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SECTOR UPDATES

THE U.A.E. HEALTHCARE SECTOR

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U.S.-U.A.E. Business Council

2001 K Street NW
Suite 201 North
Washington D.C.
+202.863.7285
news@usuaebusiness.org

usuaebusiness.org

INTRODUCTION

The coronavirus pandemic has tested public health systems globally. Few novel and infectious diseases around the world have ever posed such dramatic challenges as the novel coronavirus SARS-CoV-2, which causes COVID-19. With highly efficient human-to-human transmission and high mortality rates, COVID-19 led the World Health Organization to declare a public health emergency of international concern and caused countries around the world to reassess their public health capabilities. The United Arab Emirates, like other members of the international community, faced the unprecedented challenge of ensuring public health and safety while minimizing economic fallout.

The U.A.E. government quickly took precautionary health measures after its first recorded case of COVID-19 on the 29th of January 2020, setting the stage for the U.A.E. to be recognized as a global leader in its COVID-19 response. The U.A.E. banned large gatherings, limited international travel, required mandatory quarantines for travelers and those potentially exposed to the virus, encouraged telework, and began an unparalleled effort of mass testing. These efforts by the U.A.E.'s leadership allowed the U.A.E. to be globally ranked as one of the top countries, and the highest in the Arab world, in terms of its COVID-19 response.

The U.A.E. government also quickly charted the path to post-pandemic recovery by prioritizing vaccinations for its people. It began administering its first vaccine authorized for emergency use, China's Sinopharm vaccine, in December 2020, quickly followed by the American Pfizer-BioNTech vaccine. Four main groups were targeted for inoculation, with the first group including Emiratis and residents aged 60 and older, people with chronic health conditions, and the disabled. The second group was frontline health workers, the third other essential workers, and the fourth was members of the general public who want to be vaccinated. The shots became available at mass vaccination sites organized by the Dubai Health Authority, the Abu Dhabi Department of Health, and other health entities within the Emirates. As of June 1, 2021, more than 80 percent of the U.A.E.'s eligible population had been vaccinated.

Another key development was the ability of the U.A.E. to domestically manufacture key tools in the fight against the pandemic. Honeywell signed an agreement with Mubadala Investment Company to produce N95 face masks within the U.A.E., with an annual output capacity of nearly 30 million masks a year. This venture allowed the U.A.E. to not only meet its national requirements, but also export this critical product to frontlines around the world. Meanwhile, Group 42 (G42) entered an agreement with the Chinese pharmaceutical entity Sinopharm CNBG to manufacture COVID-19 vaccines in the U.A.E. Thanks to an industrial plant being built in the Khalifa Industrial Zone of Abu Dhabi, G42 will have a production capability of nearly 200 million doses a year and will produce a COVID-19 vaccine called Hayat-Vax. Hayat-Vax is already being produced in Ras Al Khaimah through a joint G42 and Gulf Pharmaceutical Industries PSC (Julphar) venture.

The U.A.E.'s public health efforts were not limited to its own borders and citizens. Recognizing that COVID-19 is a global challenge, the U.A.E. launched two entities to help global vaccine distribution efforts. Abu Dhabi's HOPE Consortium and the Dubai Vaccine Logistics Alliance were formed to utilize the U.A.E.'s strategic geographic location and its world-class logistical capabilities in the race to vaccinate the world. Through April 2021, it was estimated that nearly one out of every 20 COVID-19 vaccine doses administered worldwide had been transported via Emirates through its role in the Dubai

Vaccine Logistics Alliance. Through these two initiatives, alongside the valiant efforts of the Emirates Red Crescent, the U.A.E. has been able to distribute COVID-19 vaccines and relief to low- and middle-income countries around the world.

In the midst of this public health crisis, the healthcare landscape in the U.A.E. changed in significant ways, with new key entities launching and consolidating. Above all, ADQ, a holding company that already had a broad portfolio of important healthcare enterprises in Abu Dhabi such as Abu Dhabi Health Services Company (SEHA), continued its expansion into the healthcare space by launching Union 71, a laboratory testing company, and Rafed, a Group Purchasing Organization meant to manage and develop the procurement of healthcare-related services and products. Shortly after the emergence of these two groups, ADQ signed an agreement merging both Rafed and Union71 with Pure Health, a key integrated healthcare solutions provider in the U.A.E.

Meanwhile, the pandemic's upending of travel greatly diminished international patient care, a key component of the U.S.-U.A.E. relationship, and reinforced the U.A.E.'s conviction to develop its local healthcare capacity. In February 2021, SEHA and Mayo Clinic marked the first anniversary of a joint venture that launched Sheikh Shakhbout Medical City (SSMC), a 741-bed hospital designed to provide specialty care across a range of clinical practices in Abu Dhabi. In its first year, SSMC completed more than 270,000 outpatient visits, cared for over 19,000 inpatients, and provided emergency care to more than 94,000 patients. Meanwhile, Cleveland Clinic Abu Dhabi continued expanding, with construction of a 9-story, 200,000-square foot tower set for completion in 2022 that will serve as home to its Oncology Institute.

Beyond patient care, the pandemic has led the U.A.E. to redouble its commitment to investing in innovative new healthcare technologies, both in the U.A.E. and abroad. Mubadala Investment Company Chief Executive Khaldoon Khalifa al-Mubarak said early on during the pandemic that the fund would significantly increase its investments in life sciences and medical technology. As a reflection of this, in March 2021, Mubadala signed an agreement with the UK's Office for Investment to invest \$1.1 billion in UK life sciences and healthcare development projects. There are ripe opportunities for similar U.S.-U.A.E. collaboration, particularly when it comes to research on infectious diseases, pharmaceuticals, medtech, and healthcare data.

Through all of this, the U.A.E. continues to reinforce its standing as a healthcare hub in the Arab world. Arab Health, the region's premier healthcare conference held yearly in Dubai, continues to be an engine for ideas, partnerships, innovation, and collaboration. With Expo 2020 launching in the fall, and the U.A.E. dedicating a special week during Expo 2020 for Health and Wellness, the U.A.E. will bring the world together to discuss the future of healthcare.

Building on the Business Council's previous reports on the U.A.E. healthcare sector, this updated edition aims to facilitate the involvement of U.S. companies in the next phase of the U.A.E.'s healthcare development by providing key information about the Emirati healthcare sector and potential U.A.E. partners. First, this report gives an overview of the anticipated growth of the U.A.E. healthcare market, the challenges this poses for the U.A.E. government, and the steps the government is taking to meet these challenges. Then, this report dives deeper into different aspects of the U.A.E. healthcare system, from healthcare regulation and provision to insurance and pharmaceuticals. Finally, this report provides

a snapshot of both challenges and opportunities for businesses in the U.A.E. healthcare market, and it offers resources that businesses can utilize when entering this market.

Throughout, this report highlights case studies of how leading U.S. companies have become involved in the U.A.E. healthcare system to the benefit of these companies' bottom lines, their U.A.E. partners, and the health and wellness of the citizens and residents of the U.A.E.



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PART I: GENERAL TRENDS

The U.A.E. healthcare sector has expanded to meet both the evolving needs of the U.A.E.'s population and the nation's ambition to become a regional medical tourism hub. The COVID-19 pandemic has led the U.A.E. to redouble its commitment to investing in healthcare.

A. Growth

The ongoing COVID-19 pandemic has caused profound economic disruptions, the long-term consequences of which are too early to forecast. This report will therefore refrain from making specific projections as to the growth of the U.A.E.'s healthcare sector in the coming years.

That said, at the outset of the pandemic, the U.A.E. healthcare market was quickly growing. In 2018, according to the World Bank, healthcare expenditures in the U.A.E. reached \$18.2 billion and were expected to rise to \$21.3 billion by 2021. Overall healthcare spending was projected to account for 4.6% of the country's GDP by 2026, up from 4.27% in 2018. The long-term trend lines for the U.A.E.'s healthcare sector are positive.

Population growth is one driver of this expansion. Prior to the pandemic, the World Bank projected that the U.A.E.'s population would grow from 9.4 million people in 2017 to 11.055 million by 2030. The pandemic has reportedly led many foreign workers to leave the U.A.E. However, these trends may very well reverse themselves in the medium term.



Demographic shifts are also driving the growth of the U.A.E.'s healthcare sector, as the U.A.E.'s population slowly begins to age. The estimated share of the U.A.E.'s population above the age of 65 will, according to the World Bank, increase from 1.1% at present to 4.4% by 2030.¹ This will stimulate demand for healthcare and geriatric care in particular.

Problematic lifestyle habits are also propelling healthcare growth, with poor nutrition and sedentary behavior leading to obesity. In the U.A.E., 68% of the adult population carries excess weight and 27.8% of the adult population is obese.²

Widespread use of tobacco is also at play. According to the 2018 Tobacco Atlas, more than 1,300,000 adults in the U.A.E. use tobacco every day. Smoking is responsible for one in eight deaths among men in the U.A.E.³ The U.A.E. has the highest morbidity rate due to smoking in the GCC.

As a result of the above problematic lifestyle habits, chronic conditions such as cardiovascular diseases, cancer, and diabetes are prevalent.⁴

- ❖ Cardiovascular disease remains the leading cause of fatalities in the U.A.E., accounting for over two-thirds of all deaths.⁵
- ❖ Strokes are the main cause of disability in the U.A.E. and the third-greatest cause of death. From zero stroke management centers in 2014, the U.A.E. had opened 12 centers by the end of 2019.
- ❖ Cancer is also a big issue in the country, accounting for 15% of deaths.⁶ In 2020, 4,807 new cases of cancer in the U.A.E. were diagnosed.⁷ However, this figure is still relatively low in comparison to

other countries of the same size, such as Austria, where the number of new cases diagnosed in 2020 was 48,241.

- ❖ Diabetes remains widespread in the U.A.E., although its prevalence dropped to 16.3% of the total population in 2019 from 19.3% in 2013.⁸ According to a UN-backed report, the U.A.E. is lagging behind the rest of the world in its diabetes care, despite having the highest rates of internationally accredited hospitals in the world.⁹

The adoption of poor lifestyle habits by younger generations of Emiratis suggests these problems may persist. Indeed, the prevalence of children in the U.A.E. carrying excess weight is double the global average, with one in every three schoolchildren either overweight or obese at present.¹⁰ Meanwhile, a 2017 study by UAE University determined that 8.5% of children in the U.A.E. between the ages of 12 and 14 are smokers.¹¹ To counter these trends, the U.A.E. government is focused on a number of programs in school and in society aimed at changing problematic lifestyle habits.

A more positive driver of U.A.E. healthcare growth is medical tourism. In 2021, Abu Dhabi and Dubai rose to become two of the top 10 medical tourism destinations in the world, according to the Medical Tourism Index. To further bolster the U.A.E.'s standing as a prominent destination in the medical tourism industry, the Department of Culture and Tourism - Abu Dhabi signed a Memorandum of Understanding with the Medical Tourism Association (MTA) in October 2018. As part of this agreement, the MTA's annual World Medical Tourism & Global Healthcare Congress® event was hosted in Abu Dhabi in 2019 and will continue to be hosted in the U.A.E for the foreseeable future.

There are several other noteworthy reasons for the growth of the U.A.E. healthcare market including the above average medical inflation rates and the implementation of mandatory health insurance.¹² Another factor is increasing affluence, which is leading to demand for higher-quality healthcare.

Along these lines, various metrics have shown that the quality of U.A.E. healthcare has improved. In 2020, the Legatum Institute's Legatum Prosperity Index report ranked the U.A.E. 42nd globally, and second in the Middle East and North Africa, in terms of healthcare quality.¹³ Furthermore, according to BMI Research, a unit of Fitch group, patients in the U.A.E. have the best access to healthcare in the Middle East.¹⁴

B. Challenges

The tremendous growth of the U.A.E.'s healthcare market poses two major challenges for the U.A.E.: (1) recruiting and educating enough quality medical personnel and (2) containing costs.

Ensuring Adequate Staffing

Over the coming years, the U.A.E. will need an influx of medical personnel to meet its growing demand for high-quality medical services.

According to September 2018 figures released by the Dubai Health Authority (DHA), Dubai has one of the highest physician-to-population ratios in the world, with 2.9 doctors for every 1,000 residents.¹⁵ Nevertheless, according to a March 2018 report by investment bank Alpen Capital, Dubai will require an additional 8,300 physicians and 8,800 nurses by 2025.¹⁶

The U.A.E. is in particular need of nurses. According to the U.A.E. Ministry of Health and Prevention, the U.A.E. had 5.68 nurses for every 1,000 people in 2017, a figure lower than in most Western countries.¹⁷ Increasing this number was part of the U.A.E.'s Vision 2021 to provide world-class healthcare.



Several factors will complicate adequate staffing of qualified medical personnel in the years to come.

- ❖ There are shortages of skilled Emirati medical professionals.¹⁸
- ❖ The Northern Emirates, Abu Dhabi's Western Region, and more rural areas of the U.A.E. can face difficulties recruiting and retaining talent.¹⁹
- ❖ There tends to be high turnover among expatriate medical staff, as many medical personnel consider the U.A.E. either a temporary locale or a stepping-stone to gain experience before seeking careers in the West.²⁰

To mitigate the above issues, the U.A.E. announced in November 2020 its intent to expand the 10-year golden visa system to all doctors, PhD holders, and highly skilled workers.

Containing Costs

The rapid growth of the U.A.E.'s healthcare industry also poses the challenge of containing costs. Healthcare in the U.A.E. tends to be more expensive than elsewhere in the region.²¹ Moreover, the cost of healthcare is rising, with a 2020 survey by Willis Towers Watson finding that the cost of healthcare in the country is set to increase by 8% in 2021.

Waste accounts for some of these high costs.²² In February 2016, *The National* cited expert estimates that as much as \$1 billion is lost every year to factors including "identity fraud by patients and a culture of over-prescribing by doctors, who are given financial incentives to prescribe brand-name drugs."²³ These expert assessments are shared by the subjective experience of patients. In a 2017 survey of 1,964 patients in the U.A.E., King's College Hospital London found that 32% felt that doctors over-prescribed medication.²⁴

The U.A.E. has taken a wide array of measures to contain costs. For instance:

- ❖ The Ministry of Health and Prevention (MOHAP) issued circulars to doctors to curb over-prescription of antibiotics in March 2018. This action was undertaken not only to prevent resistance to superbugs but also to tackle the cost that antibiotic misuse represents to health insurance systems.²⁵
- ❖ In September 2018, the Department of Health – Abu Dhabi began to roll out a policy of dispensing generic medicine with the same efficacy and safety for patients as more expensive, branded medicine.²⁶
- ❖ Dubai has begun implementing a method known as Diagnostic Related Groups (DRGs) as a means of clustering services to avoid overutilization and charging.

C. Government Strategies

The U.A.E. federal government – which oversees the country’s healthcare sector and funds almost all non-private healthcare in the northern emirates – has developed strategic plans to both respond to the growing demand for healthcare and meet the associated challenges. The U.A.E.’s Vision 2021, the highest-level U.A.E. government strategic plan, made achieving “world-class healthcare” one of its priority goals through, among other measures, accrediting all public and private hospitals according to clear national and international standards. The 2021 Vision, which coincides with the U.A.E.’s 50th anniversary, also seeks to reduce the prevalence of diabetes, obesity, and smoking among the population, as well as decrease the number of deaths from cardiovascular diseases and cancer.²⁷

In keeping with this vision, Abu Dhabi developed its own emirate-level strategic healthcare plan. In December 2014, His Highness Sheikh Mohamed bin Zayed Al Nahyan, Abu Dhabi Crown Prince and Deputy Supreme Commander of the U.A.E. Armed Forces, approved a strategy to improve healthcare in the emirate. This strategy included 85 initiatives that aim to, among other objectives, elevate the quality of healthcare services, improve safety standards and patient experience, attract and retain medical professionals, and integrate IT systems and build on electronic data.²⁸ This strategy has also evolved to include further integration of the private sector in the Abu Dhabi healthcare sector, with entities like ADQ continuing to play an important role in health in the emirate.

