Attachment … of the Order …
of the Minister of Health,
… 2025

CANCER PREVENTION AND CONTROL PROGRAM

2025-2028

Ulaanbaatar
2025

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ABBREVIATIONS

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AFP	alpha-fetoprotein
AGH	aimag general hospitals
BIRADs	breast imaging reporting and data system
CCHD	Capital City Health Department
CHD	Center for Health Development
DORC	Department of Radiation Control
FSCH	First State Central Hospital
GPA	General Police Agency
HBV	hepatitis B virus
HIGA	Health Insurance General Agency
NCPH	National Center for Public Health
HCV	hepatitis C virus
HPV	human papilloma virus
IAEA	International Atomic Energy Agency
IARC	International Agency for Reseach on Cancer
IMRT	intensity modulated radiation therapy
MMDCRA	Medicines and Medical Devices Control and Regulation Agency
MED	Ministry of Economic Development
MOES	Ministry of Education and Science
MOF	Ministry of Finance
MOFALI	Ministry of Food, Agriculture and Light Industries
MOH	Ministry of Health
MOJHA	Ministry of Justice and Home Affairs
MOMHI	Ministry of Mining and Heavy Industries
NCC	National Cancer Center
NCDs	noncommunicable diseases
NCMCH	National Center for Maternal and Child Health
NCP	National Center for Pathology
NCTM	National Center for Transfusion Medicine
NEC	Nuclear Energy Commission
NMSU	National Medical Sciences University
PCR	polymerase chain reaction
RADS	reactive airways dysfunction syndrome
RDTC	regional diagnostic and treatment center
SBRT	stereotactic body radiation therapy
SSCH	Second State Central Hospital
TSCH	Third State Central Hospital
UN	United Nations
UNICEF	United Nations Chidlren’s Fund
VMAT	volumetric modulated arc therapy
WHO	Wordl Health Organization

ONE. RATIONALE

1.1 CANCER SITUATION WORLDWIDE

Noncommunicable diseases (NCDs), caused by lifestyle factors, account for 70 percent of all deaths worldwide. Out of more than 15 million deaths caused by NCDs, 4.5 million occure due to cancer. Cancer accounts for 30 percent of total premature deaths among 30-69-year old, caused by NCDs.

The International Agency for Research on Cancer (IARC) reports that more than 20 million people had cancer, and 9.7 million people died, because of cancer, in 2022. Lung cancer, colorectal cancer, and stomach cancer are leading causes of cancer incidence and mortality.

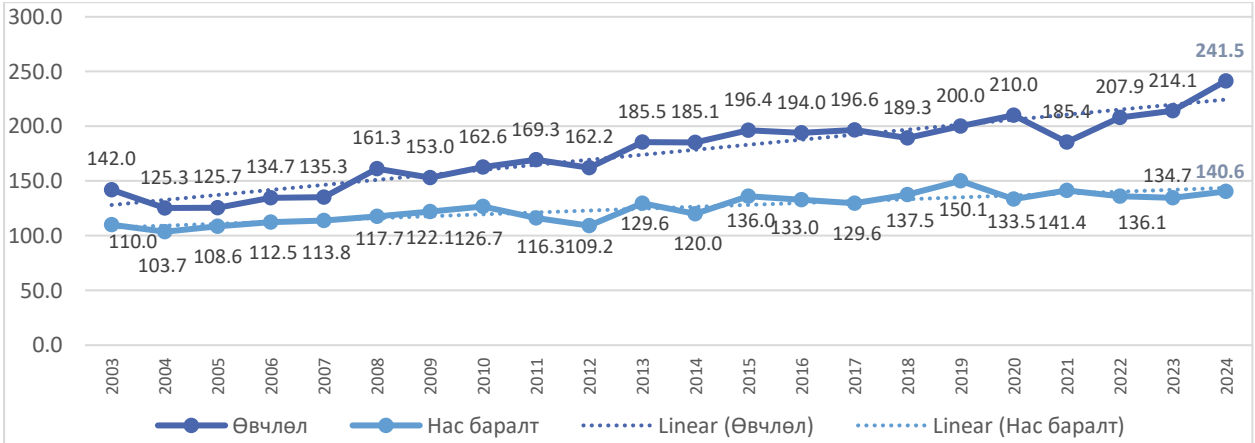
The World Health Organization (WHO) recommends to its member countries that defining population risk factors and implementing effective measures to reduce them can prevent cancer incidence by 50 percent. For instance, some countries were able to significantly reduce incidence and mortality due to lung cancer within 20-30 years of implementing effective and consistent measures against its main risk factor - tobacco smoking. Developed countres implemented successful measures against viral infections that cause cancer, and were able to significantly reduce incidence of liver, stomach and cervical cancer. However, cancer mortality tends to constantly increase in low income countries.

1.2 CANCER SITUATION IN MONGOLIA

In average, Mongolia registers annually more than 6,000 new cases of cancer, and more than 4,000 people with cancer die in a year. In comparison with other countries, Mongolia is among 50 countries with higher incidence of cancer, and has world's highest mortality, caused by cancer.

Cancer incidence tends to constantly increase, and incidence per 100,000 population increased 1.4 times, compared to 2014. Cancer mortality is slightly decreasing from 2019.

Cancer incidence and mortality rates, per 100,000 population, 2004-2024

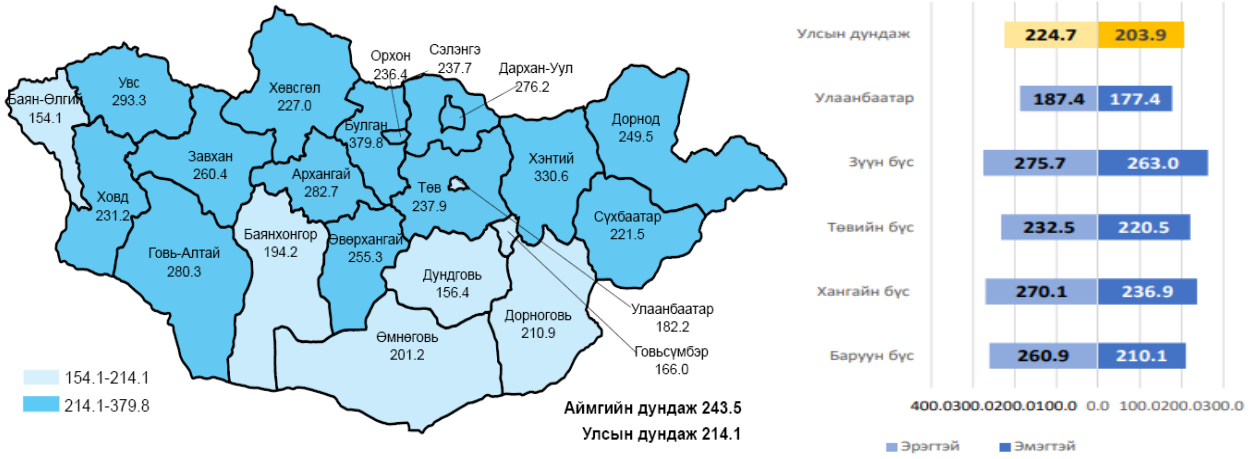


Males account for the majority of cancer incidence, and 1 of every 3 men has a cancer during their lifetime. Among population under 75, the risk of having cancer is 28.4 percent (35.6 percent for males, 23.4 percent for females).

In last ten years, liver cancer accounted for 36 percent, stomach cancer for 15 percent, lung cancer for 8 percent, cervical cancer for 7 percent, esophagus cancer for 6 percent, and breast and colorectal cancer for 4 percent, respectiveliy, of overall cancer incidence and mortality among population.

If compare aimags (provinces), Bulgan aimag has the highest rate of cancer incidence with 379.8 per 100,000 population, and Bayan-Ulgii aimag has the lowest with 154.1 per 100,000 population.

Cancer incidence per 100,000 population, by aimags and regions, 2023



If compare incidence of cancer in 2023 with 2019, there is a positive trend – proportion of cancer detected at late stages reduced by 7 percent and reached 65 percent. However, proportion of cancer detected at early stages is still low, if compare with other countries.

In average, 29.4 percent of cancer detected at early stages, and 70.6 percent detected at late stages, in last 5 years. For instance, 80 percent of lung cancer, 80 percent of esophagus cancer, 75 percent of stomach cancer, and 78 percent of colorectal cancer detected at late stages.

The Government of Mongolia is implementing cancer screening and early detection programs from 2012, and as result, 58 percent of breast cancer, and 53 percent of cervical cancer detected at early stages.

As of 2023, proportion of cancer patients with 1-year survival is 14 percent, with 1-3 years survival is 21 percent, with 4-5 years survival is 16 percent, and with 5-year survival is 43 percent, after initial detection.

The 5-year survival rate is one of important indicators for measuring quality and accessibility of cancer care and services. In last ten years, this indicator increased by 14 percent, and proportion of cancer patients with 5-year survival rate reached 43 percent in 2023. However, it's still lower in comparision with the wordlwide average.

Childhood Cancer Situation

Annually, approximately 400,000,000 children diagnosed with cancer worldwide. More than 80 percent of childhood cancers are cured in developed countries, and less than 30 percent are cured in low-and middle-income countries. Such a disproportionate difference results from unequal access to cancer diagnostic and treatment, availability of quality-assured cancer medicines at the market, and capacity of health service providers. Globally, in relation to childhood cancer incidence rate, Mongolia placed at 151, and for childhood cancer mortality rate at 113, among 185 countries listed. The childhood cancer mortality in Mongolia is among the lowest in the Western Pacific region, and among the highest in the Eastern Asia.

In 2024, 148 children of age 0-19 are diagnosed with cancer, and 66 children died, because of cancer. Among childhood cancers, leukemia and lymphatic cancer account for 49 percent, brain and spinal cord tumor for 18 percent, bone, cartilage and soft tissue cancer for 9 percent, kidney cancer for 5 percent, and other cancers for the remaining proportion of all cases.

Trends in Cancer Incidence

The total population in Mongolia increased 3.5 times, from 1 million in 1962 to 3.5 million in 2023. It is projected that the total population will increase to 5 million by 2050, and people of age over 60 will increase 3.5 times, compared with 2023. In other words, ageing of the population will lead to bigger proportion of people with higher risk of cancer.

The IARC, based on population trends, estimates that by 2050, overall cancer incidence in Mongolia will increase 2.5 times. For instance, esophagus cancer estimated to increase 3.3 times, lung cancer 2.8 times, liver cancer 2.6 times, stomach cancer 2.5 times, colorectal cancer 2.6 times, cervical cancer 1.8 times, and breast cancer 1.7 times.

1.3 Global Policies on Cancer Prevention and Control

Even though cancer incidence and mortality are increasing worldwide, it is estimated that more than 50 percent of cancer could be prevented, and accordingly, countries worldwide are prioritizing implementation of comprehensive cancer prevention and control policies.

In the 21st century, cancer regarded as one of main factors that negatively affects overall human development and economic growth. The United Nations (UN), and the WHO are implementing following policies to prevent and control cancer.

- The Political Declaration of the High-Level Meeting of the UN General Assembly on the Prevention and Control of Noncommunicable Diseases, adopted by Heads of State and Government in September 2011.
- The Global Action Plan for the Prevention and Control of Noncommunicable Disease 2013-2020, approved by the WHO in 2012.
- The Sustainable Development Goals 2030, approved and adopted by Heads of State and Government as 70th Resolution of the UN General Assembly in 2015.

The target 3.4 proritises improving cancer control, and access to nursing and palliative care for children and elderly, to ensure universal access to health.

The WHO proposed and is implementing following initiatives to fulfill its obligations and improve cancer prevention and control.

- The Cervical Cancer Elimination Initative, launched in 2020, which aims to reduce number of new cases of cervical cancer per 100,000 population to 4; to increase coverage of immunization against human papilloma virus (HPV) to 90 percent; and to increase coverage of screening programs to 90 percent.
- The Global Initiative for Childhood Cancer, launched in 2020, which aims to reach at least a 60% survival rate for children with cancer by 2030.
- The Global Patform to Improve Access to Childhood Cancer Medicines, launched in 2021, which aims to provide five-year uninterrupted supply of quality-assured cancer medicines to low- and middle-income countries.
- The Global Breast Cancer Initiative, launched in 2021, aiming to reduce breast cancer mortality rates by 2.5 percent per year, which could prevent 2.5 million deaths by 2040.

1.4 Cancer Prevention and Control Policies and Implementation in Mongolia

Mongolia approved and implemented following policy documents on cancer prevention and control since 1997.

