

 **Egypt**

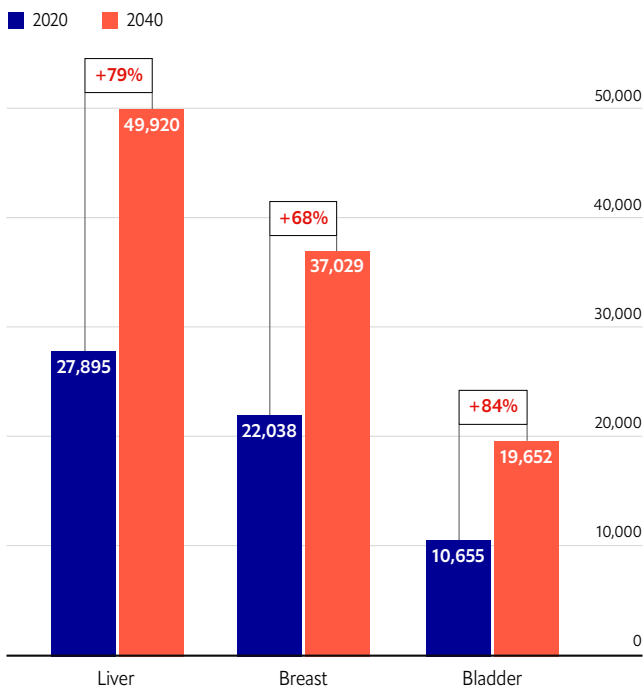
Key trends

With over 109 m people, the Egyptian population is one of the largest in the MENA region. The over-65 population, which makes up just over 5% of the total population today, is expected to double by 2040.¹ Egypt has a higher incidence of liver and bladder cancer than global averages, which is attributed to a higher prevalence of HCV, a critical risk factor for liver cancer and a higher but decreasing prevalence of schistosomiasis and a growing prevalence of smoking, key risk factors for bladder cancer.²

| | | | |
|--|----------------|--------------------|-------------------------------------|
| Population over 65 years ¹ | 5.3m (2022) | 10.7m (2040) | ↑ 100% |
| Total cancer incidence ³ | 135k (2020) | 235k (2040) | ↑ 75% |
| Total cancer mortality ³ | 89k (2020) | 162k (2040) | ↑ 82% |
| Probability of premature death from cancer per year in 2030 ⁴ | 8% (2020) | 5% (SDG target) | Projected to miss SDG target by 59% |

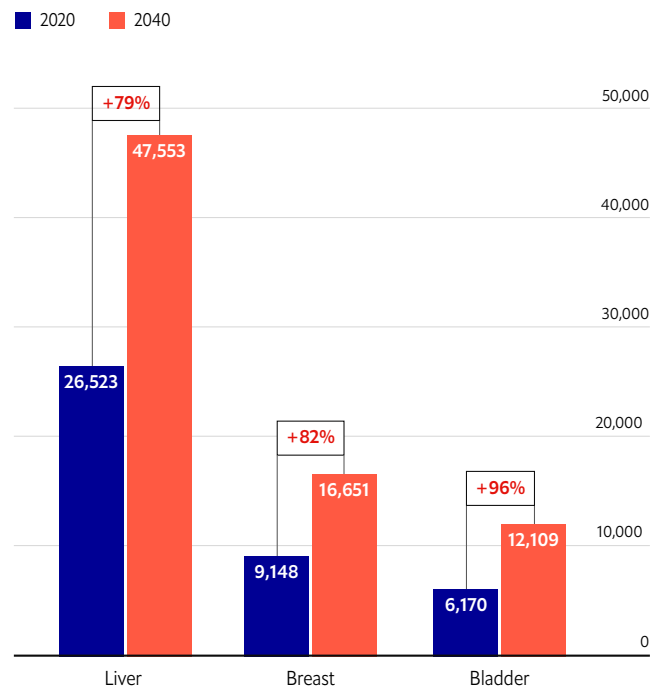
Top 3 Cancers: Incidence Projections estimates 2020 and 2040⁴

(# of people, both sexes, all ages)



Top 3 Cancers: Mortality Projections estimates 2020 and 2040⁴

(# of people, both sexes, all ages)



Policy

Egypt has an integrated NCD plan, up-to-date NCCP, and national cancer diagnosis and treatment guidelines. While the early detection and screening programmes are less developed, recent efforts, policy direction and resources, including the 100 Million Healthy Lives initiative, have helped improve screening and early detection services for HCV, breast, lung and prostate cancer.⁵ The Egyptian Women's Health Initiative was launched in 2019 with the aim of screening at least 28m women for breast cancer.⁶ As of March 2023, over 34m women have been screened.⁷



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. Egypt⁴

Health System

Healthcare system reform is critical to Egypt's Vision 2050, the country's national development agenda. NCD prevention has been a priority of the Egyptian Government over recent years with the 100 Million Healthy Lives Program to provide routine testing and treatment for infectious and chronic diseases, including hep C and obesity.⁸

