POLICY REPORTS

U.A.E. Healthcare & Life Sciences Sector

Jan 2025





Authors

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INTRODUCTION

Building on the U.S.-U.A.E. Business Council's previous reports on the U.A.E.'s 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 relevant updated information about the country's healthcare sector. This January 2025 edition highlights key developments in attracting innovation through Foreign Direct Investment (FDI) in pre-clinical and clinical trials, genomics, domestic manufacturing, and medical infrastructure. Further advancements in the U.A.E. have been made through AI integration in healthcare and life sciences. The U.A.E.'s continued bilateral partnerships with U.S. hospitals have maintained its medical tourism growth and curated an ecosystem to promote thought leadership.

The U.A.E. has continued to develop its human capital and medical infrastructure by attracting FDI and developing a local medical research, innovation, and manufacturing ecosystem. In line with government policy directives, the U.A.E.'s advancements in genomics, pharmaceutical manufacturing, and clinical trials have continued to accelerate. For example, public-private sector partnerships in Abu Dhabi have drawn in increased FDI and foreign and domestic talent and expertise, leading to a 40% increase in incubated start-ups and 86 new companies across the country. Life sciences companies in Abu Dhabi have access to state-of-the-art infrastructure, a digital health platform, vast secure datasets, 16 research universities, and 14 clinical research facilities.¹

Leading the charge in life sciences development in Abu Dhabi, Masdar City Free Zone has received FDI exceeding \$272 million in its life sciences cluster. Masdar City Free Zone's life sciences cluster includes the region's first Bio-Bank, hosting over 50 biotechnology companies, and some of the most advanced research and development facilities promoting cutting-edge research in rare diseases, genomics, cell and gene therapy, and both pre-clinical and clinical trials.² In Dubai, Dubai Science Park (DSP) continues to expand and announced in February 2024 that it will be adding 60% more offices, warehouses and labs to accommodate 30-40 new companies moving in each year. DSP currently houses around 450 organizations—the majority of which focus on healthcare, pharmaceuticals, medical equipment, and medical technology including AstraZeneca, BeiGene, Pfizer, and Virax Biolabs.³ Growth and focus on biotechnology in Abu Dhabi and Dubai is positioning the U.A.E. as a global hub for research and development, genomics, and personalized medicine.

In the past year, the U.A.E. has made substantive steps towards integrating AI into its healthcare and life sciences sector. By harnessing the power of AI, the country is revolutionizing patient care, medical research, and treatment outcomes. Central to this progress is the seamless flow of data, with U.A.E. regulators collaborating closely with industry leaders to ensure the efficient, secure transfer of information, laying the foundation for cutting-edge, data-driven healthcare solutions. For instance, M42 launched its open-access generative AI Clinical Large Language Model (LLM), Med42, during Abu Dhabi Global Healthcare Week in May 2024. Building upon the success of the initial launch in October 2023, Med42 represents the next evolution in AI-driven health innovation in the U.A.E., poised to advance

healthcare AI and transform patient care, while helping reduce the administrative burden for clinicians. Along with Med42, M42 has several other scalable and adaptable foundational models it is undertaking to advance healthcare and preventative health including DOC42, GENE42, SCAN42, CLAIM42, and CARE42. Through its application of AI technologies to this vast data source, the U.A.E. has achieved sustained advancements in clinical genomic research and disease prevention, as well as supported precision medicine and life science strategies globally.

The U.A.E. continues its collaboration with U.S. hospital groups and research institutions to develop local healthcare infrastructure. PureHealth, the Middle East's largest healthcare platform, and its subsidiary Abu Dhabi Health Services Company (SEHA), announced with Cincinnati Children's Hospital Medical Center a partnership to establish a center of pediatric excellence in Abu Dhabi in April 2024. This partnership comes after H.H. Sheikh Khaled bin Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Chairman of the Abu Dhabi Executive Council, approved the Sheikh Khalifa Medical City (SKMC), a specialized medical city focused on women's and children's health. In Dubai, Al Jalila Children's Hospital has grown its partnership with Children's National Hospital to expand its pediatric care facilities through advancing technological collaboration, enhancing training programs, and improving leadership training. The extended partnership agreement deepens the long-standing collaboration between the two hospitals and follows the historic visit of His Highness Sheikh Mohamed bin Zayed (MBZ) to Washington, D.C., where His Highness toured Children's National Hospital in September 2024. In Sharjah, Mass General Brigham and Dana-Farber Cancer Institute jointly announced in 2023 a partnership with BEEAH Group to create the 'Jawaher Boston Medical District'. The flagship hospital of the project will be a 266-bed, state-of-the-art hospital that aims to bring advanced medical services, offering a comprehensive range of specialties, including women's health, pediatrics, oncology, cardiovascular medicine, lifestyle medicine and disease prevention, neurosciences, rehabilitation medicine, and behavioral health.

The U.A.E. is leveraging its strategic location as a global hub for travel and tourism to emerge as a global medical tourism destination. In 2023, the global market for medical tourism was valued at \$31.91 billion and is projected to reach \$52.87 billion by 2027. This trend is also indicative of a broader trend where companies are increasingly investing in the health of their employees by utilizing medical tourism options offered in the U.A.E. Dubai's healthcare sector continues to implement its strategy of attracting medical tourism and international investment. In September 2024, the Dubai Health Authority (DHA) and the Dubai Department of Economy and Tourism (DET) signed a Memorandum of Understanding (MoU) to elevate Dubai's position in the global medical tourism market. This collaboration aims to establish Dubai as a leading healthcare and medical tourism destination, focusing on boosting competitiveness, operational efficiency, and transparency while upholding the highest global standards.

The U.A.E. remains a leading convenor and facilitator in healthcare and life sciences thought leadership. Organized by the Department of Health – Abu Dhabi, the inaugural Abu Dhabi Global Healthcare Week (ADGHW) in May 2024 marked a pivotal step in the emirate's mission to become a global leader in healthcare and life sciences research, development, and manufacturing. The event gathered healthcare leaders, policymakers, and stakeholders from around the world. The U.S.-U.A.E. Business Council led a U.S. Department of Commerce-certified trade delegation of executives from 25 American companies interested in entering the U.A.E. market or companies keen to grow their business in the country and received significant support from the U.S. Mission in the U.A.E. The inaugural ADGHW conference complements the long-standing Arab Health Conference held annually in Dubai. Every January, Arab Health brings together the largest gathering of healthcare and trade professionals in the Middle East. Arab Health 2024 attracted over 3,450 exhibitors, 130,000 in-person visitors, and 320 speakers, representing 183 countries while generating \$1.81 billion in business. ADGHW and Arab Health are only two of a plethora of healthcare and life sciences conferences held in the U.A.E.

This report provides a snapshot of both challenges and opportunities for our member companies in the U.A.E. healthcare market and offers resources for businesses entering the market. This report provides an overview of the latest developments and the potential for growth of the U.A.E. healthcare market, government reforms necessary to meet the demands of this evolving ecosystem both from a regulatory and service provision perspective, and the steps that the government is taking to meet these demands. Secondly, this report takes a closer look at the different actors and entities in the U.A.E. healthcare sector – from regulators to providers, insurers to manufacturers, researchers to educators, and others that are driving this rapid change.

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PART I: GENERAL TRENDS

The U.A.E. continues developing capabilities across the full spectrum of healthcare innovation and provision to achieve its goal of becoming a global leader in healthcare and life sciences, significantly investing in the sector to strengthen its position as a hub for medical innovation. In recent years, the nation's primary focus has been on expanding its healthcare infrastructure and establishing new hospitals, care centers, and medical education institutions to increase domestic healthcare capacity. Building on its focus on increased capacity, in 2024, the U.A.E. began to broaden its scope, implementing comprehensive federal and emirate-level strategies aimed at attracting and fostering local manufacturing, technology, innovation, artificial intelligence (AI), and research and development (R&D) within the healthcare sector. These initiatives are aligned with the U.A.E. government's overarching goal of creating a world-class healthcare ecosystem that provides exceptional medical care to its residents while positioning the country as a regional leader in healthcare research, international collaborations, and innovative healthcare solutions.

A. Growth

The U.A.E. healthcare market has grown rapidly over the past decade and continues to see steep growth. The healthcare sector generated more than \$4.63 billion in annual revenue in 2023.⁴ In 2024, the federal government allocated AED 5 billion (\$1.36 billion) to healthcare spending.⁵ There are 157 hospitals in the country and a total of 5,369 hospitals and clinics.⁶



Population growth has been one driver of this expansion and will continue to be the case in the future. Current UN forecasts predict that the U.A.E. population will continue to grow to about 11.1 million in 2030, 13.2 million in 2050, and 14.8 million in 2100.⁷

Demographic shifts towards an aging population are also driving the growth of the U.A.E.'s domestic healthcare sector needs. The estimated share of the U.A.E.'s population above the age of 65, according to the World Bank, will increase from 1.1% at present to 4.4% by 2030. The aging population in the U.A.E. will also likely become more diverse with the increase in expatriates retiring in the country and will therefore demand healthcare, including geriatric care, in both the private and public sectors. Similarly, the growth of the long-term resident population will result in higher demand for maternity, neonatal, and pediatric care as expatriates will increasingly give birth and raise children in the U.A.E.

Diseases resulting from unhealthy lifestyle habits continue to be prevalent among the U.A.E.'s citizens and residents. Obesity and its comorbidities such as diabetes and cardiovascular diseases account for the majority of mortalities among the U.A.E. population. Cardiovascular disease remains the leading cause of death in the U.A.E., accounting for 34% of all deaths. Around 12% of the population between the ages of 20 and 79 years old suffer from type 2 diabetes.⁸

Health problems stemming from the widespread use of tobacco, especially among youth, are also common. A study published in the Oman Medical Journal estimates the prevalence rates of smoking in the U.A.E. to range from 23.4%–24.7% in men and 0.8% in women – a rate low in comparison to many countries in the Middle East, but high compared to the rate of 12.5% among adults in the United States.⁹ With the ease of access to non-traditional smoking methods, such as midwakh, sheesha, and electronic

vapes, it is expected that these rates will continue to increase. In addition, rising temperatures and worsening air quality have increased the prevalence of climate-related health problems such as asthma, which is exacerbated by smoking and vaping.

The most recent data available from the U.A.E. Ministry of Health and Prevention shows that in 2021, cancer was the fifth leading cause of death in the U.A.E., accounting for 11,911 deaths among Emiratis and non-Emiratis.¹⁰ The Ministry's research revealed that cancer affects men more than women in the U.A.E. Colon cancer was the leading cause of cancer-related deaths, at an average of 11.49% cancer deaths per year, followed by lung cancer and breast cancer.¹¹

Mental healthcare is a growing field of medicine in the U.A.E. with patients seeking professional help to address mental health concerns including anxiety, depression, and stress. Growing demand for mental healthcare has shown a gap in the supply of access to mental health professionals, creating a new market to access their needs conveniently. Seeking convenient medical care has increased demand for convenient and accessible mental health services, such as online therapy and telemedicine. Telehealth has increased access to healthcare and mental health services, a trend that was adopted during the COVID-19 pandemic. Telehealth services have both increased efficiency and reduced the burden on inperson healthcare facilities in supporting mental health services.

In addition to growing local demand, medical tourism is another significant demand factor driving U.A.E. healthcare sector growth. The U.A.E. is one of the fastest-growing destinations for medical tourism globally. Approximately \$5.4 billion was spent by medical tourists coming to the U.A.E. in 2022.¹² Dubai has become a global hub for patients seeking treatment from across the region, Asia, Africa, and Europe. The Dubai Health Authority reported 674,000 medical tourists that spent \$270 million in 2022.¹³ In January of 2024, Dubai Healthcare City began accepting applications for medical visas, allowing treatment centers to apply for a visa of three to six months on behalf of their patients.¹⁴ Abu Dhabi has also been a popular destination of medical tourism in the U.A.E., with Abu Dhabi Investment Office (ADIO) reporting 15,000 medical tourists in 2023.¹⁵ Ras Al Khaimah (RAK) has also seen growth in medical tourism in 2024; RAK Hospital has tripled its capacity to meet patient demand and will become a 200-bed facility by the end of 2025.¹⁶

In addition to growth in capacity, the standard of care has also experienced sharp growth over recent years due to improvements in technology and healthcare innovation. The introduction of Artificial Intelligence (AI) tools in the provision and application of healthcare is improving patient experience and has significant potential to scale up. In the healthcare sector, AI is being used to improve disease diagnoses, treatment and prevention, and enhanced capabilities for genomics and personalized medical treatment. U.A.E. government entities have deployed national strategic plans to emphasize AI integration in the healthcare sector. Signed in 2019, the National Artificial Intelligence Strategy 2031 placed significant emphasis on the healthcare sector, driving AI integration.¹⁷ Following the adoption of the National AI Strategy, in 2023, the Ministry of Health and Prevention (MOHAP) launched the first Centre of Excellence (COE) for AI in the U.A.E. healthcare sector. As part of its broader vision to create a technologically advanced healthcare system powered by big data and AI, the U.A.E. is in the process of developing one of the world's largest and most diverse genomic databases. The Emirati Genome Project has collected and sequenced genomic data of over half of Emirati citizens to aid in the prevention and treatment of chronic diseases and provide personalized medicine to its citizens. This initiative is a key component of the U.A.E.'s strategy to leverage genomic data for advancements in personalized medicine and healthcare innovation.¹⁸

Telemedicine and telehealth have also been on the rise in the U.A.E. in recent years. The U.A.E. has continued to embrace technological advancements after the COVID-19 pandemic to provide more efficient patient care. Recent investments into the U.A.E.'s digital health strategy have led to growth in telemedicine, data analytics, and AI-driven diagnostics.¹⁹ Technological advancements in the healthcare sector aim to streamline healthcare operations and improve healthcare delivery to support comprehensive and accessible healthcare solutions. Telehealth growth, specifically in virtual consultations and diagnostic services, has increased employment demand for healthcare tech careers in the U.A.E. in areas of software development, cyber security, and virtual care management.²⁰

The result of the U.A.E.'s sustained commitment to investment in healthcare infrastructure, technology, research, and innovation is the steady and rapid improvement in healthcare quality in the U.A.E. In 2023, the Legatum Institute's Legatum Prosperity Index report ranked the U.A.E. 33rd in health globally, and second (after Israel) in the Middle East and North Africa, in terms of healthcare quality.²¹ The same report also ranked the U.A.E. first in four important global competitiveness indices in the healthcare industry: measles immunization, antenatal care coverage, existence of national screening programs, and scope of healthcare coverage.²² Importantly, the U.A.E. also ranked 2nd globally for satisfaction with healthcare.²³

B. Challenges

The tremendous growth of the U.A.E.'s healthcare market has driven policies and initiatives aimed at mitigating the biggest challenge still facing the country: recruiting, training, and retaining healthcare professionals.

