



# United Arab Emirates

Population: 9.4 million <sup>(2022)</sup>  
 GDP per capita: USD 53,708 <sup>(2022)</sup>  
 Life expectancy: 79 years <sup>(2021)</sup>  
 Total health expenditure: 5.3% of GDP <sup>(2021)</sup>  
 Source: World Bank




## Breast cancer

- Breast cancer is the most common cancer type in women (**40%** of all new cancer cases) and responsible for **25%** of all cancer deaths among women in the UAE.
- Breast cancer tends to be diagnosed at an earlier age in the Middle East and Africa (MEA) region than in Western countries, approximately 10 years earlier. In 2022, 87% of cases in the UAE were in women below the age of 65.

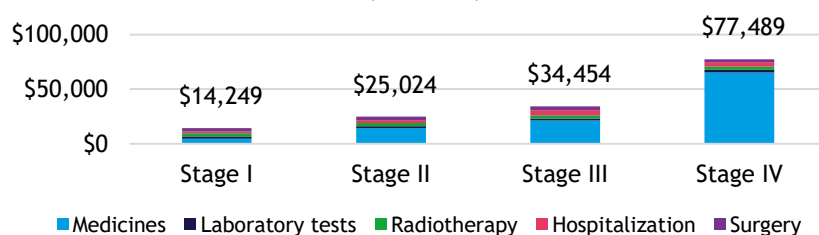
9 out of 10 women diagnosed with breast cancer in the UAE are under 65 years.



## Health system and governance of breast care

Description	Main recommendations
<ul style="list-style-type: none"> <li>The health insurance regulations and rules are somewhat different in the seven emirates. In general, local citizens have public health insurance coverage, which gives them access to both public and private health care providers. Expatriates receive compulsory health insurance coverage through their employer, which also gives them access to public and private health care providers.</li> <li>The Ministry of Health and Prevention provides support for Emirati women with breast cancer, ensuring full coverage for their treatment, screenings, and survival journey. Expats without full coverage can seek assistance from charities in the UAE to help with expenses for breast cancer treatment.</li> <li>Despite health insurance, reaching the annual cap of the insurance is a challenge for cancer patients - both for citizens and expatriates. Starting from 2019, the health authority in Dubai established a special fund to fully cover expatriate patients with breast cancer who have exceeded the insurance cap.</li> <li>Public spending on health care amounts to around <b>3%</b> of GDP, which falls short of the informal WHO spending target of <b>5%</b> of GDP.</li> <li>Typically, a local citizen suspecting they have breast cancer will first consult a primary care clinic within the public health care system. If required, they might be referred to a diagnostic center for more detailed testing. Women can also directly approach secondary or tertiary care facilities. Most often expatriates are the ones that opt to directly consult secondary or tertiary care facilities for diagnosis, due to the limitations of screening coverage. The type of services women receive depends on their health insurance plan.</li> <li><b>Around half of the economic burden associated with breast cancer comes from indirect costs</b>, which include productivity losses due to working-age patients' inability to work, either temporarily or permanently, or premature death. This burden is especially acute in the MEA region, where breast cancer presents about a decade earlier than in Western countries.</li> <li>The direct medical costs for breast cancer treatment escalate with the stage at diagnosis. For instance, <b>treating late-stage breast cancer in Saudi Arabia (a country comparable to the UAE) can be more than five times as costly as treating early-stage breast cancer</b>, underscoring the critical value of early detection to reduce the economic burden.</li> </ul>	<ul style="list-style-type: none"> <li>  Prioritize an increase in public spending on health care.         </li> <li>  Emphasize and strengthen the participation of patient organizations in the decision-making processes.         </li> <li>  Continue prioritizing the downstaging of breast cancer at diagnosis to reduce the economic burden of breast cancer.         </li> </ul>

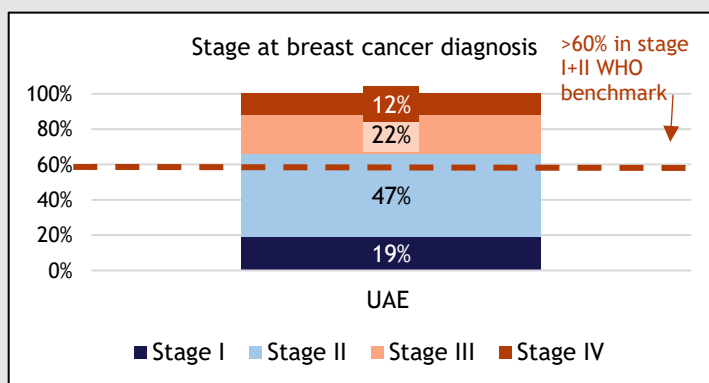
Direct medical costs of breast cancer per patient-year by stage in Saudi Arabia (USD 2018)



## Early detection

### Main challenges

- A non-organized screening program offering mammography every two years to women aged 40 and older exists. Emirati citizens throughout the UAE are eligible for screenings. Expatriates can access screening after obtaining a health card and making the necessary payment. Local experts noted that some expatriates postpone mammograms, waiting for free screenings or discounts during the month of October, if their insurance policy does not cover the costs.
- Public access to participation rates and other quality indicators of the screening program is restricted, requiring official requests for information.
- Efforts to expand mammography screenings to rural and semi-urban areas have been successful, and now, most women can access these services. The Pink Caravan, for example, organizes annual rides and events, where a team of medical professionals and volunteers travel across the seven emirates, including remote and rural areas, to provide access to screening services.
- The Pink Caravan, however, faces difficulties as many women do not keep their mammogram records, leading to issues in tracking previous screenings. Ensuring women save their medical images physically is crucial for accurate follow-ups.
- For the period of 2015-2017 across the entire UAE, approximately **66%** of breast cancer cases with staging information available at diagnosis were identified at **early stages (I and II)** as shown in the figure below. However, there is an inconsistent practice of recording stage information as around **20%** of diagnosed breast cancer cases were missing stage information.
- Local experts shared that around **64%** of breast cancer cases in Abu Dhabi were diagnosed at a late stage between 2007 and 2008. Although more recent statistics are pending, preliminary evidence suggests a substantial reduction in late-stage diagnoses to about **15%**. This indicates major progress in the early detection and awareness of breast cancer.