Dubai likewise developed strategic plans for its respective healthcare sector in keeping with Vision 2021. In January 2017, His Highness Sheikh Mohammed bin Rashid Al Maktoum, U.A.E. Vice President and Prime Minister and Ruler of Dubai, launched Dubai Health Strategy 2021. This strategy aimed to provide high-quality medical care to patients with chronic diseases, as well as promote a culture of early detection and regular check-ups. It also sought to create a high-quality, comprehensive and integrated health service system and improve the efficiency of public hospitals.

This strategy in Dubai built on previous emirate-level commitments:

- ❖ In 2013, Dubai announced a 12-year plan to reshape its healthcare system, including a 3 billion AED [\$820 million] revamp of Rashid Hospital, 40 new primary healthcare centers, and three new hospitals.²⁹
- ❖ In 2014, Dubai announced a medical tourism strategy that entailed building 22 hospitals so as to attract 500,000 medical tourists per year by 2020.³⁰
- ❖ In 2015, Dubai unveiled a 10-year plan, the Dubai Clinical Services Capacity Plan, which involves building three new medical colleges and five nursing schools. This plan also calls for implementing strategies to make the nursing profession more desirable and attract and retain high-caliber medical and healthcare staff to fill gaps in certain healthcare specialties.³¹

Other emirates also embarked on far-sighted plans to meet the anticipated growth in their healthcare sectors. Sharjah, for instance, has made healthcare a focus of its development strategies, beginning with the construction of Sharjah Healthcare City. In May 2018, Sharjah Healthcare City Authority announced it approved a plan to set up a \$100 million [367 million AED] 120-bed hospital, with construction commencing in late 2018.³²

In 2020, as the U.A.E. looked ahead to its Golden Jubilee in 2021, H.H. Sheikh Mohammed bin Rashid Al Maktoum and H.H. Sheikh Mohamed bin Zayed Al Nahyan announced 2020 to be “the year of preparations for the next 50 years.” The announcement marked the “formulation of the largest national

strategy of its kind to prepare for the next 50 years on both federal and local levels.” Healthcare has been central to deliberations, a trend that has only been reinforced by the pandemic.

As the U.A.E. redoubles its commitment to developing its healthcare sector, the private sector has an important role to play. Private-sector healthcare spending is forecasted to increase at a cumulative annual growth rate of 9.5% compared to a government contribution growth rate of 4.4%. U.S.-U.A.E. partnerships are key to the U.A.E. fully realizing its healthcare objectives.



PART II: SECTOR OVERVIEWS

Under the careful oversight of both federal and emirate-level regulatory authorities, the U.A.E. is witnessing a boom in healthcare provision from both public sector and private sector institutions. Concurrently, the U.A.E. is experiencing a rapid expansion of its pharmaceutical, medical equipment, healthcare IT, and medical education sectors.

A. Regulation

The U.A.E. has a number of healthcare regulators at both the federal and emirate levels, each with their own geographic or functional purviews. U.A.E. healthcare regulation has recently been shaped by two broad trends: (1) an expanding remit for the Ministry of Health and Prevention and (2) increasing coordination among regulatory authorities.

It has also seen several important developments:

- ❖ In July 2019, the U.A.E. updated its 2016 Medical Liability Law that requires all medical malpractice claims to be referred to a new medical liability committee before they are reviewed by U.A.E. judicial authorities.
 - The 2019 update expands and clarifies certain aspects of the 2016 law, with clarifications on topics such as gross medical errors, insurance, and telehealth.
 - The law also prohibits the arrest, imprisonment, and investigation of doctors until the committee issues a final report. The threat of criminal proceedings for medical treatment complaints had discouraged some foreign medical professionals from working in the U.A.E.
- ❖ The U.A.E. issued Federal Law Number 2 of 2019 (Health Data Law) which regulates the use of information technology and communications (ITC) in the healthcare sector.
 - One of the most notable aspects of the Health Data Law is Article 13, which prohibits the overseas transfer of health data unless an exception has been granted by one of the U.A.E.'s health authorities.
 - As of May 2021, the U.A.E. was drafting separate non-sector-specific legislation related to data privacy and localization. Moreover, it was welcoming industry feedback on all aspects of its data privacy regime, including in the healthcare sector.
- ❖ In 2016, U.A.E. President His Highness Sheikh Khalifa bin Zayed Al Nahyan issued Federal Decree Law No. 5, which allows the transplantation of human organs and tissues from both living and deceased donors. The law came into effect in March 2017 and was supplemented by a donor registration program that was rolled out in the summer of 2018. Cleveland Clinic Abu Dhabi, the country's only multi-organ transplant center, performed more than 30 transplant operations by the end of 2018, including the country's first full heart transplant, the country's first double lung transplant, the country's first deceased donor liver transplant, and the first liver transplant from a living relative. Progress has continued to be made, with the U.A.E.'s first pancreas transplant taking place at Cleveland Clinic Abu Dhabi in December 2020.
- ❖ In May 2018, it was announced that couples and unmarried women in the U.A.E. will soon be allowed to freeze their embryos and eggs following a Cabinet decision that will give more options to doctors and patients.³³

Federal Healthcare Regulations

The U.A.E. federal government has introduced a variety of legislation regulating the healthcare industry. The bedrock of this legislation is Federal Law No. 7 of 1975 concerning the practice of human medicine, which included sections on licensing and registration of physicians; laboratories, clinics, and private hospitals; and duties and responsibilities of a physician.

Since then, additional legislation has been introduced, most notably:

- Federal Law No. 28 of 1981 concerning the detention and treatment of the mentally ill;
- Federal Law No. 4 of 1983 concerning pharmaceutical professions and establishments;
- Federal Law No. 5 of 1984 concerning the practice of some medical professions by persons other than physicians and pharmacists;
- Federal Law No. 20 of 1995 concerning medicines and preparations derived from natural sources;
- Federal Law No. 11 of 2008 concerning licensing of fertilization centers;
- Federal Law No. 14 of 2014 (replacing Federal Law No. 27 of 1981) and Executive Decree No. 6 of 2016 concerning communicable disease prevention;
- Federal Law No. 5 of 2015 (replacing Federal Law No. 2 of 1996) concerning private health facilities;
- Federal Law No. 4 of 2016 (replacing Federal Law No. 10 of 2008) concerning medical liability;
- Federal Law No. 5 of 2016 (replacing Federal Law No. 15 of 1993) concerning organ transplants;⁵⁷
- Federal Law No.8 of 2019 on medical products, the profession of pharmacy, and pharmaceutical entities;
- Federal Law No. 7 of 2019 concerning medically assisted reproduction;
- Federal Law No. 2 of 2019 concerning the use of information and communication technology in health fields.

Federal Level

The most important federal regulatory authority in the U.A.E. healthcare sector is the Ministry of Health and Prevention.

Ministry of Health and Prevention (MOHAP)

The Ministry of Health and Prevention (MOHAP), formerly known as the Ministry of Health, oversees the implementation of government policy in relation to the provision of healthcare for all U.A.E. citizens and residents.³⁵ According to Cabinet Resolution No. 10 of 2008, the Ministry is to provide U.A.E. citizens with healthcare; prepare health, preventive, and training programs; organize the practice of healthcare professions; and establish, manage, and supervise health facilities.³⁶ In practical terms, MOHAP provides both healthcare services and regulatory oversight in the northern emirates. Importantly, it also licenses and controls the prices of drugs and medical devices nationwide.³⁷ The current Minister of Health and Prevention is His Excellency Abdul Rahman Mohammed Al Owais and the



Undersecretary is Dr. Mohamed Salim Al Olama.³⁸ For more information, please visit www.mohap.gov.ae.

The Insurance Authority

The Insurance Authority, which was established under Federal Law No. 6 of 2007, regulates and supervises the insurance sector in the U.A.E.³⁹ His Excellency Ebrahim Obaid Al Zaabi serves as its Director General.⁴⁰ For more information, please visit www.ia.gov.ae.

The U.A.E. Nursing and Midwifery Council

The U.A.E. Nursing and Midwifery Council, which was established by U.A.E. Cabinet Decree No. 10 of 2009, regulates the nursing and midwifery professions in the country. The Council consists of key constituents with regards to these fields and meets four times per year. The Council's work is organized by five standing committees and task forces that address the scope of practice requirements; registration and licensure; nursing and midwifery education; nursing and midwifery Emiratization; and nursing and midwifery research.⁴¹

Emirate Level

While healthcare provision in some emirates is regulated entirely by MOHAP, certain emirates or free zones also have their own regulatory authorities, most notably the Department of Health – Abu Dhabi (DOH) and Dubai Health Authority (DHA).

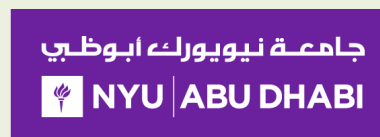
Department of Health – Abu Dhabi (DOH)

The Department of Health – Abu Dhabi (DOH), formerly known as Health Authority – Abu Dhabi (HAAD), regulates the healthcare sector in Abu Dhabi. It defines the strategy of the health system, and it monitors and analyzes both the health status of the population and the performance of the system. Importantly, the International Patient Care (IPC) Office of the DOH refers Emiratis to leading U.S. hospitals for treatment. The Chairman of the DOH is His Excellency Sheikh Abdulla bin Mohamed Al Hamed and its Undersecretary is His Excellency Dr. Jamal Mohammed Alkaabi.⁴² For more information, please visit www.doh.gov.ae/en.



DOH Partnerships with U.S. Institutions

- **Johns Hopkins Bloomberg School of Public Health** signed a 10-year agreement with the DOH in 2008 to develop research, educational, and public health programs in Abu Dhabi.⁶⁶
- **NYU Abu Dhabi (NYUAD)** signed an MoU with DOH in June 2018 to collaborate on NYUAD's UAE Healthy Future study, a long-term study to understand the causes of common chronic diseases among Emiratis, focusing particularly on priority areas of obesity, diabetes, and heart disease.⁴⁴



Dubai Health Authority (DHA)

Dubai Health Authority (DHA), which was created by Law No. 13 of 2007, is the main health authority in Dubai. DHA regulates all of Dubai's healthcare sector services through licensing healthcare facilities and professionals and inspecting health facilities.⁴⁵ DHA also regulates the cost of healthcare in the emirate and runs special programs such as one meant to encourage young Emiratis to enter medical professions.⁴⁶



In January 2019, the DHA began rating all private and public sector healthcare facilities in Dubai on their level of care and expertise. This policy is designed to provide patients with information, improve the quality of healthcare and bolster Dubai's burgeoning medical tourism sector.⁴⁷

The President of DHA is His Highness Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai and U.A.E. Minister of Finance.⁴⁸ His Excellency Awadh Seghayer Al Ketbi is its newly appointed Director General.⁴⁹ For more information, please visit www.dha.gov.ae/en.

Dubai Healthcare City Authority – Regulatory

Dubai Healthcare City Authority – Regulatory (DHCR), which was established by Law No. 9 of 2011, regulates Dubai's healthcare free zone: Dubai Healthcare City.⁵⁰ As such, it is responsible for the licensure of all healthcare professionals and healthcare operators in the free zone. It is also responsible for setting and maintaining international best practices in healthcare delivery and patient care within that zone.⁵¹

DHCR works closely with the DHA. For instance, in October 2018, Dubai Healthcare City Authority and DHA signed a Memorandum of Understanding to link the licensing data of health professionals using blockchain. The MoU will allow for health professionals to exchange licensing data to improve services and facilitate licensing and transfer of health professionals' licenses in Dubai.⁵²

Dr. Ramadan AlBlooshi is the CEO of Dubai Healthcare City Authority – Regulatory. For more information, please visit www.dhcr.gov.ae/en.

Sharjah Health Authority

Sharjah Health Authority (SHA), which was established by Sharjah Emiri Decree No. 12 of 2010 (amended by Emiri Decree No. 33 of 2016), regulates Sharjah's healthcare system. According to SHA, its prime mission at present is to develop and manage Sharjah Healthcare City. It also manages the Sharjah Health Insurance department.⁵³ Dr. Abdulaziz Saeed Al Muhairi is Director of the Sharjah Health Authority. For more information, please visit www.sha.gov.ae/en.

B. Provision

Public sector institutions play a relatively outside role in U.A.E. healthcare provision. That said, the private sector is assuming an increasingly prominent role, aligning with a deliberate government strategy to encourage public-private partnerships and private sector investment.

Public Sector

Three public sector institutions play a major role in U.A.E. healthcare provision: Abu Dhabi Health Services Company (SEHA), Dubai Health Authority (DHA), and the Ministry of Health and Prevention (MOHAP). The latter is particularly active in the northern emirates.

Abu Dhabi Health Services Company (SEHA)

The Abu Dhabi Health Services Company (SEHA), which was established by Abu Dhabi Emiri Decree No. 10 of 2007, is an independent public joint stock company that owns and operates all public hospitals and clinics across Abu Dhabi. SEHA claims to be the largest healthcare network in the U.A.E., consisting of 13 hospitals with 2,644 beds, 36 primary healthcare clinics, 10 disease prevention and screening centers, 4 dental centers, 3 mobile clinics, 2 blood banks, 2 well baby vaccination centers, 1 home care center, 1 mobile mammography clinic, 1 occupational health center, and 64 ambulances.⁵⁴ Its facilities accommodate 100,000 inpatients annually and conduct 41,00 surgeries, as well as treat more than five million outpatients. SEHA is also a major source of employment in Abu Dhabi, as it employs more than 18,700 people across the emirate.



SEHA's flagship business entities include Sheikh Khalifa Medical City, Sheikh Shakhbout Medical City, Al Rahba Hospital, Corniche Hospital (the U.A.E.'s largest maternity hospital), Al Ain Hospital, Tawam Hospital, and Al Dhafra Hospitals.⁵⁵ The Al Dhafra Hospitals business entity notably consists of six hospitals and four primary healthcare centers that serve the more than 200,000 people living in the 60,000-square-kilometer area of Abu Dhabi known as the Western (Al Gharbia) region.

In January 2020, Sheikh Shakhbout Medical City (SSMC) opened its doors, creating one of the U.A.E.'s largest hospitals providing care for patients with serious and complex medical conditions. A joint venture between SEHA and Mayo Clinic, SSMC completed more than 270,000 outpatient visits, cared for over 17,000 inpatients, and provided emergency care to more than 94,000 patients in its first year alone. SSMC is one of the UAE's largest tertiary care hospital with 741 beds. The hospital is staffed by more than 340 physicians and 1,200 nursing staff. Among employees, 48 nationalities are represented.

In addition to opening Sheikh Shakhbout Medical City, over the last several years, SEHA has embarked on the enlargement of its health facilities in the Western Region, as well as several highly publicized expansions of Sheikh Khalifa Medical City, adding a dialysis center, psychiatry center, and pediatric dialysis unit.⁵⁶ It also added new facilities, such as Al Towayya Children's Specialty Centre in Al Ain.⁵⁷

The Chairman of the Board of SEHA is His Excellency Salem Rashid Al Nuaimi and its new CEO is Dr. Tarek Fathey. For more information, please visit www.seha.ae. SEHA is part of ADQ.

SEHA Partnerships with U.S. Institutions

- **Johns Hopkins Medicine International** signed an agreement with SEHA in 2006 to manage the 479-bed Tawam Hospital in Al Ain City, which is a national referral center for oncology services. Two years later, it signed another agreement with SEHA to manage the 173-bed Al Rahba Hospital outside Abu Dhabi City.
- **Cleveland Clinic** signed an agreement with SEHA in 2007 to manage Sheikh Khalifa Medical City, which is located in Abu Dhabi City and describes itself as the “flagship institution” for the public health system in Abu Dhabi. It consists of a 586-bed tertiary hospital, 14 outpatient specialty clinics, and the Abu Dhabi Blood Bank.
- **The New England Center for Children** signed an agreement with SEHA in 2007 to launch a comprehensive education program for children with Autism Spectrum Disorder. The New England Center subsequently opened a facility in Mohammed bin Zayed City.
- **Mayo Clinic** and SEHA have a joint-venture partnership running Sheikh Shakhbout Medical City (SSMC), one of the UAE’s foremost hospitals for serious and complex care, provides the community with an advanced health care system that delivers clinical excellence and a high-quality patient experience
- **Children’s Hospital of Philadelphia (CHOP)** will have a neuro-science presence at Sheikh Khalifa Medical Center (SKMC). CHOP’s Chief of Neurology and three Epileptologists will travel to SKMC to evaluate new and previously seen patients at CHOP with Epilepsy, MS, and neuromuscular disorders. The Chief of Neurosurgery and a neurosurgeon who specializes in epilepsy surgery will also be present to evaluate new patients (refractory epilepsy candidates for surgery) and consult on other neurosurgical conditions. Working alongside SEHA’s physicians in this clinic allows collaboration on patient treatment plans and transfer of knowledge of leading research and innovation. CHOP is also supporting the advancement of pediatric medical education in cooperation with SEHA by entering an Emirati national matched medical student graduate into CHOP’s Pediatric Residency Program (3 years) on a yearly basis.