Strengthening Human Capital

The U.A.E. is facing an ongoing shortage of healthcare professionals, with projections indicating a gap of 15,000 nurses and allied health professionals in Abu Dhabi, alongside a shortfall of 6,000 physicians and 11,000 nurses in Dubai by 2030.²⁴ This growing deficit presents significant challenges to meeting the country's expanding healthcare needs and ensuring sustainable care delivery in the coming decade. Several factors complicated the adequate staffing of qualified medical personnel in the U.A.E., and government action in recent years has aimed at mitigating these challenges.

In October 2021 the U.A.E announced sweeping reforms to its visa process by granting all frontline health workers and their families a 10-year golden visa.²⁵ This initiative, under the direction of U.A.E. President Sheikh Mohammed bin Zayed, has provided stability for healthcare workers and their families in the U.A.E., who were also supported throughout the pandemic with schooling cost assistance and free flights home to visit their families. Additionally, Emirates Health Services (EHS) put forth initiatives to attract Emirati professionals and students to healthcare professions, with a specific focus on nursing.

In April 2021, MoHAP launched the National Strategy for Nursing and Midwifery – Roadmap for 2026. This strategy serves to encourage U.A.E. citizens and residents to become nurses and midwives, to promote public training programs for them, and to raise the quality of nursing care provided domestically.²⁶ Endorsed in cooperation with MoHAP, the National Institute for Health Specialties- a U.A.E. national institute established to spearhead, regulate, and organize professional development for the healthcare workforce located within U.A.E. University- launched three specialized nursing residency programs including a residency for recent graduates, a program in critical care for adults, and a program for nursing care for mental health.²⁷ Hospitals began accepting applications to the programs in 2024.

In 2023, the Department of Health- Abu Dhabi (DoH) set Emiratization targets "Tawteen" for all healthcare facilities operating in Abu Dhabi to provide 5,000 new job opportunities for U.A.E. nationals until the end of 2025.²⁸ In January of 2024, the DoH exceeded Emiratization goals by attracting over 1,200 national healthcare professionals and achieved a 12 percent year-on-year growth in the healthcare sector's national workforce within six months of launching the Tawteen initiative.²⁹

Developing Specialized Capabilities

Another area that remains a focus for the U.A.E. government is continued investment in specialized and tertiary care facilities, an area of continued need.

- In Abu Dhabi, institutions such as Cleveland Clinic Abu Dhabi and Sheikh Shakhbout Medical City (SSMC) illustrate progress in providing types and levels of specialized care in the country by bringing in international doctors and providers and developing local centers of excellence.
- Dubai is home to two of the most important children's and women's hospitals, Al Jalila Children's Specialty Hospital and Medcare Women & Children Hospital, according to Newsweek.³⁰ Additionally, Dubai Health Care City (DHCC), the emirate's healthcare free zone, has grown to include nearly 200 hospitals and clinical facilities and is continuously working to attract investment from local and international healthcare businesses, with a specific focus on those providing specialty services.³¹ Apart from Dubai, Abu Dhabi's Danat al Emarat Hospital, is a specialty women and children's hospital which is part of the M42 group. Also in Abu Dhabi, in April of 2024, Cincinnati Children's Hospital Medical Center, in partnership with PureHealth and SEHA, announced the establishment of a center for pediatric excellence. In Sharjah, the Al Qassimi Women's and Children's Hospital specializes in women's health, maternity, and pediatric care and is under the purview of the Emirates Health Services (EHS).
- Specialized diabetes care is practiced across the Emirates. In Abu Dhabi, the Diabetes Mellitus Program at Cleveland Clinic Abu Dhabi (CCAD) is a Medical Subspecialties Institute operating within CCAD that provides specialized care, patient education, and multidisciplinary medical advisory to its patients.³² Diabetes Center in Dubai at Emirates Hospitals Group offers a comprehensive and multidisciplinary approach to diabetes care. Its team of diabetes specialists has subspecialized expertise and works to create individualized treatment plans for its patients.³³ In the northern emirates, Sheikh Khalifa Medical City Ajman (SKMCA) operates the Rashid Centre for Diabetes and Research, a multidisciplinary diabetes research center operating 7 different clinical research units. Professionals in the research center work together in cooperation with other departments of the center to provide diagnosis, counseling, education, treatment and lifestyle options, support, and motivation to the patients.³⁴
- In July 2024, DP World donated 15 million AED (approximately 4.1 million USD) to the AI Jalila Foundation to support the development of the Hamdan bin Rashid Cancer Hospital.³⁵ The allocated funds by DP World will support the development of Dubai's first integrated cancer hospital, scheduled to open in 2026. The advanced healthcare facility will feature 50 clinics, 30 research areas, 60 infusion rooms, and 116 inpatient beds spread across a sprawling 56,000-square-metre campus.³⁶

C. Government Strategies

The U.A.E. federal government – which broadly oversees the country's healthcare sector and funds nonprivate 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. Centennial 2071 project, launched in 2017, is a long-term government strategy aimed at positioning the U.A.E. as the best country in the world by 2071. This federal initiative drives developments across various sectors, including healthcare and life sciences, as part of the nation's broader vision for sustainable growth and innovation.³⁷

In line with this strategic plan, the U.A.E. government has set healthcare as a top priority. The U.A.E. government spending on healthcare infrastructure is expected to exceed \$30 billion by 2027, accounting for 6% of GDP by 2026.³⁸ Significant investments have also been directed into research and technologies with the Ministry of Finance allocating \$1.3 billion to the healthcare sector, approximately 7.6% of the total annual budget.³⁹ Currently, the U.A.E.'s health research is growing at a rate three times faster than the global average.⁴⁰

Launched in November 2022, the We the U.A.E. 2031 Vision is a major federal strategy, designed to position the U.A.E. among the world's top 10 nations for healthcare quality, alongside a range of other ambitious goals for national advancement.⁴¹ This builds on a previous strategic plan, the U.A.E.'s Vision 2021, which made achieving "world-class healthcare" one of its priority goals. In executing both strategic initiatives, the U.A.E. achieved status as the leading country in Joint Commission International (JCI) accredited hospitals, after the U.S., with more than 200 accredited health facilities.⁴² The 2021 Vision, also seeks to reduce the prevalence of diabetes, obesity, and smoking among the population, decrease the number of deaths from cardiovascular diseases and cancer, and increase the supply of nurses and physicians to treat its population.

Aligned with these federal strategies, the National Strategy for Wellbeing 2031 was developed to adopt a comprehensive, holistic approach to health, fostering a broad framework for improving overall wellbeing across the nation. The National Strategy for Wellbeing 2031 seeks to promote an integrated approach to wellbeing and make the U.A.E. a global leader in quality of life.⁴³ The strategy focuses on three key components—individuals, society, and the nation—and encompasses 90 initiatives across 40 priority areas, including promoting healthy and active lifestyles, fostering mental well-being, encouraging positive thinking, and strengthening family bonds.⁴⁴

Also in 2021, the federal government launched the 'Projects of the 50', a series of economic projects that aim to accelerate the development of the U.A.E. into a regional hub and ideal destination across various sectors for talented individuals and investors. One of these projects is the Healthcare Development Program, which strives to recruit and train 10,000 Emiratis into the U.A.E.'s healthcare sector by 2025. This program falls under the scope of NAFIS, a program focused on attracting Emirati youth to the private sector, and will roll out educational programs to train students in collaboration with private-sector educators and healthcare facilities.⁴⁵

In 2023, the Emirates Health Services (EHS) launched the Innovation Strategy 2023-2026. The EHS Innovation Strategy 2023-2026 serves as a roadmap for enhancing the sustainability of the healthcare sector, empowering it to play a pivotal role in achieving the National Strategy for Wellbeing 2031, the We the U.A.E. 2031 vision, and the U.A.E. Centennial 2071 plan.⁴⁶

Abu Dhabi has also crafted its own comprehensive emirate-level healthcare strategy. In December 2014, Sheikh Mohammed bin Zayed Al Nahyan, current President of the U.A.E. and then-Crown Prince of Abu Dhabi, approved the strategy to improve healthcare in the emirate. This strategy included 85 initiatives that aimed to improve the quality of healthcare services in Abu Dhabi by enhancing safety standards and patient experience, attracting and retaining medical professionals, preparing for emergencies, embracing public health methodology, stemming unsustainable healthcare costs, and integrating IT systems and electronic data into practices.⁴⁷

Dubai likewise developed strategic plans for its healthcare sector in keeping with Vision 2021. In January 2017, 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 to promote a culture of early detection and regular check-ups. It also sought to create a high-quality comprehensive and integrated health service system by improving efficiency in healthcare, utilizing digital infrastructure, and creating a collaborative partnership between the public and private sectors.

Other emirates also embarked on long-term 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 the Sharjah Healthcare City Freezone. U.S. partnerships with public and private institutions will increasingly provide a framework for Sharjah's overall healthcare ecosystem development, especially following the announcement of the Jawaher Boston Medical District, a collaboration between BEEAH Group and Boston-based Mass General Brigham and Dana-Farber Cancer Institute.⁴⁸ While the Sharjah Health Authority is the main entity charged with the regulation and provision of healthcare services in the emirate, Emirates Health Services (EHS) shares some of this responsibility through its affiliation with Al Qassimi Women and Children's Hospital and others. The federal government similarly manages the healthcare sectors of the remaining northern emirates including Ajman, Ras Al Khaimah, Umm Al Quwain, and Fujairah.

As the U.A.E. redoubles its commitment to developing its healthcare sector, both at the federal and emirate levels, the private sector will have 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%.⁴⁹ This growth offers tremendous opportunities for U.S. companies and healthcare institutions to partner with the U.A.E. government and private entities and build towards the realization of the U.A.E.'s healthcare objectives.

PART II: SECTOR OVERVIEW

Under the 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 rapidly expanding its pharmaceutical, medical equipment, healthcare data and IT, AI integration and development, and medical education sectors.

A. Regulation

The U.A.E. has several healthcare regulators at both the federal and emirate levels, each with its own geographic or functional purview. U.A.E. healthcare regulatory structure is being shaped by two broad trends: (1) an expanding autonomy of emirate-level health authorities and (2) a changing ecosystem of cross-sector regulatory authorities.

The Ministry of Health and Prevention, the federal health regulator, is responsible for issuing laws and policies that are carried out by the emirate-level health authorities. However, as the Department of Health – Abu Dhabi (DOH Abu Dhabi) and the Dubai Health Authority (DHA) develop their priorities for growth and development in the health sector, the industry has reported cases of laws being applied differently in different emirates compared to federally. This has been especially prevalent in the case of data regulations and has impacted the flow of health data between patients, providers, insurers, and researchers. The DOH Abu Dhabi, in achieving its focus on strengthening local research, development, and manufacturing of medical products, has also facilitated the rise of its local institutions in managing service provision and data management. This trend is evidenced in the consolidation of the hospitals of the Abu Dhabi Health Services Company (SEHA) under PureHealth, a subsidiary of the sovereign wealth fund ADQ, as well as in the enablement of technology company G42 with health and patient data sovereignty through efforts to localize data in-country. Compared to Abu Dhabi, this trend of government-led encouragement of local and semi-governmental market actors has not prevailed in Dubai, where both international and local private-sector health companies tend to maintain a substantial hold in the healthcare market.

Formed in October 2023 by the U.A.E. Cabinet, the Emirates Drug Establishment (EDE), headed by Dr. Fatema Al Kaabi, is a federal entity with jurisdiction that extends across the U.A.E. including free zones and is charged with regulating and licensing procedures for medical and pharmaceutical products, healthcare items, and nutritional supplements.⁵⁰ The EDE's primary goal includes developing research and development, attracting domestic and foreign investments, and enhancing the national production and export of medical and pharmaceutical products. The EDE's Board of Directors serves a three-year term and is tasked with overseeing the federal institution's mandate to regulate and manage all medical products at the national level.

In December 2024, the U.A.E. government issued Federal Decree-Law No. 38 on Medical Products, Pharmacy Profession, and Pharmaceutical Establishments, replacing Federal Law No. 8 of 2019. Announced on December 29, the Decree-Law applies to medical devices, pharmaceutical products, healthcare items, biological products, dietary supplements, and cosmetics, and also includes biobanks and pharmaceutical establishments within free zones.⁵¹ The Decree-Law establishes a framework for licensing, supervising, and monitoring pharmaceutical establishments and biobanks, addresses ownership transfers, and defines the roles of the EDE, MOHAP, and local health authorities.⁵² Under the Decree-Law, manufacturing facilities, contract-based manufacturing companies, medical warehouses, medical storage facilities, marketing firms, pharmaceutical consulting firms, and pharmaceutical laboratories are subject to licensing and monitoring by the EDE. Biobanks, pre-clinical and clinical research entities, contract-based research and development companies, and bioequivalence centers fall under the jurisdiction of either the EDE or the relevant local health authorities.⁵³ Further, the Decree-Law defines the provisions regulating the pricing of medical products and establishes the "Pharmaceutical Policies Committee", working under the Chairperson of the Board of Directors of the EDE. This committee will propose policies for pricing, circulation, and monitoring of medical products.⁵⁴

As the U.A.E.'s healthcare sector becomes increasingly intertwined with other sectors, especially technology, tourism, and logistics, other regulatory authorities will come into play in the health and life sciences ecosystem. We have already seen this trend in the case of data, with health data laws being created by both the relevant health authorities and the U.A.E.'s Ministry for Artificial Intelligence, Digital Economy, and Remote Work Applications. In addition to data, manufacturing across sectors including healthcare is stimulated by the Make It in the Emirates Initiative, a project of the Ministry of Industry and Advanced Technology, aimed at raising the GDP contribution of industrial manufacturing to over \$80 billion by 2030.⁵⁵

Several important federal legislative developments in recent years are as follows:

- Federal Decree Law No. 11 of 2023 on Unified Procurement for Medicines, amending some provisions of the Federal Law No. 8 of 2019 on Medical Products, Profession of Pharmacy, and Pharmaceutical Facilities.⁵⁶
 - This law, passed in April 2023, notably amended certain aspects of the U.A.E.'s regulations regarding the marketing and distribution of medical products including pharmaceuticals and medical devices. One of the most critical changes this law made was to require medical product developers to identify two, rather than one, local distributors when marketing their products in the U.A.E. Industry leaders noted that this policy, while important for protecting the availability of critical medical products in the event of supply chain disruptions, can create inefficiencies for companies that produce and market value-driven products, rather than volume-driven products. The U.S.-U.A.E. Business Council has worked with industry and U.A.E. government health authority leaders to facilitate discussions that reconcile industry recommendations for global best practices and U.A.E. leadership priorities.
 - Article 22 of Federal Decree Law No. 11 of 2023 states that, "A margin of preference may be granted in favor of participating suppliers who achieve the best public interest or added national value, or in favor of locally produced procurements." In combination with U.A.E. Federal Law No. 87 of 2023, which centralizes the procurement process for medicines, this "national value" article is expected to result in higher prices for medical products of suppliers that have higher overall levels of local manufacturing content or spending on local clinical research.
- Ministerial Resolution No. 89 of 2023, Regarding Medical Products and Health Facilities that are excluded from Registration in the Drug Tracking and Monitoring Platform⁵⁷
 - This ministerial resolution, passed in March 2023 by the MOHAP, refers to the ministerial resolution passed in 2021 requiring medical products distributed in the country to be registered using the Electronic Drug Tracking and Monitoring Platform, Tatmeen. This updated resolution excludes certain products from the requirement to register them on the Tatmeen platform, including intravenous nutrition, radioactive drugs, diagnostic imaging medications, blood and blood products/derivatives, medical gasses, medical products of limited or rare demand, compound medicinal products prepared within the country in licensed pharmacies, and other approved products.
- Federal Decree Law No. 10 of 2023, On Mental Health⁵⁸

- This law, issued in October 2023, seeks to protect the rights of individuals with certain mental health conditions by establishing general rights of psychiatric patients, including in an employment context and imposes various obligations on employers. This new law (Mental Health Law) came into force on 30 May 2024 and addresses the treatment and safeguarding of the rights of 'Psychiatric Patients' through regulating the relationship between 'Psychiatric Patients' and the parties they have relationships with, including employers. The Mental Health Law applies across the U.A.E., including free zones except in the Abu Dhabi Global Market (ADGM) and Dubai International Financial Centre (DIFC) freezones because of their preexisting statutory provisions protecting employees with mental health conditions.⁵⁹
- National Policy to Promote Healthy Lifestyles in the U.A.E.⁶⁰
 - This policy, issued in 2023, serves as a framework for the U.A.E.'s emphasis on promoting and supporting healthy lifestyles through pillars that include support from the leadership and government, sustainability, innovation, cooperation and shared participation, equality and transparency, and empowerment of communities.
- Chairman's Resolution No. 146 of 2022, Regarding the regulations for international patient care⁶¹
 - This resolution, issued in 2022 by the Chairman of the Department of Health Abu Dhabi, outlines the regulations for determining when patients should acquire medical referrals to receive treatment outside the country and the cost, travel, and family accommodation expenses provided.
- Federal Decree Law No. 45 of 2021, On the Protection of Personal Data
 - This law, which came into effect in January 2022, deals with the protection of an individual's data, and the flow of data across country borders. This law was released after consultation with industry, spearheaded by the U.S.-U.A.E. Business Council, and is the precursor to a future health data law and business data law.
- Federal Law No. 13 of 2020, On Public Health⁶²
 - This law, passed in November 2020, served to identify and define national strategies and procedures for the advancement of public health, noting an absence of the subject in previous laws issued. It outlined the coordination across levels of government in addressing public health concerns and the Ministry of Health and Prevention's work to build community advocacy and understanding of public health topics. Notably, it introduced a National Public Health Committee, to be led by the Ministry. It brought a variety of concerns and topics under the umbrella of "public health," including family health, individual health (at all ages and physical abilities), psychological health, healthy lifestyles, food safety, physical activity, controlling tobacco and its derivatives, occupational health, communicable diseases, noncommunicable disease, environment health, hazardous product management, burial and cemetery sites, and medicinal products.
- Federal Law No. 2 of 2019, On the Use of Information and Communication Technology (ICT) in Health Fields⁶³
 - This law, announced in February 2019 by the then-President of the U.A.E., Sheikh Khalifa bin Zayed Al Nahyan, aims to promote and ensure the optimal use of ICT in health fields by adopting standard practices and enabling the Ministry to collect, analyze, and store health data and ensure its security. This law created a Central System to keep, exchange, and collect health information and data and, notably, restricted the storage and transfer of health information and data outside the state, unless in cases defined by the Health

Authority in coordination with the Ministry. This provision in the law has created challenges for U.S. companies, particularly those in the insurance sector as well as providers who serve patients both in the U.A.E. and the United States, and the U.S-U.A.E. Business Council has worked with industry and government to establish conversations that may synthesize mutually-beneficial solutions to these challenges.

- U.A.E. Federal Law No 2 of 2019 (the Health Data Law), which regulates the use of information technology and communications in the healthcare sector, came into effect in May 2019 and prevents businesses from storing, processing, generating, or transferring health data outside the U.A.E. unless exemptions have been granted by an emirate health authority. U.A.E. Health Data Ministerial Resolution 51 of 2021, which is an implementing regulation for the 2019 Health Data Law, allows health authorities in each emirate to grant exemptions allowing for cross-border flows of health data on a case-by-case and conditional basis until full compliance is possible. The process and criteria for receiving such exemptions are not consistent across the seven emirates. This restriction on cross-border flows of health data and the lack of clarity about what types of exemptions are available in each emirate are a concern for many U.S. companies.
- In August 2024, the Abu Dhabi Healthcare Information and Cyber Security Standard (ADHICS) version 2.0 came into effect and allows the use of sovereign (local) cloud data services for the storage and processing of health data inside of the U.A.E. ADHICS version 2.0 does not permit the use of cloud data services across the U.A.E.'s national borders. The previous ADHICS version 1.0 of 2019 did not permit the storage or processing of health data on cloud data services at all.
- Like ADHICS version 1.0 of 2019, ADHICS version 2.0 of 2024 continues to restrict crossborder flows of health data, including for data resiliency and backup purposes, except when specific exemptions have been granted by the Department of Health – Abu Dhabi. The Department of Health – Abu Dhabi explains that exemptions are generally available only on a short-term basis and on the condition that the entity is implementing a plan to reach full compliance. The Department of Health – Abu Dhabi explains that currently there is no standard provision for taking health data across borders based on the concept of legitimate interests, such as fraud prevention or fulfilling contractual obligations with clients, or the concept of presumed consent, such as when a patient has requested or requires medical treatment.

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 concerning the provision of healthcare for all U.A.E. citizens and residents.⁶⁴ Importantly, it has licensed and controlled the prices of drugs and medical devices nationwide.⁶⁵ MOHAP is working to achieve the objectives of the U.A.E.'s 'National Strategy for Wellbeing 2031', which aims to make the country a world leader in quality of life for its citizens and residents. The current Minister of Health and Prevention is H.E. Abdul Rahman bin



Mohammed bin Nasser Al Owais and the Undersecretary is Dr. Mohammad Salim Al Olama.⁶⁶ For more information, please visit <u>www.mohap.gov.ae</u>

MOHAP Partnerships with U.S. Institutions

- SAS collaborated with MOHAP for the U.A.E.'s first Center of Excellence for Artificial Intelligence (AI), which launched in October 2023. This Center will aim to promote the digitalization of health data, employ smart technologies to develop health capacities, and establish a comprehensive digital services ecosystem for patients.
- Viatris signed a Memorandum of Understanding with MOHAP in September 2022 to support the Ministry's efforts, initiatives, campaigns, research, and workshops designed to achieve the objectives of the U.A.E.'s 'National Strategy for Wellbeing 2031'.
- Janssen Pharmaceutical Companies of Johnson & Johnson signed an appendix in February 2022 to their 2018 Memorandum of Understanding with MOHAP and Axios, a healthcare consulting firm, aimed at providing affordable medicines to uninsured and lowincome expatriates suffering from pulmonary hypertension, multiple myeloma, ulcerative colitis and/or psoriatic arthritis.
- Amazon Web Services (AWS) signed a Memorandum of Understanding in January 2022 with MOHAP for partnership in creating a cloud-based electronic medical records system.



Emirates Drug Establishment (EDE)

Established in September 2023, The Emirates Drug Establishment (EDE) is the only federal authority responsible for regulating all medical and pharmaceutical products. This includes also medical devices, blood derivative products, genetically modified organisms, stem cells, medicated cosmetics, veterinary medications, and agriculture products. Setting unparalleled standards and a catalyst for groundbreaking innovation, EDE seeks to foster a collaborative ecosystem that will position the U.A.E. as a global beacon in healthcare.⁶⁸ The EDE's leadership includes Director General Her Excellency Dr. Fatima Al Kaabi and

the Board of Directors, which is chaired by H.E. Dr. Thani bin Ahmed Al Zeyoudi, U.A.E. Minister of State Foreign Trade.⁶⁹

For more information, please visit www.ede.gov.ae

Emirate Level

While healthcare provision in some emirates is regulated entirely by MOHAP, certain emirates or free zones also have their 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) 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 Mansoor Al Mansoori and its Undersecretary is Her Excellency Dr. Noura Al Ghaithi.⁷⁰ For more information, please visit www.doh.gov.ae/en



DOH Partnerships with U.S. Institutions

- Eli Lilly & Company signed a Memorandum of Understanding (MoU) with the DoH in May 2024 to leverage existing and emerging neurodegenerative disease treatments and care technologies for Alzheimer's in Dubai. The collaboration aims to transform early detection landscapes and elevate patient care standards.
- Perelman School of Medicine at the University of Pennsylvania (Penn Medicine) signed a Memorandum of Understanding (MoU) with the DoH in June 2024 to expand partnership in education, research, and innovation programs.
- Accenture signed a Memorandum of Understanding (MoU) with the DoH in November 2024 to further solidify health data governance, elevate healthcare services, and enhance patient outcomes in the emirate through leveraging Accenture's advanced data and AI solutions and global expertise.
- Children's Hospital of Philadelphia (CHOP) signed an MoU with the DoH in June 2024 to advance research in pediatric oncology and gene therapy.
- Pfizer signed an MoU with the DoH in June 2024 to advance research through the generation and analysis of real-world data (RWD) initially focusing on Sickle Cell Disease (SCD) and expanding to other disease areas for the benefit of patients.
- Illumina signed an MoU with the DoH in June 2024 to develop the expertise, infrastructure, and skilled workforce for integrating genomics into clinical practice and translational research locally and internationally.
- GSK signed an MoU with the DoH in May 2024 to establish a regional vaccine distribution hub in Abu Dhabi.

Lilly





Dubai Health Authority (DHA)

Dubai Health Authority (DHA), which was created by Law No. 13 of 2007, is the main health regulatory authority in Dubai. DHA regulates all of Dubai's healthcare sector services by licensing healthcare facilities and professionals and inspecting health facilities. 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.

DHA is undergoing a major reorganization, especially in the area of public health and disaster and emergency management. The DHA has collaborated with U.S. institutions such as the U.S. Centers for Disease Control (CDC), Health and Human Services (HHS), and the Federal Emergency Management Agency (FEMA), to learn best practices in public health protection.

His Excellency Awadh Seghayer Al Ketbi is its Director General. For more information, please visit <u>www.dha.gov.ae/en</u>

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.⁷¹ Dr. Abdulaziz Saeed Al Muhairi is Chairman of the Sharjah Health Authority. For more information, please visit www.sha.gov.ae/en

B. Provision

Public sector institutions and government-linked entities play a relatively outsize role in U.A.E. healthcare provision, apart from Dubai. However, 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

The public sector institutions that play major roles in U.A.E. healthcare provision are Dubai Health and Emirates Health Services (EHS), with EHS being particularly active in the northern emirates.

Dubai Health

Dubai Health is an integrated academic health system comprised of 6 hospitals, 26 ambulatory health centers, and 20 medical fitness centers. Its facilities include those previously operated by the Dubai Health Authority (DHA). Its flagship facilities include Dubai Hospital, Rashid Hospital, Latifa Women and Children Hospital, Hatta Hospital, Jebel Ali Hospital, and Al Jalila Children's Hospital. Its CEO is Dr. Amer Ahmad Sharif, who also serves as President of Mohammed bin Rashid University (MBZU).

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.⁷² 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.⁷³ It is affiliated with Alder Hey Children's as well as Moorfields Eye Hospital Dubai.⁷⁴ In 2021, Al Jalila announced its plan to introduce the first spinal muscular atrophy (SMA) gene therapy in the U.A.E. Al Jalila Children's Hospital is now a subsidiary of Dubai Health.

For more information, please visit <u>https://dubaihealth.ae/</u>.

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

Children's National expanded its partnership with Al Jalila Children's Hospital in October 2024 to grow its pediatric care facilities through increased technological collaboration, enhancing training programs and improving leadership training.

Emirates Health Services (EHS)

The Emirates Health Services (EHS) consists of all hospitals, primary care facilities, and public health services previously under MOHAP, including 17 hospitals, 67 primary health centers, and over 100 clinics throughout the U.A.E., especially in the northern emirates.⁷⁵

Based in Dubai, the Emirates Health Services (EHS) has the aim of enhancing the efficiency of the federal health sector in the country, by providing healthcare and treatment services, taking preventative measures in combating epidemics and diseases, and achieving sustainable development of healthcare. It also aims to implement the strategic health-related policies,

standards, and preventative care measures set by MOHAP.

EHS integrated the provision of healthcare treatment services, customer and patient experience services, federal medical training and education programs, digital health and information technology initiatives, and public health



Children's National

initiatives under its umbrella. In April 2020. H.E. Dr. Yousif Mohammed Al-Serkal was appointed to the role of Director General of the EHS after holding the position of Assistant Undersecretary for the Hospitals Sector at the Ministry of Health and Prevention since 2013.⁷⁶

Key public health-related initiatives of EHS include strategies to incorporate youth voices into health leadership discussions, attract citizens and residents to the nursing profession, a mental health support program for healthcare workers, a blood donation campaign, and a digital health and telemedicine promotional campaign.⁷⁷ EHS has become the forefront organization on Nursing and Midwifery in the U.A.E. and hosted the 3rd Edition of the U.A.E. International Conference on Nursing and Midwifery in November 2022. It has also revolutionized its own health systems and operations by using blockchain, artificial intelligence, and other advanced information technologies, paving the way for further digitization of the U.A.E.'s broader healthcare sector.⁷⁸

To address physician burnout, the EHS deployed 3M Fluency Direct, an AI-powered speech recognition solution, to ease documentation demands in January 2024. EHS chose 3M Fluency Direct for its ability to securely capture spoken dictation and add notes directly to a patient's EMR, with both IT stakeholders and providers valuing its high sensitivity, specificity, and accurate speech recognition across different voices and accents.⁷⁹ Currently, all EHS hospitals and primary health centers, with over 1,800 of the system's physicians, are being trained to use 3M Fluency Direct.