Primary prevention & risk factors

N/A
HPV vaccination programme coverage (2018)



0.4

Alcohol consumption per capita⁹ (2018)



24%

Prevalence of tobacco use (% of adults)¹⁰ (2020)



35.7%

Prevalence of obesity among adults¹¹ (2017)

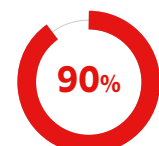


3/4

Measures taken to reduce an unhealthy diet⁴ (2020)



Awareness campaign for diet and physical activity done every 5 years⁴ (2020)



WHO target of girls fully vaccinated with the HPV vaccine by the age of 15

Infrastructure¹²

64,446

Number of patients who need radiotherapy per year

542

Patient / RT unit

100%

Radiotherapy coverage



Availability of palliative care in the public health system⁴

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

Health workforce



Physicians¹³

0.7 per 1,000 people (2019)

OECD average - 3.6



Nurses¹⁴

1.9 per 1,000 people (2018)

OECD average - 8.8



Nuclear medicine physicians⁴

8.1 per 10,000 cancer patients (2019)



Radiologists⁴

283.2 per 10,000 cancer patients (2019)

⁹Total alcohol consumption per capita (liters of pure alcohol, projected estimates, 15+ years of age)

Innovation & Data

Egypt leads the MENA region in terms of research output with a higher number of academic publications and clinical trials. In 2020, the Egyptian president issued the Regulating Clinical Medical Research Bill to establish a legislative framework for managing clinical trials.¹⁵ Improving Egypt's National Cancer Registry Program is a key focus of the NCCP.¹⁶ While adopting digital health could help reduce unmet healthcare needs and improve access in remote areas, the country will need to address disparities in internet access.



72%

Individuals using the Internet¹⁷ (2021)



0.68%

Research and development (R&D) expenditure (% of GDP)¹⁹ (2014)



95

Number of mobile subscriptions (per 100 people)¹⁸ (2021)



924
10,405

Total number of clinical trials for oncology²⁰ (2022)

Number of clinical (1999-2022)²¹

Health Financing

Healthcare spending is expected to rise in Egypt as the country moves towards achieving Universal Health Coverage (UHC) as part of the Transforming Egypt's Healthcare System Project. Currency devaluation is also increasing financial stress on Egyptian patients where out-of-pocket (OOP) spending is high. Implementing HTA is crucial for attaining UHI objectives, expanding access, and enabling better resource allocation and evidence-based decision-making. The introduction of fast-track approval mechanisms, Egyptian Drug Authority (EDA) reforms and incentives for locally manufactured products are helping to accelerate access to new medicines.²²

Health Budget²³

Current health expenditure (CHE) as % of GDP

4.3% (2020)

13.9% OECD average

Current health expenditure (CHE) per capita

US\$150 (2020)

\$5,292 OECD average

General government health expenditure as % CHE

32% (2020)

66% OECD average

Private health expenditure as % CHE

67% (2020)

34% OECD average

Value Assessment²⁴

Universal Health Insurance Law (UHI) 

Includes clause for the establishment of the HTA unit (2018)

Unified procurement Law 

Law for unified procurement was published in 2019 directing the establishment of a department for HTA

Universal Health Insurance Authority (UHIA) 

Economic evaluation is a mandatory prerequisite for all new coverage and reimbursement decisions (2022)

Barriers to HTA implementation

- Funding
- Data quality and availability
- Qualified human resources
- HTA research

Accessibility



70/100

Progress towards Universal Health Coverage (UHC) - up from 52 in 2005²⁵ (2021)



9 months - 2 years

Average time to local registration for new medicines¹⁵ (2022)

Economic Burden



\$143 billion

Total macroeconomic cost attributable to cancers between 2020-2050²⁶ (2023)

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

Affordability²³

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

59% (2020)

12% OECD average

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

\$90 (2020)

\$653 OECD average

Opportunities for Improvement

1 Expand screening programmes

Egypt has seen positive outcomes from the primary prevention and screening programmes to address liver, bladder and breast cancer. As one of the most impactful interventions to reduce mortality and treatment costs, more focus should be given to establishing prevention and screening programmes for other prevalent cancers, such as colon and cervical cancer.

2 Alleviate immediate financial pressure

The new UHI system will cover all Egyptians when fully implemented over the next 12-15 years. OOP spending at 59% of CHE is higher than the average for the MENA region (30%) and World Bank Lower Middle-Income countries (45%).²³ With over 32% of the population below the national poverty line, immediate interventions are needed to alleviate financial obstacles to cancer screening, diagnosis and treatment.²⁷

3 Collaborate in the transition to Universal Health Coverage (UHC)

The transition towards UHC provides an opportunity to strengthen and invest in end-end cancer services across the health system. It's essential to engage all stakeholders, including providers, payors, civil society organisations, industry and patients, in cancer policy and planning to realise a model of cancer care that meets the evolving needs of Egypt's population. Investment and collaboration with the private sector, through PPPs, are also expected to help close the demand gap and bring new technologies and innovation.

