

Presented by the ISPOR Arabic Network

REIMBURSEMENT OF ONCOLOGY DRUGS IN THE UAE



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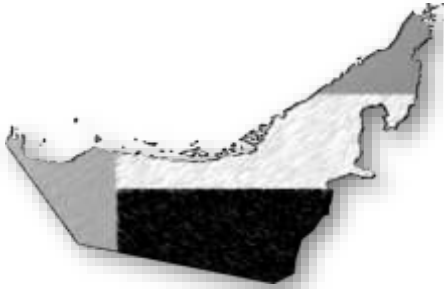
Agenda



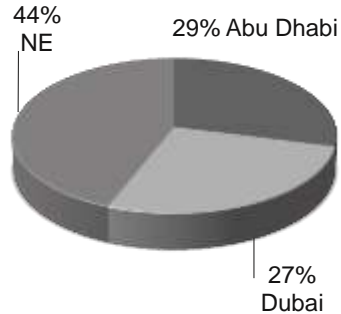
- Introduction: The UAE
- Cancer in the UAE
- Current Challenges
- Strategies & Improve Patient Access
- Summary

UAE 2017 Demographic Forecast

United Arab Emirates
9.422 Million



2017 Population % per Emirate

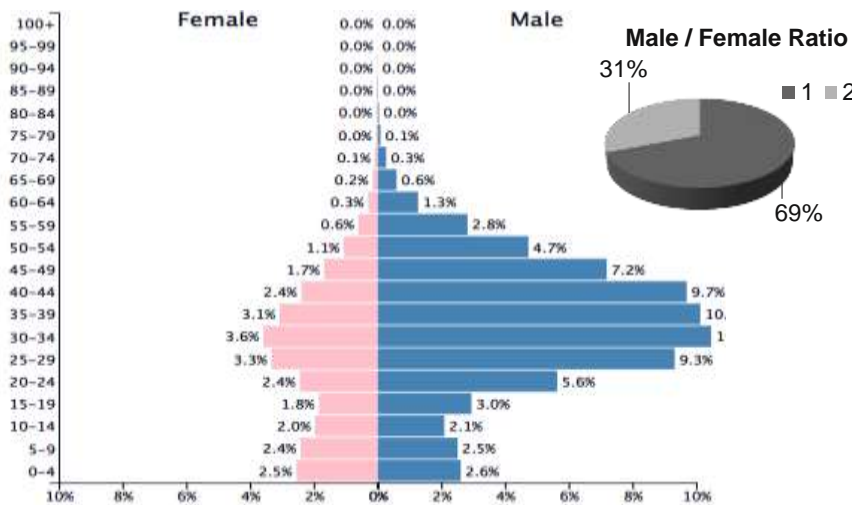


1. f= BMI forecast – Q2 2017 report
2. National Bureau of statistics
3. <https://populationpyramid.net/ united-arab-emirates/2017/>

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UAE 2017 Demographic: Male Female



<http://www.populationpyramid.net/ united-arab-emirates/2017/>

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The United Arab Emirates: An Overview



- Population: 9.4mn ^{1, 2}
- Total life expectancy at birth ≈ 77 years
- UAE GDP is 2nd in GCC 3rd in MENA region,
- GDP in 2015 = 370,296 (millions of US dollars)^{2,3},
- Real GDP growth of 2.2% to 2.6% 2016 to 2017.
- UAE HAS the following features:
 - One of most organized & fastest growing health care markets in MENA
 - Has strong HC infrastructure
 - UAE has the most attractive Investment environment ⁴

1. UAE Statistics www.uaestatistics.gov.ae
2. World Bank Reports www.worldbank.org

3. MOE 2016
4. The Global Competitiveness Index Report 2015

Healthcare System in the UAE



- MOHAP, HAAD/SEHA & DHA: Regulator & health care providers
- Health Insurance models become dominant of health funding
- Government operates the majority of hospitals
- Industry running with latest technology
- Healthcare facilities achieve International accreditation.
- International service providers manage many facilities
- Private sector participation has increased over last few years
- UAE is a medical tourism hub in the GCC and the Middle East

Pharmaceuticals & Healthcare Expenditure (2015)



- Pharmaceuticals Expenditure: AED10.77bn (USD2.93bn)
- Patented drugs sales share 67% of the market
- Followed by generic drugs at 18%
- OTC drug sale accounting for 15%.
- The UAE government contributes for ~ 71% of health expenditure
- Healthcare expenditure worth AED56.32bn (USD15.33bn), representing 4.1% of GDP.
- Healthcare spending per capita = USD1,675.