More information can be found at https://www.ehs.gov.ae/en/home

EHS Partnerships with U.S. Institutions Oracle Cerner provides an electronic health ORACLE Cerner record system to EHS called Wareed, which is used by clinicians in the U.A.E. for Autism screening in young children and to reduce patient waiting times and no-shows. \geq Johnson and Johnson and EHS signed an MoU in June 2022 to develop health services and Johnson & Johnson collaborate on advanced technology solutions for the U.A.E. healthcare sector. This partnership is set to include a joint launch of the 'Silent Noise Campaign' to raise awareness about and destigmatize mental health conditions. Children's Hospital of Philadelphia (CHOP) signed an MoU with EHS at Arab Health 2022 Children's Hospital of Philadelphia to collaborate on enhanced medical services at Al Qassimi Women and Children's Hospital and establish a visiting physician/surgeon program for 7 physicians and 5 surgeons to cover 8 subspecialities in the northern emirates. Through this partnership, knowledge will be shared through scientific education programs, conferences, and the EHS Simulation Center. Also at Arab Health 2022, CHOP was featured at the EHS booth for its innovative research on Autism Spectrum Disorder.

Ministry of Defense

The Ministry of Defense is also a significant provider of healthcare in the U.A.E. Zayed Military Hospital, a part of Zayed Military City, is a 260-bed facility, including an ICU, Burn ICU, Cardiac Care Unit, medical,

surgical, and pediatric beds. The hospital has a psychiatric center located in a separate building, bringing the total aggregate number of beds to 300. The campus includes an ambulatory care component, as well as housing for the hospital's staff and physicians. The neurology department of the Zayed Military Hospital consists of some of the most innovative and advanced healthcare technologies in the U.A.E., such as Brainsuite ICT, Brainlab, and Haag Streit. 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 most notably include PureHealth and M42. PureHealth is a subsidiary of Abu Dhabi-based investment and holding company ADQ and is the largest integrated healthcare network in the U.A.E.⁸⁰ M42 is a partnership between the prominent Abu Dhabi government investment vehicle Mubadala Investment Company and G42 Healthcare, a division of G42, the U.A.E.'s homegrown artificial intelligence and technology company. Pure Health and M42 are both supporting the development of a world-class, commercially sustainable private healthcare sector in the U.A.E.

PureHealth

PureHealth is the U.A.E.'s largest healthcare group. It was founded in 2006 and merged with all healthcare subsidiaries of ADQ in January 2022, making it the largest integrated health services provider. In December 2023, PureHealth launched on the Abu Dhabi Securities Exchange after an IPO that raised \$986 million. By the close of its first day on the market, PureHealth's shares settled at AED 5.74, after being priced initially at AED 3.26/share. PureHealth's founders will retain a 90% stake in the company.⁸¹

In November 2024, PureHealth partnered with Dell Technologies to utilize generative AI across healthcare services including early disease detection, medical data analysis, and personalized treatment plans.⁸²

Earlier in 2023, PureHealth made two major international acquisitions that contributed to its considerable growth. In September 2023, it bought Circle Health Group, one of the largest independent hospital operators in the United Kingdom, for \$1.2 billion, PureHealth's first entrance into the U.K. market.⁸³ In May 2023, it completed its nearly \$500,000 acquisition of Ardent Health, one of the largest acute care hospitals in the United States based in Nashville, Tennessee.⁸⁴ In June, PureHealth also signed an agreement with Israel's Sheba Medical Center to conduct joint research, collaborate on medical professionals' training, and promote medical tourism.⁸⁵

The Medical Office is a PureHealth Company that governs a network of advanced general and specialist hospitals across the U.A.E. including H.H. The President Initiatives Sheikh Khalifa Hospitals in the northern emirates of the U.A.E. This includes 8 hospitals and 13 centers of excellence.

The Medical Office of the Ministry of Presidential Affairs (MOPA) has historically 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 features clinics specializing in pediatrics, gynecology, emergency care, dialysis, and dermatology.⁸⁶ 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).⁸⁷

The Abu Dhabi Health Services Company (SEHA), which was established by Abu Dhabi Emiri Decree No. 10 of 2007, has traditionally owned and operated all public hospitals and clinics across Abu Dhabi. In 2022, SEHA became an asset of PureHealth (owned by ADQ) which became the largest consolidated

healthcare network in the U.A.E., consisting of 25 hospitals, 100 clinics, and 160 laboratories.⁸⁸ Its other subsidiaries across the U.A.E.'s healthcare sector include the National Health Insurance Company (better known as Daman), the Medical Office (see above), which oversees the hospitals and health facilities of Sheikh Khalifa group, Rafed, a healthcare procurement company, PureLab, the Abu Dhabi Stem Cells Centre, One Health, a medical devices distributor, and The Life Corner, a pharmacy.⁸⁹



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. 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 60,000square-kilometer area of Abu Dhabi known as the Western (Al Gharbia) region.

Since opening Sheikh Shakbout Medical City (SSMC), SEHA has undertaken several highly publicized expansions of the hospital, including the addition of a dialysis center, a psychiatry center, and a pediatric dialysis unit.⁹⁰ In October 2024, the Department of Health- Abu Dhabi designated SSMC as a Center of Excellence for Burn Treatments.⁹¹ In January 2024, SEHA acquired Mayo Clinic's shares in Sheikh Shakhbout Medical City (SSMC) in a \$150 million deal, acquiring 25,000 shares (25% of total issued shares).⁹²

In addition, over the last several years, SEHA has embarked on the expansion of its health facilities in the Western Region, as well as adding new facilities, such as Al Towayya Children's Specialty Centre in Al Ain.⁹³

In April 2024, PureHealth and SEHA announced with Cincinnati Children's Hospital Medical Center plans to establish a center of pediatric excellence in Abu Dhabi. This partnership comes after H.H. Sheikh Khaled bin Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Chairman of the Abu Dhabi Executive Council, approved a medical city that will include Sheikh Khalifa Medical City (SKMC) as a Centre of Excellence (CoE) for pediatric care, the Corniche Hospital dedicated to women and newborns' health, a rehabilitation facility, and a mental health center for women and children.

The Group Chief Executive Officer of SEHA is Saeed Jaber Al Kuwaiti and its Group Chief Medical Officer is Dr. Anwar Sallam. For more information, please visit <u>www.seha.ae</u>.

SEHA Partnerships with U.S. Institutions

- Cincinnati Children's Hospital Medical Center partnered with PureHealth and its subsidiary SEHA in April 2024 to announce a pediatric center of excellence in Abu Dhabi. With pediatric health as a key focus, the aim is to develop new treatments and therapies. Under the agreement, Cincinnati Children's Hospital Medical Center will deliver services to the center, providing specialized pediatric care.
- Children's National Hospital sponsored 11 conferences hosted by SEHA in the U.A.E. in 2023. At these conferences, Children's National Hospital showcased 14 speakers from various pediatric specialties.
- Johns Hopkins Medicine International signed an agreement with SEHA in 2006 to manage the 479bed 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.
- Children's Hospital of Philadelphia (CHOP) signed a MoU with SEHA in October 2022 to facilitate enhanced medical research and education in the U.A.E. Working alongside SEHA's physicians in this clinic allows collaboration on patients' treatment plans and transfer of knowledge of leading research and innovation.











M42

Mubadala Investment Company, a global sovereign investor established by the Government of Abu Dhabi, 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.

In 2022, Mubadala and G42, the U.A.E.'s leading artificial intelligence company, announced the merging of their healthcare businesses to create a new, first-of-its-kind integrated healthcare company. This new entity was formed to revolutionize the region's healthcare landscape and deliver personalized, patient-centric care to patients worldwide through G42 and Mubadala's combined prowess in research, technology, AI, and genomics. At first called Mubadala Health, it was eventually renamed M42.

M42's combination of healthcare and technology creates a unique, global tech-enabled healthcare company at the forefront of medical advancement. It is the largest healthcare company in the Middle East and serves as a provider and partner for the region.⁹⁴ Some of its subsidiaries include Cleveland Clinic Abu Dhabi, Imperial College London Diabetes Center, National Reference Laboratory, Danat Al Emarat, Healthpoint, and Malaffi.

In April 2024, Microsoft announced its investment of \$1.5 billion into G42 for a minority stake in G42 and joined its board of directors. The partnership between Microsoft and G42 aims to deliver advanced AI solutions with Microsoft Azure and will support the establishment of a \$1 billion fund for developers to boost AI skills in the U.A.E.⁹⁵ The deal with Microsoft will also advance precision medicine through the collaboration between G42 subsidiary M42, the Broad Institute of MIT and Harvard, Microsoft, and the International Center for Genetic Disease (ICGD). The partners are using Terra to enable data sharing and analysis across different institutions and countries. Terra, powered by Microsoft Azure, allows researchers to access and analyze anonymized genomic data from the Emirati Genome Program, which has completed over 800,000 whole genome sequences. By applying AI technologies to this data source, the collaborators aim to advance clinical genomic research and disease prevention and support precision medicine and life science strategies globally.⁹⁶

In May 2024, M42 launched the next generation of its open-access generative AI Clinical Large Language Model (LLM) Med42. M42 initially unveiled Med42 in October 2023, with the intent to standardize accuracy, efficiency, and accessibility in healthcare AI. The first iteration of Med42 counts over 8,200 downloads to date from independent developers who have tested and validated the model's performance. The second iteration launched in May is a fully optimized 70-billion parameter model based on Llama-3, Meta's latest version of open-access LLMs. This highlights Med42's efficiency and accessibility compared to larger, closed models and solidifies its position as a frontrunner in open-access clinical LLM technology.⁹⁷

The CEO of M42 is Mr. Hasan Jasem Al Nowais. For more information, please visit https://m42.ae/.

M42 Partnerships with U.S. Institutions

- Microsoft signed a \$1.5 billion strategic investment in G42 in April 2024 to co-innovate and deliver advanced AI solutions with Microsoft Azure. Microsoft's \$1.5 billion investment in G42 includes a minority stake in the company with Brad Smith, Microsoft Vice Chair and President, joining G42's board of directors. The deal advances G42's strategy of delivering generative AI and nextgeneration infrastructure and services for a range of customers across healthcare, financial services, energy, government and education.
- Cleveland Clinic Foundation and Mubadala Investment Company collaborated on the construction of Cleveland Clinic Abu Dhabi, a stateof-the-art medical institution on Al Maryah Island that offers world-class care to patients, closer to home. It boasts 15 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.
- Children's National Medical Center 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.⁷⁷





A Mubadala Company



Sheikh Zayed Institute for Pediatric Surgical Innovation Part of the Children's National Health System

Private Sector

The private sector plays an increasingly significant role in the provision of healthcare in the U.A.E., with some of the major players – and best-ranked private hospitals in the country, according to Newsweek – including Ahalia Group, Al Zahra Hospital Dubai, American Hospital Group, Arabian Healthcare Group,

Aster DM Healthcare, Burjeel Holdings, Emirates Hospitals Group, International Modern Hospital, King's College Hospital London Dubai, Mediclinic Middle East, NMC Healthcare, Saudi German Hospital Group, and Zulekha Hospital.⁹⁹

Ahalia Group

Ahalia Group was founded in 1984 in Abu Dhabi as a small, single clinic and grew into a conglomerate of two multi-specialty hospitals, 20 satellite medical centers, 35 pharmacies, as well as a line of ophthalmology centers and optical shops. It also expanded to India, operating a range of facilities under the Ahalia Health Heritage and Knowledge Village in Kerala, India.¹⁰⁰

Al Zahra Hospital Dubai

Established in 2013, Al Zahra Hospital Dubai is a 187-bed facility located on Sheikh Zayed Road that hosts a medical team of 250 doctors and 400 nurses. The Al Zahra Group formerly operated a facility in Sharjah; however, that was acquired in 2017 by NMC Healthcare and renamed.¹⁰¹

American Hospital Group

American Hospital, part of Mohamed and Obaid Al Mulla Group, was established in 1996 and encompasses multiple facilities in Dubai that, in total, host 254 beds and practice 40 medical and surgical specialties. All physicians at American Hospital are American Board Certified.¹⁰²

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 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.¹⁰³ In 2018, Arabian Healthcare Group began a collaboration with CommonSpirit Health, a U.S.-based healthcare provider, to enhance the emirate's healthcare sector through training and education programs, digital innovation, and an expansion of RAK Hospital, which will triple its capacity to become a 200-bed facility by 2025.¹⁰⁴ It is a hub for health tourism and international patients and hosts an eye care center, a rehabilitation center, and three medical centers.¹⁰⁵

Aster DM Healthcare

Aster DM Healthcare is a Dubai-based healthcare company with 27 hospitals, 115 clinics, and 223 pharmacies in the Middle East and India.¹⁰⁶ In the U.A.E., there are eight hospitals under the high-end Medcare or midrange Aster brands.¹⁰⁷ In October 2022, Aster's Medcare Women & Children Hospital became the first U.A.E. healthcare facility to enter the metaverse.¹⁰⁸

Burjeel Holdings

Burjeel Holdings is an integrated healthcare services provider that acquired the healthcare brands and assets formerly associated with VPS Healthcare. It is a network of 39 hospitals and medical centers across the Middle East, Europe, and India. It operates hospitals and medical centers under the Burjeel, Medeor, LLH, Lifecare, and Tajmeel brands. In 2022, Abu Dhabi healthcare investor International Holding Company (IHC) acquired a 15% stake in Burjeel Holdings.¹⁰⁹

Emirates Hospitals Group

Emirates Hospitals Group hosts 26 facilities and over 1,500 medical professionals in facilities across the U.A.E. It is a subsidiary of KBBO Group, which filed for bankruptcy in 2021 following the scandal involving the CEO of NMC Healthcare, Mr. BR Shetty, which was also part of the KBBO Group. Emirates Hospitals Group was successfully refinanced in January 2022 with AED 150 million (\$41 million) from Fidera, an independent London-based investment fund.¹¹⁰

International Modern Hospital

International Modern Hospital is the oldest private hospital in Dubai, established in 2005. Its fully renovated (in 2023) facility in Dubai hosts 117 beds, including 4 VIP suites, and specializes in women's and children's services, orthopedics, cardiology, general surgery, urology, gastroenterology, bariatric and plastic surgery, ENT, ophthalmology, dental, and neurosurgery.¹¹¹

King's College Hospital London Dubai

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 2017.¹¹² In September 2018, King's College opened another medical facility in Dubai.¹¹³ 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.¹¹⁴