Implementation period	Name of the document	Resolution or order that approved the document
1997-2005	Cancer Control Program	Government Resolution No. 80, 26 March 1997
2006-2013	National Program on Prevention and Control of Noncommunicable Diseases	Government Resolution No.246, 2005
2011-2021	Action Plan on Cancer Prevention and Control	Approved by the Vice Minister of Health, Chair of the Steering Committee of the National Subprogram on Cancer Prevention and Control, 26 May 2011
2008-2013	National Subprogram on Cancer Prevention and Control	Minister of Health Order No.201, 2006
2014-2015	Second National Program on Prevention and Control of Diseases Caused, by Unhealthy Lifestyle	Government Resolution No.34, 2014
2014-2015	Strategic Plan for Early Detection of Liver Cancer	Minister of Health Order No.183, 2014 (annulled)
2015-2020	National Subprogram on Cancer Prevention and Control	Minister of Health Order No.412, 2014 (annulled)
2017-2021	National Program on Prevention and Control of Noncommunicable Diseases	Government Resolution No. 289, 2017

2020-2024	Childhood Cancer Program	Minister of Health Order No. A/201, 2021
2021-2024	Plan of Action Against Cancer	Minister of Health Order No. A/360, 2021
2024-2029	The Global Patform to Improve Access to Childhood Cancer Medicines	Minister of Health Order No. A/152, 2023

The Mongolia Millenium Challenge Corporation funded project on prevention of NCDs and injuries, which covered prevention of some cancers,[1] implemented in 2009-2013; and the Austrian Government funded project, started in 2020, that provided equipment and capacity building, contributed significantly for implementation of above-mentioned policies and programs. For instance, the Austrian Government funded project supported investment and introduction of linear accelerators, 3-dimensional conformal radiotherapy, intensity modulated radiation therapy (IMRT), volumetric modulated arc therapy (VMAT), and stereotactic body radiation therapy (SBRT). The WHO, the United Nations Children's Fund (UNICEF) and the St. Jude Children's Research Hospital are jointly providing for five years (2025-2029) 35 types of essential medicines for treatment of childhood cancer, free of charge, as part of the Global Platform to Improve Access to Childhood Cancer Medicines.

The Governmnet of Mongolia achieved following results by implementing above-mentioned programs and actions in last 20 years:

- Decrease in cancer mortality by 0.8 per mille from 13.8 in 2019 to 12.8 in 2023;
- Increase in proportion of cancer detected at early stages from 78.3 percent in 2007 to 67.7 percent in 2023;
- Increase in proportion of cancer patients with 5-year survival to 43.3 percent; and
- Increase in number of health care organizations that conduct cancer chemo and target therapy.

However, high usage of alcohol and tobacco smoking among population, air pollution, unhealthy diet, urbanization, physical inactivity, and overweight and obesity are increasing the risk for cancer.

Lack of capacity of health care organizations at local level leads to the overflow of people to the National Cancer Center (NCC), and results in long waiting lists and time to get cancer care and services.

Accordingly, there is need to implement this program to increase access to cancer care, and in particular, to improve cancer prevention, screening and early detection, diagnostic and treatment, and expand participation of individuals, families and inter-sector collaboration in cancer prevention and control.

[1] Cervical and breast cancer.

TWO. VISION, GOAL AND OBJECTIVES OF THE PROGRAM

2.1 Vision:

To decrease cancer incidence and mortality, and contribute for increase in average life expectancy of Mongolian people.

2.2 Goal:

To improve cancer prevention and early detection, and quality and accessibility of cancer care and services.

2.3 Objectives:

Following objecties are set within the program's goal:

1. To activate measures for primary prevention of cancer among population;
2. To expand early detection and diagnostic of cancer;
3. To increase access to cancer diagnostic and treatment;
4. To improve quality and access to cancer rehabilition, and palliative care;
5. To improve quality of cancer registration and information, and expand cancer research; and
6. To strengphen capacity of human resources for cancer care.

Within the objectives, actions for prevention and control of following most common seven cancers - liver, stomach, esophagus, colorectal, lung, breast, and cervix - are described as separate chapters.

2.4 Main principles:

The principle of 'providing citizen-centered health care and services for the population' shall be followed during implementation of the program, including:

1. The promise 'leave no one behind' of the Agenda for the Sustainable Development and its Sustainable Development Goals;
2. The WHO recommendation for its member countries to achieve universal health coverage – meaning that all people have access to the full range of quality health services they need, without burdening financial risk;
3. To introduce innovative and progressive technologies into health care and services;
4. To promote participation of citizen and nongovernmental organizations;
5. To ensure unified and coordinated management, and inter-sector collaboration, based on the win-win principle;
6. To expand partnerships with international organizations; and
7. To ensure financial efficiency and effectiveness.

THREE. ACTIONS TO IMPLEMENT THE PROGRAM OBJECTIVES

3.1 Objective 1. To activate measures for primary prevention of cancer among population

The WHO recommends that by defining population risk factors and implementing effective measures to reduce them, its possible to prevent and reduce cancer incidence by 50 percent.

The Fourth National STEPS Survey on the Prevalence of Noncommunicable Diseases and Injury, conducted in 2018, assessed risk factors, such as regular daily tobacco smoking, eating less than 5 portions of fresh fruits and vegetables, physical inactivity, overweight and obesity, and arterial hypertension. The survey revealed that only 3.9 percent of population has no risk of NCDs, while 22.7 percent of population has high or three and more risks of NCDs combined.

Therefore, the primary prevention of cancer, including surveillance of cancer risk factors and measures to reduce them, and promoting healthy behavior and lifestyle among population, is crucial.

Priority areas	Actions to be implemented
1. Reducing cancer risk factors	1. Regular check ups of people with high risk of cancer at family and soum health centers
	2. Organize nationwide information and communication to reduce risk factors, such as alcohol use, tobacco smoking, and overweight and physical inactivity
	3. Organize advocacy on importance of reducing risk factors among population for policy and decision makers
	4. Improve legal environment for reducing risk factors
2. Expand actions against preventable cancers	1. Immunization against human papilloma virus (HPV)
	2. Enroll risky groups of population (health service providers, students of medical colleges, military and police personnel and etc.) in immunization against hepatitis B
	3. Expand voluntary immunization against hepatitis B

Expected results:

- Improved legal environment to reduce cancer risk factors among population.
- Improved check ups and monitoring of people with high risk of cancer at family and soum health centers.
- 90 percent of target groups of population immunized against HPV.
- More that 80 percent of target groups of population immunized against hepatitis B.

3.2 Objective 2. To enroll at least 50 percent of target groups of population in early detection, and expand diagnostic of cancer

Early detection program is a continuous process that enables target groups to come, get examination and testing, recalled, and receive full diagnostic and treatment, if necessary.

Early detection is a system to detect cancer among relatively healthy unsymptomatic population at early stages, using simple, specific, and cost-effective testing methods. Early detection of cancer enables possibility for cure, and prolonging lifespan of affected people.

Early detection aims to reduce number and proportion of cancer detected at late stages, and has significant role in early detection and cure of patients with breast, cervical, and colorectal cancer.

Properly conducted early detection and diagnosis of cancer allows saving of 61 percent of expenses used for treatment of patients detected at late stages, and accordingly, have positive socio-economic impact.

Priority areas	Actions to be implemented
1. Step by step organize early detection and diagnosis of cancer nationwide, and improve capacity for early diagnostic	1. Establish sustainable system for early detection of cancer among target groups, considering their age and associated risks
	2. Organize early detection of cancer at local level, using regional approach
	3. Train medical personnel (radiologists and technicians) on early detection and diagnosis
	4. Conduct information and communication for the population on importance and availability of early detection programs
	5. Ensure provision and availability of necessary diagnostic equipment, reagents and tests for early detection
	6. Improve information technology and software for early detection and diagnosis, and enable information and data sharing

Expected results:

- System for early detection and diagnosis of most common seven cancers established, and capacity of health care organizations improved.
- At least 50 percent of target groups covered by early detection programs.
- People regularly and consistently enrolled in early detection programs.

3.3 Objective 3. To decentralize cancer care and services, and to increase access to cancer diagnostic and treatment

In last years, there is ongoing intensive introduction of modern methods and technologies in cancer diagnostic and treatment, and accordingly, improvement in quality of cancer care. For instance, progressive methods, such as rehabilitation surgeries for stomach, esophagus and breast cancers, minimally invasive

laparoscopic surgeries for liver cancer, vascular access for chemotherapy, linear accelerators for radiation therapy, 3-dimensional conformal radiation therapy, intensity modulated radiation therapy (IMRT), volumetric modulated arc therapy (VMAT), and stereotactic body radiation therapy (SBRT) have been introduced.

Introduction of progressive methods into the care and services led to the slight decrease in proportion of cancer patients with less than 1-year survival after detection from 67.1 percent in 2018 to 66 percent in 2023; and to the decrease in proportion of cancers detected at late or III and IV stages from 78.3 percent to 65.0 precent. In addition, proportion of cancer patients with 5-year survival increased from 39 percent in 2020 to 43 percent in 2023.

In 2007, only the NCC was providing chemo and target therapy. In 2023, there is possibility to get chemo and target therapy at the local level, and in total 26 health care organizations (NCC, 2 specialized hospitals, 5 district general hospitals, 13 aimag general hospitals, and 5 private hospitals) are providing chemotherapy, and 17 health care organizations (NCC, 2 specialized hospitals, 3 district general hospitals, 6 aimag general hospitals) are providing target therapy.

Even though there are positive trends in improving access to care and services, on the other side, the cancer incidence is increasing; proportion of cancer detected at late stages is not decreasing significantly; flow of patients to the NCC that need diagnostic, surgeries, and rehabilitation, is steadily increasing, leading to the over centralization of care, and long waiting lists and time for obtaining both out-and-inpatient cancer services.

Therefore, there is need to expand cancer care and services, and improve human resource capacity and equipment.

Priority areas	Actions to be implemented
1. Introduce modern and progressive technologies into cancer diagnostic	1. Introduce molecular genetic diagnostic
	2. Expand mutation testing for directing the target therapy
	3. Introduce genetic testing for detection and diagnostic of inherited cancer risk
	4. Improve capacity of imaging diagnostic at the local level
	5. Introduce new technologies to improve pathology
2. Establish information technology system to monitor diagnostic quality	1. Introduce distant online monitoring and evaluation of imaging and pathology testing results
	2. Establish tissue bank
3. Introduce effective minimally invasive surgical methods into treatment of cancer	1. Introduce new technologies into cancer surgery
	2. Expand organ saving surgeries
	3. Expand cancer rehabilitation

	4. Complete preparations for use of radioactive substances in cancer diagnostic and treatment
	5. Uprade and develop new clinical guidelines and standard protocols for most common cancers
	6. Strengphen capacity of human resources for cancer surgeries
4. Decentralize and improve access to cancer care and services	1. Define and implement regional approach for provision of cancer care and services in aimags, and in the capital city
	2. Establish teams of cancer specialists that will support capacity building at the regional and aimag level
5. Improve quality and increase access to radiation therapy, expand methods of radiation that used in combination with other types of cancer treatments	1. Introduce new technologies into radiation therapy (stereotactic radiosurgery, 4-dimensional computed tomography-based ventilation imaging into intensity-modulated radiation therapy, interstitial radiation therapy, total body irradiation)
	2. Expand methods of radiation therapy that used in combination with other methods of cancer therapy (neoadjuvant therapy, adaptive radiation therapy, palliative radiation)
	3. Prolong radiation therapy in combination with chemo and target therapy for blood and occupational cancers
6. Increase types and access to systemic treatment of cancer	1. Introduce new modern methods into chemotherapy
	2. Introduce stem cell therapy, and bone marrow transplantation
	3. Increase types and access to combined surgical and radiation treatments
	4. Improve quality and safety of chemotherapy
7. Improve quality of services and capacity of the NCC	1. Complete preparations for implementing the project to establish National Cancer Center -2

Expected results:

- Capacity of health care organizations in provision of specialized cancer services by multidisciplinary specialist teams established.
- New diagnostic and treatment equipment and technologies introduced into cancer care and services.
- Capacity of human resources that provide cancer care improved.
- Waiting lists and time for accessing cancer care and services decreased.

3.4 Objective 4. To improve quality and access to cancer rehabilition, and palliative care

Cancer rehabilitation is type of care that helps people with cancer to maintain or restore function and integrate into social life, and is combined with cancer specific therapies. Cancer rehabilitation helps to prevent and reduce side effects and other changes caused by cancer and cancer treatment, and to restore ability to work. Cancer rehabilitation employs and combines different methods such as psychologic counselling, psychotherapy, physical exercise, speech recovery, different methods of physiotherapy and etc.

Cancer palliative care includes psychologic counselling, support, pain relief and management, nursing, training, and social services. It is a comprehensive care, which combines physical, psychologic, social and faith-based services, and aims to improve quality of life and support patients with incurable cancer at early and late stages, and support their families and care givers.

In Mongolia, the first palliative care unit was established in 2000 at the NCC with ten inpatient beds, 2 doctors, and 5 nurses. Currently, there are palliative care departments in all aimag and district general hospitals with total 199 inpatient beds.

As of 2022, there are 39 public and 6 private health care organizations that have contracts with the Health Insurance General Agency for provision of palliative care.

The ‘Green Ger’ center that provides psychologic support for the people with cancer was established under the NCC in 2022. In 2023, this center that operates with three staff – dietitian, psychologist, and social worker – provided nutrition related consultations for more than 3,000 people, psychologic counselling and psychotherapy for 370 people, and social worker’s support for 1,600 people.