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Health Insurance system in UAE



Abu Dhabi

Mandatory Health Insurance:

- 100% of Abu Dhabi population are insured since 2008
- Min. coverage limit is 250 KAED.

Health Coverage:

- Offered mainly by DAMAN
- Under the supervision of HAAD

Dubai

Mandatory Health Insurance:

- Applied in 2010
- Fully implemented in 2016.
- Min. coverage limit is 150 KAED.
- 100% of Dubai population are insured

Health Coverage:

- Offered by 52 Insurance Companies.
- All following the regulation of Dubai Health Authority.

Northern Emirates

No Mandatory Health Insurance Law

- MOHAP Health Card

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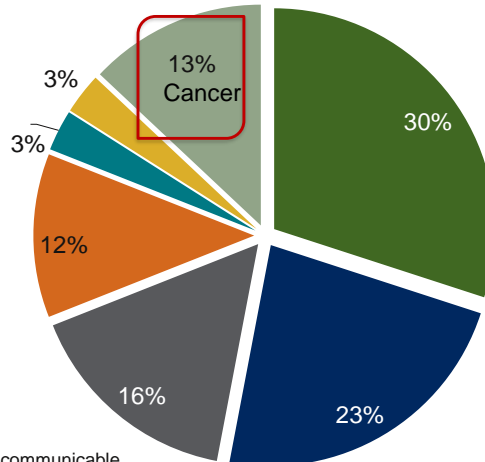
Non-Communicable Diseases In UAE

Proportional mortality



Percentage of population living in urban areas: 84.4%

Population proportion between ages 30 and 70 years: 45.9%



World Health Organization – Non-communicable Diseases (NCD)
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Major Non-Communicable Diseases

Related Causative Risk Factors



		Causative Risk Factors			
		Tobacco use	Unhealthy diets	Physical inactivity	Harmful use of alcohol
Non-communicable diseases	Heart Disease & Stroke	✓	✓	✓	✓
	Diabetes	✓	✓	✓	✓
	Cancer	✓	✓	✓	✓
	Chronic Lung Disease	✓			

NCDs pose a significant threat to lives, livelihoods and economic development globally.

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Cancer in the UAE : Facts 1

- Cancer is the third leading cause of death in the UAE after cardiovascular diseases and accidents
- There were around 427 deaths caused by cancer in 2015, 35% were nationals and 65% were expatriates.
- 44% of death were females and 56% were males
- The top five Leading causes of death among cancers in men are Lung, Colorectal, Liver, Leukemia and Pancreas.
- The top five Leading causes of death among cancers in Women are breast, Colorectal, Leukemia, Ovary, and Lung.
- Tobacco use is the most important risk factor for cancer causing 22% of global cancer deaths and 71% of global lung cancer deaths.
- About 30% of cancer deaths are a result of the five leading behavioral and dietary risks: high body mass index, low fruit and vegetable intake, lack of physical activity, tobacco use and alcohol

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Cancer in the UAE : Facts 2

- A rising chronic disease burden will drive demand for high-value medicines, particularly cancer drugs
- In July 2015, the UAE government signed an agreement to have new proton beam therapy cancer treatment in Abu Dhabi in 2015. This would make the UAE the first country in the Middle East, Africa and Asia to have proton beam radiation therapy for cancer by 2018
- MOHAP accelerated access to innovated medicines via fast track approval
- HAAD estimates that the volume of cancer inpatients and outpatients will increase between 5-16% and 8-20% respectively, 2012 to 2022.

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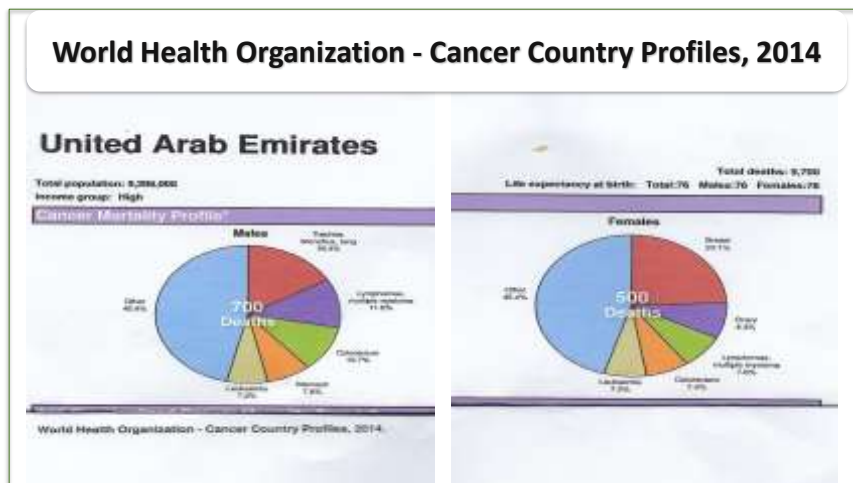
Cancer in the UAE : Facts 3