Mediclin<mark>ic Middle East</mark>

Mediclinic Middle East is a branch of Mediclinic International, which consists of 74 hospitals, five subacute and specialized hospitals, 21-day care clinics, and 23 outpatient clinics worldwide.¹¹⁵ In the U.A.E., it has seven hospitals with more than 950 inpatient beds as well as 28 clinics.¹¹⁶ In September 2018, the group opened its seventh hospital in the U.A.E., Mediclinic Parkview Hospital, an 182-bed in-and outpatient facility in Dubai which became the largest greenfield construction project by value ever undertaken by Mediclinic International across its entire international portfolio.¹¹⁷

The current Mediclinic International operation in the U.A.E. is the result of the reverse takeover by Al Noor Hospitals Group of the Johannesburg-based Mediclinic International Limited.¹¹⁸ At the time of this reverse takeover, Mediclinic had an extensive and growing U.A.E. presence. 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.¹¹⁹

NMC Group

NMC Healthcare 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. In 2022, many NMC companies were able to exit administration thanks to lenders, led by Abu Dhabi Commercial Bank, who agreed to exchange debt in the company for exit instruments under a new facility. In 2023, it filed a lawsuit against its former chief executive, Mr. BR Shetty.¹²⁰

Following this scandal and the company's exit of administration, the newly formed NMC under the new leadership of David Hadley, remains the largest integrated private healthcare platform in the U.A.E. It operates 11 hospitals and 54 clinics, and a specialty care center, employs 13,000 people, and serves over 5.5 million patients in the U.A.E. and Oman.¹²¹

Saudi German Hospital

Saudi German Hospital was founded in 1988 in the Kingdom of Saudi Arabia by the Batterjee family and has grown to become one of the largest hospital providers in the Middle East and North Africa region, with 18 medical facilities, over 3,000 beds total, and over 9,000 employees. Its location in Riyadh, Saudi Arabia operates in partnership with Mayo Clinic. In the U.A.E., it operates hospitals in the emirates of Dubai, Sharjah, and Ajman.¹²²

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.¹²³ Since then, the Zulekha Healthcare Group has also established a 140-bed hospital in Dubai, a diagnostic center, three medical centers, and three pharmacies.¹²⁴ The Zulekha Healthcare Group partnered with the Alexis Multispecialty Hospital in Nagpur, India to help serve the Central India community.¹²⁵

Private Sector Healthcare Partnerships with U.S. Institutions

Oracle Cerner and King's College Hospital London Dubai announced a strategic collaboration to leverage Oracle Cloud Dubai Region in the hospital's operations in the first U.A.E.-based cloud deployment by Oracle Cerner in the region.

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, health care providers will have the necessary tools to advance patient care.



مـسـتشـفــى كينغز كوليحج لندن King's College Hospital London



Medical Hubs

Free zones are becoming increasingly important sites for healthcare provision, as they offer many benefits to businesses such as allowing for 100% foreign ownership of companies, full repatriation of profits, exemption from personal income taxes and corporate taxes, and exemption from customs duties for goods and services.

Dubai Healthcare City

Dubai Healthcare City (DHCC), which was launched in 2002, is a healthcare free zone. DHCC currently has over 195 clinical partners and 130 regional headquarters of global companies, 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 Dubai Health.¹²⁷ DHCC's ecosystem offers a wide range of medical services with 481 registered

facilities. As a part of the U.A.E.'s efforts to increase Emirati participation in the workforce, in December 2021, DHCC launched a tailored employment training program for Emirati Nationals called Masari.¹²⁸ As of 2024, DHCC has an operating workforce of 11,500.

In a report published by DHCC during Arab Health 2024, the Dubai healthcare fee zone reported a significant Compound Annual Growth Rate (CAGR) of 16% between 2020 and 2024, marking DHCC as the emirate's major healthcare investment hub.¹²⁹ DHCC highlighted the ongoing expansion of Phase 2, designed to complement the healthcare ecosystem with preventive care, wellness, and urban lifestyle. Phase 2 has attracted investments of AED 1.03 billion (\$272 million) from 2019 to date and is estimated to encompass 22 million square feet. The development of Phase 2 corresponds with DHCC's commitment to expand its healthcare and residential facilities to meet the evolving needs of Dubai's growing population.¹³⁰

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). SHC is spread over an area of 2.5 million square meters and is conveniently located adjacent to the Sharjah International Airport and

between the two main highways of the U.A.E., Sheikh Mohammed Bin Zayed Road and Emirates Road. It operates as a tax-free zone under the Sharjah Health Authority.¹³¹

Jawaher Boston Medical District

In May 2023, His Highness Sheikh Sultan bin Mohammed Al Qasimi, Supreme Council Member and Ruler of Sharjah, approved the joint Jawaher Boston Medical District project. This project is a partnership between BEEAH Group, a public-private environmental sustainability and waste management company founded in Sharjah in 2007, and Boston-based hospital institutions Mass General Brigham and Dana-Farber Cancer Institute.¹³² This medical district will be located on the Emirates Bypass Road next to the Sharjah Mosque and is poised to establish an advanced, integrated network of healthcare systems in the emirate featuring hospitals, laboratories, R&D centers, and more.¹³³

In November of 2024, the Board of Directors of the Jawaher Boston Medical District was announced during its inaugural meeting held at BEEAH Headquarters and appointed the award-winning Renzo Piano Building Workshop (RPBW) as the architectural firm. The Board of Directors of the Jawaher Boston Medical District comprises: Khaled Al Huraimel, Group Chief Executive Officer and Vice Chairman of BEEAH; H.E. Dr. Abdelaziz Saeed Obaid Bin Butti Almheiri, Chairman of the Sharjah Health Authority; Dr. Manal Taryam, Chief Executive Officer of Noor Dubai Foundation; Naim Yazbeck, General Manager of





Microsoft UAE; Mohamed Al Marzooqi, Chief Executive Officer of HSBC UAE; Faizal Kottikollon, Founder and Chairman of KEF Holdings; and Zouheir Sabra, Chief Executive Officer – Capital at BEEAH.¹³⁴

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.¹³⁵ Then, in 2007, Abu Dhabi issued Resolution 83 directing the then-Health Authority - Abu Dhabi (now Department of Health – Abu Dhabi) to give comprehensive health coverage to all U.A.E. nationals living in that emirate at no cost through the "Thiqa" program.¹³⁶



Dubai subsequently followed suit. 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 unemployed individuals under their sponsorship.¹³⁷ 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.¹³⁸ The law fully came into effect in 2016.¹³⁹

Sharjah 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 2015.¹⁴⁰ Then, in January 2020, it decided to extend the insurance coverage to all citizens of Sharjah.

Since then, in March 2024, H.H. Sheikh Mohammed bin Rashid Al Maktoum, U.A.E. Vice President and Prime Minister and Ruler of Dubai approved the establishment of a mandatory health insurance system that will make insurance mandatory for the remainder of the Emirates of the U.A.E. The new decision will require employers in all emirates to necessarily obtain health insurance coverage for their employees, both foreign and domestic.¹⁴¹ The decision came into effect on January 1st, 2025, and the U.A.E. Cabinet has authorized the Ministry of Human Resources and Emiratization (MOHRE) to spread awareness initiatives regarding coverage and policies for this new decision.¹⁴²

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.¹⁴³ Established by Emiri Decree No. 39 of 2005, Daman is a part of PureHealth, which is, in turn, a part of ADQ.¹⁴⁴ It has 2.8 million members and a domestic network of more than 3,000 healthcare providers.¹⁴⁵ Daman 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 In November 2024, Daman was named the best-perceived health insurance brand in the U.A.E., according to the U.A.E. Healthcare 2024 report by Brand Finance.¹⁴⁷

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 health 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.¹⁸⁹

In April 2017, in a move to preempt complications for enrollees already in long-term private care, U.A.E. President His Highness Sheikh Mohamed bin Zayed Al Nahyan waived the 20% co-payment for Thiqa cardholders when receiving treatment at private healthcare facilities.¹⁴⁹ Waiving the 20% co-payment for Thiqa cardholders also improved the viability of some private healthcare institutions and their long-term expansion plans.¹⁵⁰ 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.

In February of 2024, the Abu Dhabi Public Health Center (ADPHC), a part of the Department of Health-Abu Dhabi, announced that all Thiqa cardholders can now access IFHAS, a comprehensive health screening program, in over 150 healthcare facilities across Abu Dhabi including those affiliated with Abu Dhabi Health Services Company (SEHA), M42, NMC Healthcare, Mediclinic Middle East, and Burjeel Holdings.¹⁵¹ Soon after, ADPHC announced that participation in the IFHAS program is now a requirement to maintain eligibility for full insurance benefits. The IFHAS program plays a crucial role in disease prevention and early detection of chronic conditions, including cardiovascular diseases, common cancers, oral and dental health issues, bone health, and mental health.¹⁵²

Heavy Competition

The U.A.E. health insurance market reflects the U.A.E. insurance market. 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:

- Orient Insurance Company/Allianz: Orient Insurance Company, which began operations in 1982, is one of the leading insurance companies in the U.A.E. by market share. 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 also one of the largest insurance companies 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 Mubadala became its largest shareholder after acquiring the stake of ADNIC held by the Abu Dhabi Investment Council.¹⁵⁷
- Oman Insurance Company/Bupa Global: Oman Insurance Company (OIC), which is headquartered in Dubai, is one of the leading insurance companies in the U.A.E. and the broader MENA region. It provides both group health insurance and an individual international health insurance plan designed and internationally administered by British healthcare giant Bupa Global.¹⁵⁸
- MetLife: MetLife is a leading global provider of insurance, annuities, and employee benefit programs, serving approximately 100 million customers in more than 40 countries across the world. In 2021, MetLife and Emirates NBD, Dubai's government-owned bank, announced a partnership to provide insurance to the bank's wealth, retail, and SME customer base in the U.A.E.¹⁵⁹
- Cigna: Cigna is a global health service company with 95 million customers around the world and more than 40,000 employees worldwide. Cigna has made a major push to expand its operations in the U.A.E. with its Cigna HealthGuard plan, approved by the Dubai Health Authority, for those residing in Dubai and the northern emirates.

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

- MetLife: MetLife, Inc., through its subsidiaries and \geq 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.²⁰³
- \succ 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.





D. Pharmaceuticals

The U.A.E.'s pharmaceutical market is rapidly growing and is expected to expand 50% by 2029.¹⁶⁰ Key drivers in the expansion of the U.A.E. pharmaceuticals market include a growing population and a rising prevalence of chronic diseases that have increased the demand for pharmaceutical products. Furthermore, the strategic geographic location and advanced infrastructure have greatly enabled trade and distribution networks for the U.A.E. After its establishment in September 2023, the Emirates Drug Establishment (EDE) replaced the Ministry of Health and Prevention (MOHAP) as the pharmaceutical and medical device regulator, however, many pharmaceutical regulations are still under the purview of MOHAP.

Promoting Manufacturing

Although the U.A.E. imported about \$6.17 billion worth of its pharmaceutical products in 2023, the U.A.E. has initiated new programs to promote domestic pharmaceutical manufacturing. Local pharmaceutical exports are also anticipated to rise to \$297 million by 2025.¹⁶¹

This growth is in line with the 'Operation 300billion' Initiative to increase the industrial sector's GDP contribution from AED 133 billion (\$36.2 billion) to AED 300 billion (\$81.7 billion) by 2031. This initiative, launched in March 2021 under the Ministry of Industry and Advanced Technology, which is led by H.E. Dr. Sultan Al Jaber, focuses on eleven total industrial sectors, three of which are related to medical technology and pharmaceuticals.¹⁶² In December of 2024, the Ministry of Industry and Advanced Technology and Advanced that the industrial sector's contribution to the U.A.E.'s GDP exceeded AED 205 billion (\$55.8 billion).¹⁶³

Globalpharma, a subsidiary of Dubai Investments, is actively investing in Operation 300billion and the 'Make it in the Emirates vision,' a national strategy aimed at promoting domestic manufacturing, to support and grow domestic pharmaceutical manufacturing. Globalpharma's strategic focus includes attracting international collaborations and foreign direct investments with global pharmaceutical companies, such as long-time partner GSK.¹⁶⁴ In February 2024, Globalpharma and Tabuk Pharmaceuticals signed a cooperation agreement aimed at enabling local manufacturing of several products by Tabuk Pharmaceuticals in the U.A.E. Following the agreement, Globalpharma will manufacture three pharmaceutical products including cardiovascular medicines and analgesics.¹⁶⁵

Abu Dhabi stakeholders are actively seeking to promote pharmaceutical manufacturing. During the BIO International Convention 2024, the Department of Health- Abu Dhabi, Abu Dhabi Investment Office, Etihad Airways, and AD Ports signed a Memorandum of Understanding (MoU) to strengthen Abu Dhabi's position as a global pharmaceutical and life sciences distribution hub. The MoU aims to create attractive value propositions for pharmaceutical, biotechnology, and medical technology companies to establish operations in Abu Dhabi.¹⁶⁶

In January 2023, Mubadala Investment Company and U.S.-based National Resilience, Inc. signed a deal to further advance the U.A.E.'s life sciences ecosystem through biopharmaceutical manufacturing. Through a development agreement, Mubadala will establish a new manufacturing facility, in which Resilience will operate and manufacture biopharmaceutical-related products out of the U.A.E. The range of therapeutics will be used to treat complex diseases such as cancer, infectious diseases, and inflammatory and autoimmune disorders. The Abu Dhabi-based facility will be the first Goods Manufacturing Practice biopharmaceutical facility in the U.A.E., as well as the first of its kind in the region to manufacture essential life sciences products for advanced biologics.¹⁶⁷

Pharmaceutical Intellectual Property

The U.A.E. Ministry of Health and Prevention enhanced intellectual property (AI) protection of pharmaceutical products by issuing Decree 321 on September 21, 2020, providing effective protection against unfair commercial use and unauthorized disclosure or undisclosed test or other data generated to obtain marketing approval for pharmaceutical products. The eight-year data exclusivity period provided under Decree 321 is the longest in the Gulf Cooperation Council (GCC) and protects the innovative company's investments by temporarily preventing regulatory approvals of generic versions.

In May 2021, the Office of the United States Trade Representative removed the U.A.E. from its Watch List in its Section 301 Report, an annual review of the global state of IP rights protection and

enforcement. This was largely due to the efforts of the Ministry of Health and Prevention to resolve U.S. concerns surrounding IP protection of pharmaceutical products and was supported by the issuance of Federal Law No. 11 of 2021 concerning the regulation and protection of Industrial Property Rights.