JOHNS HOPKINS
MEDICINE



Cleveland Clinic

The New England Center
for Children®
Autism Education and Research



مركز نيو إنجلاند
للأطفال
التواجد: تعليم وبحوث

MAYO
CLINIC



Children's Hospital
of Philadelphia®

Dubai Health Authority (DHA)

In addition to its role as a regulator, the Dubai Health Authority (DHA) operates Dubai's public healthcare facilities.⁵⁸ In 2019, more than 2.3 million patients visited DHA-run hospitals and medical centers. Its flagship facilities include Dubai Hospital, Rashid Hospital, Latifa Women and Children Hospital, and Hatta Hospital.

DHA continues to invest in the development of its existing facilities.⁵⁹ In May 2017, Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai, U.A.E. Minister of Finance, and President of the Dubai Health Authority, approved a 290 million AED [\$79 million] expansion plan for Dubai Hospital that will include a six-story building for specialized outpatient clinics.⁶⁰ The first phase of this expansion was completed in August 2020, involving more than 50 operational beds with the latest advances in technology becoming ready for use. In addition, Dubai's Latifa hospital is currently undergoing a 100 million AED [\$27.2 million] expansion and was set to double in capacity by March 2020, but the completion of the expansion has been delayed due to the pandemic.⁶¹

At the same time, DHA also continues to plan for new lines of medical treatment:

- ❖ In October 2018, Dubai Healthcare Corporation (DHC), a newly-created entity under DHA, announced it would open the first skin bank in the Arab region. The skin bank, which will be used in grafting of burn cases and other patients in need, is still in the planning phase.
- ❖ DHA is also working to set up a Cardiology Centre and Cancer Centre.⁶² The Dubai Oncology and Research Centre will initially provide support to 700 patients, with that number rising to 4,000 by 2027.⁶³

Ministry of Health and Prevention (MOHAP)

On top of its countrywide regulatory functions, the Ministry of Health and Prevention (MOHAP) directly manages public healthcare services in certain areas of the country. MOHAP oversees at least 17 hospitals and nearly 80 clinics throughout the U.A.E., especially in the northern emirates.⁶⁴ MOHAP has recently made a strong push to improve healthcare in the northern emirates through both the expansion of existing hospitals (such as Fujairah Hospital) and the construction of new specialist clinics and health centers.⁶⁵ In 2016, MOHAP announced that its hospitals would begin regularly catering to all U.A.E. residents instead of just Emiratis.⁶⁶

MOHAP Partnerships with U.S. Institutions

- **Children's Hospital of Philadelphia (CHOP)** and MOHAP signed a MoU in 2017, and renewed it in 2020, whereby CHOP would offer its pediatric experts on a short-term visiting basis to provide education and clinical care at the Ministry's hospitals. As a result of this important initiative, both clinicians and children in the Middle East region benefit from medical education and consultations by CHOP healthcare providers who are experts in the field of pediatric medicine. CHOP also launched a Visiting Physician/Surgeon Program with MOHAP - covering the northern emirates.



- **Children's National Hospital** continues executing the Visiting Physicians Program and research collaborations through MOHAP as part of a longstanding agreement between the two institutions.



- **GE Healthcare**, MOHAP, and Abu Dhabi International Medical Services formed an innovative, performance-based public-private-partnership in early 2016 called Unison, combining the best in medical and digital technology, hospital management, and patient care to create the U.A.E.'s first public sector teleradiology capability. This is the U.A.E.'s first radiology outsourcing solution, which provides 16 hospitals and 8 primary health clinics within MOHAP a platform to seek second opinions, match clinical cases with the most appropriate radiologists, and potentially speed up patient diagnoses and treatment.



- **Johnson & Johnson** signed a partnership with MOHAP in 2016 to screen 10,000 high-risk individuals and train 90 nurses based on the Johnson & Johnson Diabetes Institute (JDI) curriculum. In 2017, the two organizations announced early detection programs for diabetes in ten U.A.E. healthcare centers.



- **Nationwide Children's Hospital**, a pediatric hospital in Columbus, Ohio, works with MOHAP on a range of initiatives. The hospital is also collaborating with Al Qassimi Women's & Children's Hospital in Sharjah in addition to running a visiting consulting program that brings experts to Emirati hospitals.



- **Viatis**, a new pharmaceutical company formed through the merger of UpJohn and Mylan, has a partnership with Emirates Airlines and MOHAP, for the launch of "Health Matters" - a series of videos designed to increase health literacy as part of the infotainment inflight campaign. In these videos, Bill, Jill, Will, and Phil - otherwise known as the 'Ill' family - embark on a health and wellness journey guided by a character named Dr. Adam and a group of health and wellness specialists.



- **Lilly** partners with the MOHAP to accelerate access to treatments for patients with affordability challenges.⁶⁷



Ministry of Presidential Affairs

The Medical Office of the Ministry of Presidential Affairs (MOPA) has made a major push to expand the quantity and quality of healthcare provision in the U.A.E., particularly in the northern emirates. MOPA funded the 750 million AED [\$204 million] Sheikh Khalifa General Hospital in Umm Al Quwain, which officially opened in December 2012 and features clinics specializing in pediatrics, gynecology, emergency care, dialysis, and dermatology.⁶⁸ MOPA also funded the 1 billion AED [\$272 million] 248-bed Sheikh Khalifa Specialty Hospital in Ras Al Khaimah (near the border with Umm Al Quwain), which officially opened in February 2015.⁶⁹ In September 2017, the Follow-Up Committee of the Initiatives of the U.A.E. President approved funding for the 300-bed Sheikh Khalifa Central Hospital in Fujairah at a cost of 866 million AED [\$236 million]. This project was completed and inaugurated in July 2020.

Ministry of Defense

The Ministry of Defense is also a significant provider of healthcare in the U.A.E. The Ministry runs Zayed Military Hospital, which is a 365-bed tertiary hospital in Abu Dhabi that provides medical services to the families of the U.A.E. Armed Forces. Zayed Military Hospital also has two satellite hospitals, each with 120 beds, in Sharjah and Al Ain.⁷⁰ The Ministry of Defense has strong relationships with leading U.S. hospitals, including Nationwide Children's Hospital, to supplement its resources and ensure that military members and their families receive world-class care.

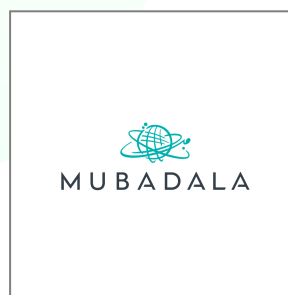
Government-Linked Entities

Government-linked entities such as Mubadala Health, a division of the prominent and diverse Abu Dhabi government investment vehicle Mubadala Investment Company, are supporting the development of a world-class, commercially sustainable private healthcare sector in the U.A.E.

Mubadala Health

Mubadala Investment Company, an investment and development company established by the Abu Dhabi government, has actively spurred the development of healthcare in the emirate through one of its sector verticals, "Mubadala Healthcare."

Mubadala Investment Company announced in early 2021 that it will bring together six of its wholly-owned medical assets in the U.A.E. into an integrated network to serve patients seeking specialized care. Through the inauguration of Mubadala Health, the integrated healthcare network is focused on enhancing patient experience, forging global partnerships, seeking innovative solutions, and driving collaboration across the healthcare sector. Abu Dhabi Telemedicine Centre (ADTC), Amana Healthcare, Capital Health Screening Centre (CHSC), Healthpoint, Imperial College London Diabetes Centre (ICLDC), and National Reference Laboratory (NRL) will work together under the umbrella of Mubadala Health to contribute to the health and wellbeing of the communities served through an integrated clinical approach.



The establishment of Mubadala Health follows the earlier efforts by Mubadala and its prominent international partners to fill gaps left by public sector providers. Along these lines, Mubadala has:

- ❖ Joined with Cleveland Clinic Foundation to create its flagship project: Cleveland Clinic Abu Dhabi. In December 2017, Cleveland Clinic Abu Dhabi opened a branch in Al Ain. The expansion of the Abu Dhabi campus offers residents of Al Ain and the surrounding area a range of outpatient and advanced imaging services as well as primary healthcare services.⁷¹

- ❖ Collaborated with institutions such as South Korea's Wooridul Hospital to set up Healthpoint, a specialty hospital. The facility has three centers of excellence: Musculoskeletal (Orthopedic and Sports Medicine and Spine Care), Bariatric and Metabolic Surgery, and Dental.⁷²
- ❖ Partnered with Imperial College London to establish the Imperial College London Diabetes Centre (ICLDC), which has three branches in the U.A.E. capital, the newest of which, in Zayed Sports City, broke even within three months of opening.
- ❖ Teamed with Swiss company Medgate to introduce the Abu Dhabi Telemedicine Center, which allows patients to seek a doctor's opinion by phone 24 hours per day, 7 days per week.⁷³

As part of the growing collaboration and integration of Emirati healthcare institutions, in January 2018, MOHAP and Mubadala entered an MoU to enhance health services across the U.A.E. The partnership will see both organizations collaborate on a range of healthcare and therapeutic areas where Mubadala Health and its network of world class healthcare companies have deep expertise.⁷⁴

The Head of Mubadala Health is Mr. Hasan Jasem Al Nowais. For more information, please visit <https://www.mubadala.com/en/what-we-do/healthcare>.

Mubadala Healthcare Partnerships with U.S. Institutions

- **Cleveland Clinic Foundation** and Mubadala Investment Company collaborated on the construction of Cleveland Clinic Abu Dhabi, a state-of-the-art medical institution on Al Maryah Island that offers world-class care to patients, closer to home. It boasts 14 institutes, including six centers of excellence in the following areas: Heart & Vascular, Neurological, Digestive Disease, Eye, and Respiratory and Critical Care. The hospital is the designated stroke and chest pain center for Abu Dhabi. The Department of Health has designated Cleveland Clinic Abu Dhabi as a human subject research facility and advanced teaching hospital. The hospital published 89 papers in the first half of 2018 and has 55 ongoing research projects. In 2019, the hospital had more than 665,000 encounters and performed more than 19,000 surgical cases.



- **Children's National Hospital** signed a MoU with Healthpoint in May 2017 to collaborate more closely in pediatric subspecialty care. As part of this MoU, Children's National would send visiting physicians to Healthpoint, and it would manage the pediatric department alongside Healthpoint.⁷⁵



Ruling Family Patronage

Members of U.A.E. ruling families have also personally contributed to healthcare in the country. In December 2008, for instance, Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the U.A.E. and Ruler of Dubai, announced the establishment of a dedicated 200-bed 692 million AED [\$188.4 million] children's specialty hospital named after his daughter, Sheikha Al Jalila.⁷⁶ Inaugurated on 1 November 2016, Al Jalila Children's is the first dedicated children's hospital in the U.A.E., and it aims to be a driving force behind tertiary and quaternary care in the region. The hospital has 28 fully operational clinics for pediatric healthcare, two leading educational programs, and several pediatric research studies.⁷⁷ In November 2018, Al Jalila Children's hospital performed Dubai's first pediatric kidney transplant. It is affiliated with Alder Hey Children's as well as Moorfields Eye Hospital Dubai.⁷⁸

Al Jalila Children's Partnerships with U.S. Institutions

- In February 2018, Al Jalila Children's Hospital in Dubai entered into an agreement with **Children's National Hospital** in Washington, D.C. with a core aim of enabling Children's National to advise Al Jalila Children's on the use of health information technology to deliver quality care for children across the GCC and the region. Children's National Hospital continues collaboration with Al Jalila Children's Hospital on several capacity-building projects.



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Private Sector

The private sector is playing an increasingly significant role in the provision of healthcare in the U.A.E., with companies such as NMC Healthcare, Mediclinic Middle East, and VPS Healthcare all embarking on aggressive expansion plans.

NMC Healthcare

NMC Healthcare claims to be the U.A.E.'s largest private healthcare provider. It was a publicly listed company on the London Stock Exchange and part of the UK's exclusive FTSE 100 index, until a fraud scandal broke in March 2020 and it was forced into administration. Prior to this scandal, NMC owned and managed over 190 healthcare facilities that include hospitals, medical centers, long term care facilities, day surgery centers, fertility clinics, and home health services across 17 countries.⁷⁹ In the U.A.E., it advertised 24 facilities in four emirates.⁸⁰



NMC rapidly expanded its U.A.E. operations in the past several years, partly through wide-ranging acquisitions, up until its administration in 2020. In 2015, it purchased ProVita International Medical Center's facilities in Abu Dhabi and Al Ain for \$160 million, and it acquired Dr. Sunny Healthcare Group's chain of six medical centers for \$64 million.⁸¹ In 2016, it opened the \$200 million 250-bed NMC Royal Hospital in Khalifa City, and it acquired homecare provider LifeWise Home Healthcare, which is the

largest private provider of inpatient long-term care in Abu Dhabi.⁸² Then, in 2017, it completed the \$650 million purchase of Al Zahra Hospital in Sharjah, which claims to be the first and largest private general hospital in the U.A.E.⁸³ Its core assets in the U.A.E. and Oman are now up for sale.

Emirates Healthcare Company

Emirates Healthcare, which has historically been closely associated with NMC Health, provides a wide range of healthcare services under the brands Emirates Hospitals and Clinics, CosmeSurge, and Emirates Rehab and Homecare Services.

- ❖ Emirates Hospitals currently runs two hospital facilities, and it is also developing new medical and day case surgery centers in Dubai and Abu Dhabi. In July 2017, Emirates Hospitals acquired 60 percent of Mobile Doctors 24-7, which offers 24-hour medical and wellness concierge services to its 145,000-plus registered members.⁸⁴
- ❖ CosmeSurge, created in 1998, claims to be the Middle East's most trusted name in cosmetology and aesthetic medicine.
- ❖ Emirates Rehab and Homecare Services, established in 2006, is reportedly a first-of-its-kind healthcare provider dedicated to long-term recovery, elderly care, and home health services in the U.A.E.⁸⁵

Mediclinic Middle East

Mediclinic Middle East is a branch of Mediclinic International, which consists of 72 hospitals, eight sub-acute and specialized hospitals, 18 day case clinics, and 18 outpatient clinics worldwide.⁸⁶ In the U.A.E., it has seven hospitals with more than 900 inpatient beds as well as 19 clinics.⁸⁷ In September 2018, the group opened its seventh hospital in the UAE, Mediclinic Parkview Hospital, a 182-bed in-and outpatient facility in Dubai.⁸⁸

The current Mediclinic International is the result of the reverse takeover by Al Noor Hospitals Group of the Johannesburg-based Mediclinic International Limited.⁸⁹ At the time of this reverse takeover, Mediclinic had an extensive and growing U.A.E. presence, announcing in April 2015 the construction of the aforementioned 700 million AED [\$191 million] Mediclinic Parkview Hospital in Dubai.⁹⁰ Meanwhile, Al Noor Hospitals Group was the largest private healthcare company in Abu Dhabi with seven facilities in Abu Dhabi city, one in the Western Region, and two in Al Ain.⁹¹

Aster DM Healthcare

Aster DM Healthcare is a Dubai-based healthcare company with 26 hospitals, 115 clinics, and 225 pharmacies in the Middle East and India.⁹² In the U.A.E., it has eight hospitals under the high-end Medcare or midrange Aster brands.⁹³ In October 2016, it opened a 100-bed Medcare Women & Children Hospital, which is run nearly entirely by women.⁹⁴

VPS Healthcare

VPS Healthcare is an integrated healthcare services provider with 24 operational hospitals, 125 medical centers, and 10,000 employees across the Middle East, Europe, and India. In the U.A.E., it operates hospitals and medical centers under the Burjeel, Medeor 24x7, LLH, and Lifecare brands. It also has a variety of specialized clinics, pharmacies, and even a pharmaceutical company.⁹⁵ In December 2017, VPS launched its flagship Burjeel Day Surgery Center, which is the largest day surgery center in the Middle East.⁹⁶ VPS Healthcare completed the construction of a 1.4 billion AED [\$381 million] 400-bed Burjeel Medical City in Mohammed bin Zayed City.⁹⁷