However, there is need to improve awareness of people and access to cancer rehabilitation, and to provide palliative care for all people with cancer that require it.

Priority areas	Actions to be implemented
1. Provision of comprehensive rehabilitation for people with cancer	1. To provide comprehensive cancer rehabilitation, including psycologic counselling, psychotherapy, physical exercise, speech recovery and physiotherapy, pre-and post chemo, radiation and surgical therapy
2. Improve quality and access to palliative care	1. Establish possibility for and improve capacity for palliative care specialists (palliative care doctor, nurse, social worker, psychologist and etc.) to work in a team
	2. Increase accessibility of childhood cancer palliative care
	3. Expand availability of nonmedical palliatve care for childhood cancer (cultural events, interaction with pets and other animals, and etc.)

	4. Expand training and counselling for families and caregivers of people with cancer
	5. Expand and promote programs for cancer survivors

Expected results: Increased number of entties that provide rehabilitation and palliative care for cancer patients, and expanded community-based care and services.

3.5 Objective 5. To improve quality of cancer registration and information, and expand cancer research

There are many new methods and technologies being introduced into cancer diagnostic and treatment. However, there is need to establish system for evaluating impacts of these technologies, considering their results and cost effectiveness, since the evidence-based data to disseminate to health policy and decision makers, as well as patienst and their families is lacking.

Priority areas	Actions to be implemented
1. Improve system for cancer registry and surveillance	1. Upgrade national cancer resistry program, CanReg-Mon, to international standards
	2. Create dashboard for real-time sharing and exchange of information between cancer registry and early detection registry
	3. Improve quality of cancer registry and information, including capacity of human resources and equipment at health care organizations
	4. Increase number of channels to disseminate cancer statistics and information
2. Expand cancer research	1. Expand tissue bank of most common cancers
	2. Expand molecular-genetic research of cancer
	3. Expand molecular epidemiologic research
	4. Expand clinical trials
	5. Establish unified data base for national research on cancer risk factors, causes, diagnostic and treatment

Expected results:

- Cancer registry and information system upgraded to present time requirements, and possibility for health organizatons to share infomation and avoid duplication, established.
- Cancer research expanded.
- Evidence-based decision making improved.

3.6 Objective 6. To strengphen capacity of human resources for cancer care

As of 2023, in total 66.3 thousand staff are working for the health sector. If compare with the previous ten years average, the total number increased by 11.8 thousand.

The 2023 statistics show that the number of cancer doctors per 10,000 people is 0.3 (India 0.01, Turkey 0.07, Korea 0.11, China 0.18, Poland 0.21, Russia 0.4, Japan 0.9, and USA 1.6). [2]

Priority areas	Actions to be implemented
1. Train doctors and other medical personnel in some cancer specialties	1. Include required specialty indexes into the registry list of specialists
	2. Build capacity of cancer doctors and other medical personnel through long-and short - term training abroad
	3. Conduct on the job training for national cancer doctors and other medical personnel by inviting high-level foreign specialists
	4. Make relevant revisions into the training curricula of medical colleges and universities
2. Build capacity of primary health care centers, and aimag and district general hospitals on cancer care	1. Train and improve capacity of doctors and other medical personnel at aimag and district general hospitals
	2. Train and improve capacity of doctors and other medical personnel at primary health care centers on early detection and diagnostic of cancer
	3. Train master trainers on cancer issues among people from nongovernmental organizations and communities

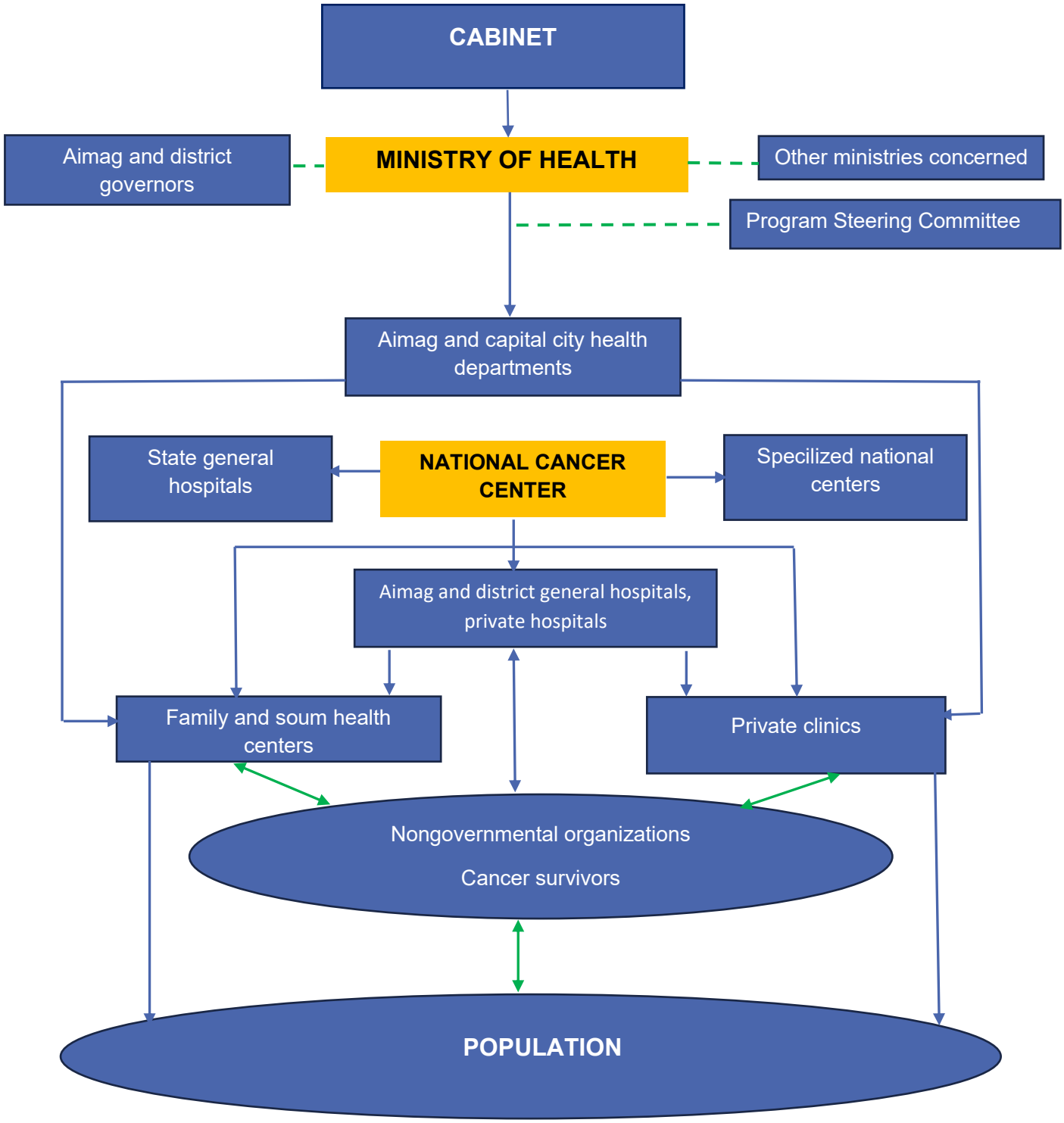
Expected results:

- Specialists required for provision of cancer care and services trained, and capacity of human resources improved.
- System for provision of cancer care and services at the local level established.

[2] Statista 20246 Jenny Yang Now30.2023

FOUR. PROGRAM MANAGEMENT AND ORGANIZATION

4.1 Program management and organization



4.2 Program financing:

The program shall be financed from following sources:

1. State and local budget;
2. Health Insurance Fund;
3. Health Promotion Fund;
4. Programs and projects funded by international partners;
5. Grants and donations from donor countries, foreign and national nongovernmental organizations, business entities, and citizen; and
6. Other sources.

4.3 Program duration, monitoring and evaluation:

The program shall be implemented in 2025-2028. The NCC shall compile annual reports on the program implementation, and introduce to the Program Steering Committee. The Ministry of Health (MOH) shall conduct monitoring and evaluation of the program in 2026, and final evaluation in first quarter of 2029.

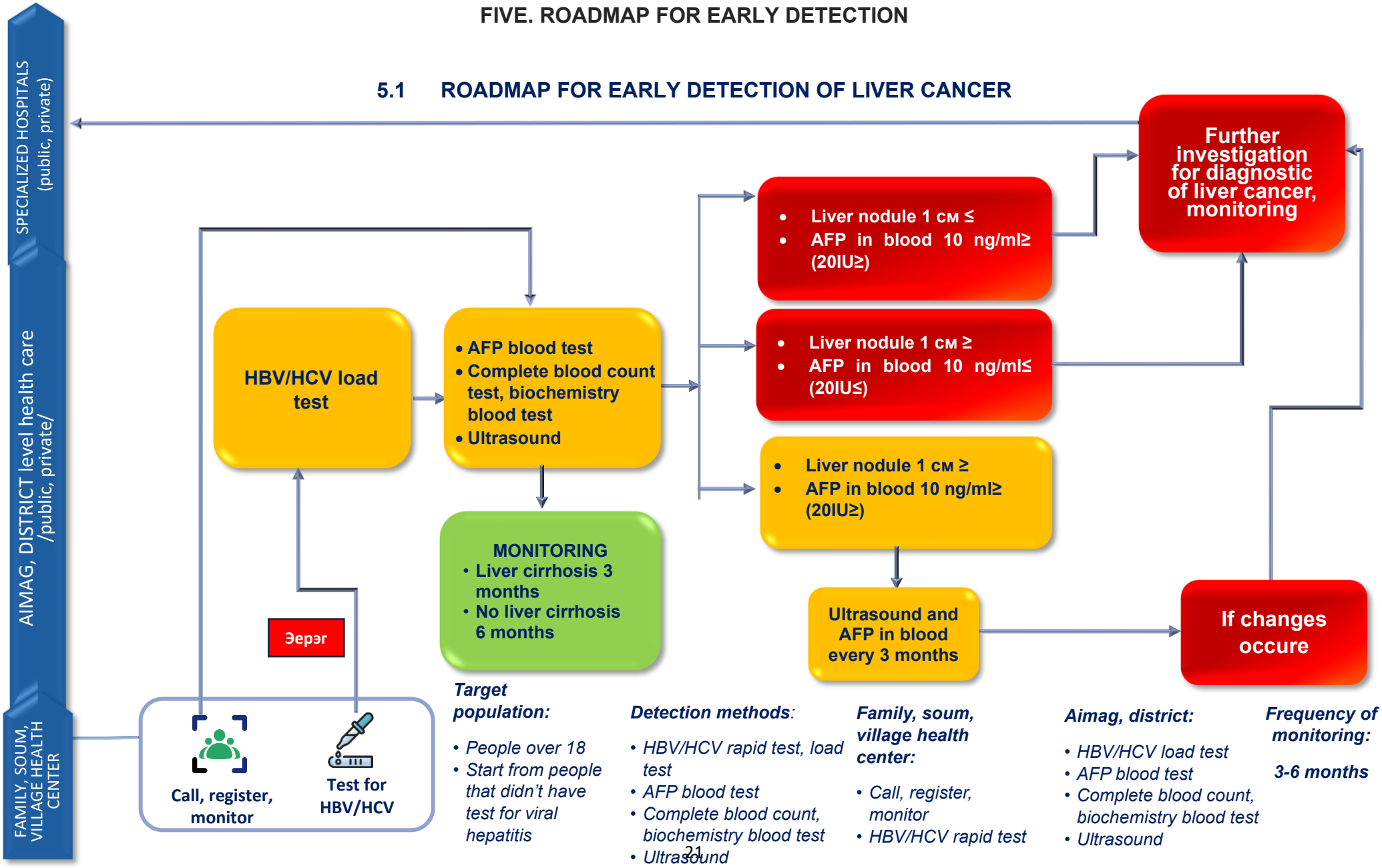
The program's monitoring and evaluation could be conducted by an independent institution.

