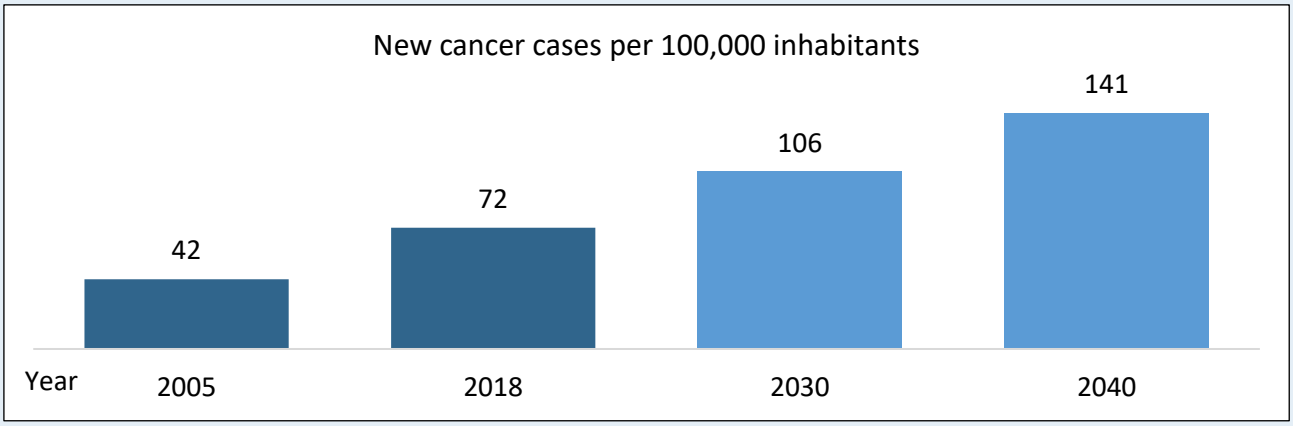
SAUDI ARABIA

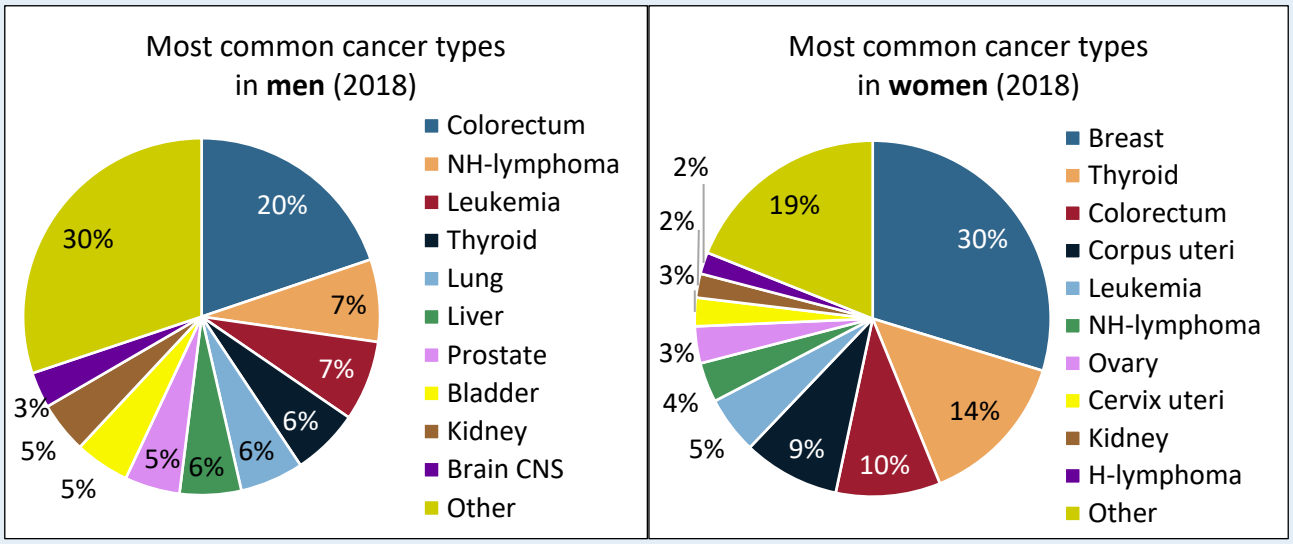
Population: 34.3 million
GDP per capita: USD 23,140
Life expectancy: 74.9 years
Total health expenditure: 6.4% of GDP
(in 2018)