The Thumbay Group

The Thumbay Group, a Dubai-based business conglomerate, is one of the largest healthcare providers in the region. It operates a 250-bed hospital in Ajman, a 150-bed hospital in Dubai, a 60-bed hospital in Fujairah, and a medical and dental specialty center in Sharjah. It also owns a chain of multi-specialty day care hospitals (Thumbay Hospital Day Care), clinics (Thumbay Clinic), and high-end clinics (Thumbay Clinic ELITE). In addition, it runs a chain of diagnostic labs (Thumbay Labs) and pharmacies (Thumbay Pharmacy). Notably, all hospitals and clinics under the group provide teaching and training opportunities for the students of Gulf Medical University, Ajman, which is also operated by the group.⁹⁸ The Thumbay Group added 100 new beds to Thumbay Hospital Dubai in 2018 and plans to build 45 new clinics and five new medical centers of excellence.⁹⁹ The Thumbay academic hospital network will have a total of 1,000 beds in the UAE by 2022, in addition to upcoming clinics, day care hospitals, labs and pharmacies at various locations.¹⁰⁰

Belhoul Lifecare

Belhoul Lifecare is a comprehensive healthcare services provider that was formed from the integration of all healthcare facilities and services offered by Belhoul Group Holdings (now Belhoul Investment Office). It includes the Belhoul Specialty Hospital, which is a 60-bed tertiary care hospital. It also includes the Belhoul European Hospital, which is a specialized day-care hospital with 22 outpatient clinics.¹⁰¹ The Belhoul Group also controls Gulf & World Traders, which was established in 1969 to provide the U.A.E. and neighboring GCC countries with hi-tech healthcare-related products.¹⁰²

Amanat

Faisal bin Juma Belhoul, who was responsible for the transformation of Belhoul Group Holdings into a modern investment company and is also managing partner at Ithmar Capital, launched Amanat Holdings, which specializes in investments in healthcare and education.¹⁰³ Following its exit from a stake in Al Noor Hospitals, Amanat is currently invested in both a 300-bed hospital and a home care company in Saudi Arabia.¹⁰⁴ In November 2018, the company said that it has now invested 2 billion AED (\$540 million), across three education assets, three healthcare assets and one social infrastructure asset.¹⁰⁵ It is currently invested in Cambridge Medical and Rehabilitation Center, a provider of specialized rehabilitation and long-term care, with facilities in Abu Dhabi and Al Ain.

Gulf Healthcare International

Gulf Healthcare International operates 19 medical and diagnostic centers across the U.A.E. and Kuwait.¹⁰⁶ In the U.A.E., it runs seven clinics and polyclinics under three brand names: “Amber Clinics,”

“Al Noor Polyclinic,” and “Dr. Joseph’s Polyclinic.” It also operates eight diagnostic laboratories under the brand name “Medsol Diagnostics.”¹⁰⁷

UEMedical

UEMedical, part of United Eastern Group, claims to be Abu Dhabi’s leading privately owned healthcare development and investment company with a portfolio of healthcare projects including a hospital, six specialty centers, and 14 family clinics.¹⁰⁸ UEMedical operates the 150-bed Danat Al Emarat Women and Children Hospital in Abu Dhabi, which is managed by leading Singaporean healthcare provider ParkwayHealth.¹⁰⁹

UEMedical also runs the HealthPlus network of premium outpatient centers.¹¹⁰ In addition, it has partnered with Moorfields Eye Hospital, one of the oldest ophthalmology hospitals in the world, to launch Moorfields Eye Hospital Centre in Abu Dhabi.¹¹¹ Notably, Moorfields chose the U.A.E. as the site of its first overseas branch almost a decade earlier when it established Moorfields Eye Hospital Dubai in Dubai Healthcare City in 2006.¹¹²

Avivo Group

Avivo Group is a U.A.E.-based healthcare firm offering specialized healthcare services in Abu Dhabi, Dubai, Sharjah, and Kuwait.¹¹³ It currently has 47 healthcare assets, including 2 hospitals, 29 clinics, 10 dental centers, 6 pharmacies, 6 distribution centers, and 2 diagnostic facilities. The vast majority of these assets are in the U.A.E.¹¹⁴

Ahalia Medical Group

Ahalia Medical Group, established in the U.A.E. in 1984, currently operates three multi-specialty hospitals.¹¹⁵ It also runs 23 satellite medical centers and over three dozen pharmacies throughout the country. In May 2018, Sharjah Healthcare City Authority granted the Ahalia Group permission to set up a \$100 million 120-bed hospital in the emirate. The multi-specialty hospital, which is spread across 538,195 square feet, is the first hospital to set up within the mega healthcare city.¹¹⁶

AlSharq Healthcare

AlSharq Healthcare, a wholly owned division of the Fujairah National Group conglomerate, manages several healthcare facilities in the eastern part of the U.A.E. Its flagship facility is the 100-bed Al Sharq Hospital in Fujairah. It also runs 4 medical centers, 4 retail pharmacies, 2 specialized clinics, and a medicine store.¹¹⁷

Arabian Healthcare Group

Arabian Healthcare Group is a global healthcare management and consulting firm set up in 2011 by the Government of Ras Al Khaimah (RAK). Comprising of a network of hospitals, diagnostic centers, pharmacies, and wellness services, its flagship facility is the 65-bed RAK Hospital, which is managed in cooperation with Sonnenhof Swiss Health.¹¹⁸

Middle East Healthcare Company (Saudi German Hospitals)

The Middle East Healthcare Company, the largest healthcare provider in Saudi Arabia, owns and operates hospitals under the brand name Saudi German Hospitals.¹¹⁹ In March 2012, it opened the 165-bed Saudi German Hospital in Dubai, which is in the process of expanding thanks to a \$100 million loan.¹²⁰ It recently completed constructing the Saudi German Hospital – Ajman, a 150-bed facility.

Zulekha Healthcare Group

The Zulekha Healthcare Group established Zulekha Hospital in Sharjah in 1992, and it subsequently grew from a 30-bed facility to a 185-bed 290,000 square-foot hospital.¹²¹ Since then, the Zulekha Healthcare Group has also established a 79-bed hospital in Dubai, a diagnostic center, three medical centers, and three pharmacies.¹²² Zulekha Group is currently expanding its facility in Dubai to provide a state-of-the-art 100-bed cancer unit.¹²³ In January 2018, Zulekha Healthcare Group announced plans to build a 150-bed hospital in Sharjah.¹²⁴

Capital Health

Capital Health (not to be confused with Mubadala's Capital Health Screening Center) is an integrated healthcare group that was launched in November 2017 and currently has two flagship facilities in Abu Dhabi under development. It is building a 166-bed Specialized Rehabilitation Hospital that it claims will be the U.A.E.'s first acute, sub-acute, and long-term rehabilitation facility with outpatient facilities. Capital Health is also developing the Health Shield Medical Centre, which will be a multi-specialty healthcare facility located in the Al Qurm district of Abu Dhabi.¹²⁵ In May 2018, Capital Health signed a partnership with Chicago's Shirley Ryan AbilityLab to bring its renowned model of care to its new Specialist Hospital in Abu Dhabi.¹²⁶

Private Sector Healthcare Partnerships with U.S. Institutions

- **American Hospital (AH) joined the Mayo Clinic Care Network in 2016**, becoming the first member in the Middle East. As one of Dubai's leading private hospitals, AH holds multiple international and national accreditations and recognitions, leading as the first hospital in the Middle East to become Joint Commission International (JCI) and College of American Pathologists (CAP) accredited in 2000 and 2001, respectively.
- **Mayo Clinic Laboratories and American Hospital Dubai** announced a strategic partnership aimed at improving advanced laboratory diagnostics in the Dubai region. Under the agreement, the two organizations began delivering laboratory testing through a collaboration based out of American Hospital Dubai in early 2021. Mayo Clinic Laboratories and American Hospital Dubai are working together to improve access to complex laboratory diagnostics for the region's providers. By improving access to laboratory testing, healthcare providers will have the necessary tools to advance patient care.¹²⁷



City Centre Clinic

Majid Al Futtain Healthcare, the healthcare arm of leading property developer Majid Al Futtain, operates “City Centre Clinic,” an integrated healthcare network with five locations in the U.A.E. Its flagship project is a Day Care Specialty Clinic, which is located in Deira City Centre in the heart of Dubai. It also has clinics at City Centre Me’aisem, My City Centre Al Barsha, Ibn Batuta Mall, and Nad Al Hammar.¹²⁸

King’s College Hospital

King’s College Hospital, one of London’s largest teaching hospitals, opened a Medical and Surgical Center in Abu Dhabi in November 2014. Then, in November of the next year, it signed an agreement with Al Tayer Group and Dubai Investments to build a \$200 million 100-bed branch of King’s College Hospital in Dubai as well as three other King’s College Hospital clinics. The first of these clinics, a Medical Center in Jumeirah, opened in September 2017.¹²⁹ In September 2018, King’s College opened another medical facility in Dubai.¹³⁰ The late U.A.E. President Sheikh Zayed Al Nahyan once provided a donation to King’s College Hospital to set up its specialist liver research center.¹³¹

Medical Hubs

Free zones are becoming increasingly important sites for healthcare provision.

Dubai Healthcare City

Dubai Healthcare City (DHCC), which was launched in 2002, is a healthcare free zone that allows for 100% foreign ownership of companies; full repatriation of profits; a guaranteed 50-year exemption from personal income taxes and corporate taxes; and exemption from customs duties for goods and services. DHCC currently has over 150 clinical partners, and it hosts brand-name providers such as Moorfields Eye Hospital and Maghrebi Eye Hospital.

It is also home to the Mohammed bin Rashid University of Medicine and Health Sciences, part of the Mohammed bin Rashid Academic Medical Center.¹³² In 2017, DHCC announced the establishment of Emirates Reference Laboratory to provide access to efficient, reliable, and cost-effective pathology testing services.¹³³



Sharjah Healthcare City

In January 2017, His Highness Sheikh Sultan bin Mohammed Al Qasimi, Supreme Council Member and Ruler of Sharjah, approved the master plan for Sharjah Healthcare City (SHC). First announced in 2010, it is expected to be one of the largest healthcare centers in the Middle East, spread over an area of 2.4 million square meters. It will operate as a tax-free zone under the Sharjah Health Authority.¹³⁴ In March 2017, Ahalia Hospital announced that it would be the first U.A.E. hospital to be part of SHCC with the construction of a 100-bed general hospital.¹³⁵



C. Insurance

Over the last decade, the U.A.E. has moved toward mandating health insurance for all citizens and residents, greatly expanding the country’s health insurance market. However, the large number of

domestic and foreign players in this market has led to intense competition and limited profitability. Moreover, there are restrictions on the entry of new foreign companies into the market.

Mandatory Coverage

Abu Dhabi has led the way in implementing mandatory health insurance for citizens and residents. In 2005, Abu Dhabi issued Law No. 23, requiring all employers to provide health insurance to their employees and their employees' dependents.¹³⁶ Then, in 2007, Abu Dhabi issued Resolution 83 directing the then-Health Authority - Abu Dhabi (now Department of Health) to give comprehensive health coverage to all U.A.E. nationals living in that emirate at no cost through the "Thiqa" program.¹³⁷



Dubai subsequently followed Abu Dhabi's lead. In 2013, Dubai introduced Law No. 11, requiring employers to provide basic health insurance coverage for their employees and requiring sponsors to provide health insurance for those unemployed individuals under their sponsorship.¹³⁸ This law was implemented in phases: first for companies with more than 1,000 employees, then for companies with more than 100 employees, and finally for all companies and sponsors.¹³⁹ The law fully came into effect in 2016.¹⁴⁰

Since then, Dubai has endeavored to increase the scope of mandatory insurance coverage. In November 2017, the Dubai Health Authority launched a new initiative to provide a complete spectrum of care from screening to treatment for three types of cancer under the basic benefit plan of the Dubai Mandatory Health Insurance Scheme. Prior to then, cancer coverage under the scheme was limited to 150,000 AED [\$40,840].¹⁴¹ In October 2018, it was reported that mandatory health insurance in Dubai will include mental health treatment and rehabilitation of debilitating physical and neurological conditions.¹⁴²

Sharjah has gradually joined Abu Dhabi and Dubai in moving toward more expansive health insurance as well. The Sharjah government extended health insurance to all Sharjah citizens aged 55 and over in April 2015.¹⁴³ Then, in January 2020, it decided to extend the insurance coverage to all citizens of Sharjah.

Daman's Market Importance

The U.A.E. health insurance industry is dominated by the National Health Insurance Company (Daman), which is the largest insurance payer in Abu Dhabi and the third largest in Dubai.¹⁴⁴ Established by Emiri Decree No. 39 of 2005, Daman is a part of ADQ.¹⁴⁵ It exclusively manages the aforementioned "Thiqa" program for U.A.E. nationals in Abu Dhabi as well as the Abu Dhabi Basic Plan for low-income expatriates in that emirate.¹⁴⁶



U.A.E. Health Insurance Terminology

- “Thiqa” is a health insurance program for U.A.E. nationals and those of similar status living in Abu Dhabi. It is exclusively managed by Daman on behalf of the Government of Abu Dhabi.
- “Enaya” is the Government of Dubai Employee Healthcare Benefits Scheme. Officially launched in July 2009, it provides a broad range of cover as well as preventive treatment and routine health checkups to more than 90,000 individuals. The third party administrator for this program is Neuron LLC.
- “Saada” is a health insurance program for citizens of Dubai who are not covered by any government health program. It is expected to ultimately reach 130,000 people. The third party administrator for this program is NEXtCARE.
- “Isahd” – Insurance System for Advance Healthcare in Dubai – is a Dubai Health Authority (DHA) initiative to provide healthcare insurance for all nationals and residents in the private sector. The system requires that everyone in the private sector have a minimum level of health insurance in place. Around 50 companies are permitted to sell such policies, while only 14 of them have been selected as Participating Insurers to specially serve the low-income expatriate segment. MetLife is one of the 14 Participating Insurers approved to provide the “Essential Benefits Package” to expatriates who earn less than 4,000 AED [\$1,089] per month.¹⁴⁷

In July 2016, the then-Health Authority – Abu Dhabi (now Department of Health) announced changes to the Thiqa program with a view to making the healthcare sector more sustainable. Under these changes, Thiqa cardholders would pay 20% of the cost of hitherto free treatment at private hospitals; treatment at public hospitals would still be free. Thiqa cardholders would also pay 50% (as opposed to 10% formerly) of the cost of treatment outside Abu Dhabi, except in cases where that type of treatment was unavailable inside the emirate.¹⁴⁸

However, the U.A.E. government ultimately walked back these changes given their implications for the healthcare sector. These moves would have posed complications for those enrollees currently in long-term private care.¹⁴⁹ These changes would have also potentially impacted the viability of some private healthcare institutions and their long-term expansion plans.¹⁵⁰ As such, in April 2017, His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the U.A.E. Armed Forces, ordered the waiving of the 20% co-payment for Thiqa cardholders when receiving treatment at private healthcare facilities.¹⁵¹

Recently, in November 2020, Daman announced that U.A.E. nationals in Abu Dhabi must pay for elective private medical treatment in the other emirates. This followed the phasing out of all direct billing at hospitals in October 2020.

Heavy Competition

The U.A.E. health insurance market reflects the U.A.E. insurance market as a whole. It is generally overcrowded, limiting profitability. There are currently more than 60 players in the U.A.E. insurance market, split between local insurers and the subsidiaries of foreign insurers.