Unlike the United States, the U.A.E. does not yet provide additional incentives for innovation in the form of extensions of the market exclusivity period for the broader use of existing drugs, such as for the treatment of pediatric patients or of orphan diseases (diseases for which drugs are undeveloped owing to limited potential for profitability). The U.A.E. also does not yet provide additional incentives for innovation in the form of longer market exclusivity periods for biologic drugs, which sometimes are more expensive to develop.

Controlling Prices

The U.A.E. government focuses on controlling rising drug prices through pharmaceutical pricing legislation, while also seeking to encourage domestic pharmaceutical manufacturing and safeguard pharmaceutical IP.¹⁶⁸ The pricing of medical products in the U.A.E. is governed by the MOHAP Pricing Rules, which are based on the Medical Product Pricing Guidelines issued by the Ministry of Health and Prevention (MOHAP).¹⁶⁹ The MOHAP Pricing Rules aim to ensure reasonable pricing with consideration of similar drug prices, pharmacoeconomic studies, public prices in USD, CIF prices, and export prices to reference countries among other provisions.¹⁷⁰ U.A.E. government procurement prices of imported on-patent pharmaceuticals in particular have heretofore been largely set based on a comparison to the median price in a basket of eighteen comparator countries, including the country of origin and other countries in the Gulf Cooperation Council (GCC) region, a basket that is updated usually every five years. The Pricing Rules are likely going to transfer to the Emirates Drug Establishment (EDE) in the future with its product registration procedures and will be reviewed and updated.

Article 22 of Federal Decree Law No. 11 of 2023 states that, "[A] margin of preference may be granted in favor of participating suppliers who achieve the best public interest or added national value, or in favor of locally produced procurements." In combination with U.A.E. Federal Law No. 87 of 2023, which centralizes the government procurement process for medicines, U.A.E. government officials say that implementation of the preference for national value is expected to result in higher prices for medical products of suppliers that have higher overall levels of local manufacturing content or local clinical research spending.

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 12 internationally certified manufacturing facilities globally. These factories collectively produce



over one million boxes of medicines per day with 80% produced for export. In 2021, Julphar began manufacturing COVID-19 vaccines in conjunction with G42 Healthcare. In October 2022, Julphar signed an MoU with PureHealth to establish the first factory in the country to produce Glargine, a drug used as an alternative to insulin in the treatment of diabetes.¹⁷¹ In November 2024, Julphar announced the divestment of Zahrat Al Rawdah Pharmacies LLC to BinDawood Holding, a leading Saudi listed retail conglomerate operating Dunabe and BinDawood grocery stores, at an estimated cost of \$118.4

million.¹⁷² The transaction is in line with Julphar's strategy to divest non-core activities and pivot toward investments in specialty pharmaceutical products.

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 U.S. subsidiary of Neopharma acquired an antibiotic manufacturing facility and its related assets in Bristol, Tennessee, but this closed in 2020.¹⁷³
- Globalpharma: 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.
- 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.¹⁷⁴
- LIFEPharma: Part of the aforementioned VPS Healthcare (now integrated into Burjeel Holdings), LIFEPharma has a facility at Jebel Ali Free Zone Area in Dubai that can produce 1 billion tablets, 300 million capsules, and 150 million liters of liquid per year.¹⁷⁵ In 2020, LIFEPharma signed a multitude of agreements with international firms, pushing the U.A.E.'s pharmaceutical exports into North American and European markets.¹⁷⁶
- Pharmax Pharmaceuticals: Pharmax Pharmaceuticals is the first local company located in Dubai Science Park 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).¹⁷⁷ Its facility in the U.A.E. can produce 250 million tablets and 85 million capsules a year, and it focuses on affordable generic medicines. In 2019, Pharmax was awarded its first Good Manufacturing Practice approval by the European Union, becoming one of the few manufacturing facilities in the U.A.E. to achieve this standard.¹⁷⁸
- KELIX bio: KELIX bio is a wholly owned subsidiary of Mubadala Investment Company and is a leading specialty pharmaceutical company based in Dubai. In October 2024, KELIX bio bought four pharma assets of GlobalOne Healthcare Holding (GHH), a healthcare division of the U.A.E. investment company Yas Holding, in a continued effort to develop the U.A.E. life sciences ecosystem. As part of the acquisition, KELIX bio acquired Bioventure, Bioventure Healthcare, Gulf Inject, and Wellpharma.¹⁷⁹

International Pharmaceutical Companies

As the U.A.E.'s domestic pharmaceutical manufacturing industry has grown, many international pharmaceutical companies have established a presence in the country. There are currently 11 multinational pharmaceutical companies operating in the U.A.E., including Johnson & Johnson, MSD (known as "Merck" in the U.S.), Pfizer, AstraZeneca, GSK, Roche, Novartis, and Sanofi. Organon, Pfizer, Viatris, and Janssen EMEA (the pharmaceutical arm of Johnson & Johnson) have made 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 setting up in-country facilities for research, digital solutions, and advocacy to support the local ecosystem, as mentioned in the section about the Department of Health – Abu Dhabi.¹⁸⁰

Acino, a global pharmaceutical company headquartered in Switzerland which was acquired by ADQ in 2022, announced in June 2024 that it will be expanding its operations from its manufacturing facility in

Dubai Science Park. Acino has a 1,300-square-meter manufacturing site in Dubai Science Park and has increased production capacity to over 250 million tablets and 87 million capsules annually and aims to build sustainable export channels while complying with the U.A.E.'s regulatory process to ensure sustainability of volume increases in manufacturing.¹⁸¹

These international pharmaceutical companies are attracted to 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.

Pharmaceutical Hubs

Several free zones have become hubs for the pharmaceutical industry.

Dubai Healthcare City: His Highness Sheikh Mohammed bin Rashid Al Maktoum, U.A.E. Vice-President and Prime Minister and Ruler of Dubai, launched Dubai Healthcare City (DHCC) in 2002 intending to establish 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 is 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, Organon, Sanofi, and Viatris.¹⁸²

- 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, Boston Scientific, Bristol-Myers Squibb, Fresenius Medical Care, Medtronic, Merck Serono, Pfizer, and Zimmer Biomet. In total, the community employs over 3,600 industry professionals.¹⁸³
- 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 a leading source of foreign direct investment (FDI) in the U.A.E. 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 within the free zone from 38 countries, including leading industry players such as Johnson & Johnson, Colgate, Roche, Sanofi, GlaxoSmithKline, and Quest Vitamins.

Masdar City: Masdar City was built in Abu Dhabi by Masdar, a subsidiary of Mubadala Investment Company, in 2006. Masdar City Free Zone is a hub within Masdar City and is recognized for fostering innovation and sustainability.¹⁸⁴ Masdar City Free Zone's life science cluster includes the region's first Bio-Bank, hosts over 50 biotechnology companies, and some of the most advanced research and development facilities promoting cutting-edge research in rare diseases, genomics, cell and gene therapy, and both pre-clinical and clinical trials.¹⁸⁵





lehel Ali Free Zone

E. Medical Equipment

The U.A.E. is witnessing growth in the adoption of advanced medical devices. The medical device market in the country is projected to generate revenues of \$2.6 billion by the end of 2024. Within this market, cardiology devices are expected to represent the largest segment, with an anticipated market volume of \$441.3 million in 2024. Despite these market indicators and ambitions to expand local manufacturing, domestic production of medical equipment remains largely nascent, offering opportunities for international companies.

Cardiovascular Devices

Cardiovascular devices are a major segment of the U.A.E. medical device market, especially given the increasing incidence of cardiovascular disease due to the prevalence of a sedentary lifestyle and obesity among the local population. This market is principally centered on interventional cardiology and cardiac rhythm management.¹⁸⁶ The cardiovascular device market in the U.A.E. encompasses a variety of devices for diagnostics and treating cardiovascular diseases, which remains a leading cause of mortality. Coupled with continued technological innovations and strategic investments, the U.A.E. cardiovascular device market is poised for continued expansion.

Many 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.¹⁸⁷ Abbott's acquisition of St. Jude Medical created a combined company with best-in-class solutions across the areas of cardiovascular and neuromodulation.¹⁸⁸ In December 2022, the U.A.E. became the third country in the world, after the U.S. and Canada, to implant Abbot's leadless pacemaker in a patient.
- 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.¹⁸⁹ Medtronic is world-renowned for its wide array of cardiac and vascular products.¹⁹⁰
- 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.¹⁹¹

Diagnostic Imaging Equipment

Diagnostic imaging equipment also comprises a large percentage of the U.A.E. medical device market. Here, the U.A.E. prefers products from brand-named international companies, who have often turned to the U.A.E. as 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.¹⁹²

- 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 in Dubai Healthcare City.¹⁹³ In December 2016, Siemens Healthineers partnered with Easa Saleh Al Gurg to set up its first U.A.E. business.¹⁹⁴ PureHealth, 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.¹⁹⁵

Other U.S. medical device and diagnostic companies that have an active presence in the U.A.E. include 3M Healthcare, Baxter, Beckman Coulter Inc., Boston Scientific, and Stryker. Many others are represented through local distributors.

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.¹⁹⁶ 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).

The U.A.E. has also implemented the use of 3D printing into its life sciences development goals. 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' 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 the medical products sector, which could create 3D-printed teeth, bones, artificial organs, medical and surgical devices, and hearing aids. As of July 2022, there was a team of 16 doctors and engineers using six Formlabs 3D printers, working with the Dubai Health Authority and the Dubai 3D Printing Strategic Alliance, which promotes 3D printing within the U.A.E.

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

- \triangleright 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
- 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.¹⁹⁷





Medtronic

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 Advancement of AI has created opportunities for healthcare providers to ease the work of doctors and nurses. At the same time, it has also brought into focus the importance of proper laws, regulations, and policies regarding the storage and transfer of this data.

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 reduce duplication, medication errors, and the length of hospital stays; improve patient safety and outcomes; and inform more effective public health policies.

MOHAP, EHS, and Wareed

In 2008, the U.A.E. Ministry of Health and Prevention (MOHAP) 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, Oracle Cerner, Gulf Business Machines (the sole distributor of most IBM products and services), and Injazat Data Systems.¹⁹⁷

In December 2021, MOHAP launched Riayati, a national medical records database created to connect 3,000+ U.A.E. public and private sector healthcare providers to effectively share data in real-time throughout the country. Riayati was developed through collaboration across federal and emirate-level governments such as MOHAP, EHS, DOH Abu Dhabi, and DHA.¹⁹⁸ The launch of Riayati made the U.A.E. the first country in the MENA region to put forth a digital national healthcare platform.

Emirates Health Services (EHS) has since taken over the management of Wareed and other electronic and digital services for healthcare that were formerly under the umbrella of MOHAP. EHS launched the Smart Health Services application to provide patients with a bundle of health services, including booking a medical appointment, requesting a medical report, home care, and viewing medical records in 2022. U.S. companies such as Oracle Cerner and Johnson & Johnson work through partnerships with EHS in their provision of digital health products and services.

DoH and Malaffi

In August 2018, the Department of Health - Abu Dhabi (DOH) signed a strategic partnership agreement with Injazat Data Systems, now a G42 company, to develop an integrated Health Information Exchange system for the healthcare sector in Abu Dhabi. The system, known as Malaffi was launched in January 2019 and became the region's first health information exchange platform. It enables real-time exchange of patient health information between healthcare providers to improve 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 Abu Dhabi.¹⁹⁹ Its four core areas of functionality are Diagnostic Data Exchange, Provider Portal, Patient Portal, and Public Healthcare Services.

During GITEX Global 2024, the DOH launched Sahatna, an integrated mobile app that enables users to manage appointment booking, teleconsultations, and access to health records and genomic reports.²⁰⁰ This new transformative app will enhance the patient healthcare experience in Abu Dhabi and aims to spur a nationwide behavior change for improved long-term health outcomes.

DHA, Salama, and NABIDH

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 DHA has since extended 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 launched in November 2020. This initiative enabled 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. Since its launch, NABIDH unified over 1,300 healthcare facilities in Dubai and unified over 9.47 million patient records, with 81% of healthcare professionals actively connected to the system.²⁰¹

In November 2024, e& Enterprise and U.A.E. medical, health, and wellness screening center Smart Salem, a fitness facility managed by Dubai Health, announced a three-year partnership to implement a cloud-based Picture Archiving and Communication Systems (PACS). This new platform will deliver secure storage, retrieval, and sharing of medical images for healthcare providers.

Other Initiatives

In November 2024, Reinsurance Group of America, Incorporated, a leading global life, and health reinsurer, announced the launch of Aspire - a licensed third-party administrator based in the U.A.E. Developed in partnership with technology provider CarePay, Aspire offers a platform aimed at supporting health insurance portfolio management for insurance companies.²⁰² The Aspire platform facilitates data exchange and communication between insurers and stakeholders, with standards in line with the General Data Protection Regulation (GDPR). Through Aspire, insurance companies benefit from enhanced efficiency in claims processes and sustainability.

AI in He<mark>althcare</mark>

AI has been an area of growth within the digital healthcare sector that provides multiple applications for improving patient experience and has significant potential to scale up. Recent investments into the U.A.E.'s digital health strategy have led to growth in telemedicine, data analytics, and AI-driven diagnostics.²⁰³ Technological advancements aim to streamline healthcare operations and improve healthcare delivery to support comprehensive and accessible healthcare solutions. AI continues to improve disease diagnoses, treatment, and prevention.

U.A.E. government entities have deployed national strategic plans to advance AI integration into the healthcare sector. Signed in 2019, the National Artificial Intelligence Strategy 2031 placed significant emphasis on the healthcare sector, driving AI integration.²⁰⁴ Following the National AI Strategy, in 2023, the U.A.E. Ministry of Health and Prevention (MOHAP) launched the first Centre of Excellence (COE) for Artificial Intelligence (AI) in the U.A.E. healthcare sector. The primary objective of the COE for AI is to advance the digitalization of health data and integrate smart technologies to enhance healthcare capabilities and offerings. Additionally, the COE aims to establish a comprehensive digital service ecosystem that delivers sustainable, innovative, and high-quality services to users across the healthcare system.²⁰⁵

In 2023, the Emirates Health Services (EHS) signed a Memorandum of Understanding (MoU) with Care.AI to incorporate Generative AI technology into patient room monitoring systems.²⁰⁶ The MoU focuses on implementing Generative AI and Care.AI systems across EHS healthcare facilities and will span emergency departments, operating rooms, intensive care units, and neonatal units to support patient care initiatives.²⁰⁷ In January 2024, the EHS also deployed 3M Fluency, an AI-powered speech recognition solution to ease documentation demands of health records. 3M Fluency Direct accurately and securely captures spoken dictation, adding important notes directly to a patient's electronic medical

records.²⁰⁸ Currently, all EHS hospitals and primary health centers, with over 1,800 of the system's physicians, are being trained to use 3M Fluency. The efforts of EHS to continuously develop its digital system are in line with its strategy to optimize the use of digital and advanced technologies to promote healthy lifestyles among all members of the Emirati community, and to drive a shift in the work environment toward sustainable, innovative solutions and integrated, comprehensive services that meet the highest international standards.