Target Indicators for evaluation of the program implementation

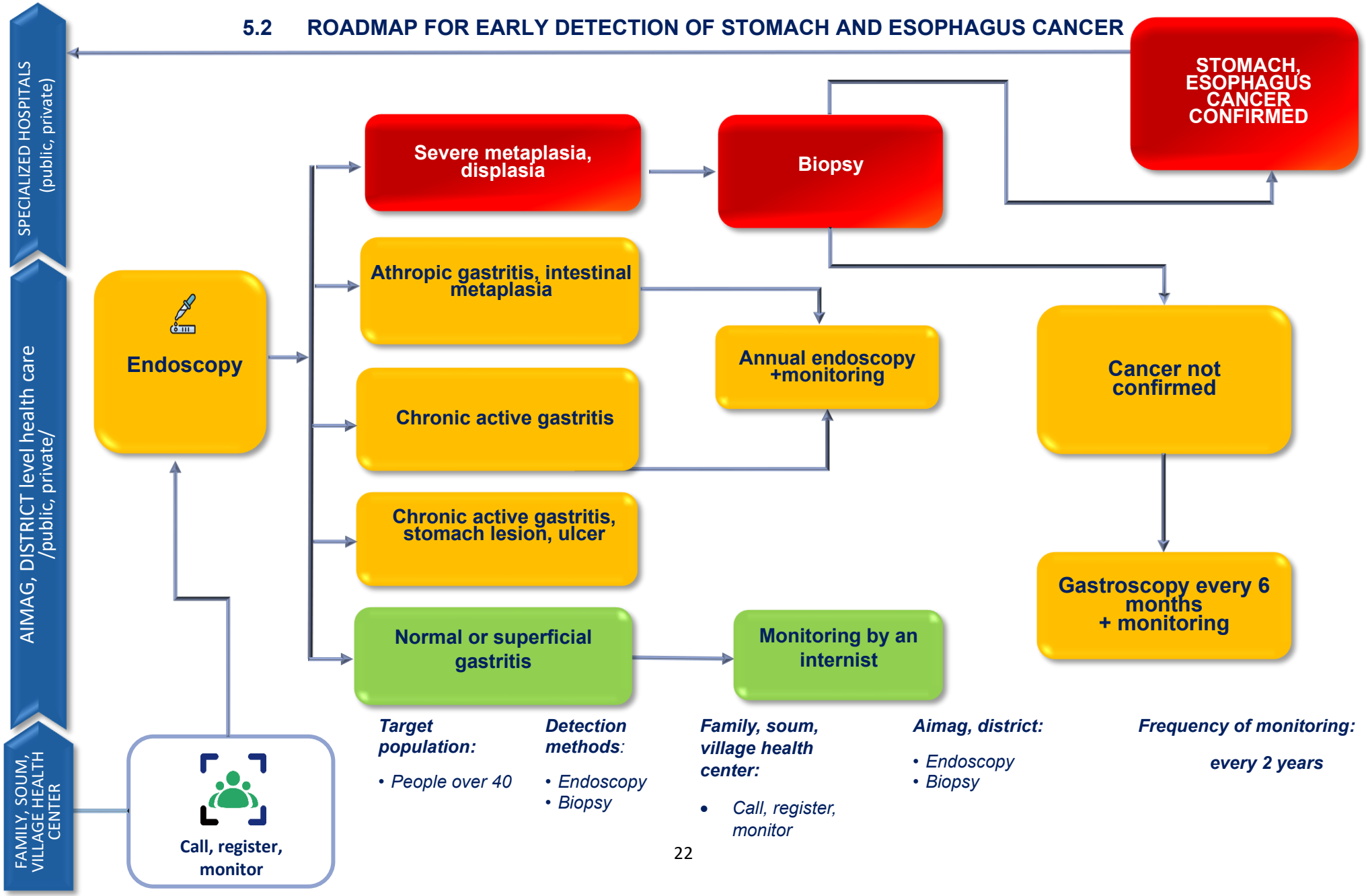
#	Indicator	Baseline	Target		Source of information
			2026 он	2028 он	
1.	Proportion of target groups of people enrolled in early detection programs		≥34.2	≥54.2	Health statistics
	Liver cancer		≥30	≥50	
	Stomach cancer		≥30	≥50	
	Esophagus cancer		≥30	≥50	
	Colorectal cancer		≥30	≥50	
	Breast cancer		≥50	≥70	
	Cervix uteri cancer	38.6%	≥50	≥70	
	Lung cancer		≥20	≥40	
2.	Number of aimag and district general hospitals that have capacity for provision of cancer surgery	-	6	8	NCC's registry and reports
3.	Proportion of cancer patients with 5-year survival after initial diagnosis				NCC's registry and reports
	Liver cancer	19.4	Increased at least 5 percent, compared to the baseline		
	Breast cancer	38.8	Increased at least 5 percent, compared to the baseline		
	Cervix uteri cancer	45.8	Increased at least 5 percent, compared to the baseline		
	Stomach cancer	27.3	Increased at least 5 percent, compared to the baseline		

FIVE. ROADMAP FOR EARLY DETECTION

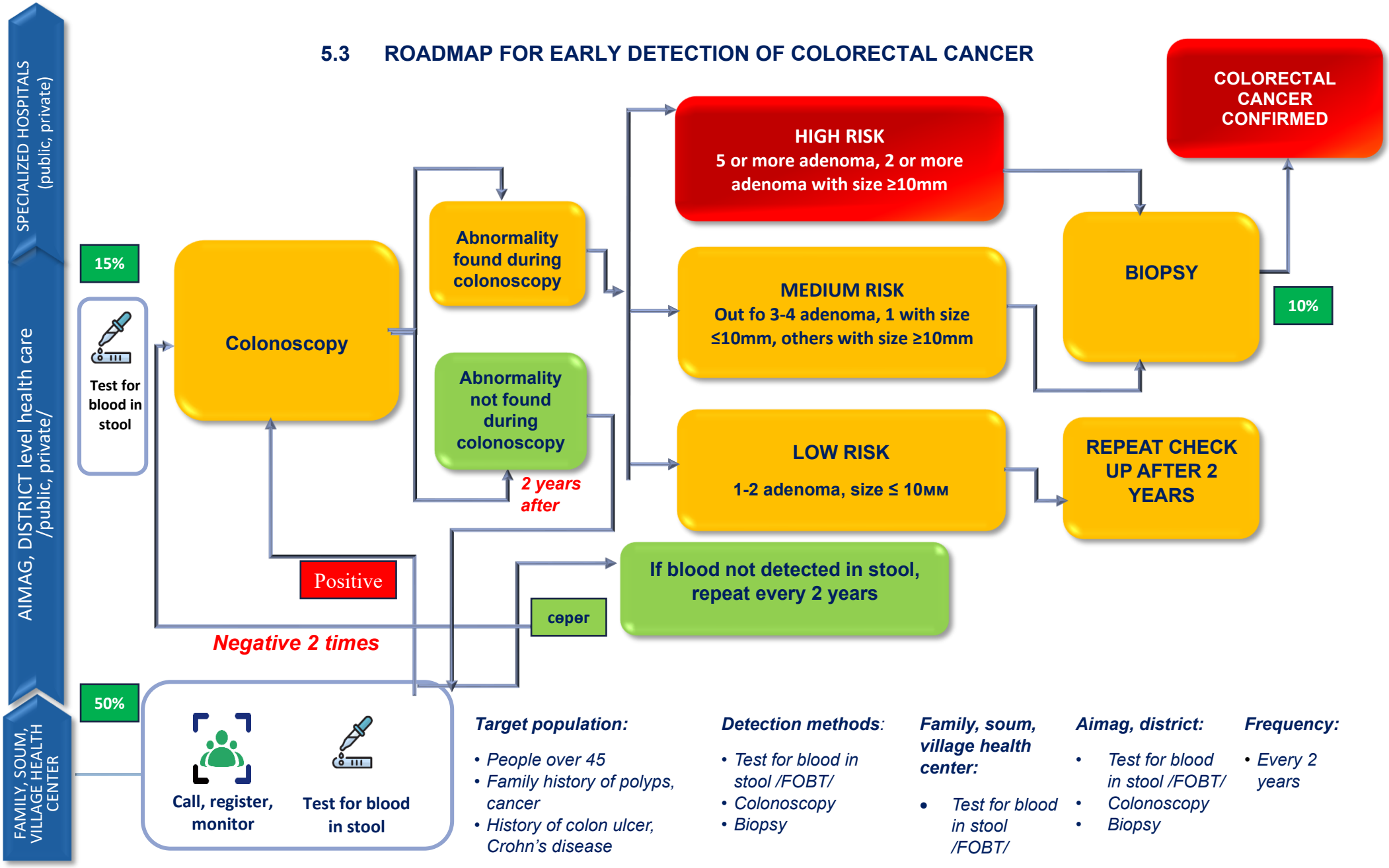
5.1 ROADMAP FOR EARLY DETECTION OF LIVER CANCER



5.2 ROADMAP FOR EARLY DETECTION OF STOMACH AND ESOPHAGUS CANCER



5.3 ROADMAP FOR EARLY DETECTION OF COLORECTAL CANCER



Target population:

- *People over 45*
- *Family history of polyps, cancer*
- *History of colon ulcer, Crohn's disease*

Detection methods:

- *Test for blood in stool /FOBT/*
- *Colonoscopy*
- *Biopsy*

Family, soum, village health center:

- *Test for blood in stool /FOBT/*

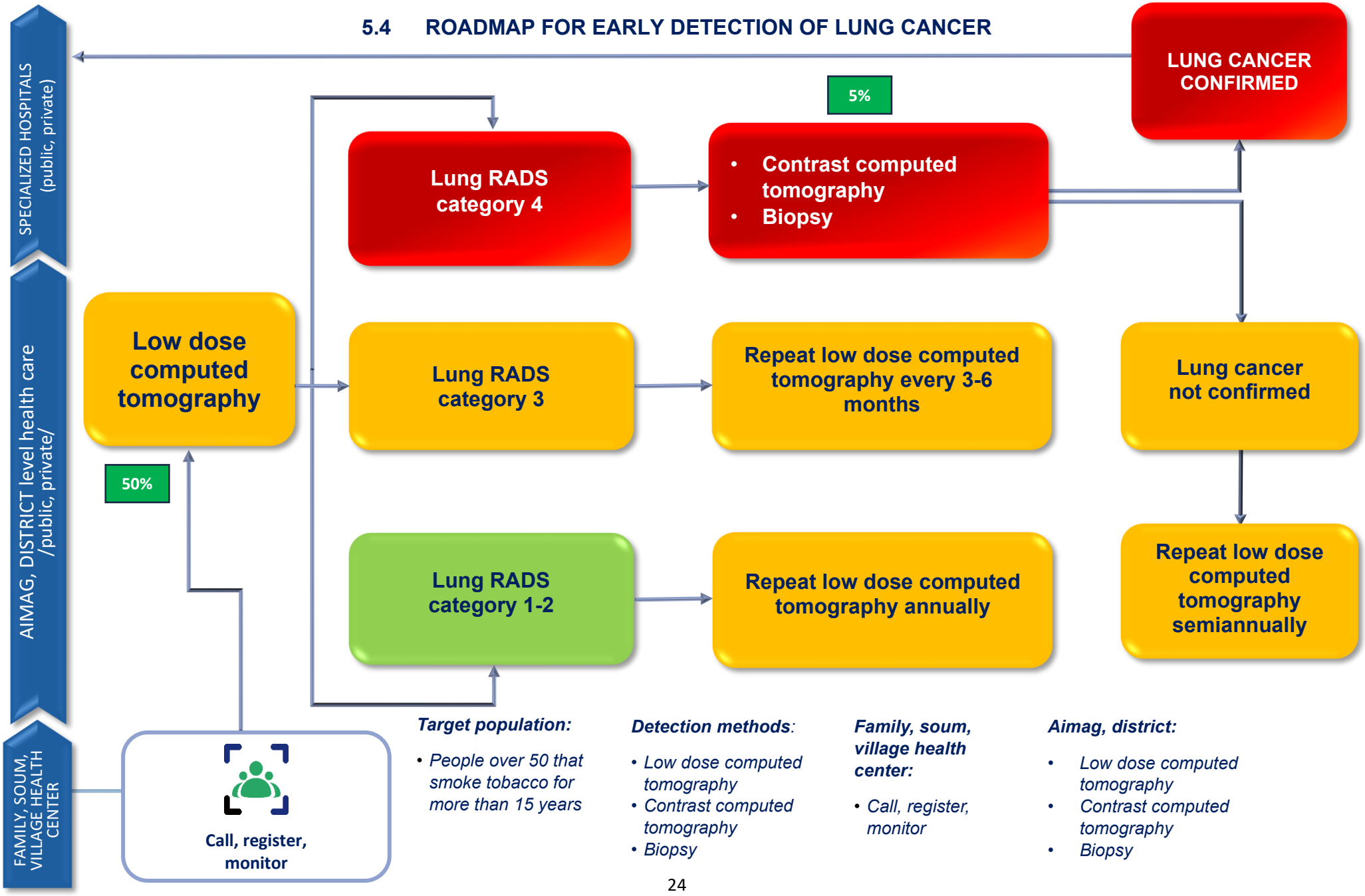
Aimag, district:

- *Test for blood in stool /FOBT/*
- *Colonoscopy*
- *Biopsy*

Frequency:

- *Every 2 years*

5.4 ROADMAP FOR EARLY DETECTION OF LUNG CANCER



Target population:

- *People over 50 that smoke tobacco for more than 15 years*

Detection methods:

- *Low dose computed tomography*
- *Contrast computed tomography*
- *Biopsy*

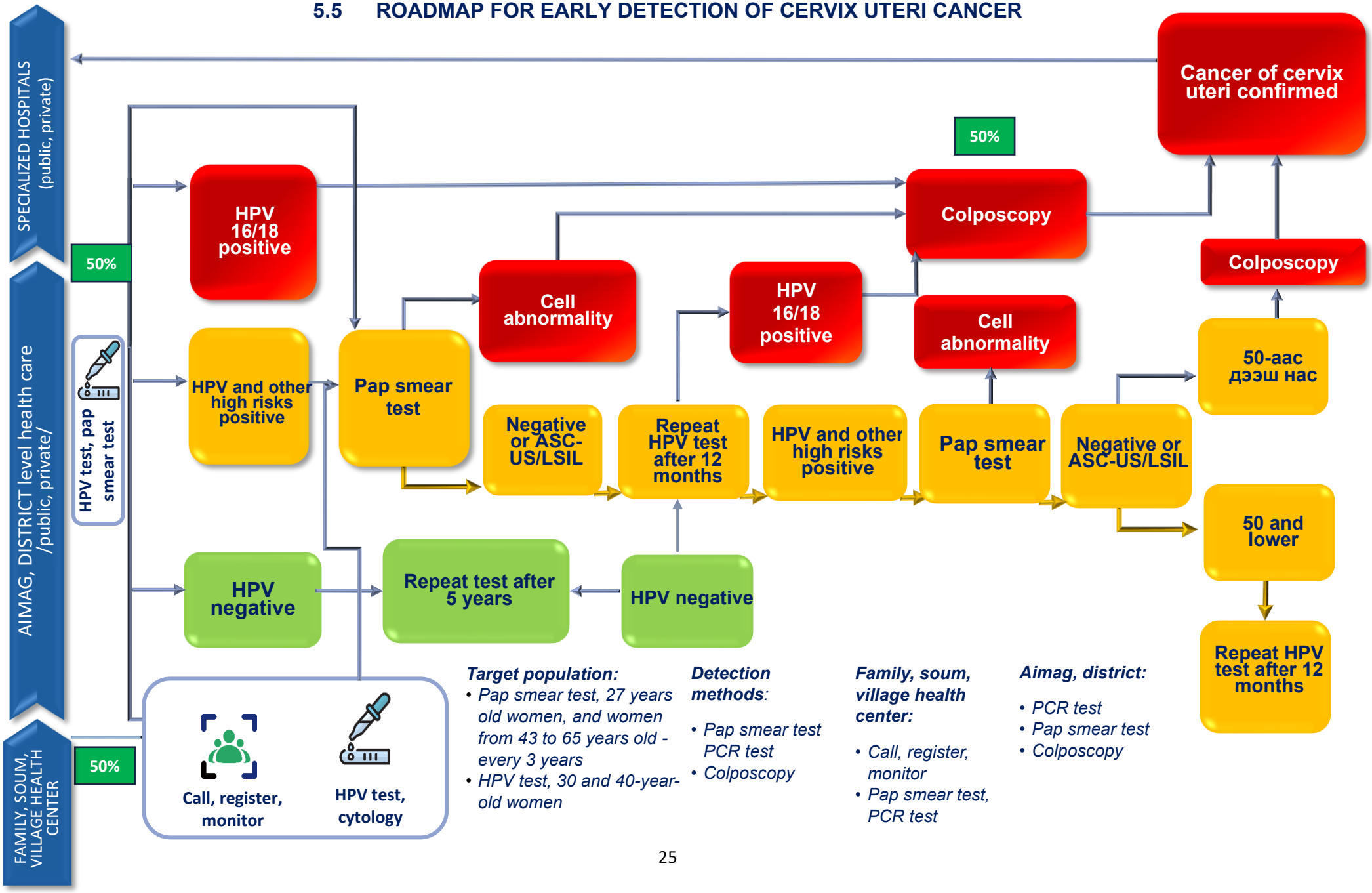
Family, soum, village health center:

- *Call, register, monitor*

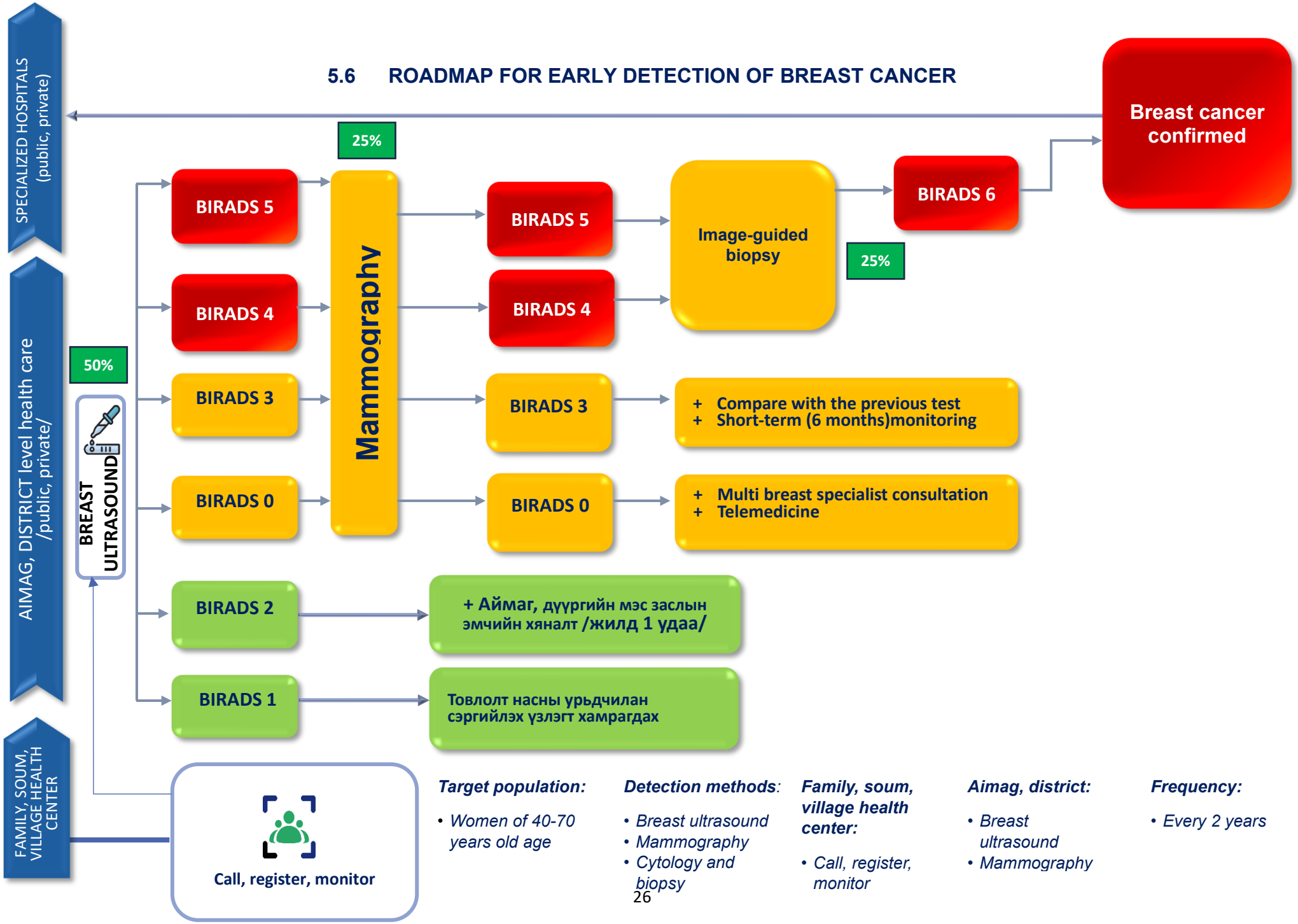
Aimag, district:

- *Low dose computed tomography*
- *Contrast computed tomography*
- *Biopsy*

5.5 ROADMAP FOR EARLY DETECTION OF CERVIX UTERI CANCER



5.6 ROADMAP FOR EARLY DETECTION OF BREAST CANCER



Target population:

- *Women of 40-70 years old age*

Detection methods:

- *Breast ultrasound*
- *Mammography*
- *Cytology and biopsy*

Family, soum, village health center:

- *Call, register, monitor*

Aimag, district:

- *Breast ultrasound*
- *Mammography*

Frequency:

- *Every 2 years*

SIX. ACTION PLAN TO IMPLEMENT CANCER PREVENTION AND CONTROL PROGRAM

6.1. GENERAL ACTION PLAN TO IMPLEMENT CANCER PREVENTION AND CONTROL PROGRAM (2025-2028)

6.2. ONE. ACTION PLAN TO IMPLEMENT LIVER CANCER PROGRAM

6.3. TWO. ACTION PLAN TO IMPLEMENT ESOPHAGUS, STOMACH, AND COLORECTAL CANCER PROGRAM

6.4. THREE. ACTION PLAN TO IMPLEMENT LUNG CANCER PROGRAM

6.5. FOUR. ACTION PLAN TO IMPLEMENT CERVIX UTERI CANCER PROGRAM

6.6. FIVE. ACTION PLAN TO IMPLEMENT BREAST CANCER PROGRAM

6.7. SIX. ACTION PLAN TO IMPLEMENT BLOOD CANCER PROGRAM

6.8. SEVEN. ACTION PLAN TO IMPLEMENT CHILDHOOD CANCER PROGRAM

GLOSSARY

Terminology	Explanation
Ablation	Ablation is the treatment to remove or destruct tissue by high frequency, freesing or chemical substance.
Adenocarcinoma	Adenocarcinoma is a type of cancer that starts in the glandular cells.
Advanced cancer	Advanced cancer is cancer that has spread from primary location to other parts of the body. If cancer growths outside of primary location but not spread other organs and parts of the body, it's called localized advanced cancer. If cancer spread to other parts of the body it's metastatic cancer.
Angiography	Angiography is a type of X-ray test to check blood vessels around the cancer by injection of a contrast agent.
Adjuvant therapy	Additional cancer treatment given after the surgical, radiation therapy of early stage cancer to lower the risk that the cancer will come back. It's alos called additional and combined treatment.
Benign	A benign tumor is a noncancerous collection of cells that don't spread to other areas of the body.
Biomarker	To investigate the cancer genes, proteins, hormones and other substances are tested. It is used for cancer diagnostic and to see how well the body responds to a treatment, and for determing whenether cancer is returned or not.
Biopsy	A biopsy is a procedure to remove a piece of tissue or a sample of cells from the suspected cancer.
Brachytherapy	Brachytherapy is type of radiation therapy is given directly or closer to cancer.
Cancer	Cancer is a disease when abnormal cells grow uncontrollably, go beyond their usual boundaries to invade adjoining parts of the body and/or spread to other parts of the body through blood or lymph system.
Cancer care team	A multidisciplinary team of health specialists to detect, treat and provide care for cancer patients.
Cancer cell	Cells that divide and multiply abnormally, spreading in the body, and growing by spreading among normal cells. Cancer cells are result of mutation due to various factors.

Cancer Incidence rate	Cancer incidence refers to the number of new cases of specific cancer in a population over a given period, usually one year. The cancer incidence rate is typically expressed as the number of new cancer cases per 100,000 people.
Cancer prevalence	Prevalence is the number of people with a specific cancer a given population at a specific time. This includes both newly diagnosed and pre-existing cases of the disease.
Cancer screening	Cancer screening is checking for cancer in people who don't have yet symptoms. Screening could include blood, urine, imaging and other tests. Screening conducted for specific target group of the population depending on their age, gender and other criteria.
Carcinogen	A carcinogen is a substance, organism or agent capable of causing cancer.
Carcinoma	Carcinoma is a type of cancer that starts in the epithelial cells of the skin or other organs.
Chemotherapy	Chemotherapy is a treatment that uses chemicals to kill fast-growing cells in the body. Chemotherapy is most often conducted by single or combination of different medicines.
Dysplasia	The presence of abnormal cells within a tissue or organ. Dysplasia is not cancer, but it may sometimes become cancer.
Epidemiology	Epidemiology is the study of the determinants, occurrence, and distribution of health and disease in a defined population. Its results used for reducing and controlling diseases.
Genetic testing	Genetic testing is a method to look for genetic changes. This testing is not used only for people with riks of inherited disease.
Genomics	Genomics is the study of an organism's genome (body’s DNA combination in the single cell), including its role, functions, sequence, and combination, using recombinant DNA and DNA sequence methods, and bioinformatics.
Growth factors	Growth factors are proteins that stimulate cell growth and differentiation. Some cancer cells produce growth factors that stimulate and speed up their growth.
Hormone therapy	Hormone therapy is a cancer treatment that uses medicines that slows or stops the growth of cancer that uses hormones to grow.
Immunotherapy	Immunotherapy is treatment that uses a person's own immune system to fight cancer.
Invasive cancer	Cancer that has spread beyond the layer of tissue in which it developed and is growing into surrounding, healthy tissues.
Malignant	Malignant cancer cells grow in an uncontrolled way and can invade nearby tissues and spread to other parts of the body.