- Health experts have underlined the need for greater health awareness, both in preventing cancer and in encouraging people to consult a physician when symptoms first appear
- Life Pharma announced its intentions to construct a new oncology manufacturing facility in the second half of 2016
- Top Five Best Selling Brands are : Glivec ; Herceptin; Avastin, Neulastim & Revlimid.
- While Roche and Novartis having the highest share
- BMI report state UAE as an attractive destination for oncology drug sales.
- Roche partnered with the Health Authority of Abu Dhabi in setting up the 'Cancer Wave' initiative to raise cancer awareness in the UAE.

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Cancer Mortality Male/Female Profile*

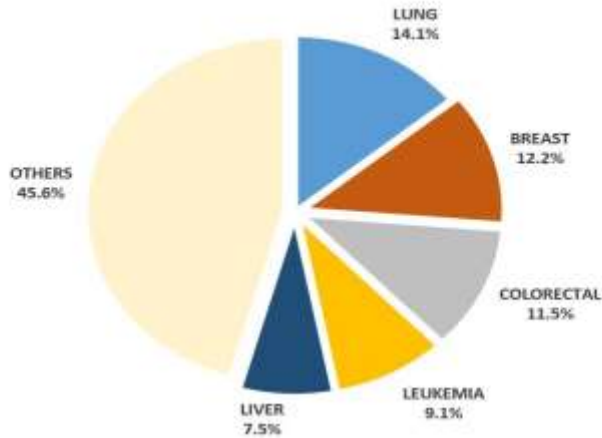


* No mortality data available. Figures are based on national incidence estimates and modelled survival.



Abu Dhabi Cancer Cause Death 2015

Leading Causes of Death Related to Cancer - Abu Dhabi 2015



<https://www.haad.ae/simplycheck/tabid/140/Default.aspx>

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UAE 2021 Vision: Healthcare Agenda - Value based opportunities

Indicators	2012 Result	2021 Target
Deaths from cardiovascular diseases per 100,000 population	211	158.2
Prevalence of diabetes	19.02%	16.28%
Deaths from cancer per 100,000 population	78	64.2
Average healthy life expectancy	67	73
Physicians per 1,000 population	1.5	2.9
Nurses per 1,000 population	3.5	6
Prevalence of smoking	21.6% (Men) 1.9% (Women)	15.7% (Men) 1.66% (Women)
Percentage of accredited health facilities	46.8%	100%

Source: UAE Vision 2021

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Ministry of Health and Prevention POA



- Raising awareness of population
- Reducing people's exposure to risk factors
- Improving services to prevent & treat leading health problems
- Improving patient access to health care services
- Decreasing the cost of health care

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WHO Leadership Global Plan for the prevention and control of NCDs 2013-2020



- WHO plan aims to reduce the number of premature deaths from NCDs by 25% by 2025
- The plan based on **nine voluntary global targets**
- The nine targets focus in part by addressing factors such as: *tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity* that increase people's risk of developing these diseases.

<http://www.who.int/mediacentre/factsheets/fs355/en/>

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Non-Communicable Diseases: WHO Strategies/the 9 Targets



Target 1:	• A 25% relative reduction in risk of premature mortality from CVDs, cancer , diabetes, chronic respiratory diseases.
Target 2:	• At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context.
Target 3:	• A 10% relative reduction in prevalence of insufficient physical activity.
Target 4:	• A 30% relative reduction in mean population intake of salt/sodium.
Target 5:	• A 30% relative reduction in prevalence of current tobacco use
Target 6:	• A 25% relative reduction in the prevalence of raised BP according to national circumstances.
Target 7:	• Halt the rise in diabetes and obesity.
Target 8:	• At least 50% of eligible people receive drug therapy and counselling (including glycemic control) to prevent heart attacks and strokes.
Target 9:	• An 80% availability of the affordable basic technologies and essential medicines to treat major NCDs in both public and private facilities.