In Abu Dhabi, during Abu Dhabi Global Healthcare Week (ADGHW) in early 2024, the Department of Health – Abu Dhabi (DoH) signed a Memorandum of Understanding (MoU) with Mohamed bin Zayed University of Artificial Intelligence (MBZUAI), a leading AI research institution based in Abu Dhabi, and Core42, a G42 company specializing in AI solutions. The MoU will launch the global AI Healthcare Academy for the health workforce.²⁰⁹ The partnership aims to create a framework for advancing technology-driven and data-enabled healthcare systems in the Emirate. The AI Healthcare Academy will contribute to the development of a globally trained AI workforce, enhancing diagnostic and operational efficiency, improving patient care, and optimizing healthcare processes worldwide.

In May 2024, M42 launched the next generation of its open-access generative AI Clinical Large Language Model (LLM) Med42. M42 initially unveiled Med42 in October 2023, with the intent to standardize accuracy, efficiency, and accessibility in healthcare AI. Med42 is an open-access generative AI tool designed to support healthcare professionals in patient care, research, and administration. Med42 has also developed a Global Life Sciences Platform, hosted on the U.A.E. cloud using Microsoft Azure Health Data services to provide an environment for clinical research and drug discovery.

In Dubai, the Dubai Health Authority (DHA), in collaboration with Roche Diagnostic Middle East, hosted a workshop in December 2024 titled "NABIDH Elevate," focusing on the impact of AI and diagnostic integration within the Dubai healthcare ecosystem. The NABIDH Elevate workshop is an ongoing initiative with private sector stakeholders to discuss the advancements of the NABIDH platform, which soon will include imaging data as part of Dubai's advancements to integrate AI with digital health innovation.

Genomics

As part of its broader vision to create a technologically advanced healthcare system powered by big data and artificial intelligence (AI), the U.A.E. is in the process of developing one of the world's largest and most diverse genomic databases. The Emirati Genome Program, spearheaded by M42, has already collected DNA samples from over 800,000 U.A.E. citizens and aims to expand participation to approximately 10 million individuals. This initiative is a key component of the U.A.E.'s strategy to leverage genomic data for advancements in personalized medicine and healthcare innovation.²¹⁰ This database will be used to provide insights into individual and population health in the U.A.E.

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

- \geq Oracle Cerner, which designs health information technology that is employed worldwide, is highly active in the U.A.E., where its clients include the Abu Dhabi Health Services Company (SEHA), Emirates Health Services (EHS), 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. 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 Oracle Cerner. In June 2018, Mubadala Healthcare implemented an integrated electronic health record system from Oracle Cerner. In 2021, all Mubadala Health providers were connected to a single laboratory information system in which physicians are able to guickly and easily order from the full range of advanced tests offered by National Reference Library.
- 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.²⁰⁴ InterSystems IRIS gained recognition as a platform supporting Al models and technology for healthcare.







Telemedicine

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. Telemedicine growth in the U.A.E. is driven by the country's strategic focus on digital health, innovation, and accessibility. Technological advancements in medical technology, AI predictive analytics, and genomic sequencing have all impacted the rapid growth of telemedicine.

The adoption of telemedicine has grown increasingly popular especially following the COVID-19 pandemic, with the telemedicine market valuation expected to reach \$1.2 billion by 2029.²¹¹ Six telemedicine solutions were approved for use by the Telecommunications and Digital Government Regulatory Authority (TDRA) in April 2020: Mind Mina Telemedicine, NextGenGP Telehealth, vSee, OKADOC, DOXY, and GetBEE-licensed telehealth, all of which were supported on all U.A.E. mobile networks in coordination with the country's two telecommunications operators, Etisalat and du.

Mental health care is a growing field of medicine in the U.A.E. with patients seeking professional help to address mental health concerns including anxiety, depression, and stress. Growing demand for mental healthcare has led to a gap in access to mental health professionals, creating a new market to access their needs conveniently. Telehealth has increased access to healthcare and mental health services, a trend that was adopted during the COVID-19 pandemic. Telehealth services have both increased efficiency and reduced the burden on in-person healthcare facilities in supporting mental health services. In May 2024, the Ministry of Health and Prevention passed into law the U.A.E. Federal Mental Health Law (Federal Law No. 10/2023) replacing Federal Law No. 28/1981.²¹² This law addresses the treatment and supports the rights of Psychiatric Patients and further regulates the relationship between 'Psychiatric Patients' and the parties they have relationships with, including employers.²¹³

In Abu Dhabi, providers like the Abu Dhabi Telemedicine Centre have been at the forefront of virtual consultations and diagnostic services.²¹⁴ Mubadala Health operates and manages the Abu Dhabi Telemedicine Center, which 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.²¹⁵

The Dubai Health Authority (DHA) introduced telemedicine at its facilities through the "Dubai RoboDoc" initiative in 2017. In 2019, this service was reintroduced as the DHA's "Doctor for Every Citizen" telemedicine initiative. Though it was originally only accessible by citizens, whether they be physically present in Dubai or traveling, working, or studying abroad, after the pandemic, it became a resource for all residents of Dubai.²¹⁶ DHA also launched the Virtual DHA Clinic in 2018, which offers telemedicine consultations with doctors and specialists, as well as online medical services such as prescription refills and medical certificate requests.²¹⁷ Telehealth consultations reached nearly 375,000 in 2023, a 28% increase from 2022, while electronic prescriptions exceeded 230,000 in 2023, a 103% increase from 2022.²¹⁸ Dubai now has over 140 telehealth service providers licensed by the DHA.

Finally, several startups have embraced telemedicine concepts. Of the top 10 most funded health technology startups in the MENA region in 2022, several of them are based in the U.A.E. "Altibbi", a remote medical consultations platform with over 10,000 available doctors, has received a total of \$52.5 million in funding and won the World Summit Award for 'Best Digital Health Content'. Altibbi has

conducted more than 5 million telehealth consultations and recently launched the "Weqaya" men's health subscription plan, promoting preventative and primary healthcare.²¹⁹ "Okadoc" is another appointment-booking and virtual consultation application that has gained investment from the Abu Dhabi Investment Office (ADIO).²²⁰

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.²²¹ The DHA runs two planforms — Dubai Health Authority App and Dubai Health Experience – designed to help residents manage appointments, access services, see lab results, find facilities, and access profiles of healthcare professionals.²²² 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 children.

During the pandemic, the U.A.E. utilized several smart solutions and apps to detect cases of COVID-19 and control its spread. Most prominent among the smart solutions was the Al Hosn app, the official contact-tracing app of the federal government that held an individual's vaccine information, allowed residents and citizens to see all of their COVID-19 test results and records, and notified individuals if they came in contact or close proximity to someone who was infected with COVID-19. Every user who downloaded the app had a unique QR code containing information about the user's health. Through this data, the competent health authorities could identify people who could transmit the virus and who could be at risk of contracting the virus. They could then communicate with those at risk and re-test them. This app was a joint initiative between the Ministry of Health and Prevention, the Department of Health - Abu Dhabi (DoH), and the Dubai Health Authority. The other prominent digital solution developed by MOHAP in response to the pandemic was the chatbot service called "Virtual Doctor for COVID-19." The chatbot in the Virtual Doctor service asks several vital questions that help it deduce if a person is at risk of getting COVID-19.

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

- Microsoft announced a strategic investment of \$1.5 billion in G42 to co-innovate and deliver advanced AI solutions with Microsoft Azure in April 2024. As part of the investment, Microsoft will hold a minority stake in G42 and will join its board of directors. Through the partnership, G42 will expand deployment of Microsoft Cloud to enhance information technology and achieve faster delivery times. Some areas of focus will be on financial services, energy, government, education, and healthcare.
- \geq 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. 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.214

G. Education, Research, and Events

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 are key partners in cultivating Emirati medical professionals and transferring knowledge.

Honeywell





Education and Training

The U.A.E. is home to several medical education institutions, the most notable of which 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, a Master of Medical Sciences, and a Doctor of Pharmacy. Additionally, it offers PhDs in Biomedical Sciences and Public Health and Occupational Health.²²³
- Mohammed Bin Rashid University of Medicine (MBRU): Opened in 2014, Mohammed bin Rashid University of Medicine is located in the Mohammed bin Rashid Academic Medical Center in Dubai Healthcare City. MBRU offers bachelor's and master's degrees through its three colleges: the Hamdan Bin Mohammed College of Dental Medicine, the College of Medicine, and the College of Nursing and Midwifery.²²⁴ It is now part of Dubai Health.
- Khalifa University: Founded in 2007, Khalifa University launched Abu Dhabi's first medical school in September 2018. The Khalifa University College of Medicine and Health Sciences offers a four-year Doctor of Medicine degree program modeled after the North American medical education system.²²⁵
- 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 in Molecular Medicine.²²⁶ The University of Sharjah also has Colleges of Dental Medicine, Pharmacy, and Health Sciences, the latter of which offers a BSc. in Nursing.²²⁷ The University of Sharjah is notably home to the 325bed University Hospital Sharjah.²²⁸
- Higher Colleges of Technology: The Higher Colleges of Technology's Health Sciences Division offers a broad range of Health Sciences bachelor's 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.²²⁹
- Gulf Medical University: Based in Ajman, this University, which is associated with the Thumbay Group, offers an 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.²³⁰ 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,





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and Toxicology, which has been made possible thanks to a partnership between Gulf Medical University and the University of Arizona's Mel and Enid Zuckerman College of Public Health.²³¹ In February 2024, Gulf Medical University introduced a pathway medicine program offering three years of pre-clinical study at GMU in the U.A.E. followed by three years of medical and clinical studies in Poland, Italy, Ghana, Malaysia, Egypt, the UK, and the United States.²³² In July 2024, GMU, in collaboration with the Thumbay Group, announced it will launch the Thumbay College of Management and AI in Healthcare by 2025.²³³ The new college will offer undergraduate and postgraduate programs for its students and aims to develop a domestic workforce trained in AI healthcare integration.

- Ajman University: Founded in 1988 as the first private university in the GCC, Ajman University offers degrees in the medical and health sciences in three of its nine colleges.²³⁴
- 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 an MBBS degree as well as bachelor's degrees in Dental Surgery, Pharmacy, and the Science of Nursing. It also offers Master of Science Degrees in Pharmacy and Nursing.²³⁵
- 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.²³⁶ 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.²³⁷

- Dubai Medical College for Girls: This all-female institution offers an MBBS degree to women.²³⁸
- Dubai Pharmacy College: This all-female college provides Bachelor of Pharmacy and Master of Pharmacy degrees.²³⁹
- Royal College of Surgeons in Ireland Dubai: Established in 2005, this institution offers Master of Science degrees in Healthcare Management as well as Quality & Safety in Healthcare Management.²⁴⁰

In recent years, medical education institutions and partnerships have been a key focus of the U.A.E.'s healthcare leadership, with several notable developments as follows.

- In Dubai in 2021, H.H. Sheikh Mohammed Bin Rashid Al Maktoum, U.A.E. Vice President and Prime Minister and Ruler of Dubai created the Dubai Academic Health Corporation (DAHC), which serves to integrate all public healthcare provision facilities with medical universities.²⁴¹ This initiative aims to both strengthen the emirate's healthcare facilities by creating a pipeline of talented students from universities into the workforce as well as to offer local medical students hands-on experience in their communities.
- Emirates Health Services (EHS) has led various scholarships and education initiatives to increase the number of Emiratis studying and joining the nursing and midwifery professions.
- Sheikh Shakhbout Medical City, a member of the PureHealth network, announced in May 2024 the official opening of its Centre of Innovation and Medical Simulation. The new facility serves as an advanced medical simulation center for training healthcare professionals, including doctors, nurses, allied health workers, and medical students.²⁴²

The intersection of healthcare and space is a new area of focus for the U.A.E. In August 2024, Mohamed Bin Rashid University of Medicine and the Mohammed Bin Rashid Space Centre initiated a specialized training program in cell culture techniques for Emirati astronauts.²⁴³ The partnership will equip astronauts to conduct research experiments, driving advancements in human health and equipping the U.A.E.'s astronauts with the expertise needed for future missions. As the U.A.E. continues to make strides in space exploration, this new training program will equip the next generations of Emirati astronauts with the tools needed to provide critical medical training during missions.

Prominent U.S. healthcare institutions support the education and training of Emirati healthcare professionals by hosting Emiratis at their institutions in the United States or conducting training in the U.A.E.

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

- Children's National Medical Center 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 U.A.E. University, Higher Colleges of Technology, and Khalifa University.
- > 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 15 Institutes. The program was relaunched following the pandemic in August 2022 to host 60 students over the course of 2 weeks. 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. By the end of 2021, Cleveland Clinic Abu Dhabi had 39 U.A.E. nationals as active medical residents across seven specialties.



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 clinical epidemiology/health policy.²⁴⁵ 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., using dedicated facilities such as those provided by Masdar City and Dubai Science Park. The Masdar City Free Zone Life Sciences Cluster in Abu Dhabi is a rapidly expanding hub for life sciences and biotechnology, supported by the region's most advanced R&D institutions, leading contract research organizations (CROs), and government-

backed initiatives from the Department of Health - Abu Dhabi and the Abu Dhabi Investment Office. Meanwhile, Dubai Science Park 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 are home to a wide range of organizations conducting activities including research and product development, testing, diagnostics, manufacturing, and production.²⁴⁶ In February 2024, Dubai Science Park announced that it is adding 60% more offices, laboratories, and warehouses over the next few years. This expansion will subsequently lead to greater innovation in the life sciences sector.