Outside of the aforementioned Daman, three of the most prominent local insurers – both in general and in health insurance – are:

- ❖ **Oman Insurance Company/Bupa:** Oman Insurance Company (OIC), which is headquartered in Dubai, is the biggest insurer in the U.A.E. and one of the leading insurance companies in the MENA region. It provides both group health insurance and an individual international health insurance plan designed and is internationally administered by British healthcare giant Bupa Global.¹⁵²
- ❖ **Orient Insurance Company/Allianz:** Orient Insurance Company, which began operations in 1982, is a leader in the U.A.E. insurance market. Based in Dubai, it is part of Al Futtaim Group, a major U.A.E. conglomerate. It provides both individual and group medical insurance.¹⁵³ Orient Insurance Company is also the regional partner of German multinational insurance and asset management giant Allianz.¹⁵⁴
- ❖ **Abu Dhabi National Insurance Company (ADNIC)/MSH International:** ADNIC, which was founded in 1972, is a publicly listed composite insurance provider headquartered in Abu Dhabi and is the third-largest insurance company in the U.A.E. by assets.¹⁵⁵ It provides both individual medical insurance and group medical insurance in partnership with French company MSH International.¹⁵⁶ It is owned by Abu Dhabi Investment Council, which is an investment arm of the Abu Dhabi government.¹⁵⁷

As for international insurers, the largest as of the end of 2016 was U.S. insurance giant MetLife. The second largest was AXA Gulf, which is the regional division of French insurance multinational AXA and the largest non-life international insurer in the Arabian Gulf.¹⁵⁸ Other prominent international insurers include U.S. health insurance companies Aetna and Cigna, the latter of which has made a major push to expand its operations in the U.A.E. with its Cigna HealthGuard plan, approved by the DHA, that is tailored for those residing in Dubai and the northern emirates.

Capitalizing on the large number of health insurers in the U.A.E. and the new coverage requirements, compareit4me.com launched the first automated, real-time, online health insurance comparison platform in the country. This platform enables those looking for health insurance to compare and buy policies online. Compareit4me is part of a thriving U.A.E. startup community that is transforming the way that healthcare and other industries operate.¹⁵⁹

Restrictions to Entry and Regulations

International insurance companies must overcome certain obstacles to entering the U.A.E. market. For one, the U.A.E.'s Insurance Authority, which oversees insurance companies onshore (but not in free zones), has long been hesitant to license new insurers given that the sector is often characterized as overcrowded. In fact, the Insurance Authority has publicly called for consolidation of the sector in order to avoid what it views as unhealthy competition.¹⁶⁰

In addition, insurance companies operating in the U.A.E. must comply with increasingly stringent regulations on their activities meant to strengthen the sector and encourage consolidation. In early 2015, the U.A.E. Insurance Authority announced a series of new regulations including limits on how companies could invest their money and how much exposure they could have to different asset classes.¹⁶¹ Companies were given until January 2018 to comply with these regulations.¹⁶²

U.S. Insurance Companies in the U.A.E.

- **MetLife:** MetLife, Inc., through its subsidiaries and affiliates, is one of the world's leading financial services companies, providing insurance, annuities, employee benefits, and asset management to help its individual and institutional customers navigate their changing world. Founded in 1868, MetLife has operations in more than 40 countries and holds leading market positions in the United States, Japan, Latin America, Asia, Europe, and the Middle East. MetLife is a pioneer of life insurance with a presence of nearly 65 years in the Gulf. Through its branches, MetLife offers life, accident, and health insurance along with retirement and savings products to individuals and corporations. In the U.A.E., MetLife has had operations since 1962 and today is a leading multinational life and medical insurance company across the country.¹⁶³
- **Cigna:** In June 2017, Cigna opened an office at the Dubai International Financial Center (DIFC) to serve as its regional headquarters. The next month, Cigna announced the acquisition of Zurich Insurance Middle East, gaining official presence in Lebanon, Oman, the U.A.E., and Kuwait. Then, in October, it launched a much-touted individual insurance and wellness solution specially tailored for residents of Dubai and the northern emirates. Cigna has been growing in experience by entrenching itself in the region and adding local capabilities like its clinical team, culturally relevant resources, and an ever-expanding network of hospitals, clinics, and pharmacies. Prior to its acquisition of Zurich Insurance Middle East, Cigna already had an established presence via a local partner providing health insurance to U.A.E. residents for over 15 years.
- **Aetna International:** Aetna's Dubai office, based in Dubai Media City, is the nerve center for Aetna International's recently merged European and Middle East & Africa divisions. Notably, Aetna International administers healthcare plans for individuals, families, and corporate groups in the U.A.E. on behalf of RSA Insurance. It also administers Al Ain Ahlia Insurance Company plans within the country.¹⁶⁴



D. Pharmaceuticals

The U.A.E.'s pharmaceutical market is rapidly growing. Although the U.A.E. imports most of its drugs at present, this is beginning to change, and some international pharmaceutical giants have partnered with U.A.E. companies to locally manufacture their products. The COVID-19 pandemic has sharpened the U.A.E.'s focus on investing in the life sciences, both in the U.A.E. and abroad.

Growing Sales

Prior to the COVID-19 pandemic, the U.A.E. pharmaceutical market was growing at a rapid rate. This report will refrain from forecasting the rate of growth of this sector due to the vagaries of the pandemic. However, it is expected that this trend will broadly continue.

This growth came despite U.A.E. government efforts to contain rising drug prices, which are regulated by pharmaceutical pricing legislation.¹⁶⁵ In July 2011, the U.A.E. began a series of price reduction initiatives aimed at bringing U.A.E. pharmaceutical prices in line with those in neighboring countries.¹⁶⁶ Through these initiatives, the U.A.E. had, as of December 2017, cut the prices of 8,732 pharmaceutical products.¹⁶⁷ By January 2021, the U.A.E. had also authorized 6,176 generic drugs which cost nearly 60% less than branded medicines.

Import Reliance

The U.A.E. has historically imported the vast majority of its pharmaceutical products from abroad. Marwan Abdulaziz Janahi, who is the Executive Director of Dubai Science Park and the Chairing Member of the Pharmaceuticals and Medical Equipment taskforce of the Dubai Industrial Strategy 2030, estimated in November 2017 that nearly 90% of pharmaceuticals in the U.A.E. were imports.¹⁶⁸ This trend will likely continue for the foreseeable future.

At the same time the U.A.E. is expected to meet the vast majority of its pharmaceutical needs through imports, the U.A.E.'s pharmaceutical production and exports are anticipated to rise. These increased exports will be driven by the expansion of the U.A.E.'s nascent domestic manufacturing industry. This expansion is a priority for the U.A.E. government, and it is a key plank of the 2030 Dubai Industrial Strategy.

Julphar and U.A.E. Pharmaceutical Manufacturers

The U.A.E.'s domestic pharmaceutical manufacturing industry is headlined by Julphar Gulf Pharmaceutical Industries, which is the largest generic pharmaceutical manufacturer in the Middle East and North Africa. Established in 1980 under the guidance of the former Emir of Ras Al Khaimah His Highness Sheikh Saqr bin Mohammed Al Qasimi, Julphar now operates 16 manufacturing facilities globally, 13 of which are in the U.A.E. These factories collectively produce over one million boxes of medicines per day. In April 2021, Julphar announced that they would begin manufacturing COVID-19 vaccines in conjunction with G42 Healthcare.



The U.A.E. has several other domestic pharmaceutical manufacturers as well:

- ❖ **Neopharma:** Neopharma claims to be Abu Dhabi's premier pharmaceutical manufacturing company. Started in 2003, Neopharma has 10 manufacturing facilities across 3 continents and over 2,000 employees. In October 2018, the US subsidiary of Neopharma acquired an antibiotic manufacturing facility and its related assets in Bristol, Tennessee.¹⁶⁹ Neopharma has reportedly been impacted by

the legal woes of its longtime Executive Vice Chairman and Managing Director, Dr. B.R. Shetty, who was at the center of the NMC Health scandal.

- ❖ **Globalpharma (a Sanofi Company):** Globalpharma, which is based in Dubai Investment Park, is a major U.A.E. pharmaceuticals manufacturer. Established in 1998, its manufacturing facility can produce up to 300 million tablets, 150 million capsules, and over 7 million liters of dry syrup and liquid each year. In 2014, Dubai Investments sold a majority stake in Globalpharma to French firm Sanofi, and Globalpharma is now being integrated as a Sanofi company to become the platform to manufacture and promote the generics portfolio of Sanofi in the Middle East region.¹⁷⁰
- ❖ **Medpharma (member of Valeant):** Medpharma is one of the leading pharmaceutical branded generic companies in the U.A.E. In September 2014, it was acquired by Lebanon-based Integrated Pharma Solutions and Canada-based Valeant Pharmaceuticals.¹⁷¹ At the time, Medpharma had about \$30-\$40 million in sales per year.¹⁷²
- ❖ **LIFEPharma:** Part of the aforementioned VPS Healthcare, LIFEPharma has a facility at Jebel Ali Free Zone Area in Dubai that has the capacity to produce 1 billion tablets, 300 million capsules, and 150 million liters of liquid per year.¹⁷³ It is reportedly planning to build a 547 million AED [\$149 million] cancer drug plant at Khalifa Industrial Zone Park in Abu Dhabi.¹⁷⁴
- ❖ **Pharmax Pharmaceuticals:** Pharmax Pharmaceuticals is the first local company located at Dubai Science Park that seeks to be engaged in the development and commercialization of pharmaceuticals. It was established by one of the U.A.E.'s leading pharmaceutical and healthcare product distributors, Al Ittihad Drug Store (IDS).¹⁷⁵ In August 2018, Pharmax Pharmaceuticals began the production of "affordable generic medicines".¹⁷⁶

International Pharmaceutical Companies

At the same time that the U.A.E. has a growing domestic pharmaceutical manufacturing industry, many international pharmaceutical companies have established a presence in the country. Some of these companies – such as Pfizer, Viartis, and Janssen EMEA (the pharmaceutical arm of Johnson & Johnson) – decided to make the U.A.E. the site of their regional headquarters. Moreover, these companies are increasingly not just selling products in the U.A.E., but engaging in other activities as well, such as setting up scientific offices.¹⁷⁷

These international pharmaceutical companies are drawn to operate in the U.A.E. for a variety of reasons. In addition to its growing domestic market, the U.A.E. boasts a strategic location and sophisticated logistics infrastructure that make it an ideal hub to access growing regional markets in Africa, Asia, and the Middle East. The U.A.E. has also created business friendly environments in which pharmaceutical companies can operate, as seen in the next section.

Key to the continued expansion of international pharmaceutical companies in the U.A.E. is the protection of intellectual property. In May 2021, the Office of the United States Trade Representative removed the U.A.E. from its Watch List in its Annual Section 301 Report on Intellectual Property Protection. This was largely due to the U.A.E. Ministry of Health and Prevention resolving U.S. concerns with IP protection of pharmaceutical products.

U.S.-U.A.E. Pharmaceutical Partnerships

- **Julphar Gulf Pharmaceutical Industries and MSD:** In April 2014, Julphar entered into an agreement with Merck Sharp & Dohme (MSD), as U.S.-based pharmaceutical giant Merck is known outside the United States, under which Julphar can produce, distribute, and sell select MSD products in the U.A.E., Kuwait, Bahrain, Oman, Qatar, and Iraq.
- **Neopharma and Wyeth:** In May 2014, Neopharma joined with Wyeth, a Pfizer unit, to manufacture selected Pfizer products, starting with cardiovascular medicines related to hypertension and heart diseases.



Pharmaceutical Hubs

Several free zones have become hubs for the pharmaceutical industry.

- ❖ **Dubai Healthcare City:** Launched in 2002 by His Highness Sheikh Mohammed bin Rashid Al Maktoum, U.A.E. Vice President and Prime Minister and Ruler of Dubai, Dubai Healthcare City (DHCC) seeks to become an internationally recognized location of choice for quality healthcare and an integrated center of excellence for clinical and wellness services, medical education, and research. It has become a hub for pharmaceutical companies such as Abbott, Allergan Middle East, AstraZeneca, Baxter, Boehringer Ingelheim, Eli Lilly, Gilead Sciences, Johnson & Johnson, Julphar, Merck Serono, Merck Sharp and Dohme (MSD), Novartis, Novo Nordisk, and Sanofi.¹⁷⁸
- ❖ **Dubai Science Park:** Dubai Science Park (DSP), which is part of the TECOM Group, is a science-focused business community, dedicated to supporting entrepreneurs, start-ups, SMEs, and MNEs. Since its inception in 2005, the community has grown to more than 350 companies, including Amgen, Bayer, Bristol-Myers Squibb, Fresenius Medical Care, Medtronic, Merck Serono, and Pfizer, and together the community employs over 3,600 industry professionals.¹⁷⁹
- ❖ **Jebel Ali Free Zone:** In the 34 years since its inception, Jebel Ali Free Zone (Jafza) has become a key contributor to Dubai's economy and a growth engine for trade and commerce in the wider MENA region. Jafza is the leading source of foreign direct investment (FDI) in the U.A.E., accounting for around 32% of all FDI inflow, and has created a business environment that has helped drive forward economic diversification. As a part of its diversification efforts, Jafza has worked towards helping grow Dubai's healthcare and pharmaceutical industry. Currently, there are over 160 companies registered with the free zone



from 38 countries, including leading industry players such as Johnson & Johnson, Colgate, Roche, Sanofi, GlaxoSmithKline, and Quest Vitamins. In September 2017, Jafza agreed to work alongside the UAE Ministry of Health and Prevention to increase support for the sector and encourage the establishment and growth of an indigenous pharmaceutical product manufacturing base in Dubai.

E. Medical Equipment

The projected growth of the U.A.E.'s medical equipment market broadly mirrors that of other sectors. Given that the U.A.E. produces relatively little medical equipment domestically, this means significant business opportunities for international companies. That said, the pandemic has led the U.A.E. to explore local production of certain medical equipment.

Diagnostic Imaging Equipment

Diagnostic imaging equipment comprises a large percentage of the U.A.E. medical device market. Here, the U.A.E. has a preference for products from brand name international companies, who have often turned to the U.A.E. for the site of their regional headquarters.



- ❖ **GE Healthcare:** From its regional headquarters in Dubai, GE Healthcare provides transformational medical technologies and services to meet the demand for increased access, enhanced quality, and more affordable healthcare around the world. From medical imaging, software & IT, patient monitoring, and diagnostics to drug discovery, biopharmaceutical manufacturing technologies, and performance improvement solutions, GE Healthcare helps medical professionals deliver great healthcare to their patients.¹⁸⁰
- ❖ **Siemens Healthineers:** Siemens Healthineers, which is the separately managed healthcare business of Siemens and is a leading provider of medical imaging equipment, bases its Middle East regional office out of Dubai Healthcare City.¹⁸¹ In December 2016, Siemens Healthineers partnered with Easa Saleh Al Gurg to set up its first U.A.E. business.¹⁸² Pure Health, a part of ADQ, is the authorized distributor for some of the top brands in the Medical and Diagnostic Devices business such as Siemens Healthineers.
- ❖ **Philips Healthcare:** Dubai serves as the Middle East headquarters for Philips Healthcare, which is also a global leader in health technology. This headquarters services 15 markets, including the U.A.E.¹⁸³

Cardiovascular Devices

Cardiovascular devices are another important segment of the U.A.E. medical device market, especially given the increasing incidence of cardiovascular disease due to sedentary lifestyles and obesity. This market is principally centered on interventional cardiology and cardiac rhythm management.¹⁸⁴

Many of the key players in this segment also have significant U.A.E. operations.

- ❖ **Abbott:** Dubai serves as a regional headquarters for Abbott, which is one of the world's leading healthcare companies in medical devices as well as nutrition, pharmaceuticals, and diagnostics.¹⁸⁵ Abbott's acquisition of St. Jude Medical created a combined company with best-in-class solutions across the areas of cardiovascular and neuromodulation.¹⁸⁶
- ❖ **Medtronic:** Dubai is the home for Medtronic's headquarters for the Middle East & Africa, Central Asia & Turkey (MEACAT). These markets comprise 1,400 Medtronic professionals and produce

approximately \$1 billion in revenue.¹⁸⁷ Medtronic is world renowned for its wide array of cardiac and vascular products.¹⁸⁸

- ❖ **Johnson & Johnson:** Dubai is the home of Johnson & Johnson Middle East FZ-LLC, which oversees the regional production of a broad range of products used primarily by healthcare professionals in the fields of cardiovascular disease as well as orthopedics, neurovascular, surgery, vision care, diabetes care, infection prevention, diagnostics, sports medicine, and aesthetics.¹⁸⁹

Local Manufacturing and 3D Printing

Although the U.A.E. is still heavily reliant on imports of more sophisticated medical equipment, it has begun to develop a nascent medical products industry, starting with products like medical consumables. For instance, Abu Dhabi National Industrial Projects (ADNIP) partnered with NNE Pharmaplan to launch the Abu Dhabi Medical Devices Company, which manufactures Auto Disable syringes, Single Use syringes, Insulin syringes, and IV Cannula.¹⁹⁰ During the pandemic, Mubadala subsidiary Strata partnered with Honeywell International to set up a production line in Al Ain capable of producing over 30 million N95 masks per year, transforming the U.A.E. from a net importer to a net exporter of this critical personal protective equipment (PPE).