Cancer epidemiology

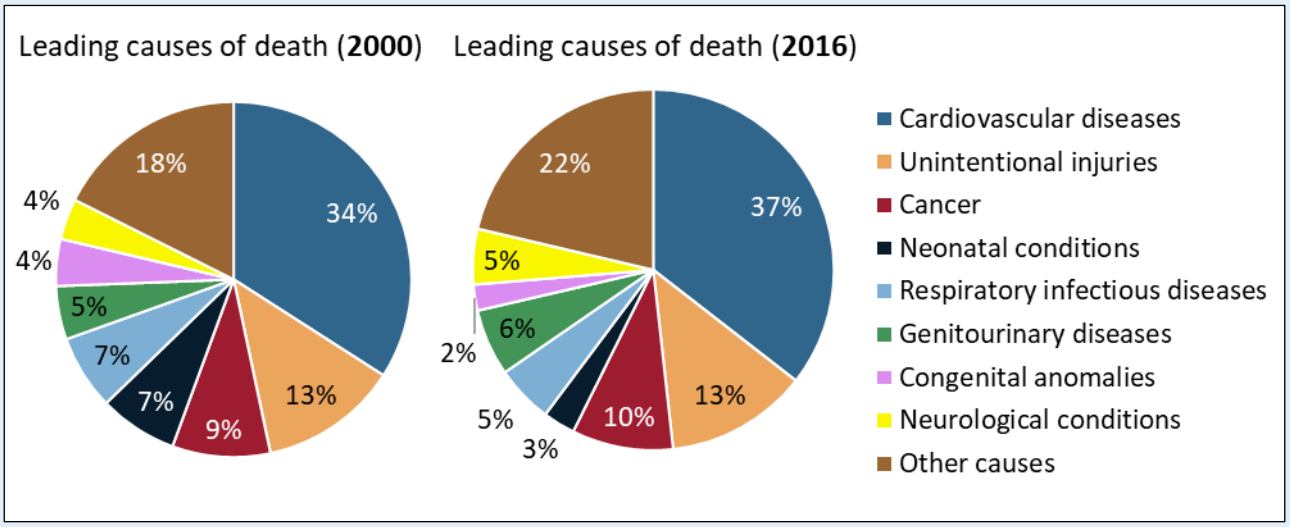
- The number of newly diagnosed cancer cases (incidence) has been increasing and is expected to increase further in the coming decades.



- There are many different cancer types diagnosed in men and women.



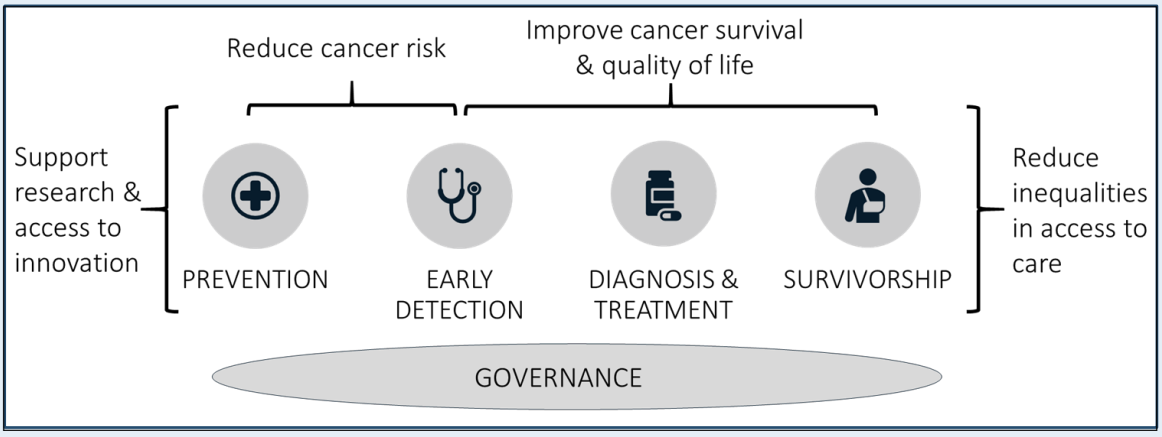
- Cancer is gradually becoming one of the leading causes of death.



Economic burden of cancer

- **Direct costs** within the health care system: USD 30 per capita in 2018 (≈2.0% of total health expenditure)
- **Indirect costs** of productivity losses (premature death, sick leave, early retirement): USD 21 per capita in 2018
- **Informal care costs**: not quantifiable

Areas of cancer control and overarching goals



Recommendations to improve cancer care

General steps to improve cancer care:

1. **Measure and understand** the magnitude and the development of the disease burden of cancer
2. **Plan, coordinate, and implement** – financial and non-financial – actions to address cancer
3. **Monitor and evaluate** actions on cancer control

Governance of cancer care

- There is a cancer plan for 2014–2025 with overall objectives focusing on most areas of cancer care. Despite this plan, many activities in cancer care are overshadowed and affected by the fundamental changes of the health care system as part of the Saudi Vision 2030. The absence of a dedicated funding plan for all planned actions in the cancer plan might also limit the commitment to implementation. A revision of the current cancer plan to bring it in line with the Saudi Vision 2030 could be considered.