Several dedicated research centers have emerged in the country, with branches focusing on medical research. The Technology Innovation Institute (TII), the applied research arm of Abu Dhabi's Advanced Technology Research Council (ATRC), established its Biotechnology Research Center to support and facilitate domestic research in the emerging fields of Biotechnology, such as bio-medicine, bio-robotics, and nanotechnology, environmental biotechnology, molecular

biotechnology and genetics, and bioinformatics.²⁴⁷ TII's researchers work alongside ASPIRE, the technology program development pillar of the ATRC, which follows a mandate to develop a research and development ecosystem in Abu Dhabi. To achieve this mandate, ASPIRE works to develop a globally competitive research-funding platform through the Ghadan 21 government accelerator programs and collaborate with global partners to find solutions to local and global challenges across a variety of sectors of which biotechnology, health, and food are key focus areas.²⁴⁸

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. Recent additions illustrating Thumbay's commitment to research are 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





Institute



Workforce Development, which focuses on responding to national, regional, and international shortages.²⁴⁹

Alongside this growth in local research, Emirati researchers continue to collaborate with researchers in the United States through partnerships with leading medical institutions. In June 2024, the Department of Health – Abu Dhabi and the Perelman School of Medicine at the University of Pennsylvania (Penn Medicine) announced a partnership to expand partnerships in education, research, and innovation programs. The Memorandum of Understanding (MoU) will further enhance collaborative translational research development based on Penn's Institute for Translational Medicine and Therapeutics (ITMAT). In addition, the MoU seeks to explore the potential of launching two multi-year collaborative research programs.²⁵⁰



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

- Perelman School of Medicine at the University of Pennsylvania (Penn Medicine) announced an expansion of partnerships with the DoH in education, and innovation research, programs. The Memorandum of Understanding (MoU) will further enhance collaborative translational research development based on Penn's Institute for Translational Medicine and Therapeutics (ITMAT). In addition, the MoU seeks to explore the potential of launching two multi-year collaborative research programs.
- \geq Illumina, a California-based biotechnology company, opened its Illumina Solutions Centre in Dubai in November 2022, a 9,100-square-foot laboratory bringing genomics technology and precision medicine to the U.A.E. Illumina strives to use the new center as a regional hub for research and training in diagnostic tests such as prenatal screenings and genomic tests for cancer. Genomics testing technology and precision medicine treatments have historically been more widely available to populations of European descent, because of the concentration of research in this field happening in Europe. However, it is a very important field of medical study to the MENA region, where there is a high incidence of genetic diseases and conditions. Illumina's new Solutions Centre will serve to gather representation of the region's genetic data and educate local scientists on genetic testing techniques and technologies, leading to improved precision medicine therapies and drug development.
- \geq New York University Abu Dhabi (NYU Abu Dhabi) announced the launch of the "U.A.E. 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, U.A.E. 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 NYU Abu Dhabi that grants researchers from various disciplines access to the university's advanced science laboratories and research centers to conduct ground-breaking studies.³⁰⁵



illumina

جامعـة نيويورك أبوظـي NYU ABU DHABI Foundation Research Center is a 200 million AED [\$54 million] institution being built in Dubai Healthcare City to research five major areas: cancer, cardiovascular disease, diabetes, obesity, and mental health.²⁵⁴Al Jalila Foundation not only



funded the construction of the Al Jalila Foundation Research Center, but it also provided scholarships to U.A.E. medical students and funded U.A.E.-based medical research.²⁵⁵ 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.²⁵⁶

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 "Arab Health", the largest gathering of healthcare and trade professionals in the Middle East. Arab Health 2024 hosted over 3,450 exhibitors, 130,000 in-person visitors, and 320 speakers, represented 183 countries, and generated \$1.81 billion worth of business.²⁵⁸ For more information about Arab Health 2025, please visit <u>www.arabhealthonline.com</u>. Kallman Worldwide is the official USA representative of Arab Health and organizer of the USA Partnership Pavilion since 1996.²⁵⁹

In May 2024, Abu Dhabi Global Healthcare Week (ADGHW) launched its inaugural conference at ADNEC and Abu Dhabi City. ADGHW brought together 15,000 attendees, 325 exhibitors, and 300 expert speakers. This important new conference provided a platform for thought leadership and global ideas exchanges, as well as to display the latest advancements in health and technology. For more information, please visit <u>www.adghw.com</u>.

The U.A.E. also hosts a variety of more specialized annual events. One of these is DUPHAT, the largest pharmaceutical exhibition in the MENA region, which, in January 2024, featured more than 1,300 companies from 95 countries and a record total attendance of 32,000 visitors.²⁶⁰ For more information about DUPHAT, please visit <u>https://duphat.ae/</u>. Another such event is MEDLAB, which is the largest attended laboratory expo worldwide with approximately 830 exhibitors and more than 25,000 attendees.²⁶¹ For more information about MEDLAB, please visit <u>www.medlabme.com</u>. Other opportunities to host conferences of all sizes, topics, and audiences across the healthcare and life sciences sector exist, especially for companies and institutions looking to forge research and thought leadership partnerships and connections in the U.A.E.

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 (MOHAP) 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. In November 2024, MOHAP signed a strategic agreement with AstraZeneca to enhance lung cancer early detection programs across the U.A.E. As part of the partnership, a digital lung health assessment platform will be launched, targeting high-risk groups.²⁶²

These initiatives complement 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.²⁶³ In its first eight editions, the caravan traveled 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.²⁶⁴

In October 2024, Burjeel Holdings launched the 'Scan for Life' initiative to provide complementary breast cancer screenings across the U.A.E. The Scan for Life campaign seeks to make breast cancer screening more accessible and encourages women to take advantage of free mammograms, emphasizing the importance of early detection.²⁶⁵

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.²⁴⁸



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 with a child under 12 years old 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.²⁶⁶ 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.²⁶⁷ Two years later, in 2017, the U.A.E. introduced an excise tax of 100% on tobacco products.²⁶⁸ 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. In June 2024, MOHAP published a tobacco-free workplace guide as part of its ongoing efforts to combat smoking. The guide offers a comprehensive explanation of measures implemented to create a tobacco-free workplace and outlines the detrimental effects of smoking on individual and environmental health.²⁶⁹

Combating Obesity, Diabetes, and Cardiovascular Disease

In addition to 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 as well as public health campaigns. After all, NYU Abu Dhabi's "U.A.E. Healthy Future Study," which published initial research in late 2023, determined that Emiratis face widespread instances of high blood pressure and high cholesterol levels, risk factors for diabetes, obesity, and heart disease. These results, which demonstrated that around one-third of the Emirati population of the U.A.E. faces these health problems, raised alarm about the "public health emergency" of heart disease.²⁷⁰

The U.A.E. has sought to combat these chronic ailments by promoting exercise and healthy lifestyles. 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. Sheikh Abdullah bin Zayed, Minister of Foreign Affairs and International Cooperation, was among the many U.A.E. officials who publicly embraced this challenge. Several companies, such as Emirates, also accepted Sheikh Hamdan's challenge.²⁷¹ Sheikh Hamdan repeated the Dubai Fitness Challenge in 2018, and it has become a recurring yearly challenge.

In 2022, the National U.A.E. Taskforce on Obesity discussed developing a joint roadmap to steer efforts and find effective ways to address obesity, in line with the National Strategy for Wellbeing 2031 and the aspirations of the U.A.E. to become one of the best countries in the world in terms of quality of life. The Taskforce comprises representatives from MOHAP, the Dubai Health Authority, the Department of Health – Abu Dhabi, and the Abu Dhabi Public Health Centre. It is mandated to combat obesity in children from 5 to 17 years, according to Emirati government directions, and based on the recommendations of the World Health Organization (WHO), which outlined six key elements to treat this disease. These elements are healthy eating, weight management, pre-and post-conception care, healthy eating, and physical activity in early childhood, and healthy nutrition for school students. The Taskforce is also entrusted with multi-sectoral coordination to oversee obesity-related activities to ensure a comprehensive and integrated approach, based on a clear-phased action plan.

U.A.E. healthcare authorities have partnered with the private sector on various initiatives to combat obesity:

 In March 2024, the Department of Health- Abu Dhabi (DoH) signed a Memorandum of Understanding (MoU) with Eli Lilly and the World Obesity Federation to drive innovative solutions to obesity prevention and management through a multisectoral approach. Through the MoU, the DoH aims to empower healthcare professionals to manage the economic burden of obesity to improve understanding, drive prevention and treatment solutions, and raise public awareness about managing obesity as a chronic disease.²⁷² MOHAP and Novo Nordisk Pharma Gulf established a partnership to create a national scientific guide for obesity management and weight control in September 2024. The collaboration aims to enhance public awareness of cardiovascular diseases and their complications.²⁷³

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 Department of Health- Abu Dhabi launched the "Weqaya" program, which screens individuals for cardiovascular disease, diabetes, and the risk factors associated with these two ailments.²⁷⁴ U.A.E. nationals must undergo Weqaya screening to qualify for the elite "Thiqa" health insurance program.²⁷⁵

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

- U.A.E. Healthy Kidney 5K: The New York Road Runners historically partnered 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. In January 2025, the U.A.E. Healthy Kidney 5K will be held in Miami.³²⁸
- Cleveland Clinic Abu Dhabi organized and took part in several community events to raise awareness of chronic or prevailing illnesses in the U.A.E. while also encouraging healthier and more active lifestyles. In 2022, the hospital organized the "Ramadan Night Run" to raise awareness for Parkinson's disease during the month of Ramadan. The event saw participation of over 500 patients, patient families, and individuals from the community.

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 is a wide range of resources that companies can draw on to help them seize opportunities and overcome challenges.

A. Opportunities

As previously noted, the U.A.E.'s increasing population, demographic shifts, high prevalence of chronic diseases, wealth, ambitions to become a regional medical tourism hub, and broader economic diversification plans are all driving the expansion of the country's healthcare market. So, too, is the country's embrace of the transformative potential of AI, as well as its desire to become a regional and global hub for the life sciences.



While it has a thriving healthcare market in its own right, the U.A.E. is also 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, and it boasts advanced transportation and logistics infrastructure. This strategic geographical location and world-renowned logistical capabilities 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. The 'Projects of the 50' initiative, an ambitious fifty-year set of projects to guide the country's development over the next five decades, will surely increase the U.A.E.'s standing as a global business hub for American and international companies.

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 has done and Mass General Brigham and Dana-Farber Cancer Institute are working to do. Alternatively, they could manage U.A.E. hospitals in the same fashion as Johns Hopkins Medicine International. They can also provide value through consultations and training partnerships.

The U.A.E. also offers opportunities in the pharmaceutical and life sciences sectors. U.S. companies will not only find the U.A.E. a ripe market for pharmaceutical exports, but they will increasingly find it a suitable platform for the manufacture of drugs, perhaps following the lead of Merck and Pfizer in agreeing to local production arrangements. They will also increasingly conduct clinical trials, research and development, and IP creation in the country.

U.S. companies will find in the U.A.E. a growing market for medical and diagnostic equipment sales and one in which they can potentially sign agreements to install and service their own medical devices, as have GE Healthcare, Medtronic, and Illumina. At the same time, U.S. companies will find clients who are eagerly pursuing the latest innovations in healthcare information technology, as IBM and Oracle Cerner can attest.

AI is a rapidly growing sector in the U.A.E. and will continually integrate into the healthcare sector. The establishment of MGX, a new AI-focused investment vehicle, signals an interest in accelerating the adoption of AI through partnerships in the U.A.E., region, and around the globe, including in the healthcare sector. As a major investment company that aims to mobilize up to \$100 billion to enhance the future of AI, MGX will help drive investment flows in AI both to and from the U.A.E. and will likely lead to increased opportunities for AI development and integration into the healthcare and life sciences sector.

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

Public health and sustainability advocacy and initiatives are also welcome contributions to the U.A.E.'s health sector. Organon, a women's-health-focused pharmaceutical company formed out of a spin-off from Merck, has engaged female leaders in the U.A.E. such as Dr. Asma Al Mannaei, Executive Director of Research and Innovation at DOH Abu Dhabi, through panel discussions, events, and advocacy campaigns about gender equity and women's health. Especially following the country's hosting of COP28 in November 2023, there is ample opportunity for partnerships for U.S. companies that are pioneering environmental sustainability in the healthcare industry. Cleveland Clinic Abu Dhabi, for example, was awarded the Ashikaga-Nikken Excellence Award for Green Hospitals by the International Hospital Federation for its commitment to environmental sustainability.²⁷⁸

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, Leo A Daly has helped design and build medical facilities in the U.A.E., such as the Zayed Military Hospital Campus, the Al Ain Fertility Clinic, and the Abu Dhabi Police Clinic and Hospital Complex. Additionally, U.S. venture capital and private equity firms may find promising investment opportunities in the U.A.E. 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-theground commitment. Fortunately, there are numerous business-friendly environments in which U.S. companies can establish themselves, including free zones like Dubai Healthcare City, Dubai Science Park, and Masdar City. The U.S.-U.A.E. Business Council's newly updated guide to "Doing Business in the United Arab Emirates" provides U.S. company executives with 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 relatively small population of 10 million people limits the size of local demand making it critical that large healthcare enterprises rely on the U.A.E.'s connections to the wider region or the U.A.E.'s booming medical tourism market.

Limits to local demand are further exacerbated by the large number of domestic firms established in the market and the increase in international competitors entering the fray. 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.

Another potential challenge for U.S. companies operating in the U.A.E. healthcare market is increasing price sensitivity. After bouts of global inflation and increasing healthcare costs, the U.A.E. government is taking firmer stances regarding controlling 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 capture the myriad 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: Tanya Cole U.S. Embassy in Abu Dhabi, Commercial Section P.O. Box 4009, Abu Dhabi, U.A.E. Tel: +971-2-414-2665 E-mail: Tanya.Cole@trade.gov Website: <u>https://www.trade.gov/knowledge-product/united-arab-emirates-market-overview?section-nav=2758</u>

Economic Officer: Bryn West U.S. Embassy in Abu Dhabi, Commercial Section P.O. Box 4009, Abu Dhabi, U.A.E. Tel: +971-02-414-2230 E-mail: westbc@state.gov Website: <u>https://www.trade.gov/knowledge-product/united-arab-emirates-market-overview?section-nav=2758</u>

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: <u>https://www.trade.gov/knowledge-product/united-arab-emirates-market-overview?section-nav=2758</u>

Commercial Attaché in Dubai: Bruce Ellsworth U.S. Consulate General in Dubai P.O. Box 121777, Dubai, U.A.E. Tel: +971-50-652-9301 E-mail: <u>Bruce.Ellsworth@trade.gov</u> Website: <u>https://www.trade.gov/knowledge-product/united-arab-emirates-market-overview?section-nav=2758</u>

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

U.A.E. Desk Officer: Naomi Wiegler 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: naomi.wiegler@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 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 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 Emirates Health Services DSO Digital Park Building A8 Dubai, U.A.E. Tel: +971-4-665-0000 Website: www.ehs.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: <u>www.seha.ae</u>

Dubai Health Authority (DHA) Dubai Health Authority Building, Al Maktoum Bridge Street, Bur Dubai Area 4545, U.A.E. Tel: +971-800-342 Email: wasselsotak@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: dgreenhalgh@usuaebusiness.org Website: <u>www.usuaebusiness.org</u>

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@fcciuae.ae Website: www.fcciuae.ae

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

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

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

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

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