- Some women **ignore painless breast lumps** due to a lack of awareness about breast cancer symptoms, leading to delays in seeking treatment.
- Cultural expectations to endure silently and **societal judgment over breast cancer diagnosis** influence women's reluctance to seek screenings or treatment.
- Women often receive **insufficient encouragement** from health care providers to undergo routine breast cancer screenings.
- Despite initiatives from NGOs aimed at educating the public, **misconceptions that breast cancer is a death sentence** continue to persist.

### Genetic risk assessment in the UAE is improving

In 2022, the Department of Health Abu Dhabi introduced the Precision Oncology Program, a pioneering initiative in the region focusing initially on breast cancer. Its main goal is to offer individualized cancer prevention plans for at-risk women. Also, the UAE initiated the Emirati Genome Program to explore the genetic foundations of Emiratis using advanced technology. This program includes genetic testing, such as the BRCA test for women at high risk and counseling sessions.

### Main recommendations



Provide primary care practitioners with patient education materials about breast cancer screening to distribute during ordinary appointments.



Continue improving breast cancer awareness through community engagement, multilingual resources, and personal stories.



Promote the use of electronic health records that include imaging storage and transfer capabilities, to ensure more effective communication with, e.g., services provided by the Pink Caravan initiative.



Make data on screening rates and other quality indicators of the screening program publicly available.



Enhance data completeness by standardizing the documentation process for diagnosis across health care facilities.



Boost investments in local genetic testing facilities to minimize dependence on overseas testing centers.

## Diagnostic services

### Main challenges

- In Abu Dhabi, innovative artificial intelligence systems have been introduced to diagnose breast cancer from ultrasound images.
- Radiographers in the UAE, who play a key role in producing mammogram images, lack specialized training in mammography. A study found that only **56%** of them have completed a specialization in this area.
- There are no established national targets for the timeline during which a breast cancer diagnosis should be completed. Yet **many pathology labs have received accreditation from the College of American Pathologists (CAP)**, indicating their adherence to quality standards.
- Cultural beliefs and fears, such as the misconception that biopsies can spread cancer or a lack of mental preparedness for the diagnosis, can delay the breast cancer diagnostic process, despite efforts to expedite it for those with clear symptoms.
- **Less than 2% of physicians in Dubai specialize in pathology.** There may be a need for more pathologists to meet the growing global demand for pathology services.

Test	Access to biomarker testing	
	Emirati citizens	Expats
<b>Essential biomarkers</b> (ER, PR, HER2, Ki-67)	Available for all	
<b>Gene expression profiles</b> (Oncotype DX, Mamma Print, etc.)	Available for all	Not reimbursed
<b>Newer biomarkers</b> (PIK3CA, BRCA1/2, PD-L1, NTRK, dMMR/MSI-H, TMB-H)	PIK3CA, NTRK, TMB-H are not reimbursed, while the rest are reimbursed.	

### Main recommendations



Implement specialized training and ongoing professional development for radiographers in mammography and boost the pathology workforce.



Establish clear timelines for breast cancer diagnosis and standardize and expedite the process.



Create dedicated funds to provide free diagnostic imaging exams for underserved groups.



Develop educational materials and counseling services to dispel misconceptions about diagnostic procedures such as biopsies.

## Treatment

### Main challenges

- A notable **nurse shortage in oncology** is exacerbated by higher pay in certain centers, with the UAE easing recruitment requirements to mitigate this issue.
- Tawam Hospital is the main comprehensive cancer center in the UAE, located in the eastern region of Abu Dhabi. **For patients residing in other parts of the country, such as Dubai or Sharjah, the distance to the hospital may pose a challenge in terms of accessibility.**
- There are patient-induced treatment delays, driven by seeking multiple opinions or denial of diagnosis.
- Insurance coverage for expatriates, especially those on basic plans, may be limited, affecting access to specific medicines and treatments. A small percentage of expatriates without private health insurance lack coverage entirely.
- The financial burden of treatment of uncovered patients prompts them to seek aid from charities like Friends of Cancer Patients, where they may face delays due to **waitlists**.
- **Expatriates face job insecurity** when undergoing cancer treatment, risking the loss of their residence permit and financial hardship, which may force them to return home.
- The health care system's fragmented service delivery complicates the patient's journey and impacts the quality of care by undermining multidisciplinary treatment approaches.
- **Non-adherence to treatment plans** is a prevalent issue.

Despite challenges, local experts emphasize that there are minimal barriers to offering the latest breast cancer treatments to women in the UAE. Complaints about treatment quality are rare, and advanced treatment options are readily available. Patients generally express satisfaction with their care.

### Main recommendations



Broaden specialization in oncology for nurses.



Offer transportation help for patients traveling far for treatment.



Introducing patient navigators to address the knowledge gap in cancer care navigation.



Initiate campaigns to educate patients on the importance of adhering to treatment plans.



Facilitate financial aid processes of NGOs.



Implement quality assurance to promote multidisciplinary team consultations.