



# United Arab Emirates (UAE)

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## Key trends

**As the economy and population of the UAE grow, the number of cancer patients will also significantly increase.**

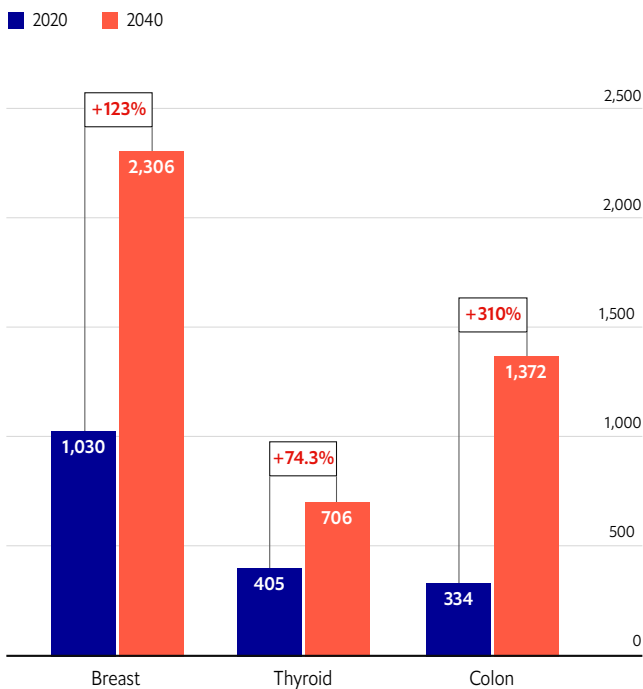
The percentage of the population aged over-65, a high-risk group for cancer, will increase by 272% between 2022-2040.

The anticipation of an increasing cancer burden poses a challenge to patients, national health services, the economy and broader society.

<b>Population over 65 years<sup>1</sup></b>	<b>173k</b> (2022)	<b>643k</b> (2040)	<b>↑ 272%</b>
<b>Total cancer incidence<sup>2</sup></b>	<b>4.8k</b> (2020)	<b>15.9k</b> (2040)	<b>↑ 231%</b>
<b>Total cancer mortality<sup>2</sup></b>	<b>1.9k</b> (2020)	<b>8.2k</b> (2040)	<b>↑ 335%</b>
<b>Probability of premature death from cancer per year in 2030<sup>3</sup></b>	<b>4.49%</b> (2020)	<b>2.63%</b> (SDG target)	Projected to miss SDG target by <b>1.86%</b>

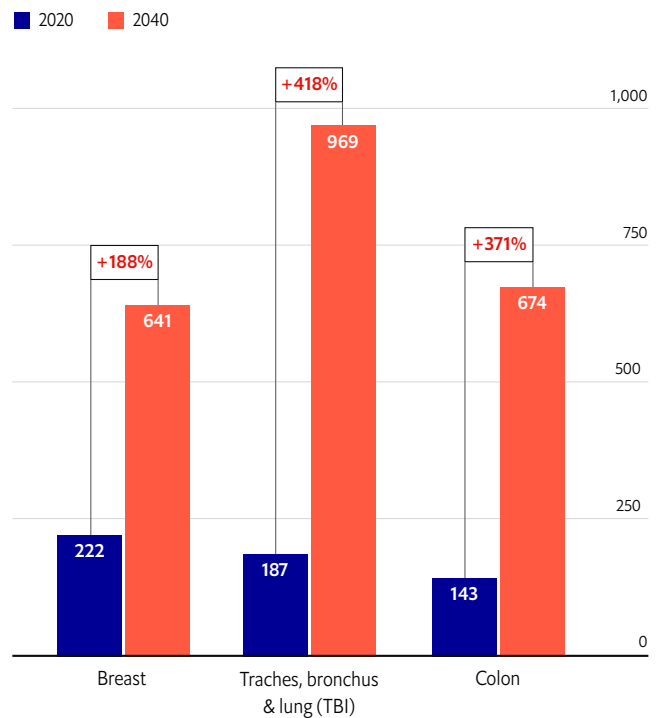
**Top 3 Cancers: Incidence Projections estimates 2020 and 2040<sup>2</sup>**