Organization and financing of health care and cancer care

- Public spending on health care amounts to around 4% of GDP, which falls short of the informal WHO spending target of 5% of GDP. Additional spending on cost-effective measures to increase the quality of care in all regions of the country needs to be done. A closer analysis of health spending by disease category could help the MoH to evaluate priorities in its health budget.
- The Saudi Vision 2030 is currently transforming the governance and organization of the health system. Up until now, the fragmentation of the health system with multiple public providers and private providers is a challenge, as the public providers are not looking at each other and act independently. Patients might be treated differently by different providers. The aim to put all public providers under one umbrella needs to ensure greater provision of equitable care.
- While all local citizens and public-sector expatriates have free access to public health care services, the employer-provided insurance of private-sector expatriates only covers a basic level of care. Blue-collar private-sector expatriates may not be able to afford a private health insurance to extend their coverage. This limits their access to health care in general and to cancer care services in particular. The minimum care package covered by employer-provided insurance could be raised to bring it more in line with the one available for local citizens and public-sector expatriates.

Cancer registration

- Continuing to improve cancer registration and its analysis is important. The national cancer registry needs to be revived to provide up-to-date data. Underreporting of new cancer cases needs to be addressed and collaboration between health providers needs to be improved.
- Only cancer incidence is captured in the national registry, while information on cancer mortality is missing. Linking information on mortality to the registry and assessing survival needs to be prioritized. This will allow more real-time monitoring and performance assessment of cancer care.

Prevention

- The fight against tobacco consumption has been a priority in recent years, but not yet achieved a turnaround in smoking rates. Excise taxes on cigarettes could be increased further and existing age limits for tobacco purchase need to be enforced to deter young people from starting to smoke.
- Obesity needs to be addressed. Measures need to be taken to encourage changing dietary habits away from a Western diet with fast food. Excise taxes on sugary drinks could be increased further. Ways to increase physical activity also need to be encouraged.
- A strategy to roll out a vaccination program against HPV in children could be considered, as cervical cancer is the eighth most common cancer type in women.
- Implementing an HCV screening program for adults along with offering antiviral therapy could be considered to eliminate HCV.

Early detection

- Health literacy in the general population on early symptoms of cancer needs to be improved. More generally, patients need to be encouraged to seek medical advice in the health care system instead of opting for herbal medications upon experiencing symptoms.
- The implementation of nationwide cancer screening programs is currently hampered by the fragmented health system and a lack of coordination between providers. The ongoing transformation of the health system as part of the Saudi Vision 2030 needs to improve this.
- Steps to turn the non-organized breast cancer screening program into an organized one could be taken to improve participation.
- Given the increasing obesity rates, opportunistic colorectal cancer screening could be turned into an organized program to improve participation.

Diagnosis and treatment

- Cancer care provision, in particular cancer surgery and radiation therapy, is highly concentrated in Riyadh, Jeddah, and Dammam. Access to cancer care outside these regions is limited. Few oncologists are available in rural areas, which results in poor quality of care. The current establishment of smaller cancer treatment centers (satellite centers) in more regions is a step in the right direction to overcome geographic disparities and to raise the quality of care.
- No real national treatment guidelines exist and can be applied consistently due to the fragmentation of the health system. The ongoing transformation of the health system as part of the Saudi Vision 2030 needs to improve this to ensure a more equitable provision of cancer care.
- The most modern diagnostic imaging units, such as PET-CT scanners, are limited to the three main urban regions. Investment in additional scanners could be considered to enable greater patient access to accurate diagnosis. There is also a need to recruit more trained radiologists to analyze the imaging results.
- Access to modern molecular diagnostic testing with NGS outside of the three main urban regions needs to be improved to enable the administration of modern cancer drugs.
- The number of radiation therapy machines is fairly close to recommended standards, but the geographic distribution is inadequate with poor access in rural areas. The planned establishment of smaller cancer treatment centers in more regions could improve the situation.

- The lack of availability of modern cancer drugs has been a long-standing issue, but the situation has improved in recent years. Current availability of modern drugs (targeted therapies and immunotherapies) is good and similar as in Kuwait but lower than in the UAE. Budget constraints still mean that some eligible patients might not receive the latest approved drugs.
- A major shift towards a more value-based assessment of new drugs using HTA to inform reimbursement decisions is underway. This can help in the prioritization of introducing modern cancer drugs by focusing on value-for-money instead of narrowly focusing on prices.
- Clinical trial activity could be promoted to create another route for patients to access modern cancer drugs. Research centers with dedicated drug discovery units could also capitalize on these activities.
- Local drug manufacturing could be expanded and upgraded to be able to produce high-technology drugs such as biologics and CAR-T cell therapies. This could stimulate competition and lower overall drug costs in the long term as well as increase self-sufficiency.

Survivorship

- The few existing psycho-oncology services at certain hospitals could be extended to more facilities and offered to more patients.
- Informal caregivers with regular jobs could be better supported, such as through a right to flexible working arrangements and paid leave.
- The reintegration in the labor market of cancer survivors could be supported by flexible working arrangements.
- Cancer survivors could be protected from discrimination in the acquisition of certain services (e.g., health insurance, life insurance, loans, mortgages), by imposing time limits up to which a previous cancer diagnosis needs to be disclosed.