REPUBLIC OF LEBANON
MINISTRY OF PUBLIC HEALTH

NATIONAL CANCER PLAN 2023-2028

With the international support of:

Forward

As Lebanon faces challenges deeply impacting its health system, it's with a sense of resolve and hope that I write this introduction to Lebanon’s inaugural National Cancer Plan.

Born out of an earnest collaboration with national and international experts, this plan represents our unwavering dedication to rekindle hope, dignity, and zest for life among those affected by cancer.

It is a meticulously designed blueprint that encompasses not only prevention, early detection, and state-of-the-art treatment, but it also addresses the emotional well-being of patients and communities.

We commit ourselves to fortify our healthcare infrastructure, foster continuous learning for healthcare professionals, and invest in research and technology.

Moreover, recognizing the financial burden cancer places on patients and their families, we vow to work alongside stakeholders to create sustainable financial solutions.

Through this plan, with the maxim “that they may have life and have it more abundantly” guiding us, we embark on a journey towards a future where cancer care is holistic, accessible, and fosters a life lived with health, happiness, and optimism.

Together, through collaboration and compassion, we shall light the path ahead.

Dr Firass Abiad

Minister of Public Health

The Core Team and Committee members

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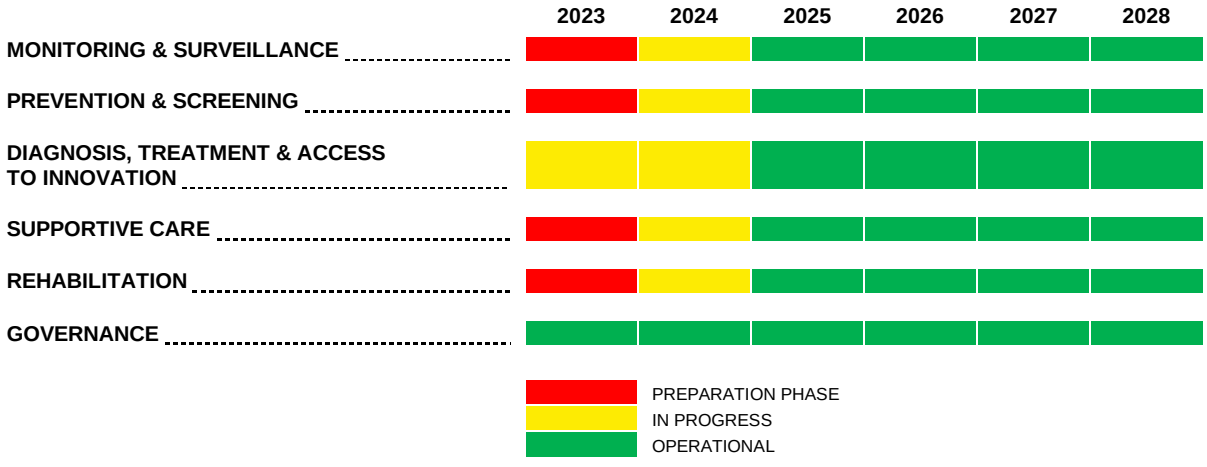
Reasons for a National Cancer Plan

- Increasing incidence
- Poor prevention
- Late diagnosis
- Complexity of treatment options
- Quality of care and patient outcome directly related to multidisciplinary care delivery and adherence to evidence-based guidelines
- Limited access to palliative care
- Increasing cancer care cost
- Longer survival after cancer

Chapters and Timeline



Guiding Principles

The goal of the NCP is to reduce cancer-related morbidity and mortality and improve the quality of life of patients and their caregivers

This plan:

1. Is national and covers private and public practices
2. Proposes concrete and sustainable actions, considering the existing priorities and utilizing available resources in the most cost-effective way
3. Is designed for the next five years, with proposed interventions setting the ground for further development and expansion
4. Promotes equity and accessibility for all
5. Considers quality and evidence-based care delivery
6. Remains in harmony with the socioeconomic and cultural context of the country
7. Adopts a multi-sector approach when applicable
8. Includes at least one research proposition in each chapter (science, epidemiology, health economy, sociology, policy…)
9. Includes qualitative or quantitative performance indicators
10. Prioritizes items to be implemented and time frame as decided by the governance body

