreme wealth that provides powerful sports cars is a lethal combination as well. Infant and child mortality is prevalent due to non-use of car seats. Although a law, it is not often enforced.
One need only look at the list of health concerns identified by the UAE Strategic Plan to understand what is contributing to the life expectancy statistics; lifestyle diseases such as diabetes and cardiovascular disease, and cancer top the list. By addressing these related healthcare issues, the life expectancy age should increase as a result. Often it is a major public education awareness campaign consistently implemented across the national and expatriate populations needed to affect change. Prevention coupled with early treatment are key.

**UAE NATIONAL HEALTHCARE STRUCTURE**

**THE MINISTRY OF HEALTH (MOH)**

The Ministry formulates nationwide health policies and regulates the healthcare market in the UAE and the Northern Emirates.

The UAE’s two largest Emirates, Dubai and Abu Dhabi, are governed by the Dubai Health Authority (DHA) and Health Authority of Abu Dhabi (HAAD).

**DUBAI HEALTH AUTHORITY**

Dubai has emerged as one of the top healthcare destinations globally. The Emirate has an advanced healthcare system with numerous hospitals and primary healthcare centers offering state-of-the-art medical technologies and services that match international standards.

**HEALTH AUTHORITY OF ABU DHABI**

In late December 2014, HAAD announced its five-year strategic plan to 2020, focusing on improving the quality of care, reducing capacity gaps, attracting and training workforce, emergency preparedness, cost-effective healthcare spending, e-health, and wellness and prevention of diabetes.

**THE FEDERAL HEALTH INSURANCE AUTHORITY (FHIA)**

The FHIA will eventually be a standalone organization comprehensively managing the UAE’s health insurance (currently being handled by the Ministry of Finance (MOF). The FHIA will also manage licensing, registration, and codes of conduct for healthcare service providers.

**PUBLIC/PRIVATE HEALTHCARE COLLABORATION**

The UAE government has been liberal in welcoming foreign companies to support the growth of its healthcare industry. Subsequently, the country is witnessing several collaborations and strategic tie-ups between public and private companies and healthcare stakeholders.

The private sector dominated the UAE’s healthcare infrastructure landscape by operating nearly 70 percent of the 115 hospitals in the UAE in 2014. However, government-run hospitals held a higher bed capacity. While the country’s bed capacity grew at an annualized rate of 3.7 percent since 2009 to reach 11,657 beds in 2014, the bed availability remained almost stable at nearly 13 per 10,000 persons. The ratio of nurses to population improved over the years to 35.9 per 10,000 persons. Although Dubai and Abu Dhabi reported the best physicians and nurses to population ratios in the GCC, overall, the country lags behind its regional peers due to lack of infrastructure in its northern region, the Emirates of Sharjah, Ajman, Um Al Quwain, Fujairah, and Ras al Khaimah. Abu Dhabi and Dubai, the major healthcare hubs, have taken significant steps to develop the sector.
MANDATORY HEALTH INSURANCE

UAE citizens are entitled to free healthcare under the law. However, it’s worth noting that nearly 90 percent of the population is expatriates. In the past few years, the government foreshadowed the implementation of employer provided mandatory health insurance provision, moving towards a universal healthcare scheme in order to maintain sustainable healthcare expenditures. Prior to 2014, less than half of Dubai's population had medical insurance. Abu Dhabi was the first Emirate to actually introduce mandatory health insurance for expatriates by linking it to resident permits.

HEALTHCARE FREE ZONES

The city has also developed two healthcare free zones, Dubai Healthcare City (DHCC) and Dubai Biotechnology and Research Park, to meet the demand for high-quality care.

DHCC has approximately 160 clinical partners including hospitals, outpatient medical centers and diagnostic laboratories across 150 plus specialties with licensed professionals from almost 90 countries. DHCC is also home to the Mohammed Bin Rashid University of Medicine and Health Sciences, part of the Mohammed Bin Rashid Academic Medical Center. The free zone is governed by the Dubai Healthcare City Authority (DHCA) and regulated by the independent regulatory arm, Dubai Healthcare City Authority – Regulation (DHCR), whose quality standards are accredited by the International Society for Quality in Healthcare (ISQua).