Metastatic cancer	Cancer that has spread to distant from the initial location organs.
Molecular diagnostics	Molecular diagnostics is a collection of techniques used to analyze biological markers in the genome to diagnose, control, define risk, and define most appropriate treatment for the individual.
Mortality rate	Mortality rate is a measure of the number of deaths in a year per 100,000 population.
Neoadjuvant therapy	Treatment given as a first step to shrink a tumor before the main treatment, which is usually surgery. It is used for preparation to the surgery, for improving outcome of the main treatment, and prevent recurrence of cancer.
Neoplasia	Abnormal and uncontrolled growth of cells.
Oncology	Oncology is a branch of medicine that specializes in studying cancer origin, causes, pathogenesis, clinical features, early detection, diagnostic, prevention, treatment, and control of cancer. It consists of three components: – Systemic treatment, target therapy, immune therapy, hormonal therapy; – Cancer surgery r surgical treatment of cancer; and – Cancer radiation therapy: treatment of cancer by ionizing radiation.
Palliative care	Cancer palliative care is a comprehensive care, which combines physical, psychologic, social and faith-based services, and aims to improve quality of life and support patients with incurable cancer at early and late stages, and support their families and care givers.
Radiation therapy	Radiation therapy is a cancer treatment that uses high doses of radiation to kill cancer cells. Radiation therapy could be used before surgery to shrink cancer, after surgery to kill cancer cells, or as a main therapy. Radiaton therapy could used for palliative purposes.
Risk factor	Anything that increases risk of cancer. Fferent cancers have different risk factors. For instance, sun exposure is a risk factor for skin cancerl; tobacco smoking is risk factor for lung and other cancers. Tobacco smoking, physical inactivity, unhealthy diet are risk factors that could be managed. Age, gender, genetical mutations are factors that couldn’t be avoided.
Secondary cancer	Cancer that spreads for initial location to other parts of the body.
Stage of presentation	Stage is used for severity of the cancer based on the size at the initial location and whether it’s spread to other parts of body, or not.

Survival	General: survival after onset of cancer in absence of other causes of death. Subjective: comparison of the proportion people that servived cancer with healthy group of people with the same characteristics.
Survival rate	Cancer survival rate is the percentage of people whotreated and survive a certain type of cancer for a specific amount of time.
TNM staging system	The TNM Staging System is most commonly used system for defining cancer stage. – Tumor (T) defines the extent of the tumor; – Nodule (N) defines extent of spread to lymph nodes; and – Metastasis (M) tells whether there are distant metastases (spread of cancer to other parts of the body).

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6.1. GENERAL ACTION PLAN TO IMPLEMENT CANCER PREVENTION AND CONTROL PROGRAM (2025-2028)

Program objective	№	Actions to implement the program objective	Financing source	Baseline	Indicator	Target level				Budget (million tugrug)				Budget (million tugrug)	Implementing organizations		
						2025	2026	2027	2028	2025	2026	2027	2028		Main	Collaborative	Participating
One. To activate measures for primary prevention of cancer among population																	
Objective 1.1. Conduct survey on risk factors of NCDs among urban and rural population, and establish data base and monitoring system at primary health care centers	1	Family and soum health centers to conduct nationwide survey on risk factors of NCDs among the population	State budget, international programs and projects	-	Proportion of target groups of population covered by the survey	50%	100%	-	-	30.0	20.0	-	-	50.0	NCPH	Aimag and capital city governor's offices	Family, soum, and village health centers
	2	Family and soum health centers to organize work to monitor risky groups of population and call them for early detection, based on the survey on risk factors of NCDs	Health Insurance Fund	-	Proportion of target groups, proportion of people enrolled in early detection	25%	50%	70%	100%	-	-	-	-	-	Family, soum, and village health centers	HIGA, aimag and capital city governor's offices	-
Objective 1.2. Reduce spread of risk factors	1	Organize communication activities on prevention of overweight and obesity	State budget, international programs and projects	Percentage of overweight and obese people 49.4% (STEPS-2019)	Percentage of the population with overweight and obesity	45%	40%	35%	30%	70.0	70.0	70.0	70.0	280.0	NCPH	Aimag and capital city governor's offices	Health organizations of all levels
	2	Organize communication activities to raise awareness on the harm of tobacco smoking	State budget, international programs and projects	Rate of tobacco smoking among population of age 15-69 is 24.2% (STEPS-2019)	Tobacco smoking among population	20%	18%	16%	14%	100.0	100.0	100.0	100.0	400.0	NCPH	Aimag and capital city governor's offices	Health organizations of all levels
	3	Organize communcation activities to reduce risk factors of most common cancers among population, as refecletd in the Annual Action Plan, approved by the Steering Committee	State budget, international programs and projects	-	Percentage of completed activities in a year	100%	100%	100%	100%	400.0	400.0	400.0	400.0	1,600.0	MOH	NCPH	NCC, mass media, health organizations
Objective 1.3.Improve inter-sector collaboration to reduce risk factors	1	Organize inter-sector meeting on reducing cancer risk factors	State budget, international programs and projects	-	Number of meetings organized	1	1	1	1	100.0	100.0	100.0	100.0	400.0	MOH	MOJHA, GPA, MOMHI	NCPH, NCC, NCMCH and other governmental and nongovernmental organizations

Objective 1.3. Improve inter-sector collaboration to reduce risk factors	2	Increase community participation by selecting short-term projects from nongovernmental organizations on cancer prevention and control	State budget, Health Promotion Fund, international programs and projects	-	Number of activities implemented	2	2	2	2	200.0	200.0	200.0	200.0	800.0	MOH. NCPH	NCC	Nongovernmental organizations
Two. To improve capacity of cancer diagnostic and treatment, and introduce modern technologies																	
Objective 2.1. Improve capacity of molecular biology and molecular genetic testing and diagnostic	1	Improve capacity of NCC on molecular genetic diagnostic, and introduce modern technologies (NGS)	State budget, international programs and projects	-	Types of tests conducted using sequencing method (NGS)	-	5	10	-	750.0	-	-	-	750.0	MOH	NCC	-
	2	Increase access to and types of genetic mutation testing required for target and immune therapy of lung, stomach, colorectal, breast and other cancers	State budget, Health Insurance Fund	6 types of genetic mutations tested in 200 people in a year	Number of types of cancer genetic mutation testing introduced into diagnostic	20	30	40	50	50.0	50.0	50.0	50.0	200.0	NCC, NCP	MMDCRA, NCMCH	HIGA
	3	Introduce genetic testing into diagnostic of inherited cancer risk	State budget, international programs and projects	-	Number of people with inherited risk cancer that had genetic testing	-	-	100	200	-	-	-	-	-	MOH	FSCH, NCC	-
	4	Train teams of specialists (laboratory doctors, technicians, information technology specialists, bioinformatics specialists, equipment maintenance engineers) required for molecular genetic diagnostic	State budget, international programs and projects	There are 10 specialized doctors available, however, there are no trained specialists on target therapy of cancer	Number of teams trained	1	2	1	1	100.0	100.0	100.0	100.0	400.0	MOH	NCHD, NCC	FSCH
Objective 2.2. Improve capacity of pathology diagnostic, and introduce modern and progressive technologies	1	Provide slide scanners and other equipment for local health organizations to improve their pathology services	State budget, international programs and projects	-	Number of aimags that were provided with the equipment	7 (Dornod, Zavkhan, Uvurkhangai, Umnugobi, Uvs, Khuvsgul, Khentii aimags)	5	-	-	5,921.0	4,000.0	-		9,921.0	MOH	NCP	RDTCs, AGHs

Objective 2.2. Improve capacity of pathology diagnostic, and introduce modern and progressive technologies	2	Imporve capacity of pathology doctors and specialists in Dornod, Zavkhan, Uvurkhangai, Umnugobi, Uvs, Khuvsgul, Khentii and other aimags	State budget, international programs and projects	Dornod 2 doctors, Umnugobi 1 doctor, Bayankhongor 1 cytologist, Dornogobi 1 doctor, Darkhan-Uul 1 cytologist	In total, train 4 new doctors, and strengphen capacity of 10 doctors	50%	50%	-	-	70.0	70.0	-	-	140.0	NCP, NCHD	Professional societies	RDTCs and AGHs in Dornod, Zavkhan, Uvurkhangai, Umnugobi, Uvs, Khuvsgul, Khentii and other aimags
	3	Introduce and ensure sustainability of immunohistochemistry testing n the diagnostic of liver cancer in Dornod RDTC, stomach cancer in Uvs AGH, head and neck cancers in Uvurkhangai RDTC	State budget, Health Insurance Fund	-	Number and types of immunohisto-chemistry tests	5	10	10	10	20.0	20.0	-	-	40.0	NCP	Dornod RDTC, Uvs AGH, Uvurkhangai RDTC	-
	4	Provide slide scanners for NCP and NCC, and establish tissue bank	State budget, international programs and projects	Currently there is 1 slide scanner at NCP	Number of slide scanners used for diagnostic, tissue bank	Slide scanner 2, tissue bank 1	-	-	-	4358.0	-	-	-	4,358.0	MOH	NCP, NCC	-
	5	Get consulting services on pathology from high developed countries using slide scanner, establish system for provision of online support for health organizations at the local level	State budget, international programs and projects	-	Number of test results discussed using virtual means of communication	50	130	200	300	-	-	-	-	-	MOH	NCP, FSCH, NCC	-
	6	Establish system for safe transportation of specimen at NCP, and provide designated vehicle for transportaion	State budget, international programs and projects	Health organizations transport specimen to NCP, however, NCP doesn't have vehicle for transportation of specilmen	Vehicle for transportation of specimen	3	-	-	-	420.0	-	-	-	420.0	MOH	NCP	-
	7	Increase number and types of chromogens for histochemistry testing	Health Insurance Fund	Currently, 12 chromogens used at NCP	Number and types of tests	20	25	-	-	-	-	-	-	-	NCP, NCC, MMDCRA	Health organizations	-
	8	Improve capacity and increase types of immunohistochemistry tests	Health Insurance Fund	Currently, NCC and NCP conduct immunohistochemistry test. In 2023, 2,628 tests conducted using 61 markers, with the overlap of 81%	Number os tests and markers	70	80	90	100	-	-	-	-	-	NCP, NCC, MMDCRA	Health organizations	-

Objective 2.2. Improve capacity of pathology diagnostic, and introduce modern and progressive technologies	9	Provide fully automatic PCR equipment for NCP	State budget, international programs and projects	-	Number of equipment supplied	1	-	-	-	400.0	-	-	-	400.0	MOH	NCP, NCC, MMDCRA	-
	10	Build capacity of doctors and specialists by conducting joint with international specialists conferences and training on pathology	State budget, international programs and projects	-	Number of conferences and training organized per year	1	1	1	1	70.0	70.0	70.0	70.0	280.0	NCCP	NCP	Public and private health organizations in aimags and capital city
	11	Build capacity and train doctors and specialists of NCP on diagnostic of most common cancers	State budget, international programs and projects	Currently, there are 18 pathology doctors, 2 cytologists, and 2 technicians at NCP	Number of doctors and specialists trained	10	10	Refresher training 50%	Refresher training 50%	30.0	30.0	30.0	30.0	120.0	MOH	NCP, NCHD	-
Objective 2.3. Introduce online monitoring and assessment of the resulst of imaging diagnostic	1	Health organizations that provide cancer care and services to establish multispecialist committees on cancer diagnostic, and provide technical support for doctors and other specialists	State budget, international programs and projects	-	Number of multispecialist committees established, number of online consultations provided	Mult-specialist committees established	50	80	100	2.0	4.0	5.0	-	11.0	NCC, society of radiologists	NCP, FSCH, SSCH, TSCH	Aimag and capital city health departments, AGHs, RDTCs
	2	Establish system for online monitoring and assessment of the results of cancer imaging diagnostic	State budget, international programs and projects	-	Percentage of software development	100%	-	-	-	-	-	-	-	-	MOH	Professional societies	-
Objective 2.4. Intrroduce and strengphen surgical services for cancer care in aimags, and in the capital city	1	FSCH, SSCH to develop surgical services for head and neck cancer	State budget, international programs and projects	-	Number of surgeries performed	At least 40	At least 50	At least 70	At least 80	200.0	-	-	-	200.0	MOH	NCC	FSCH, SSCH
	2	Uvurkhangai aimag RDTC to introduce surgical services for head and neck cancer	State budget, international programs and projects	-	Number of surgeries performed	At least 20	At least 25	At least 35	At least 35	100.0	-	-	-	100.0	MOH	NCC, Governor's Office	Uvurkhangai aimag Health Department, RDTC
	3	Khan-Uul district general hospital to introduce surgical services for head and neck cancer	State budget, international programs and projects	-	Number of surgeries performed	-	At least 20	At least 35	At least 40	100.0	-	-	-	100.0	MOH	NCC	Khan-Uul district general hospital
	1	Train teams of specialists required for full body radiation therapy	State budget, international programs and projects	-	Number of teams trained	1	1	-	-	-	-	-	-	-	MOH, NCC	NEC, NCMCH	IAEA