•1•

MONITORING AND SURVEILLANCE

1A – Supporting the National Cancer Registry (NCR)

i. The strategic vision of the National Cancer Registry will be developed by the National Cancer Committee which will define its terms of reference. The National Committee will meet periodically to achieve this goal

ii. Comprehensive annual cancer reports will be issued annually with a maximum delay of two years starting 2025. This action requires closing the gaps in the existing reporting system, expanding the current registry and harmonizing data collection tools for all reporting institutions. Sufficient resources will be allocated to ensure implementation.

iii. A collaboration between various sources of data will be implemented to include survival, stage, and mortality indicators in the cancer registry

- A National Mortality Data sharing process will be established between the MOPH and the Ministry of Interior
- Survival analyses will be generated starting 2025, including detailed annual reports on cancer-related deaths

iv. Enhance the partnership with the International Agency for Research on Cancer (IARC) for capacity building and reaching the IARC standards for international publication of the NCR data

1B – Creating a surveillance system for cancer-related risk factors

To establish a longitudinal cohort from the general population ("captive population") for the routine surveillance of socioeconomic, demographic, environmental and behavioral determinants of cancer in Lebanon.

These data will serve to guide preventive programs and policies and evaluate their potential impact. This activity will be implemented in partnership with academic, community and primary care centers

- The National Protocol for captive population will be prepared by the end of 2024
- Resources will be secured by the end of 2025
- Captive population recruitment will begin by the end of 2026
- Annual reports will be available at the beginning of 2027
- The generated data will be made readily available for research purposes

•2•

PREVENTION AND SCREENING

2A – Improving dietary habits and preventing obesity-related cancers

i. Promoting behavioral changes via educational campaigns periodically

ii. Ensuring the implementation of the recently developed legislation on industrial trans-fat elimination in collaboration with other ministries

iii. Reducing sugar consumption through effective taxation of sugar-sweetened foods and beverages

iv. Preparing, disseminating, and ensuring the implementation of nutrition educational material through a collaboration between the MOPH, NGOs and other ministries

2B – Encouraging physical activity

i. Implementing community-wide physical activity campaigns and programs

ii. Train healthcare providers in PHCCs to offer physical activity counseling with referral to physical therapy as needed

2C – Developing a comprehensive anti-smoking strategy

i. Implementing the Lebanese regulation on tobacco (Law 174) in collaboration with the Ministry of Interior
ii. Adding excise taxes on tobacco products
iii. Implementing effective public campaigns raising awareness about the harmful effects of all types of tobacco products (cigarettes, shisha, e-cigarette, vaping) and secondhand smoke exposure
iv. Launching proactive educational programs in schools and universities and engaging youth in peer-to-peer education
v. Launching proactive educational programs in the workplace

2D – Strengthening alcohol control

i. Increasing excise taxes on alcoholic beverages
ii. Enacting and enforcing bans and restrictions on alcohol advertising in various media outlets
iii. Providing brief psychosocial intervention for individuals with hazardous and harmful alcohol consumption
iv. Regulating alcohol access for vulnerable populations such as youth and pregnant women
v. Developing laws against alcohol promotion and sponsorship
vi. Raising awareness about the link between alcohol and cancer

2E – Controlling air pollution, pesticides and other environmental pollutants

i. Raising public awareness about the role of air pollution in causing cancer

ii. Raising awareness about occupational hazards (occupational pesticide and asbestos exposure) and cancer and drafting/amending regulations to limit exposure for individuals at risk

iii. Coordinating with the Ministry of Environment to reduce air pollution caused by electrical generators and factories

iv. Ensuring the implementation of pesticide use regulation in collaboration with the Ministry of Agriculture and the Ministry of Environment

2F – Improving HPV vaccination rates

i. Encouraging the National Immunization Technical Advisory Groups (NITAGs) committee to recommend including HPV vaccination in the national immunization calendar and negotiating competitive pricing to ensure affordable and equitable access

ii. Coordinating with relevant specialties and their scientific societies (obstetrics and gynecology, pediatrics, internal and family medicine) to provide capacity building support for HPV vaccination