One area in which the U.A.E. is poised to potentially play a leading role in the future is 3D printing. In 2016, His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the U.A.E. and Ruler of Dubai, launched the 'Dubai 3D Printing Strategy' in order to exploit this technology for the "service of humanity" and promote the status of the U.A.E. and Dubai as a leading hub of 3D printing technology by the year 2030. One of the primary focus areas of this strategy is to the medical products sector, which could involve developing 3D printed teeth, bones, artificial organs, medical and surgical devices, and hearing aids. As of late 2020, Dubai Health Authority doctors across all DHA hospitals had successfully performed more than 50 surgeries to date using 3D printing techniques across several medical specialties such including oncology, cardiology and orthopedics.¹⁹¹

U.A.E. Partnerships with U.S. Medical Equipment Companies

- **Abbott** announced in October 2017 the establishment of the Abbott Diabetes Academy. This Academy, which is located in Dubai Healthcare City, is the first dedicated training academy in the U.A.E. for healthcare professionals working with diabetes patients. With its mission to act as a center of excellence and education and training partner for the regional public and private healthcare and diabetes community, the Academy will provide practical tools that can be applied by endocrinologists, diabetologists, and educators to improve the region's management of diabetes. The announcement of this Academy came during the first USA Healthcare Symposium and Showcase on Nutrition, Obesity, and Diabetes, which was held as part of Discover America month at the Mohammed bin Rashid University of Medicine and Health Sciences in Dubai.²⁵⁴ Additionally, Abbott's ID-Now Molecular COVID-19 devices are being used in Dubai International Airport to screen travelers departing from Dubai. The ID Now system provides results in 13 minutes or less. Abbott's ID Now Molecular makes the return to travel safe and healthy in both the U.A.E. and country of arrival. The ID NOW system is a strategic tool in returning to the 'new normal,' and an enabler of safe flights. Abbott also established a U.A.E. Scientific Office in Dubai Healthcare City, which registers Abbott U.A.E. to be the "Country of Origin" and the "Marketing Authorization Holder" for products made in the U.A.E.. This promotes the production of local products made and sold in the U.A.E.- like the recently announced "Made in UAE" initiative.



- **GE Healthcare** brings the best of its scale and capabilities to serve as a strategic partner to public and private sector providers across the U.A.E. including the U.A.E. Ministry of Health and Prevention, Dubai Health Authority (DHA), and Abu Dhabi Health Services Company (SEHA).
- **Medtronic** signed a deal with the University of Sharjah in 2015 whereby Medtronic Academy, the educational wing of Medtronic, would collaborate with the University to educate regional physicians on Medtronic products and therapies as well as general cardiac topics.¹⁹²



F. Information Technology

The U.A.E.'s Healthcare Information Technology (IT) market is set to grow swiftly in the coming years. This growth is partly driven by government initiatives around the digitization of electronic medical records. The pandemic underscored not just the utility of electronic medical records but the power of telehealth.

Electronic Health Records and Health Information Exchanges

For the past decade, the U.A.E. has been gradually implementing electronic health record (EHR) and health information exchange (HIE) systems throughout the country that promise to help the country reduce duplication, medication errors, and the length of hospital stays; improve patient safety and outcomes; and inform more effective public health policies.

In 2008, the U.A.E. Ministry of Health launched the “Wareed” project to establish a ‘one patient, one record’ electronic health record system by linking all of its facilities in Dubai and the northern emirates. This project, which involved deploying Cerner Millennium systems in all Ministry hospitals and clinics, was managed by Dubai-based Hybrid Health Solutions and implemented by a consortium including iCapital, Cerner Corporation, Gulf Business Machines (the sole distributor of most IBM products and services), and Injazat Data Systems.¹⁹³ The now-Ministry of Health and Prevention continues to improve upon this system with new features, such as those enabling clinicians to verify correct medication doses.¹⁹⁴

That same year, the Abu Dhabi Health Services Company (SEHA) launched its own electronic health records system. In 2008, Tawam Hospital in Al Ain became the first SEHA hospital to successfully implement Cerner Millennium healthcare information technology solutions at its facility.¹⁹⁵ By 2015, HIMSS Analytics Middle East awarded all 11 SEHA facilities a “Stage 6” rating on its Electronic Medical Record Adoption Model.¹⁹⁶

In August 2018, the Department of Health - Abu Dhabi (DOH) signed a strategic partnership agreement with Injazat Data Systems, a wholly owned subsidiary of Mubadala Investment Company, to develop an integrated Health Information Exchange system for the healthcare sector in Abu Dhabi. The system, known as Malaffi and launched in January 2019, claims to be the region’s first health information exchange platform. It enables a real-time exchange of patient health information between healthcare providers with the aim of improving healthcare quality and patient outcomes. Malaffi connects more than 2,000 Abu Dhabi healthcare providers from both the public and the private sectors, offering healthcare services to more than 3 million people in the Emirate of Abu Dhabi.¹⁹⁷ Its four core areas of functionality are Diagnostic Data Exchange, Provider Portal, Patient Portal, and Public Healthcare Services. As of April 2021, 95% of all hospitals in Abu Dhabi were connected to Malaffi.

Meanwhile, in Dubai, the Dubai Health Authority (DHA) embarked on an electronic health records system known as “Salama.” This system, which was announced in February 2016, has created one electronic record for each resident who uses a public hospital in that emirate.

The Dubai Health Authority now intends to extend this electronic health records system to private facilities in the emirate as well through its NABIDH (Network and Analysis Backbone for Integrated Dubai Health) initiative. This initiative will ultimately enable the creation of a single unified medical record for each individual in Dubai by linking the information contained in all public and private healthcare facilities.¹⁹⁸

U.S.-U.A.E. Electronic Health Record and Health Information Exchange Partnerships

➤ **Cerner Corporation**, which designs health information technology that is employed in more than 27,000 facilities worldwide, is highly active in the U.A.E., where its clients have included the Abu Dhabi Health Services Company (SEHA), the Ministry of Health and Prevention (MOHAP), Mobile Doctors, Healthpoint, National Reference Laboratory, King's College Hospital Dubai, Al Jalila Children's Specialty Hospital, and the U.A.E. Armed Forces. In 2008, MOHAP began deploying Cerner Millennium as part of its Wareed Project to establish a "One Patient, One Record" system in its hospitals; in November 2016, MOHAP renewed and expanded this partnership with Cerner. In July 2018, Mubadala Healthcare implemented an integrated electronic health record system from Cerner. In March 2020, Cerner worked with MOHAP to develop a new program to keep patients up to date on their refills amidst the COVID-19 pandemic. Cerner was also instrumental in MOHAP's information-gathering methods to coordinate a national response during the pandemic. Cerner's clients in the U.A.E. include: SEHA, MOHAP, Healthpoint, National Reference Laboratory, King's College Hospital Dubai, Al Jalila Children's Specialty Hospital, American Hospital Dubai, Sheikh Khalifa Medical City Ajman, and Zayed Military Hospital.



➤ **Epic Systems**, a Wisconsin-based company with an international office in Dubai, has long been present in the U.A.E. healthcare sector. As early as 2008, it signed a seven-year contract to implement clinical technology at the Mohammed bin Rashid Al Maktoum Academic Medical Center in Dubai Healthcare City. Epic Systems' electronic medical records information system is also used by Cleveland Clinic Abu Dhabi, which was awarded the prestigious HIMSS Stage 7 certification for its improvements using Epic.



➤ **InterSystems**, a global U.S.-based provider of database, integration, and analytics software, has been engaged to deploy its health information systems at a variety of U.A.E. medical institutions, including Mediclinic, Emirates Hospital Group, Neuro Spinal Hospital, and Capital Health's Specialized Rehabilitation Hospital.¹⁹⁹



Along these lines, private healthcare facilities have made significant investments in new electronic health records systems. In 2017 alone, Mediclinic, Emirates Hospital Group, and Neuro Spinal Hospital all turned to InterSystems TrakCare for such purposes. In so doing, these institutions have highlighted InterSystems' advanced interoperability, which will enable it to respond to the NABIDH scheme.²⁰⁰

The ultimate goal of all of the above initiatives is a unified national database of patients' medical records. In December 2020, MOHAP confirmed that the U.A.E. is set to launch its National Unified Medical Record Platform (NUMR). Known as Riayati, the system is set to connect 3,000+ U.A.E. public and private sector healthcare providers with the aim of effectively sharing data in real-time throughout the country. MOHAP is working with the Department of Health Abu Dhabi and the Dubai Health Authority to link Riayati with all other affiliate medical record systems, such as Malaffi. Riayati has been developed, operated, and soon will be managed by Pure Health, a part of ADQ.

Telemedicine

The U.A.E. is also improving healthcare through the increasing adoption of telemedicine, which has seen a boom amidst the pandemic. Six telemedicine solutions were approved for use by the Telecommunications Regulatory Authority (TRA) in April 2020, with NextGen Healthcare, VSee, OKADOC, Doxy.me, GetBEE, as well as Mind Mina Telemedicine all becoming licensed solutions in the U.A.E.

Telemedicine enables both patients to consult medical professionals and medical professionals to consult each other from a distance. This has reduced hospital visits, limited the movement of patients between hospitals, and extended healthcare services to more remote locations.

In Abu Dhabi, Mubadala Healthcare formed a joint venture with Switzerland's leading telemedicine provider, Medgate, to create the Abu Dhabi Telemedicine Center. This center offers over-the-phone medical consultations in both Arabic and English with medical professionals 24 hours per day, 7 days per week. All services are offered exclusively through Daman to Thiqa and Enhanced cardholders.²⁰¹

Meanwhile, in Dubai, Dubai Health Authority (DHA) has introduced telemedicine at its facilities through the "Dubai RoboDoc" initiative. In March 2017, DHA completed the trial phase of this initiative, which enables doctors to consult with two or more specialists in different health facilities at the same time by way of robots. After the completion of this trial phase, DHA announced that it plans to make this service available across all DHA hospitals and health centers. It also plans to make the service available to home-care patients by means of visiting nurses.²⁰²

In addition to the above initiatives, the U.A.E. has embraced teleradiology. Mulk Holdings, a prominent Sharjah-based conglomerate, has built two telemedicine and diagnostic centers in Dubai.²⁰³ More recently, as seen above, GE Healthcare, the Ministry of Health and Prevention, and Abu Dhabi International Medical Services formed an innovative, performance-based public-private-partnership called Unison to create the U.A.E.'s first public sector teleradiology capability.

Finally, several startups have embraced telemedicine concepts. "Health at Hand," which is licensed by the Dubai Multi Commodities Center, provides patient-to-doctor video consultations.²⁰⁴ Meanwhile, "Heydoc!" allows you to find the right doctor, chat with the doctor, share pictures or other information, and get personalized guidance. Finally, "Smart Seha" allows you to call a doctor.²⁰⁵

Other U.S.-U.A.E. Information Technology Partnerships

- **IBM** is currently engaged with health leaders in the U.A.E., deploying IBM Services and Technology to enhance and augment care practices and support the U.A.E.'s Artificial Intelligence vision. Commonly referred to as Artificial Intelligence, this new generation of technology and systems that it helps power promises to touch every facet of work and life – with the potential to radically transform them for the better. This is because these systems can ingest and understand all forms of data, which is being produced at an unprecedented rate. The purpose of AI and cognitive systems developed and applied by IBM is to augment human intelligence, not replace it. Cognitive systems, like IBM Watson, can reason over this data, forming hypotheses and judgments.
- **Honeywell**, a global leader in connected healthcare, has over 50 years of experience in hospital environments worldwide. The company has a long history in the U.A.E., where it leverages advanced software solutions and Internet of Things (IoT) technology to deliver 'Connected Hospital,' 'Connected Clinician,' and 'Connected Patient' initiatives. Integrating infrastructure and disparate systems to enable better care, Honeywell works with state-of-the-art healthcare facilities across the U.A.E. to ensure the rapid flow of information for more agile operations. Honeywell also specializes in workflow automation and communications to help reduce errors and increase productivity for clinicians, while improving the health of patients through effective monitoring in the hospital and beyond. As part of its commitment to innovation, Honeywell recently implemented an infant tracking solution at a large private hospital in the Middle East. The system provides a special service level to parents who want to track the identity, activity, and movement of their newborn babies, to ensure the highest level of safety and care.²⁰⁶

IBM Watson Health™

Honeywell
THE POWER OF **CONNECTED**

Smart Technology and Apps

The U.A.E. has long embraced the power of smart technologies and apps in the medical field. For instance, the Dubai Health Authority (DHA) has introduced smart pharmacies where robots can dispense

12 prescriptions in less than one minute from a store of up to 35,000 medicines.²⁰⁷ DHA has also put electronic tags on babies' ankles to protect against any unauthorized movement.²⁰⁸ At the same time, it has introduced a small wireless patch that can remotely monitor the heart rates of patients for up to 30 days.²⁰⁹ DHA has also released a wide variety of apps that are geared toward various audiences from patients to doctors, students, medical tourists, blood donors, pregnant women, diabetics, investors, and even kids.

During the pandemic, the U.A.E. Government utilized several smart solutions and apps to detect cases of COVID-19 and control its spread. Most prominent among the smart solutions is the ALHOSN U.A.E. app, which detects if an individual has been in close proximity to someone who had contact with anyone infected with COVID-19. The other is the chatbot service titled Virtual Doctor for COVID-19. The chatbot in the Virtual Doctor service asks several vital questions which will help it deduce if a person is at risk of getting COVID-19. Every user who downloads the app will have a unique QR code, which would contain information about the user's health. The app is encrypted, and the data remains on the user's phone. Through this data, the competent health authorities can identify people who can transmit the virus and who could be at a risk of contracting the virus. They can then communicate with those at risk and re-test them. This app is a joint initiative between Ministry of Health and Prevention, Department of Health - Abu Dhabi (DoH) and Dubai Health Authority.

G. Education, Research, and Events

In order to meet its ever-increasing need for qualified medical professionals, the U.A.E. has sought to grow its nascent medical education and training capacity. It has also endeavored to make the country a regional hub for medical research and events. Leading U.S. hospitals have been key partners in cultivating Emirati medical professionals and transferring knowledge.