References

1. World Bank. Databank, population estimates and projections. Accessed June 2023. Available from: <https://databank.worldbank.org/source/population-estimates-and-projections>
2. Ibrahim, A.H., Shash, E. (2022). General Oncology Care in Egypt. In: Al-Shamsi, H.O., Abu-Gheida, I.H., Iqbal, F., Al-Awadhi, A. (eds) Cancer in the Arab World. Springer, Singapore. https://doi.org/10.1007/978-981-16-7945-2_4
3. WHO. Cancer: World Health Organization; 2022. Available from: <https://www.who.int/newsroom/fact-sheets/detail/cancer>
4. WHO. Cancer Country Profile 2020. Egypt. Available from <https://www.who.int/publications/m/item/cancer-egy-2020>
5. Das M. Egypt launches 100 Healthy Days health-care campaign. The Lancet Oncology. Available from [https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045\(23\)00338-8/fulltext](https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(23)00338-8/fulltext)
6. The Arab Republic of Egypt Presidency. Egyptian Women's Health Initiative. <https://www.presidency.eg/en/>
7. Egypt today. Over 34.7 million women screened under Egypt's early breast cancer detection initiative. Accessed March 2023. <https://www.egypttoday.com/Article/1/123467/Over-34-7-million-women-screened-under-Egypt%E2%80%99s-early-breast>
8. The World Bank. A Healthier Tomorrow for All Egyptians. October 2019. Available from <https://www.worldbank.org/en/news/feature/2019/10/07/a-healthier-tomorrow-for-all-egyptians>
9. WHO. Total alcohol consumption per capita. Global Health Observatory Data Repository (apps.who.int/ghodata)
10. WHO. Prevalence of current tobacco use (% of adults) - Egypt, Arab Rep. Global Health Observatory Data Repository (apps.who.int/ghodata).
11. World Obesity. Prevalence of adult overweight & obesity (%). Global Obesity Observatory. Available from <https://data.worldobesity.org/tables/prevalence-of-adult-overweight-obesity-2/>
12. Provision of radiotherapy in the Eastern Mediterranean Region (EMR): Relation between RT facilities, population and cancer incidence. 2013 International Atomic Energy Agency, DIRAC (Directory of Radiotherapy Centers)
13. World Bank. Physicians (per 1,000 people). Available from <https://data.worldbank.org/indicator/SH.MED.PHYS.ZS>
14. World Bank. Nurses and midwives (per 1,000 people). Available from <https://data.worldbank.org/indicator/SH.MED.NUMW.P3>
15. Provision of radiotherapy in the Eastern Mediterranean Region (EMR): Relation between RT facilities, population and cancer incidence. 2013 International Atomic Energy Agency, DIRAC (Directory of Radiotherapy Centers)
16. IQVIA. Assessment of Access-to-Medicine Timelines in Selected Countries in Middle East and Africa. 2021. Available from <https://www.iqvia.com/-/media/iqvia/pdfs/mea/white-paper/assessment-of-access-to-medicine-timelines-in-selected-countries-in-middle-east-and-africa.pdf>
17. World Bank. Individuals using the internet (% of population) 2022. Available from: <https://data.worldbank.org/indicator/IT.NET.USER.ZS>
18. World Bank. Mobile cellular subscriptions per 100 people. 2021. Available from <https://data.worldbank.org/indicator/IT.CEL.SETS.P2>
19. World Bank. Research and development expenditure (% of GDP)
20. U.S. National Library of Medicine (ClinicalTrials.gov). Accessed May 2023
21. WHO. Global Observatory on Health Research and Development. Number of clinical trials by year, country, WHO region and income group (1999-2022). Available from <https://www.who.int/observatories/global-observatory-on-health-research-and-development/monitoring/number-of-clinical-trials-by-year-country-who-region-and-income-group>
22. Al Tamimi & Co. Clinical Research Law – A legislation responding to ethical concerns in a challenging context [Available from: <https://www.tamimi.com/law-update-articles/clinical-research-law-a-legislation-responding-to-ethical-concerns-in-a-challenging-context/>
23. WHO. Global Health Expenditure database. 2020. Available from <https://apps.who.int/nha/database>
24. Fasseeh AN, Elezbawy B, Gamal M, Seyam A, Abourawash A, George M, et al. A roadmap toward implementing health technology assessment in Egypt. *Frontiers in Public Health*. 2022;10.
25. WHO. The Global Health Observatory. UHC service coverage index (3.8.1). 2021
26. Chen S, Cao Z, Prettner K, et al. Estimates and Projections of the Global Economic Cost of 29 Cancers in 204 Countries and Territories From 2020 to 2050. *JAMA Oncol*. 2023;9(4):465-472. doi:10.1001/jamaoncol.2022.7826
27. World Bank. Poverty & Equity Brief Arab Republic of Egypt. Middle East & North Africa. April 2020. Available from https://databankfiles.worldbank.org/public/ddpext_download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_EGY.pdf