2G – Maintaining free access to hepatitis B vaccination

i. Maintaining the current national policy providing free access to hepatitis B vaccination

2H – Expanding the coverage of cervical cancer screening

i. Increasing access to cervical cancer screening to achieve the 70% coverage target set by WHO

- Educating healthcare providers on cervical cancer screening guidelines and encouraging them to offer HPV testing and/or pap smear to sexually active females
- Organizing campaigns to raise public awareness about the importance of cervical cancer screening

ii. Educating adolescents and youth on safe sex behaviors and coordinating with the Ministry of Education and Higher Education to advocate for the integration of safe sex education in school curricula

2I – Strengthening the national breast cancer screening program

i. Assessing the impact and cost-effectiveness of previous national breast cancer awareness and screening campaigns to help inform future campaigns

ii. Assessing the knowledge, attitude, and perception of women regarding breast cancer screening

iii. Addressing barriers for breast cancer screening

- Organizing community-based awareness workshops addressing misconceptions, with a focus on underserved and rural areas
- Advocating for screening mammography coverage by third-party payers

iv. Enhancing quality control for mammography screening via an accreditation program in collaboration with the Lebanese Society of Radiology, which will:

- Conduct periodic surveys to assess the condition and quality of mammography equipment
- Ensure that radiologists and radiology technicians have the required qualifications to perform this task

2J – Improving the uptake of colorectal cancer screening

i. Conducting campaigns to raise public awareness about the risk factors for colorectal cancer and the importance of screening

ii. Advocating for coverage of screening tests (FIT and colonoscopy) by third-party payers

iii. Educating healthcare providers on colorectal cancer screening guidelines

2K – Screening for lung cancer

i. Conducting cost-effective analyses for the use of low-dose computed tomography for lung cancer screening

2L – Screening for prostate cancer

i. Educating healthcare providers on prostate cancer screening recommendations

ii. Raising public awareness about the pros and cons of universal prostate cancer screening

2M –Involving Primary Health Care Centers (PHCCs) in primary prevention

i. Integrating tobacco screening and counseling into routine clinical care in PHCCs. This can be achieved by including tobacco use assessment and documentation in PHENICS (the electronic health record used in PHCCs). Training healthcare providers to offer appropriate counseling, and access to smoking cessation programs and aids

ii. Training healthcare providers to offer physical activity counseling using the 5A technique with documentation in PHENICS

iii. Integrating health education programs on lifestyle risk factors for cancer (obesity, tobacco use, lack of physical activity,

alcohol use, unhealthy diet) in school health programs provided by PHCCs

iv. Providing education of youth and sexually active individuals on safe sex practices

2N – Involving PHCCs in early detection/screening

i. Organizing outreach activities and awareness workshops about the importance of cancer screening interventions and addressing misconceptions

ii. Encouraging healthcare providers to refer eligible women for breast cancer screening

iii. Encouraging healthcare providers to provide cervical cancer screening

iv. Implementing a monitoring and evaluation system at the level of PHCCs to ensure the provision of screening services

2O – Conducting research and cost-effectiveness studies for cancer screening and prevention

i. Building capacity to conduct cost-effectiveness studies of various cancer screening and preventive strategies

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DIAGNOSIS, TREATMENT AND ACCESS TO INNOVATION

3A – Developing conditions for systematic coordination among all healthcare players

i. Setting and defining **Cancer Reference Centers** catering to all regions in Lebanon

- Cancer reference centers can be teaching or university hospitals with clearly identified oncology departments, community hospitals (private or public) and/or clinics highly specialized in the care of cancer patients.
- Defining accreditation criteria for cancer reference centers including the implementation of multidisciplinary tumor boards (MDTs) and adherence to regularly updated treatment protocols, among others
- The reference centers will become the hubs of all regions in Lebanon and will be given special mandates in research and teaching
- Medical protocols, organization and use of technical facilities will be harmonized across all defined reference centers
- Access pathways to reference centers will be defined by the MOPH
- By the end of 2028, all oncological surgeries should be performed by surgeons trained in specific surgical procedures. Specific requisites (minimum number of cases performed per year and quality control criteria) will be set in collaboration with surgical specialties and their scientific societies and in accordance with international standards. Standards for operative reports will be defined.