Education and Training

Over the last several decades, a number of medical education institutions have sprouted up in the U.A.E. The most notable of these institutions are:

- ❖ **United Arab Emirates University (UAEU):** Opened in 1984, UAEU's College of Medicine and Health Sciences takes pride in being the first and highest-ranked medical school in the U.A.E. It offers a four-year M.D. program, the pre-requisite for which is successful completion of its two-year premed program. It also offers several graduate programs including a Master of Public Health, Master of Medical Sciences, and a Doctor of Pharmacy. Additionally, it offers PhDs in Biomedical Sciences and Public Health and Occupational Health.²¹⁰



- ❖ **The University of Sharjah:** Opened in 2006, the University of Sharjah's College of Medicine offers a Bachelor of Medicine and Bachelor of Surgery (MBBS) degree; a Master's degree in Molecular Medicine; a Master's degree in Leadership on Health Professions Education; and a Doctorate degree in Molecular Medicine.²¹¹ The University of Sharjah also has Colleges of Dental Medicine, Pharmacy, and Health Sciences, the latter of which offers a BSc. in Nursing.²¹² The University of Sharjah is notably home to the 325-bed University Hospital Sharjah.²¹³



- ❖ **Higher Colleges of Technology:** The Higher Colleges of Technology's Health Sciences Division offers a broad range of Health Sciences Bachelor Degree programs across its 17 campuses, including Bachelor's degrees in Emergency Medical Services, Health Information Management, Medical Imaging Science, Medical Laboratory Technology, Nursing, Pharmacy, Social Work, and Veterinary Science.²¹⁴
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كليات التقنية العليا
HIGHER COLLEGES OF TECHNOLOGY
- ❖ **Gulf Medical University:** Based in Ajman, this University, which is associated with the aforementioned Thumbay Group, offers a MBBS degree as well as Bachelor's degrees in Biomedical Sciences, Physiotherapy, Medical Laboratory Sciences, Medical Imaging Sciences, Anesthesia & Surgical Technology, and Nursing. It also offers Doctorate degrees in Dental Medicine and Pharmacy.²¹⁵ In August 2018, Gulf Medical University (GMU) expanded its footprint and launched Academic Thumbay University Hospital, two new colleges, and new programs as part of its planned educational strategy. The expansion includes the introduction of a Master's degree in Public Health, Environmental Health, and Toxicology, which have been made possible thanks to a partnership between Gulf Medical University and University of Arizona's Mel and Enid Zuckerman College of Public Health.²¹⁶
 - ❖ **RAK Medical & Health Sciences University:** Fully owned and managed by the government of Ras Al Khaimah, this institution claims to be the first comprehensive health science university in the U.A.E. It offers a MBBS degree as well as Bachelor's degrees in Dental Surgery, Pharmacy, and the Science of Nursing. It also offers Master's of Science Degrees in Pharmacy and Nursing.²¹⁷
 - ❖ **Fatima College of Health Sciences:** Established in 2006, this Abu Dhabi-based college began by offering a BSc. in Nursing through a program now operated in collaboration with Griffith University in Australia. It currently offers more than ten degree programs at BSc. and Diploma levels in Health Sciences.²¹⁸ Notably, it has collaborated with Etihad Airways Medical Center to provide three students per year with an opportunity to pursue a career in nursing with the airline.²¹⁹
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كلية فاطمة لعلوم الصحة
FATIMA COLLEGE OF HEALTH SCIENCES
- ❖ **Dubai Medical College for Girls:** This all-female institution offers a MBBS degree to women.²²⁰
 - ❖ **Dubai Pharmacy College:** This all-female college provides Bachelor of Pharmacy and Master of Pharmacy degrees.²²¹
 - ❖ **Royal College of Surgeons in Ireland - Dubai:** Established in 2005, this institution offers Master's of Science degrees in Healthcare Management as well as Quality & Safety in Healthcare Management.²²²

One of the newest entrants to the U.A.E. medical education scene is the Mohammed bin Rashid Academic Medical Center, which includes the Mohammed bin Rashid University of Medicine and Health Sciences, the Al Maktoum Medical Library, and the Khalaf Ahmad Al Habtoor Medical Simulation Center. The Mohammed bin Rashid University features a College of Medicine that offers a six-year MBBS program in partnership with Queen's University Belfast and clinical affiliate Mediclinic.²²³ The Hamdan bin Mohammed College of Dental Medicine is also part of the Mohammed bin Rashid University, offering Master of Science programs in Endodontics, Oral Surgery, Orthodontics, Pediatric Dentistry, Periodontology, and Prosthodontics.²²⁴ The Khalaf Ahmad Al Habtoor Medical Simulation Center (KHMSC), named after a prominent U.A.E. real estate tycoon, is the first comprehensive simulation training facility of its kind in the region.²²⁵



New public and private sector medical education institutions are also taking root in neighboring Abu Dhabi. In early 2016, the Abu Dhabi Urban Planning Council approved plans for the creation of a medical school at the prestigious Khalifa University, which has since been renamed the Khalifa University of Science and Technology following its 2017 merger with both the Masdar Institute and the Petroleum Institute.²²⁶ Khalifa University launched Abu Dhabi's first medical school in September 2018. The University's American-style Doctor of Medicine (MD) program began being offered to students in 2019.

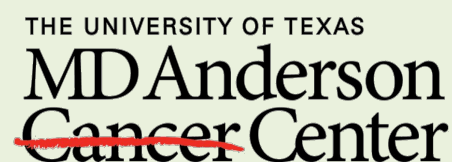


Other U.S.-U.A.E. Educational Partnerships

- **Children's National Hospital** provides four training positions to Emirati physicians during their clinical and trial rotations. Each year, it also provides work experience to a number of Emirati students from UAE University, Higher Colleges of Technology, and Khalifa University.



- **MD Anderson Cancer Center and Cleveland Clinic Abu Dhabi** entered into a medical partnership in 2014 with the Khalifa bin Zayed Al Nahyan Foundation (KBZF) to develop the skills of Emirati doctors, medical students, and administrators. Under the partnership, educational programs are offered to qualified Emirati candidates, ranging from collaborative internships to scholarships, residencies, and fellowships.



- **Boston Children's Hospital** physicians have participated in numerous educational programs in the U.A.E. over many years including Arab Health, SEHA Pediatric Conference, and grand rounds lectures in the public and private sector. In 2021, BCH is the keynote sponsor for the Arab Health Pediatric Focus Day and will present a series of lectures on advances in neurology, surgery, cardiology, and cardiac surgery.²²⁷



Other U.S.-U.A.E. Educational Partnerships (continued)

- **Cleveland Clinic Abu Dhabi** chose 75 Emirati and expatriate high school students to participate in its prestigious two-week Junior Caregiver Program in the summer of 2018 across 4 of its 14 Institutes. It also formed partnerships with local education establishments such as Fatima College of Health Sciences, a local higher education college, from which it recruited five candidates to join its graduate nursing program. The hospital also sponsored 20 students from the college to continue their studies. Cleveland Clinic Abu Dhabi has been designated an advanced teaching facility by the Abu Dhabi Department of Health. In September 2018, Cleveland Clinic Abu Dhabi welcomed its first eight U.A.E. national resident physicians as part of its ongoing plans to boost the number of Emirati physicians practicing in the country and support a sustainable healthcare sector.



كليفلاند كلينك أبوظبي
Cleveland Clinic Abu Dhabi

A Mubadala Company

- **Cleveland Clinic Abu Dhabi** and **New York University Abu Dhabi** agreed in May 2016 to collaborate on research, knowledge sharing, education, and training programs.

جامعة نيويورك أبوظبي



NYU | ABU DHABI

Research

U.A.E. universities are increasingly conducting innovative medical research. For instance, Sharjah University created a Research Institute of Medical & Health Sciences, which seeks to help make the university a national and international leader in biomedical and health sciences. Its research focuses on experimental and system biology, experimental genetics, disease states experimental therapeutics, inflammatory diseases, and clinic epidemiology/health policy.²²⁸ Moreover, NYU Abu Dhabi has created a Public Health Research Center (PHRC), which seeks to identify environmental and genetic determinants of health problems in Abu Dhabi and develop and test new public health interventions to promote wellness in the emirate.



Likewise, private sector companies are increasingly conducting research in the U.A.E., facilitated by dedicated facilities such as those provided by Dubai Science Park. The community features world-class laboratory space, equipped with air exhaust and ventilation systems, acid resistant draining, and pH

neutralization systems amongst other technical features. As a result, the laboratories have become home to a wide range of organizations conducting activities, including research and product development, testing, diagnostics, manufacturing, and production.²²⁹



Meanwhile, several dedicated medical research centers have emerged in the country. In March 2017, the Thumbay Institute of Precision Medicine and Translational Research opened on the site of Gulf Medical University to conduct postgraduate research, particularly on diabetes and cancer. The Thumbay Institute of Population Health, which focuses on research in the fields of public health, epidemiology, evidence based medicine, big data analysis, and global health, and the Thumbay Institute of Healthcare Workforce Development, which focuses on responding to national, regional, and international shortages, are recent additions to Thumbay's commitment to research.²³⁰

Mohammed Bin Rashid Medical Research Institute, an initiative of Al Jalila Foundation, is a world class biomedical research institute strategically located in the heart of Dubai Healthcare City next to the Mohammed Bin Rashid Academic Medical Center, which houses the Mohammed Bin Rashid University for Medicine and Health Sciences, ensuring seamless collaboration in the academic, healthcare, and scientific community. It is the U.A.E.'s first independent multi-disciplinary medical research center and aims to bring together leading local and international scientists to work together to discover solutions for the region's biggest health challenges: cancer, cardiovascular disease, diabetes, obesity, and mental health. In April 2020, Al Jalila Foundation expanded its research portfolio in response to the novel coronavirus (COVID-19) outbreak with dedicated research grants to address the pandemic and infectious diseases. The center has a goal to collaborate with renowned research institutions around the world to foster international scientific collaborations, nurture home-grown biomedical researchers, and introduce best practices in the region.

At the same time that medical research has expanded in the U.A.E., Emirati researchers have conducted research in the United States through partnerships with leading medical institutions. For instance, in December 2016, an Emirati researcher, Dr. Humaid Al Shamsi, who is an Assistant Professor at the MD Anderson Cancer Center at the University of Texas, was the primary investigator in the identification of a rare subtype of colon cancer. The discovery was the result of collaboration between the Sheikh Khalifa bin Zayed Al Nahyan Institute for Personalized Cancer Therapy at MD Anderson and the Mayo Clinic, with research support from the Khalifa bin Zayed Al Nahyan Foundation.²³¹

U.S.-U.A.E. Research Collaborations

- **Harvard International Medicine** (now Partners HealthCare International) and the government of Dubai founded the Dubai Harvard Foundation for Medical Research to support cutting-edge collaborative research and establish sustainable research and education programs focused on diseases relevant to the MENA region. In January 2015, it formed the Harvard Medical School Center for Global Health Delivery-Dubai in Dubai Healthcare City. This institution is mandated to address regional health issues through research, medical education, and training.
- **New York University Abu Dhabi (NYU Abu Dhabi)** announced the launch of the “UAE Healthy Future Study” in early 2017, which is a long-term study of 20,000 Emiratis to better understand the risk factors of obesity, diabetes, and heart disease. The study is being conducted in collaboration with SEHA, Zayed Military Hospital, UAE University, Zayed University, Khalifa University, EBTIC, Healthpoint, Capital Health Screening Center, and Daman. Separately, in November 2018, the Emirates Scientists Council signed a strategic partnership agreement with New York University Abu Dhabi. The MoU grants researchers from various disciplines access to the university’s advanced science laboratories and research centers to conduct ground-breaking studies.²³²
- **The Medtronic Foundation** gave a two-year \$100,000 Health Access Grant to Al Jalila Foundation in February 2017 to fund a local research program focusing on Vitamin D deficiency across the country. The grant will allow Al Jalila Foundation to promote early detection and prevention of the disease.²³³



**CENTER FOR GLOBAL
HEALTH DELIVERY-DUBAI**
HARVARD MEDICAL SCHOOL

جامعة نيويورك أبوظبي



NYU | ABU DHABI



Medtronic
FOUNDATION

The U.A.E. has spurred much of the above activity through generous grants. For example, Al Jalila Foundation has not only funded the construction of the Al Jalila Foundation Research Center, but it has also provided scholarships to U.A.E. medical students and funded U.A.E.-based medical research.²³⁴ Al Jalila Foundation is not alone, as the Sheikh Hamdan bin Rashid Al Maktoum Award for Medical Sciences, which funds medical research, is now in its 22nd year.²³⁵

مؤسسة الجليلا
AL JALILA FOUNDATION



“Reaching the Last Mile” Global Health Forum

In November 2017, Abu Dhabi convened key global health stakeholders for the “Reaching the Last Mile” global health forum. This forum, held in partnership with the Bill & Melinda Gates Foundation and the Carter Center, sought to catalyze action to reach the “last mile” of eliminating and eradicating certain preventable diseases.

During this forum, His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the U.A.E. Armed Forces, and Bill Gates each pledged \$20 million towards a \$100 million fund to tackle diseases including river blindness and lymphatic filariasis (elephantiasis). Two of the world’s largest drug companies, MSD (as U.S. pharmaceutical giant Merck is known outside the United States) and GlaxoSmithKline, also announced in-kind contributions of drugs, with co-investments from the UK Department of International Development and the U.S. Agency for International Development (USAID). MSD, in particular, announced that it would manufacture and provide free of charge 880 million tablets through 2025 to support river blindness treatment and efforts to achieve eradication. The conference also led to the establishment of a new research institute based in Abu Dhabi that will develop policies to combat infectious disease.

In November 2019, global leaders once again convened in Abu Dhabi at the Reaching the Last Mile Forum. This time, they affirmed their commitment to eradicating polio and pledged \$2.6 billion as part of the first phase of the funding needed to implement the Global Polio Eradication Initiative’s Polio Endgame Strategy 2019-2023. [Pledges](#) came from a diverse array of donors, including: \$160 million from His Highness Sheikh Mohamed bin Zayed Al Nahyan, \$215.92 million from the United States, and \$1.08 billion from the Bill & Melinda Gates Foundation.

This forum built on previous partnerships between the U.A.E. and both the Bill & Melinda Gates Foundation and the Carter Center. In 2013, Abu Dhabi, in partnership with the Bill & Melinda Gates Foundation, convened the Global Vaccine Summit, which raised \$4 billion in commitments to polio eradication. More than 30 years ago, the late U.A.E. President His Highness Sheikh Zayed bin Sultan Al Nahyan forged a partnership with the Carter Center around Guinea worm disease eradication that continues to this day.²³⁶

Exhibitions and Conferences

Over the last decade, the U.A.E. has become a regional hub for healthcare exhibitions and conferences. Every January, the U.A.E. hosts the largest gathering of healthcare and trade professionals in the Middle East, “Arab Health.” In 2021, Arab Health started in May 2021 as a hybrid event and will continue into an in-person experience in June 2021.

The U.A.E. also hosts a variety of more specialized annual events. These include MEDLAB, which is the largest attended laboratory expo worldwide with approximately 600 exhibitors and more than 25,000 attendees.²³⁷ Also included are the Building Healthcare Innovation and Design Show, the AccessAbilities Expo, and the Health Information and Management Systems Society (HIMSS) U.A.E. Health Week.²³⁸ For more information about MEDLAB and the Building Healthcare Innovation and Design Show please visit www.medlabme.com and www.buildinghealthcare-exhibition.com/en/Home.html.

H. Public Health

In line with the U.A.E.'s Vision 2021, the U.A.E. has recently made a major push to reduce the incidence of chronic diseases by adopting relevant legislation and launching public health campaigns.

Cancer Screening

The U.A.E. government has made concerted efforts to promote early cancer detection through screening. The Ministry of Health and Prevention has been particularly forward-leaning in terms of raising awareness about cancer and the importance of early detection through regular medical check-ups, as well as offering free breast cancer screenings across the U.A.E.

These initiatives have complemented the longstanding efforts of the Friends of Cancer Patients. Founded by Sheikha Jawaher bint Mohammed Al Qasimi, this group has organized the high-profile "Pink Caravan" every year since 2011 to raise awareness about breast cancer early detection and screening.²³⁹ In its first eight editions, the caravan travelled 1,700 kilometers across the seven emirates with 490 riders and 700 volunteers, providing free medical tests and screenings to 56,000 men and women, leading to the diagnosis of 61 breast cancer cases.²⁴⁰

U.S.-U.A.E. Cancer Partnerships

- **The Susan G. Komen Foundation** has partnered with the U.A.E. to raise awareness of breast cancer and facilitate more effective outcomes in its prevention and treatment. The U.A.E. Embassy in Washington, D.C. regularly participates in the Susan G. Komen Race for the Cure as an official sponsor.
- **The American Cancer Society (ACS)** has partnered with Friends of Cancer Patients in the U.A.E. since 2014 to launch the U.A.E.'s first Relay for Life Race and translate the ACS's Cancer Atlas into Arabic. This Atlas provides a comprehensive guide to the global cancer landscape and is used to promote cancer prevention and control worldwide.²⁴¹



Anti-Smoking

The U.A.E. has also focused on combating smoking. In January 2014, the U.A.E. announced the implementation of Federal Law No. 15 of 2009 that, among other things, made it illegal to smoke in houses of worship, universities, and schools; prohibited smoking in a vehicle when a child under 12 was present; forbid the sale of cigarettes to individuals under the age of 18; banned all tobacco advertising and promotion; and mandated a large warning label on the packaging of tobacco products.²⁴² Building on this legislation, in November 2014, the then-U.A.E. Ministry of Health announced a nationwide ban on smoking in all enclosed public spaces.²⁴³ Two years later, in 2017, the U.A.E. introduced an excise tax of 100% on tobacco products.²⁴⁴ In early 2021, U.A.E. health authorities opened smoking cessation clinics at various locations across the country to support individuals who sought to quit smoking.