Objective 2.5.Improve quality and access to radiation therapy	2	Establish human resource capacity at NCC for 14 hours per day operation of the radiation therapy center	State budget, international programs and projects	-	Number of teams trained 1	1	-	-	-	90.0	-	-	-	90.0	MOH	NCC	-
	3	Complete preparations for establishment of the radiation therapy unit in Khovd aimag	State budget, international programs and projects	-	New facilities for radiation therapy 2, number of teams trained 2	-	Facilities 100%	Human resources 100%	-	-	-	-	-	-	MOH	NCC	NEC, DORC, IAEA
Objective 2.6. Introduce robotic surgery	1	Train teams of doctors and specialists for robotic surgery	State budget, international programs and projects	7 people at NCC started training in the simulation laboratory	Number of teams trained	-	At least 2	-	-	-	180.0	-	-	180.0	MOH	CHD	-
Objective 2.7. Increase types of and access to systemic treatment of cancer	1	Increase number of health care organizations that conduct chemotherapy	State budget, international programs and projects	Currently, 13 aimags and 5 district conduct chemotherapy	Increased percentage of health care organizations that conduct chemotherapy	3 aimags, 3 districts /27%/	3 aimags, 1 district, /increase by 50%/	-	-	220.0	-	-	-	220.0	MOH	NCC	AGHs in Selenge, Dundgobi, Sukhbaatar, Khentii, Bulgan, Darkhan-Uul, general hospitals in Bayanzurkh, Chingeltei, Nalaikh, Khan-Uul district
	2	Increase types of chemo, target, and hormonall therapy, based on clinical guidelines and standard protocols	State budget, Health Insurance Fund, international programs and projects	Number of medicines covered by health insurance and used for chemotherapy 27, target therapy 18, hormonal therapy 5	Number of new medicines introduced for the therapy	25%	50%	75%	100%	-	-	-	-	-	MOH, NCC	MMDCRA	Health organizations, suppliers of medicines
Objective 2.7. Increase types of and access to systemic treatment of cancer	3	Organize training on chemotherapy, enroll oncologists in aimags and capital city in chemotherapy specialization training	State budget, international programs and projects	Chemothery oncologists in aimags 18, districts 12, chemotherapy nurses in aimags 29, districts 7, chemotherapy pharmacists in aimags 12, districts 5, pharmacy technicians in aimags 13, districts 6	Number of oncologists trained	10	10	10	10	-	-	-	-	-	MOH	MMDCRA, NCC, CHD	Public and private health care organizations

	4	Provide equipment (laminar air flow, refrigerators for medicine storage and etc.) for chemotherapy	State budget, international programs and projects	Equipment available in 6 aimags, 5 districts, out of which equipment in 5 aimags, 2 districts is outdated and requires replacement	Number of aimags provided with equipment	11 aimags, 7 districts	-	-	-	723.0	-	-	-	723.0	MOH	NCC, CCHD	Aimag health departments, district health alliances and general hospitals
Objective 2.8. Improve quality and access to cancer rehabilitation, palliative care and support services	1	Develop and approve guideline on cancer rehabilitation care and services	State budget, international programs and projects	-	Guideline approved	100%	-	-	-	-	-	-	-	-	MOH	NCC	Professional committee
	2	Increase number of health care organizations that provide palliative care	State budget, international programs and projects, Health Insurance Fund	Number of day care beds for palliatve care 23, inpatient beds 192	Increase in percentage of beds for palliative care	25%	50%	75%	100%	30.0	30.0	30.0	30.0	120.0	MOH	NCC	Aimag health departments, district health alliances and general hospitals
	3	Build capacity of palliative care teams through contnuous training (short and long-term, on the job, online and etc.)	State budget, international programs and projects	Palliative care doctors 29, palliative care nurses 43, psychologists 13, dietitians 13, social workers 19	Number of doctors and nurses trained	500	500	500	500	20.0	20.0	20.0	20.0	80.0	MOH	NCC	Aimag health departments, district health alliances and general hospitals
	4	Expand training, counselling and information activities for families and caregivers of people with cancer	State budget, international programs and projects	-	Number of people enrolled in training, number of educational materials developed	300 people, 2 educational materials	300 people, 2 educational materials	300 people, 2 educational materials	300 people, 2 educational materials	50.0	50.0	50.0	50.0	200.0	MOH	NCC, NCPH, NCMCH	Aimag and capital city health departments, public health cennters, nongovernmental organizations
	5	Develop and implement program for cancer survivors	Health Promotion Fund	-	Percentage of planned annual actvities completed	100%	100%	100%	100%	50.0	50.0	50.0	50.0	200.0	NCC, NCPH, NCMCH	Nongovernmental organizations	-
Objective 2.9. Complete preparations for the project to establish National Cancer Center 2	1	Develop and approve feasibiliy study for the National Cancer Center 2	State budget	Not done	Feasibility study approved	1	-	-	-	-	-	-	-	-	MOH, the president's office	MOF, MED, NCC	-
	2	Approve architectual design and start construction of National Cancer Center 2	State budget, international programs and projects	Work on architectual design started	Approved architectual drawings, percentage of construction work completed	Renovated fence and pipes for heating, water and sewage	Drawings approved	Percentage of construction work completed 20%	Percentage of construction work complete 50%	36,600.0	36,600.0	36,600.0	12,200.0	122,000.0	MOH, the president's office	MOF, MED, NCC	-

	3	Conduct human resources planning for National Cancer Center 2, and train human resources, according to the plan	State budget, international programs and projects	Working group to conduct human resource planning appointed	Human resource plan approved, percentage of planned activities completed	Approved human resource plan	Сурпалт 25%	Training 50%	Training 50%	-	-	-	-	-	MOH, NMSU, NCC	MOF, MOES	-
Three. Capacity building of human resources, continuous training																	
Objective 3.1. Upgrade postgraduate training system on oncology	1	Approve professional index for specialized cancer surgeons	State budget, international programs and projects	Currently, there is no index	Minister of Health order that approves an index	1	-	-	-	-	-	-	-	-	MOH	NCC, CHD	-
	2	Develop and approve training program on cancer surgery in accordance with approved professional index	State budget, international programs and projects	Currently, there is no program	Number of programs approved	4	-	-	-	-	-	-	-	-	MOH	NCC, CHD	-
	3	Organize specialization training on cancer surgery	State budget, international programs and projects	-	Number of doctors trained	16	20	20	20	-	-	-	-	-	MOH	NCC, CHD	-
	4	Develop and approve postgraduate training program on angiography for cancer diagnostic	State budget, international programs and projects	Currently, there is no program	Approved program	1	-	-	-	-	-	-	-	-	MOH	NCC, CHD	-
	5	Organize postgraduate training on cancer angiography	State budget, international programs and projects	-	Number of doctors trained	12	12	12	12	-	-	-	-	-	MOH	NCC, CHD	-
	6	Develop and approve specialization training programs on cancer chemotherapy, radiation therapy, gynecologic oncology, and cancer nursing	State budget, international programs and projects	-	Number of new programs approved	4	-	-	-	-	-	-	-	-	MOH	NCC, CHD	-
	7	Organize postgraduate training for chemotherapy technicians	State budget, international programs and projects	Currently, there is no program	Number of chemotherapy technicians trained	20	10	10	5	-	-	-	-	-	MOH	NCC, CHD	-
	8	Develop and approve postgraduate training program for cancer chemotherapy pharmacists	State budget, international programs and projects	-	Approved program	1	-	-	-	-	-	-	-	-	MOH	NCC, CHD	-

Objective 3.1. Upgrade postgraduate training system on oncology	9	Upgrade professional index of blood transfusiologists, and revise it to combined index as cancer-blood transfusiologist	State budget	-	Approved program	1	-	-	-	-	-	-	-	-	MOH	NCTM, CHD	-
	10	Integrate childhood cancer into under and postgraduate training curriculum of medical doctors, pediatricians, schools of public health and nursing	State budget	-	Integrate childhood cancer into under and postgraduate training curriculum	-	50%	50%	-	-	-	-	-	-	MOES	MOH, CHD	NCMCH
Objective 3.2. Improve working conditions of cancer specialists at some positions/worplaces	11	Assess working conditions of cancer specialists at some positions/worplaces, and make nessessary changes and improvements	State budget	-	Assessment results	-	50%	50%		-	100.0	-	-	100.0	MOLSP	MOH	-
Four. To improve quality of cancer registration and information, and expand cancer research																	
4.1. Improve cancer registry and surveillance and registry of early detection																	
Objective 4.1.1. Strengphen cancer registry and surveillance	1	Establish possibility for sharing data of cancer registry and surveillance with the overall health data base	State budget, international programs and projects	-	Legal environmnet created for sharing data	50%	50%	-	-	100.0	100.0	-	-	200.0	MOH, NCC, NCMCH	MODDC, National Data Center	Aimag and capital city health departments
	2	Organize training on cancer registry and surveillance	State budget, international programs and projects	Annual training	Number of doctors and other specialists trained	50	60	80	100	50.0	50.0	50.0	50.0	200.0	MOH	NCC	Aimag and capital city health departments
	3	Revise and approve guideline on cancer registry and surveillance	State budget, Health Promotion Fund	Minister of Health Order No.431, 2014	Approved guideline	100%	-	-	-	-	-	-	-	-	MOH	NCC	Professional societies
Objective 4.1.2. Strengphen cancer early detection registry and information	1	Develop software for cancer early detection registry, including additional developments for early detection registry of 7 cancers	State budget, international programs and projects	Eerly detection data registry of cervical and breast cancer will be done through www.screening.gov.mn	Number of newly added modules	7	-	-	-	200.0	-	-	-	200.0	MOH, NCC	CHD	-
4.2. Expand research on cancer																	
Objective 4.2.1. Expand tissue bank of most common cancers	1	Establish and expand cancer tissue bank	State budget, international programs and projects	-	Tissue bank 1	-	-	50%	50%	-	-	-	-	-	NCP	NCC	-

Objective 4.2.2. Develop molecular epidemiology research	1	Conduct cyto-and molecular level research on correlation between cancer molecular genetics and environmental factors and infection	State budget, international programs and projects	-	Number of researches done	-	-	1	-	-	-	100.0	-	100.0	MOH	NCC, NCMCH	Public and private health organizations
Objective 4.2.3. Expand clinical trials	1	Establish platform for clinical trials in collaboration with international research institutions	State budget, international programs and projects	IIa level clinical trial on a medicine against delta virus was implemented successfully	Number of contracts with international institutions to conduct joint clinical trials	1	1	1	1	100.0	100.0	100.0	100.0	400.0	MOH	NCC, NCMCH	CHD
	2	Enroll doctors and other specialists in training on best clinical practices, required for developing and supporting clinical trials	State budget, international programs and projects	Limited number of NCC doctors have GCP training completion certifcate	Number of doctors and other specialists completed GCP training	50	100	150	200	80.0	80.0	80.0	80.0	320.0	MOH	NCC, NCMCH	CHD
	3	Introduce new medicines, devices and technologies through multi-participant clinical trials	State budget, international programs and projects	-	Number of newly introduced medicines	-	-	1	2	-	-	100.0	100.0	200.0	MOH	MMDCRA	NCC
Objective 4.2.4. Establish unified data base of national research done on cancer risk factors, causes, diagnostic and treatment	1	Regularly publish and disseminate compilations of the results of national cancer research	State budget, international programs and projects	-	Number of journals and compilations published	100	100	100	100	50.0	50.0	50.0	50.0	200.0	MOH	NCC	CHD
	2	Disseminate abstracts and reports of research through online means	State budget, international programs and projects	-	Number of abstracts and reports available online	100	200	300	400	-	-	-	-	-	MOH	NCC, NCMCH	CHD
TOTAl														**146,703.0**			

ONE. ACTION PLAN TO IMPLEMENT LIVER CANCER PROGRAM

Actions to implement the program objective	Financing source	Baseline	Indicator	Target level				Budget (million tugrug)				Total budget (million tugrug)	Implementing organizations		
				2025	2026	2027	2028	2025	2026	2027	2028		Main	Collaborative	Participating
1.1. Actions to prevent liver cancer															
1.1.1.Approve by the Steering Committee and implement annual plan of information and communication activities on liver cancer prevention and early detection	State budget, international programs and projects	-	Percentage of annual work plan implementation	100%	100%	100%	100%	-	-	-	-	-	MOH	MCPH, NCCD, NCC	Governmental and nongovernmental organizations
1.1.2. Include into immunization schedule of adults vaccination against hepatitis B, and inrease it's coverage	State budget	In 2023, 15,947 health care personnel, and 3,637 people have got voluntary vaccination against hepatitis B. It accounts for 1% of the population over 18	Percentage of people vaccinated	-	10%	20%	30%	-	-	-	-	-	MOH	NCCD	Primary and referral level health care organizations, public health centers
1.2. Actions to organize early detection and diagnosis of liver cancer, and improve capacity of health care organizations															
1.2.1. Enroll people over 18 in hepatitis B and C testing, starting from people that didn't had testing, to define target groups of population for early detection of liver cancer	State budget, Health Insurance Fund, international programs and projects	From 1,152,220 people enrolled in Healthy Liver Program (2017-2020), 90,376 (7.8%) people tested positive for HBV, and 107,871 (9.4%) people tested positive for HCV	Percentage of population tested for HBV and HCV	10%	30%	50%	50%	2,400.0	3,200.0	4,800.0	4,800.0	15,200.0	MOH	NCCD, aimag and capital city health departments, nongovernmental organizations	Primary and referral level health care organizations (public and private)
1.2.2. Enroll target groups of the population in early detection of liver cancer, according to the algorithm	State budget, Health Insurance Fund	In first 4 months of 2024, out of 103,028 (11.3%) people of age 40-65, enrolled in early detection, 21 people had liver cancer	Percentage of the target groups enrolled in early detection	10%	30%	50%	50%	7,800.0	1,500.0	1,500.0	1,500.0	12,300.0	MOH	NCCD, NCC	Referral level health care organizations (public and private)