ii. Ensuring nationwide coverage via **regional oncology networks** coordinating cancer care by 2028

- The plan aims to develop an integrated oncology care network which includes private practices, community centers/institutions and reference centers. The networks aim to provide patients with multidisciplinary care throughout their cancer journey. Special certification and approval processes for oncology networks will be defined. Legal and financial aspects of network coordination will be considered to improve effectiveness and sustainability
- Establishing and implementing eligibility criteria for anticancer therapy preparation and administration
- Expanding the MEDITRACK system to ensure access to anticancer therapy
- Improving access to affordable high-quality generics and biosimilars

iii. Ensuring multidisciplinary and personalized cancer care delivery

- Establishment of cancer-specific MDTs which will meet periodically in reference centers with online access provided to satellites across the regional oncology network The MDT recommendations will inform the decision for drug approval and dispensing by the MOPH
- Time between diagnosis and treatment initiation should be measured. The MDT meetings should not negatively impact this indicator
- The MDT should include at least a surgical oncologist, medical oncologist, radiation oncologist, pathologist and

radiologist. The MDT can also include other healthcare providers (oncology nurse, psychologist, oncology pharmacist, genetic counselor and other specialists as needed)

iv. Improving quality of care through involvement of third-party payers

- Reimbursement criteria will be standardized across all third-party payers to ensure quality of care and equity among citizens. These criteria will be based on updated clinical guidelines published by the MOPH.
- These national clinical cancer guidelines will be based on international cancer guidelines and adapted to the local context considering cost and efficiency

v. Encouraging broad dissemination and generalized implementation of clinical guidelines among healthcare providers and patients

vi. The MOPH, in coordination with cancer reference centers, will disseminate clinical guidelines and provide patient-friendly versions as well

vii. All medical facilities involved in cancer care should meet the standards set by the MOPH

3B – Improving medical diagnostics of cancer patients

i. Establishing an accreditation process for pathology and clinical labs, with specific quality standards established by the MOPH. Accreditation by an international organism such as

ISO 15189, JCI or CAP is a plus and recommended when possible

ii. Standardizing pathology reports among various centers

iii. Identifying reference cancer labs

- Reference laboratories will require accreditation to perform specialized testing including, but not limited to, flow cytometry, cytogenetics and molecular pathology

iv. Establishing laboratory networks between reference laboratories and peripheral laboratories

3C – Improving access to innovative diagnostic and therapeutic tools

i. Improving the quality of oncology-specific imaging facilities

- Establishing an accreditation process for radiology and radiation therapy facilities with specific quality standards established by the MOPH.
- Standardizing imaging reports among various centers
- Establishing training and accreditation for staff working in radiology and radiation therapy facilities

ii. Optimizing radiation therapy facilities to provide treatment in accordance with international standards and guidelines

- Establishing collaboration and cross coverage between various radiation therapy facilities particularly those with a single radiation therapy machine.

3D – Strengthening paramedical training programs through focused training

i. Establishing an accreditation process for oncology pharmacists and technicians involved in chemotherapy preparation, with quality standards established by the MOPH.

ii. Establishing an accreditation process for all oncology nurses working on the Lebanese territory, with specific quality standards established by the Ministry of Public Health

iii. Encouraging the Lebanese Order of Physiotherapists to develop guidelines for cancer rehabilitation and supportive care

3E – Improving care provided to children with cancer through adapted care provision

i. Ensuring that the diagnosis of pediatric cancer in Lebanon is facilitated and accelerated through the establishment of a dedicated care network. This network should be under the direction of the MOPH and work on:

- Gathering data on pediatric cancer from all treating institutions
- Raising public awareness about warning signs of cancer in children
- Raising awareness among primary healthcare workers (pediatricians, family physicians, general practitioners) on early signs and symptoms of specific pediatric cancers (e.g., red reflex examination)
- Organizing targeted campaigns for specific pediatric cancers (e.g., retinoblastoma) and addressing high-risk group screening

ii. Concentrating the care of pediatric cancer in Lebanon: assess all centers treating children with cancer from 0 to 18 years' old

iii. Ensuring free and available high-quality diagnostic work-up in pediatric centers

iv. Ensuring access to medicines recognized as essential for the treatment of pediatric cancer in the national cancer clinical guidelines

v. Implementing a center for diagnosing and treating adolescents and young adults with cancer whether these cancers are encountered in the pediatric or adult population

vi. Preventing and ensuring long-term follow-up of treatment-related side effects, including fertility preservation

vii. Ensuring participation of the main diagnostic and treatment centers in clinical research within an international cooperative group such as the Children Oncology Group (COG) or the European Branch of the International Society of Pediatric Oncology (E-SIOP)

3F – Adapting oncology care to the specific needs of patients aged 70 and older

i. Providing comprehensive assessment of geriatric cancer patients using physical, psychosocial, cognitive, sensory and nutritional assessment tools

ii. Tailoring cancer treatment taking into account frailty and the expectations of geriatric cancer patients and their caregivers

iii. Promoting educational bridges between oncologists and geriatricians

iv. Involving physiotherapists in the evaluation of geriatric cancer patients

v. Promoting clinical research in geriatric cancer

vi. Increasing awareness among the Lebanese public about specific needs of geriatric cancer patients

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SUPPORTIVE CARE

4A – Raising public awareness of palliative care and its integration into routine cancer care

i. Increasing public awareness of palliative care and its benefits on patient's journey

4B – Enabling patient-centered care and shared decision-making: Integrating truth-telling and advanced care planning into cancer care across different care settings

i. Adopting a national culturally appropriate framework/guideline for truth-telling and advanced care planning

ii. Developing a national program on pain management addressing misconceptions among healthcare providers and patients. Facilitating access to opioids

iii. Revising the Lebanese law No. 574 on the *patients' rights and informed consent* and the law No. 240 on the *code of medical ethics* to engage the patient in the process of communication and decision-making

iv. Developing and adopting policies, resources, and tools needed to support the uptake of truth-telling and advanced care planning

v. Investing in training healthcare providers to improve the uptake of truth-telling and advanced care planning

vi. Adopting outcome measures for truth-telling and advanced care planning

4C – Making palliative care available and accessible to all cancer patients. Building capacity of primary care teams and specialist palliative care providers through education, training and continuous professional education

i. Developing and providing palliative care training for all healthcare providers working with cancer patients

ii. Developing and providing specialist palliative care training programs

iii. Integrating palliative care education across all healthcare disciplines in their educational curricula

iv. Integrating palliative care training in medical residency programs

v. Developing palliative care fellowship programs across different university hospitals

vi. Developing palliative care clinical nursing educational programs

vii. Developing accredited post-graduate inter-professional diplomas/certificates in palliative care

viii. Supporting access for healthcare providers to receive palliative care training at specialized centers

ix. Integrating spiritual care into palliative care training programs

x. Allocating budgets for palliative care training by healthcare organizations/donor agencies/national bodies

4D – Making palliative care available and accessible to all cancer patients. Reimbursing palliative care services across different settings

i. Updating & implementing decree 447 on palliative care reimbursement and standards for hospital and home-based palliative care
ii. Establishing palliative care billing codes in the NSSF blue book to ensure alignment of insurance companies for reimbursement
iii. Integrating reimbursement of home-based palliative care across all third-party payers
iv. Developing comprehensive national standards for home-based palliative and hospice care to guide reimbursement of palliative care community services

4E – Making palliative care available and accessible to all cancer patients. Supporting the development of hospital and community-based palliative care services across the country

i. Supporting centers providing cancer care to develop hospital-based palliative care services via integrated consultation team services
ii. Supporting organizations to develop community/home-based palliative and hospice care services

iii. Developing a national framework/guideline to ensure that cancer patients are referred in a timely manner to specialty palliative care services across different settings

iv. Revising training criteria for physicians to become recognized as palliative care physicians (MOPH decree #1048 issued 28 July 2013)

v. Implementing the MOPH (2019) hospital accreditation criteria which include palliative care standards