Combating Obesity, Diabetes, and Cardiovascular Disease

On top of its efforts to combat cancer and smoking, the U.A.E. has tried to fight growing rates of obesity and associated ailments through regulation and taxation of the food and beverage industry. In December 2013, the U.A.E. cabinet announced that it would require calorie counts to be printed on food products, limit the size of soft drinks that can be sold, regulate advertising of fast food, and enforce healthy food standards at school cafeterias.²⁴⁵ In 2017, the U.A.E. introduced an excise tax of 50% on carbonated drinks.²⁴⁶ In 2019, it expanded this 50% excise tax to beverages with added sugars and sweeteners.

Additionally, the U.A.E. has sought to combat these chronic ailments by promoting exercise. In 2017, His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council of the Dubai Government, launched the Dubai Fitness Challenge, which challenged Dubai to be active for 30 minutes every day for 30 days. His Highness Sheikh Abdullah bin Zayed, Minister of Foreign Affairs and International Cooperation, was among the many U.A.E. officials who publicly embraced this challenge. A number of companies, such as Emirates, also accepted Sheikh Hamdan's challenge.²⁴⁷ Sheikh Hamdan repeated the Dubai Fitness Challenge in 2018, and it has become a recurring yearly challenge.

Some Emirati educational institutions, like the Jumeira Baccalaureate School in Dubai, are targeting childhood obesity head-on, providing students with healthier food choices. Lunchtime offerings include a buffet of nutritious food, including vegetarian options with sugar-free ketchup and mayonnaise. Joining the childhood obesity movement was Bareen International Hospital which announced the launch of its inaugural Take the Stairs challenge, a social media-driven campaign designed to encourage people young and old to swap the lifts for the stairs, in a bid to boost exercise levels across the region.

In recent years, educational campaigns about the danger of cardiovascular diseases have increased in the U.A.E. In December 2018, Amgen lit up Burj Khalifa in Dubai, the world's tallest building, as part of its "See The Emergency In Cholesterol" campaign.²⁴⁸

Finally, the U.A.E. has endeavored to detect chronic ailments at an early stage so they can be effectively managed and treated. For instance, the then-Health Authority – Abu Dhabi (now Department of Health) launched the "Weqaya" program, which screens individuals for cardiovascular disease, diabetes, and the risk factors associated with these two ailments.²⁴⁹ U.A.E. nationals must undergo Weqaya screening in order to qualify for the elite "Thiqa" health insurance program.²⁵⁰

U.S.-U.A.E. Fitness Partnerships

- **New York Road Runners** partners with the U.A.E. Embassy in Washington, D.C. on its annual U.A.E. Healthy Kidney 10K, which benefits the National Kidney Foundation.²⁵¹
- **Cleveland Clinic Abu Dhabi** and the Department of Health – Abu Dhabi organize Cycle for Health UAE, which seeks to promote cycling as a fun and healthy way to reduce the risk of chronic diseases. This initiative involves regular events at Zayed Sports City Stadium and is held in partnership with Healthpoint and Imperial College London Diabetes Center, all part of Mubadala Investment Company's network of world-class healthcare providers. Cleveland Clinic Abu Dhabi has also supported the 2017, 2018, and 2019 editions of Walk alongside Mubadala's Imperial College London Diabetes Center, the Department of Health – Abu Dhabi, and Healthpoint.²⁵²



PART III: ENTERING THE MARKET

The U.A.E. healthcare market offers enormous opportunities for U.S. companies to expand their presence and forge meaningful partnerships. However, it also poses certain challenges. Fortunately, there are a wide range of resources that companies can draw on to help them navigate any risks.

A. Opportunities

As previously noted, the U.A.E.'s increasing population, demographic shifts, high prevalence of chronic diseases, wealth, and ambitions to become a regional medical tourism hub are all driving the expansion of the country's healthcare market. As a result, Business Monitor International projects healthcare expenditures in the U.A.E. to continue rising to new heights in the 2020s.²⁵³

At the same time that it is a thriving healthcare market in its own right, the U.A.E. is an ideal regional hub from which to provide medical goods and services. The country is centrally located at the crossroads of Africa, Europe, and Asia. It boasts advanced transportation and logistics infrastructure. The strategic geographical location and world-renowned logistical capabilities have allowed the U.A.E. to become a global center for COVID-19 vaccine distribution worldwide.



Moreover, the U.A.E. enjoys relative security, political stability, and favorable business regulations. The U.A.E. has recently accelerated the pace of economic reforms meant to solidify its standing as the place to do business in the region.

Within this context, the U.A.E. provides attractive opportunities for U.S. companies in the field of healthcare provision, where there is a high demand for U.S. expertise, particularly in more specialized domains. American healthcare providers could replicate institutions in the U.A.E. as Cleveland Clinic did. Alternately, they could manage U.A.E. hospitals in the same fashion as Johns Hopkins Medicine International does. They can also provide value through consultations and training.

The U.A.E. also offers opportunities in the pharmaceutical, medical equipment, and healthcare IT sectors. U.S. companies will not only find the U.A.E. a ripe market for pharmaceutical exports, but they may also find it a suitable platform for the manufacture of drugs, perhaps following the lead of Merck and Pfizer in agreeing to local production arrangements. In addition, U.S. companies will find in the U.A.E. a growing market for medical equipment sales and one in which they can potentially sign agreements to install and service their own medical devices, as has GE Healthcare and Honeywell. At the same time, U.S. companies will find clients that are eagerly pursuing the latest innovations in healthcare information technology, as IBM Watson Health and Cerner can attest. The COVID-19 pandemic has also showcased the U.A.E.'s need for state-of-the-art testing equipment, which companies like Abbott provided to the U.A.E.'s airports for high-quality passenger screening.

The U.A.E. presents opportunities in meeting an ever-increasing demand for medical professionals as well. Along these lines, U.S. doctors and nurses will find gainful employment in the U.A.E. In addition, world-class medical institutions will find local counterparts that are eager to partner with them to give the best education and training to future generations of local medical professionals, as Children's National Hospital, Children's Hospital of Philadelphia, and others know well.

The above is far from an exhaustive list of opportunities available for U.S. companies in the U.A.E. healthcare market, and less obvious opportunities exist as well. For instance, U.S. companies may seek contracts to design or build the U.A.E.'s myriad of planned medical facilities. Moreover, U.S. venture capital and private equity firms may find promising investment opportunities in the U.A.E. healthcare space, which includes a wide array of innovative healthcare startups.

Regardless of the opportunity U.S. companies are pursuing, one of the keys to success will be an on-the-ground commitment. Fortunately, there are numerous advantageous environments in which U.S. companies can establish themselves, including Dubai Healthcare City and Dubai Science Park. The U.S.-U.A.E. Business Council's guide to "[Doing Business in the United Arab Emirates](#)" provides U.S. company executives the essential information they need when considering operations in the U.A.E.

B. Challenges

While there are abundant opportunities for U.S. businesses in the U.A.E. healthcare industry, these opportunities are somewhat limited by the size of the market. The U.A.E.'s population of approximately 10 million people, which is relatively small by global standards, limits the profitability of certain healthcare enterprises that depend on scale and whose scale cannot be achieved by either the U.A.E.'s connections to the wider region or the U.A.E.'s booming medical tourism market. This is particularly the case where there are a lot of domestic players, as there is in the healthcare insurance industry.

Competition is also a challenge, with more international competitors entering the scene. Asian firms, mainly from China and South Korea, have invested heavily in the U.A.E., and China in particular is continuously looking for ways to expand. Following the historic Abraham Accords in 2020, Israeli healthcare firms have also begun moving into the U.A.E. What used to be a market dominated by American and, to a lesser extent, European business is expanding to include other eager players.

Another potential challenge for U.S. companies operating in the U.A.E. healthcare market is tightening budgets. In an environment of lower oil prices and increasing healthcare costs, there have been firmer stances regarding prices throughout the healthcare industry. Moreover, there have been efforts to achieve greater efficiencies and cost savings.

C. Resources

American companies that are looking to pursue opportunities in the U.A.E. healthcare market and forge fruitful partnerships with local counterparts can draw on a variety of resources and services, both in the United States and U.A.E.

They can rely on the assistance of U.S. government institutions, located in both the U.A.E. and Washington, D.C.

U.S. Government Contacts in the U.A.E.

Senior Commercial Officer: Thomas Bruns
U.S. Embassy in Abu Dhabi, Commercial Section
P.O. Box 4009, Abu Dhabi, U.A.E.
Tel: +971-2-414-2665
E-mail: thomas.bruns@trade.gov
Website: <https://www.trade.gov/knowledge-product/united-arab-emirates-market-overview?section-nav=2758>

Healthcare Commercial Specialist in Dubai: Vandana Nair
U.S. Consulate General in Dubai
P.O. Box 121777, Dubai, U.A.E.
Tel: +971-4-309-4963
E-mail: Vandana.nair@trade.gov
Website: <https://www.trade.gov/knowledge-product/united-arab-emirates-market-overview?section-nav=2758>

U.S. Government Contacts in Washington, D.C.

U.A.E. Desk Officer: Drew Peterson
U.S. Department of Commerce
U.S. and Foreign Commercial Service
International Trade Administration
14th St. & Constitution Avenue, N.W.
Washington, D.C. 20230
Tel: (202) 482-0879
Email: drew.pederson@trade.gov

In addition, U.S. companies can turn to U.A.E. government institutions in both the United States and the U.A.E.

U.A.E. Government Contacts in the U.S.

U.A.E. Commercial Counselor: Saud Al Nowais
U.A.E. Embassy, Trade & Commercial Office
3522 International Court, NW
Washington, DC 20008
Tel: (202) 243-2425
Email: trade@uaeembassy-usa.org
Website: <https://www.uae-embassy.org/services-resources/doing-business>

U.A.E. Consulate in Los Angeles
1999 Avenue of the Stars, Suite 1250
Los Angeles, CA 90067
Tel: (310) 551-6534
Email: protocol.la@mofa.gov.ae

U.A.E. Consulate in New York
535 5th Ave., 32nd Floor
New York, N.Y. 10017
Tel: (212) 419-7670
Email: nycon@mofa.gov.ae

U.A.E. Consulate in Boston
One International Pl, Suite 2901
Boston, MA 02110
Tel: (617) 948-8800
Email: consboston@uaeembassy-usa.org

U.A.E. Consulate in Houston
7505 South Main Street, Suite 510
Houston, TX 77030
Tel: (832) 956-6666
Email: houstoncon@mofa.gov.ae

U.A.E. Government Contacts in the U.A.E.

Ministry of Health and Prevention
P.O. Box 848, Abu Dhabi, U.A.E.
Tel: +971-2-652-0590
P.O. Box 1853, Dubai, U.A.E.
Tel: +971-4-230-1000
Website: www.mohap.gov.ae

Department of Health – Abu Dhabi
P.O. Box 5674, Abu Dhabi, U.A.E.
Tel: +971-2-449-3333
Website: www.doh.gov.ae

Abu Dhabi Health Services Company (SEHA)
P.O. Box 109090, Abu Dhabi, U.A.E.
Tel: +971-2-410-2000
Website: www.seha.ae

Dubai Health Authority (DHA)
Dubai Health Authority Building, Al Maktoum Bridge Street, Bur Dubai Area 4545, U.A.E.
Tel: +971-800-342
Email: wasselotak@dha.gov.ae
Website: www.dha.gov.ae

Finally, U.S. companies can count on major U.S. trade associations and chambers of commerce and their counterparts in the U.A.E.

U.S. Trade Associations/Chambers of Commerce

U.S.-U.A.E. Business Council
2001 K Street, NW, Suite 201 North
Washington, D.C. 20006
Tel: +1 202 863 7285
Email: news@usuaebusiness.org
Website: www.usuaebusiness.org

U.A.E. Trade Associations/Chambers of Commerce

Federation of U.A.E. Chambers of Commerce & Industry
P.O. Box 3014, Abu Dhabi, U.A.E.
Tel: +971-2-621-4144
Email: info@fccuae.ae
Website: www.fccuae.ae

Abu Dhabi Chamber of Commerce & Industry
P.O. Box 662, Abu Dhabi, U.A.E.
Tel: +971-2-621-4000
Email: contact.us@adcci.gov.ae
Website: www.abudhabichamber.ae

Dubai Chamber of Commerce & Industry
P.O. Box 1457, Dubai, U.A.E.
Tel: +971-4-228-0000
Email: customercare@dubaichamber.com
Website: www.dubaichamber.com/

Sharjah Chamber of Commerce & Industry
P.O. Box 580, Sharjah, U.A.E.
Tel: +971-6-530-2222
Email: scci@sharjah.gov.ae
Website: www.sharjah.gov.ae

Ajman Chamber of Commerce & Industry
P.O. Box 662, Ajman, U.A.E.
Tel: +971-600-595-959
Email: info@ajmanchamber.ae
Website: www.ajmanchamber.ae

Fujairah Chamber of Commerce & Industry
P.O. Box 738, Fujairah, U.A.E.
Tel: +971-9-223-0000

Email: chamber@fujcci.ae

Website: www.fujcci.ae

Ras Al Khaimah Chamber of Commerce & Industry

P.O. Box 87, Ras Al Khaimah, U.A.E.

Tel: +971-7-207-0222

Email: info@rakchamber.ae

Website: www.rakchamber.ae

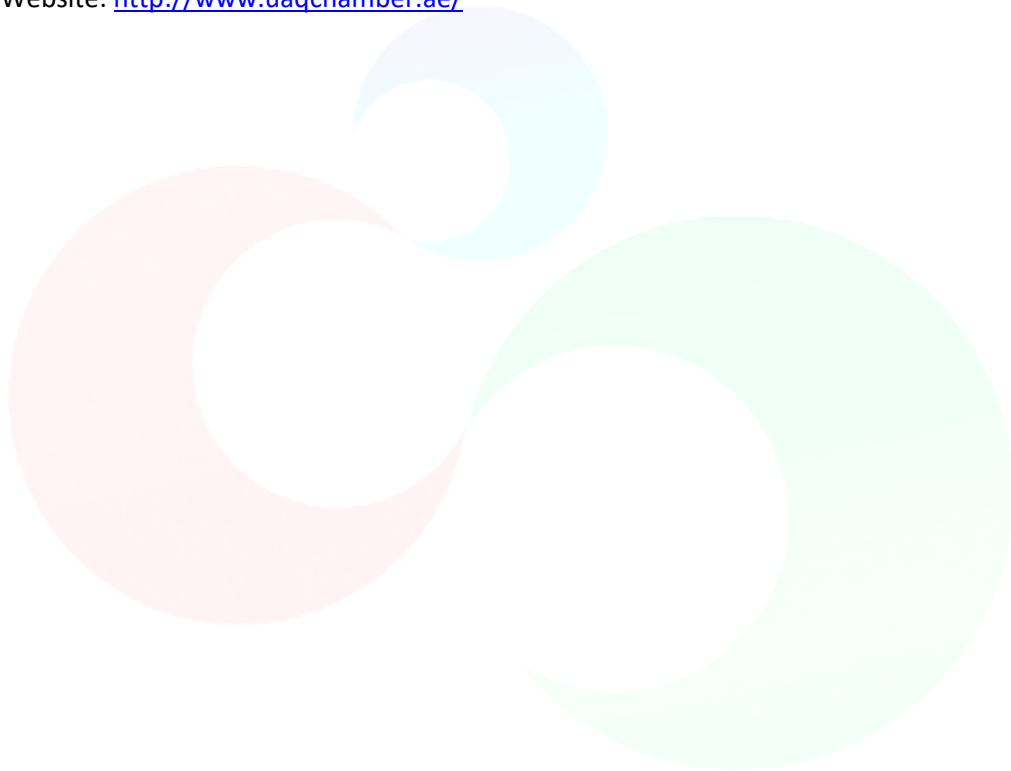
Umm Al Quwain Chamber of Commerce & Industry

P.O. Box 436, Umm Al Quwain, U.A.E.

Tel: +971-6-765-1111

Email: uaqcci1@eim.ae

Website: <http://www.uaqchamber.ae/>



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