Health Insurance Coverage: Cancer Patient



- Health Insurance coverage divide the type of treatment into outpatient & inpatient
- Where inpatient is defined as any hospital stay that can range from 120min to x no of days post surgery

Enhanced plans:

- The limitation is the total policy limit. If policy limit is 300,000 AED hence the coverage for all outpatient services including drugs will stop after reaching this cap
- For inpatient: few of the enhanced policies have also a cap but the cap is very high to a degree that we have never received a case where patient crossed his cap.

Secondly for basic :

- Basic outpatient drugs have a cap of 1500 AED hence his access to outpatient drugs are limited
- On the other hand his access to inpatient drugs (most of the cancer drugs are IV and require more than 120min) is relatively high

Estimated cost of treatment:

1. Early Breast Cancer

- HER2 positive early Breast Cancer
- Including the targeted therapy = 375 KAED
- Treatment includes: (trastuzumab/Herceptin)& (pertuzumab/ Perjeta)

2. Colorectal Cancer

- Including the targeted therapy = 425 KAED
- Treatment includes: Bevacizumab/ Avastin

3. Leukemia

- Including the targeted therapy = 300 KAED / month
- Treatment includes: (imatinib/Glivec)

Current Challenges

Key Factors

- The cost of treatment
- Current reimbursement system ranged from full coverage for locals and enhanced plans to co-pay or limited coverage for expatriates.
- Public reimbursement prices five times lower than private for both patented and generic drugs.
- Lack of related research
- Lack of National Cancer Registry

Health Insurance Coverage & Reimbursement

- 32% of the population have full benefits of the Healthcare system
- 41% of the population have partial access to healthcare system due:
 - Limited insurance coverage allow partial benefit of HC services.
 - Segment of the population prefer have HC services out UAE.
- 27% of the population doesn't reach the healthcare system:
 - Unawareness about the disease
 - Lack of coverage (no Insurance)

Solutions Promote Access to Treatment Cancer Patient Assistance Programs 1



Government exemption program

- Patients receiving their treatment in the government hospitals In Abu Dhabi been supported by an exemption program

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Solutions Promote Access to Treatment Cancer Patient Assistance Programs 2



Charity support: Dubai& NE

- Charity organizations supported cancer patients according to special criteria, including:
 - Patient affordability to pay for the treatment
 - Availability of funds at the charity
- Pharma companies make special programs to support patient access to treatment in 2 ways:
 - Direct support for the patients through a third party
 - Make special agreement with the charity
- As an Example: Roche Supports
 - Patients on (Herceptin)/ Breast Cancer.
 - Patients on (Mabthera)/ Lymphoma

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Solutions Promote Access to Treatment Cancer Patient Assistance Programs 3



Musanda Patient Assistance Program¹

- Cost sharing is an example for successful strategies that promote access to high cost innovative medicines
- Designed for patients under basic health insurance plans or those who do not have insurance at all
- Through patient assistance programs facilitated by non-profit, patient support agencies, in collaboration with pharmaceutical companies and charities, under supervision of MOHAP.
- The pharmaceutical company provides 30-70% of the annual treatment course free of charge while the patient and/or the charity organization covers the rest of the treatment course.
- This program starts in the ME in 2011-2012. and implemented in the UAE in 2013, and been expanded later on to include several oncology products
- This partial payment program designed to improve access to innovative drug as patients pay only what they can afford based on personalized financial assessment results and receive the remainder of the treatment free.

1. <http://www.axios-group.com/assets/Fact-sheets/About-Axios-Fact-Sheet-8Feb2016.pdf>

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To SUM UP



- Healthy individuals, world class healthcare services, education and happiness, are at the top of the UAE gov. agenda
- MOHAP& local health authorities has develop and implement successful strategies in line with WHO 9 targets to reduce the burden of cancer focusing in:
 - Lessening the modifiable risk factors such as tobacco use
 - Promoting early detection& to be treated adequately
- Challenges are existing, however, patients are receiving their cancer treatment via either Gov. exemption program, or via supported program managed by Pharma industry, with charity and third party
- Joint efforts & active collaboration among all stakeholders including regulator, healthcare providers, payers, suppliers and education is the right recipe to cover any potential challenges

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The Way Forward Via UAE VISION



We want to be among the **best countries in the world by 2021**

- Promote public health via prevention & world class Healthcare services
- Mandate healthcare insurance coverage for all population
- Capacity building & Quality education
- Promote & support creativity and research
- Enhancing the UAE's competitiveness through increased investments in research and bio-technology.
- Happiness for all population

“With our Citizens at the heart of development, we strive to become one of the most competitive countries in the world”

**His Highness Sheikh
Mohammed Bin
Rashid Al Maktoum**

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Q&A

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