The Dubai Biotechnology and Research Park is a free zone created to serve the value chain of the medical science sector. Formerly known as DuBiotech, it is now home to 280 companies in the life sciences, energy and environment sectors.

MEDICAL TOURISM

The GCC countries plan to encourage medical tourism by developing world-class healthcare and hospitality facilities while relaxing the visa-related policies. The UAE is at the forefront, having simplified the entry process for patients by introducing new visa options including visas for multiple entries and the patient’s escort. Dubai is already a popular medical destination and it welcomed 260,000 medical tourists in the first half of 2015. Dubai has unveiled a master plan to attract half a million foreign patients annually, which is likely to bring in revenue of $700 million by 2020. The plan, to be implemented in two phases, involves the construction of eighteen private and four public hospitals with a workforce of more than 3,800. In January 2016, Dubai Health Care City announced its plan to build the world’s largest wellness center over the next four years in a bid to strengthen the healthcare system, as well as to drive medical tourism in the Emirate. Such massive developments within the healthcare sector that are focused on medical tourism are likely not to only attract patients from across the world but also reduce the outbound visits of locals for specialized treatment.

Today, Dubai is perceived as one of the top destinations for medical tourism, in particular, for cosmetic surgery. In the first half of 2015, the Emirate hosted 260,000 medical tourists. This figure is expected to increase in 2017. It will lead to growth in UAE medical tourism revenues, which are likely to cross $700 million by 2020.

MARKET SIZE FORECAST

The healthcare market in the UAE is projected at $19.5 billion in 2020, indicating an annual average growth of 12.7 percent from 2015. The outpatient and inpatient markets are projected to reach $12.1 billion and $7.5 billion, respectively, in 2020. The country is likely to see a nearly 3 percent annual increase in the number of hospital beds required, presenting a demand of more than 13,800 beds by 2020. In 2014, Dubai spent $3.5 billion on healthcare, of which the private sector accounted for 66.6 percent. From
2012, the overall healthcare spending grew by 27.7 percent and that in the private sector increased by 37 percent.

**FUTURE GOVERNMENT INITIATIVES IN THE HEALTHCARE SECTOR**

The five-year health strategy of Abu Dhabi is mainly concentrated on e-health and healthcare informatics, in addition to reducing capacity gaps and improving the quality of care. The city foresees an additional requirement of 2,200 hospital beds, 4,800 doctors, and 13,000 nurses by 2022. There are several public and private projects under the planning and construction stages, which are likely to bridge the shortfall. In January 2015, DHA revealed its 10-year healthcare plan that focuses on building a world-class and patient centric model of care. The plan estimates a requirement of an additional 8,000 beds, 7,323 doctors, and 8,510 nurses in Dubai in the next decade. To fill the gap, DHA has proposed to hire and retain a highly skilled medical workforce and construct several hospitals, three medical colleges, and give nursing schools. In January 2016, His Highness Sheikh Mohammed Bin Rashid Al Maktoum launched a five-year health strategy for streamlining the healthcare sector in Dubai. The strategy features fifteen programs and 93 initiatives, and four approaches aimed at ensuring a healthy and safe environment, providing high quality comprehensive and integrated healthcare system, attaining innovation, improving healthcare service efficiency, and creating an integrated database to facilitate smart governance.

The UAE government announced a budget of $13.2 billion for 2016, about eight percent of which is envisaged to be utilized towards healthcare infrastructure development. In a move to assess the quality of services, the UAE Cabinet introduced a nationwide program on January 10, 2016 to evaluate public hospitals and clinics, based on parameters such as wait time, patient satisfaction, duration of admittance, and success percentage of surgeries, among others.

**TRADE SHOW**

**ARAB HEALTH EXHIBITION**

» Date: January 30 – February 2, 2017  
» Website: [http://www.arabhealthonline.com/](http://www.arabhealthonline.com/)  
» Location: Dubai, UAE  
» Arab Health, the largest healthcare trade show in the Middle East, is the premiere event for any company committed to business development in the region. Arab Health 2016 showcased more than 4,000 companies exhibiting their latest innovations to more than 130,000 healthcare professionals attending from 163 countries.