vi. Encouraging collaboration between oncology and palliative care stakeholders

4F – Promoting palliative care research

i. Identifying research priorities for palliative care (practice-based, education-based and policy-based research priorities)

ii. Financing palliative care research

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REHABILITATION

5A – Addressing social barriers affecting cancer patients

i. Ensuring loan and insurance access for cancer survivors

- Cancer patients should not be discriminated against and should be treated equally with regards to financial transactions, including bank loans
- Cancer patients should not be discriminated against and should be given equal opportunity with regards to healthcare insurance. Healthcare insurance should not exclude coverage of future malignancies
- Healthcare insurance should not exclude coverage for cancer-related rehabilitative services or reconstructive surgeries/ procedures

ii. Ensuring that cancer patients retain their jobs and are allowed to recover

- Cancer patients should not be discriminated against in the workplace. Employers in both public and private sectors should allow for extended sick leave days, with the option for unpaid leave. They should retain healthcare benefits (insurance, NSSF, etc.) that their employer normally provides
- Cancer patients should have equal job opportunities
- The work environment should be adapted to the specific of cancer patients

iii. Helping patients stay at home by developing at-home care and support services

- Ensuring that cancer patients have access to safe and approved home care agencies for optimal nursing and rehabilitation care
- Setting up taskforces that can disseminate information on existing at-home support structures

iv. Encouraging cancer patients and advocacy groups to participate in hospital life by defining the scope of such participation

v. Cancer patients and survivors involved in advocacy work can provide educational and psychosocial support to other cancer patients and their caregivers

vi. Acknowledging and supporting the involvement of volunteers, NGOs and patients' and parents' associations in cancer facilities

vii. Introducing a systematic assessment of cancer treatment on fertility/reproductive health and engaging the discussion with cancer patients

viii. Developing survivorship care plans for remote areas where resources are scarce

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GOVERNANCE

6A – Creating the "Cancer Program" within the MOPH

i. Guiding principles

- Equity and accessibility to all
- Quality and evidence-based care delivery
- Universal coverage for cancer screening
- Adoption of a multi-sectoral approach to cancer care delivery
- Leveraging public-private partnerships for the NCP implementation
- Taking concrete and sustainable actions considering the existing priorities utilizing the available resources in the most cost-effective way possible and in harmony with the socioeconomic and cultural context

ii. Governance structure

- Currently the MOPH does not have a Cancer Program. It only has a National Cancer Committee, composed of clinicians, who review files submitted by treating physicians for medication access/coverage pre-approval
- The following governance structure for the NCP is proposed:
  - Establishing by a Ministerial decree a Cancer Program at the MOPH
  - The staff of the Cancer Program should include: a medical doctor (preferably oncologist, Public Health degree is an asset), a clinical pharmacist, a public

health officer and an administrative assistant. Consultants in epidemiology, statistics, health education etc. may be recruited as needed

iii. The Cancer Program can be initially supported by external sponsors until a clear budget allocation is included in the MOPH's financial planning.

iv. The Cancer Program implementation is supported by three committees:

- The health technology assessment (HTA) program team whose establishment is under progress under the MOPH
- The National Cancer committee in charge of the implementation of the NCP under the MOPH. This committee would be the precursor of the future national cancer institute
- The inter-ministerial cancer committee which includes in addition to the MOPH, Ministries of Social Affairs, Labor, Defense, Education, Trade and Commerce, Youth and Sports, Finances and Environment, as well as the "National Council for Scientific Research" (CNRS), the Central Agency for Statistics (CAS) and the Directorate of Civil Affairs (Ministry of Interior). This committee mainly facilitates Inter-ministerial cooperation and collaboration for implementing national policies

6B – Guiding the implementation of the National Cancer Plan with health technology assessment (HTA)

i. Continuously evaluating cancer treatment efficacy, toxicity and cost in order to provide high-quality cost-effective care

ii. Implementing managed entry agreements (MEA) post-HTA to address clinical and financial uncertainties

6C – Inviting all Lebanese healthcare organizations and societies to refer to the National Cancer Plan

i. All initiatives aimed at improving cancer patient care should be in line with the National Cancer Plan

ii. Specific protocols and accreditation standards should match the National Cancer Plan