(# of people, both sexes, all ages)



**Top 3 Cancers: Mortality Projections estimates 2020 and 2040<sup>2</sup>**

(# of people, both sexes, all ages)



# The future of cancer care: health system sustainability in the Middle East and North Africa (MENA): United Arab Emirates (UAE)

## Policy

While the UAE has a comprehensive and up-to-date NCCP, it has yet to be officially adopted. Implementation of the NCCP is necessary to effectively and systematically combat cancer. The government has expanded screening and early detection efforts with established breast, cervical and colon cancer programmes. However, population coverage among target groups is below WHO targets.<sup>4</sup>



**Early detection programme/ guidelines for 4 cancers (breast, cervix, colon, childhood)**



**# of MPOWER measures fully implemented and achieved**



**Integrated NCD plan**



**Up-to-date NCCP**



**National screening program for breast cancer**



**National screening program for cervical cancer**

\* MPOWER: **M**onitor tobacco use and prevention policies, **P**rotect people from tobacco smoke, **O**ffer help to quit tobacco use, **W**arn about the dangers of tobacco, **E**nforce bans on tobacco advertising, promotion and sponsorship, and **R**aise taxes on tobacco.  
Source: WHO. Cancer Country Profile 2020. UAE<sup>3</sup>

## Health System

While health system infrastructure and capacity in the UAE are sufficient to manage today's cancer burden; ongoing efforts are needed to expand prevention interventions and palliative care service locations and reduce reliance on expatriate healthcare workers to maintain access to quality care as the number of cancer patients increases.

### Primary prevention & risk factors

**26.2%**  
HPV vaccination programme coverage<sup>1</sup> (2018)



**3.9**

Alcohol consumption per capita<sup>5</sup> (2018)



**23.5%**

Prevalence of tobacco use (% of adults)<sup>6</sup> (2020)



**27.8%**

Prevalence of obesity among adults<sup>7</sup> (2018)

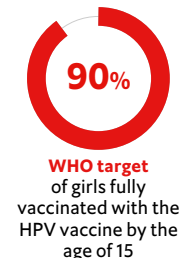


**2/4**

Measures taken to reduce an unhealthy diet<sup>1</sup> (2020)



Awareness campaign for diet and physical activity done every 5 years<sup>1</sup> (2020)



<sup>1</sup>Total alcohol consumption per capita (liters of pure alcohol, projected estimates, 15+ years of age)

### Infrastructure<sup>9</sup>

**2,353**

Number of patients who need radiotherapy per year

**471**

Patient / RT unit

**100%**

Radiotherapy coverage



Availability of palliative care in the public health system<sup>3</sup>

(Approximately 50% of cancer patients require RT) (2013)

### Health workforce



**Physicians<sup>10</sup>**

**2.6 per 1,000 people** (2019)

OECD average - 3.6



**Nurses<sup>11</sup>**

**5.7 per 1,000 people** (2019)

OECD average - 8.8



**Nuclear medicine physicians<sup>3</sup>**

**31.9 per 10,000 cancer patients** (2020)



**Radiologists<sup>3</sup>**

**1,064 per 10,000 cancer patients** (2020)

## Innovation & Data

Data on cancer is expected to improve further with the development of the UAE National Cancer Registry (UAE-NCR) and the Riayati platform, a database for all electronic medical records in the country.<sup>11</sup> Internet access and smartphone penetration are among the highest globally, providing a good basis for digital health applications.<sup>12,13</sup> Research activity has also gradually increased, with the number of clinical trials rising from 38 in 2012 to 55 in 2022.<sup>14</sup> The National Center for Health Research (NCHR) was recently established to support medical innovation and clinical trial activity.<sup>15</sup>



**100%**

Individuals using the Internet<sup>12</sup> (2021)



**0.7%**

Research and development (R&D) expenditure (% of GDP)<sup>14</sup>



**195**

Number of mobile phone subscriptions (per 100 people)<sup>13</sup> (2021)



**27  
603**

Total number of clinical trials for oncology<sup>15</sup> (2022)

Number of clinical trials (1999-2022)<sup>16</sup> (2022)

# The future of cancer care: health system sustainability in the Middle East and North Africa (MENA): United Arab Emirates (UAE)

## Health Financing

According to the UAE Ministry of Finance, health expenditure was projected to reach \$21 billion by 2021 and \$26 billion by 2025, driven by demographic changes, medical tourism, and the rise in national wealth. This increase in healthcare spending raises the significance of developing a suitable HTA or value assessment system to support resource allocation and evidence-based decision-making.<sup>18</sup> Drug approval timelines for new medicines, at an average of less than six months, are the fastest in the region.<sup>19</sup> There are also efforts to incentivise local manufacturing to reduce exposure to price and supply chain fluctuations and support local R&D.<sup>20</sup>

### Health Budget<sup>21</sup>

**Current health expenditure (CHE) as % of GDP**

**6%** (2020)

13.9% OECD average

**Current health expenditure (CHE) per capita**

**US\$2,192** (2020)

\$5,292 OECD average

**General government health expenditure as % CHE**

**66%** (2020)

66% OECD average

**Private Health Expenditure as % CHE**

**39%** (2020)

34% OECD average

### Value Assessment<sup>22</sup>

**Has a systematic process to support healthcare decision-making?**



**Is there an existence of a standard methodology or process guideline?**



**Are there legislative and / or regulatory requirements to consider HTA results in benefit package decisions?**

**N/A**

### Barriers to HTA implementation

- Awareness/advocacy of the importance of HTA
- Mandate from policy authority
- Institutionalisation of HTA
- Qualified human resources
- Political support

### Accessibility



**78/100**

Progress towards Universal Health Coverage (UHC) - up from 76 in 2005<sup>23</sup> (2021)



**6 months**

Average time to local registration for new medicines<sup>19</sup> (2022)

### Economic Burden



**\$66 billion**

Total macroeconomic cost attributable to cancers between 2020-2050<sup>24</sup> (2023)

(Total macroeconomic burden attributable to cancers in 2020-2050 using a discount rate of 3%)

### Affordability<sup>21</sup>

**Out-of-pocket (OOP) spending as % of current health expenditure (CHE)**

**11%** (2020)

12% OECD average

**Out-of-Pocket (OOP) spending per capita in USD**

**\$246** (2020)

\$653 OECD average

## Opportunities for Improvement

### 1 Expand screening programmes

Expanding screening and early detection programmes is one of the most impactful ways to improve cancer survival rates and manage treatment costs. Coverage rates for national screening programmes in the UAE are well below WHO targets, ranging from 1.6% for colon cancer to 7% for cervical cancer among eligible population groups.<sup>4</sup> Health authorities should also work with private insurers to expand and promote screening among expatriate residents, who are not covered under national programmes.

### 2 Explore alternative insurance solutions

While expatriate residents are covered by insurance plans, typically through their employer, these plans are often subject to expiration dates and limitations that do not cover lengthy and costly cancer treatment. Many expatriate patients rely on financial support from NGOs and patient organisations. Alternative solutions to insurance packages that provide financial protection and access to treatment should be explored as the expatriate population increases.

### 3 Collaborate to develop national cancer capabilities

Several healthcare advancements and Public Private Partnerships (PPPs) in the UAE also support innovation in oncology, including the National Genome Strategy, which has led to personalised precision medicine programmes for oncology, policies and strategies to support the use of AI in healthcare, as well as developments in the delivery of advanced treatments like stem cell therapy, CAR-T cell therapy and bone marrow transplants, providing an opportunity to position the UAE as a leader in innovative and complex care.<sup>4</sup>

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