1.2.3. Improve monitoring and early detection among pregnant mothers and children detected with HBV during antenatal care	State budget, Health Insurance Fund	-	Percentage of children enrolled in early detection	-	40%	50%	60%	-	-	-	-	-	MOH	NCCD, NCMCH	Primary and referral level health care organizations, public health centers
1.2.4. Develop and approve gudeline on early detection of liver cancer	State budget, Health Insurance Fund, international programs and projects	Currently there is no guideline available	Approved guideline on early detection	100%	-	-	-	-	-	-	-	-	MOH	NCCD, NCMCH	-
1.2.5. Provide public hospitals with ultrasound machines, required for early detection of liver cancer	State budget, Health Insurance Fund, international programs and projects	Nationwide, 21 aimags and 9 districts have ultrasound machines	Number of new ultrasound machines supplied for 6 RDTCs, 6 district general hospitals, and 3 state hospitals	-	6	9	-	-	1,740.0	2,610.0	-	4,350.0	MOH	MOF	6 RDTCs, 6 district general hospitals, and 3 state hospitals
1.2.6. Train sonographers involved in early detection of liver cancer	State budget, Health Insurance Fund, international programs and projects	Currently, 117 sonographers work in aimag and capital city public hospitals	Number of sonographers trained on early detection of liver cancer (public and private hospitals)	100	100	Refresher training 50%	Refresher training 100%	30.0	30.0	30.0	30.0	120.0	MOH, CHD	NCC, soicety of radiologists	Aimag and capital city health departments, private health care organizations
1.2.7. Establish call and recall system for early detection of liver cancer	State budget, Health Insurance Fund, international programs and projects	-	Percentage of organizations that integrated data in the call and recall system's data base	50%	100%	-	-	-	-	-	-	-	MOH, CHD, NCC	Aimag and capital city health departments	All public and private health organizations, National Statistics Office
1.3.Actions to improve capacity on diagnostic and treatment of liver cancer															
1.3.1. Develop and approve clinical protocols on diagnostic and treatment of liver cancer	State budget, international programs and projects	Clinical guideline on liver cancer approved in 2017	Clincial protocols approved by Health Minister's Order	100%		-	-	10.0	-	-	-	10.0	MOH	NCC, professional society	-

1.3.2. Establish and increase coverage of a system for monitoring and treatment of HBV and HCV carriers, detected during early detection program	State budget, Health Insurance Fund	Out of 22,466 people tested for HBV during Healthy Liver Program (2017-2020), 41.1% had antiviral treatment, out of 29,729 people tested for HCV, 67.3% had antiviral treatment	Percentage of annualy targeted population that had treatment	Annually, at least 50% of people tested for active HBV infection, and at least 60% of people tested for active HCV infection enrolled in treatment	Annually, at least 50% of people tested for active HBV infection, and at least 70% of people tested for active HCV infection, and 20% tested for active HDV infection enrolled in treated	Annually, at least 50% of people tested for active HBV infection, and at least 70% of people tested for active HCV infection, and 30% tested for active HDV infection enrolled in treatment	Annually, at least 50% of people tested for active HBV infection, and at least 70% of people tested for active HCV infection, and 40% tested for active HDV infection enrolled in treatment	-	-	-	-	-	MOH	NCCD, NCC	Referral level heath care organizations (public and private)
1.3.3. Establish system for immunology testing at RDTCs and specimen transportaion from neighboring aimags	State budget, Health Insurance Fund	-	Number of laboratories capable of conducting testing for cancer markers and safely transporting specimen	6	-	-	-	-	-	-	-	-	MOH	NCC	6 RDTCs
1.3.4. Enroll radiologists in aimag and district public and private health care organizations in continuous postgraduate training on liver cancer diagnostic (PET CT scan, contrast MRI, CT)	State budget, international programs and projects	Currently, there are 108 radiologists working in public hospitals	Number of radiologists trained	40	80	Refresher training 80	Refresher training 80	60.0	60.0	60.0	60.0	240.0	MOH, CHD	Society of radiologists, NCC	Aimag and capital city health departments
1.3.5. Train teams of specialists on use of radiation substances for liver cancer treatment	State budget, international programs and projects	-	Number of teams (4 specialists) trained	-	1 team	-	-	-	120.0	-	-	120.0	MOH	CHD, SNC	NCC
1.3.6. Establish mechanism for monitoring post-liver transplant treatment (immunesuppression therapy) at hospitals	State budget, international programs and projects	Currently, FSCH responcible for nationwide provision of the treatment	Number of health care organizations capable of conducting immunesuppressio n therapy	2	3	-	-	-	-	-	-	-	MOH, HIGA, MMDCRA	FSCH	NCC, SSCH

1.3.7. Organize measures for improving quality and accessibility, and centralized procurement of medicines and devices for early detection, diagnostic and treatment of liver cancer	State budget, Health Insurance Fund	-	Quality and access to medicines and devices, number of medicines and devices available at e-procurement shop	100%	-	-	-	-	-	-	-	-	MOH, MMDCRA	NCC, NCP	Public health care organizations
1.4. Actions to decentralize liver cancer care and services															
1.4.1. Develop and establish Dornod RDTC as a liver cancer surgery center for the Eastern Region	State budget, international programs and projects	Currently, liver surgeries are not performed in the region	Number of successful liver surgeries performed	10	20	35	More than 50	-	-	-	-	-	MOH	NCC, FSCH, SSCH	Dornod aimag health department and RDTC
1.4.2. Songinokhairkhan, Khan-Uul, and Sukhbaatar (Selbe) district general hospitals to develop capacity for liver cancer surgery	State budget, international programs and projects	Currently, liver surgeries are not performed	Number of successful liver surgeries performed	10	20	40	More than 50	-	-	-	-	-	MOH	NCC, FSCH, SSCH	Songinokhairkhan, Khan-Uul, and Sukhbaatar (Selbe) district general hospitals
1.4.3. Provide full sets of equipment and instruments, required for open and laparoscopic liver cancer surgery, for Dornod RDTC, Songinokhairkan, Khan-Uul, and Sukhbaatar (Selbe) district general hospitals	State budget, international programs and projects	4 full sets	Number of full sets for surgery	Open surgery 8, endoscopic surgery 4	-	-	-	2,280.0	-	-	-	2,280.0	MOH	Local administrations and parliaments, CCHD	Dornod RDTC, Songinokhairkan, Khan-Uul, and Sukhbaatar (Selbe) district general hospitals
1.4.4. Train teams (hepatobiliary and pancreatic surgeons, anesthesiologists, intensive care doctors, nurses, pathologists, and technicians), required for liver cancer surgery for Dornod RDTC, Songinokhairkan, Khan-Uul, and Sukhbaatar (Selbe) district general hospitals	State budget, international programs and projects	Currently, there are no human resources for liver and pancreatic surgery	Number of teams trained	4	-	-	-	30.0	30.0	30.0	30.0	120.0	MOH, CHD	NCC, FSCH, SSCH	Dornod RDTC, Songinokhairkan, Khan-Uul, and Sukhbaatar (Selbe) district general hospitals

1.4.5.The national team on liver cancer surgery to conduct quaterly on the job training for Dornod RDTC	State budget, international programs and projects	-	Number of jointly performed liver cancer surgeries	6	10	14	20	20.0	20.0	20.0	20.0	80.0	MOH, CHD, NCC	FSCH, SSCH, Dornod RDTC	Professional societies
1.4.6. Enroll interventional radiologists in aimag and district public and private hospitals in posgraduate short-term and on the job training on angiography diagnostic and treatment of liver cancer	State budget, international programs and projects	There are 12 interventional radiologists in aimags, and no of them in district general hospitals	Number of interventional radiologists trained	5	10	15	20	40.0	40.0	40.0	40.0	160.0	CHD, NCC	Aimag and capital city health departments, general hospitals	Governor's offices
1.5. Actions to improve quality and access to chemo and radiation therapy of liver cancer															
1.5.1. Introduce stereotactic body radiation therapy for liver cancer	State budget, international programs and projects, Health Insurance Fund	Stereotactic body radiation therapy was successfully performed on 3 patients	Number of patients that had stereotactic body radiation therapy	15	30	45	60	-	-	-	-	-	NCC	NEC, HIGA	IAEA
1.5.2. Expand systemic treatment and increase types of availabe medicines for incurable, late stage and repeatative liver cancer, not suitable for surgical treatment	State budget, international programs and projects, Health Insurance Fund	Systemic treatment of liver cancer started in 2021, combined immune and target therapy started in 2024	Number of patients that had systemic therapy	100	130	150	200	-	-	-	-	-	MOH	NCC, MMDCRA, HIGA	Health care organizations of all levels that conduct systemic therapy
TOTAL												**34,980.0**			

TWO. ACTION PLAN TO IMPLEMENT ESOPHAGUS, STOMACH, AND COLORECTAL CANCER PROGRAM

Actions to implement the program objective	Financing source	Baseline	Indicator	Target level				Budget (million tugrug)				Total budget (million tugrug)	Implementing organizations		
				2025	2026	2027	2028	2025	2026	2027	2028		Main	Collaborative	Participating
2.1. Actions on prevention of esophagus, stomach and colorectal cancer															
2.1.1. Approve by the Steering Committee and implement annual plan of information and communication activities on stomach cancer prevention and early detection	State budget, international programs and projects	-	Percentage of annual work plan implementation	100%	100%	100%	100%	-	-	-	-	-	MOH	MCPH, NCCD, NCC	Governmental and nongovernmental organizations
2.1.2. Organize information and communication activities to reduce use and consumption of salt (in fast food, school lunches and etc.) and support healthy lifestyle	State budget, international programs and projects	Nationwide, average consumption of salt per day is 11 grams /STEPS/	Percentage of population with reduced consumption of salt	-	-	-	40%	-	60.0	60.0	60.0	180.0	MOH, NCPH	MOFALI, MOES, aimag and capital city governor's offices, mass media	Aimag and capital city health departments, business entities that produce food
2.1.3. Organize information, communication and advocacy activities for citizen and business entities to reduce use and consumption of sugary products (drinks, food)	State budget, international programs and projects	Use of sugary drinks among 6-11 years old children is 43.8% and of sugary food is 17.3% (5th national survey on nutrition)	Percentage of population with reduced consumption of sugary products	-	-	-	50%	-	60.0	60.0	60.0	180.0	MOH, NCPH	MOFALI, MOES, aimag and capital city governor's offices, mass media	Aimag and capital city health departments, business entities that produce food
2.1.4. Organize information, communication and advocacy activities for citizen, communities, and decision makers to reduce use and consumption of trans fats	State budget, international programs and projects	Use of fried food among 6-11 years old children is 20.4% (5th national survey on nutrition)	Percentage of population with reduced consumption of trans fats	-	-	-	50%	-	40.0	40.0	40.0	120.0	MOH, NCPH	MOFALI, MOES, aimag and capital city governor's offices, mass media	Aimag and capital city health departments, business entities that produce food
2.1.5. Conduct survey on use of cutlery cleaning and disinfection equipment in eateries, and make efforst to improve their proper use in accordance with standards	State budget, international programs and projects	MNS 4946:2019	Number of eateries with equipment for cleaning and disinfection of cutlery	20%	30%	40%	50%	40.0	40.0	40.0	40.0	160.0	MOH	MOFALI, CCHD, NCPH, mass media	Business entities that operate eateries

2.1.6. Organize information, communication and advocacy actities to reduce use of plastic containers for storage of drinking water and food	State budget, international programs and projects	Conduct baseline survey on use of plastic containers for water and food, and reduce their use	Percentage in reduction of plastic container use	10%	30%	40%	50%	40.0	40.0	40.0	40.0	160.0	MOH, NCPH	MOE, MOES, MOFALI, aimag and capital city governors offices, mass media	Schools, colleges and universities, families
2.2. Actions for early detection and diagnostic of esophagus, stomach and colorectal cancer, and capacity building of health organizations															
2.2.1. Enroll people over 40 in early detection of esophagus and stomach cancer	State budget, Health InsuranceFund	-	Precentage of annual target population enrolled in early detection	10%	30%	50%	50%	6,300.0	15,120.0	15,120.0	15,120.0	51,660.0	MOH	NCCD, NCC	Referral level health care organizations (public and private)
2.2.2. Enroll people over 45 in early detection of colorectal cancer	State budget, Health InsuranceFund	-	Precentage of annual target population enrolled in early detection	10%	30%	50%	50%	1,300.0	4,800.0	4,800.0	4,800.0	15,700.0	MOH	NCCD, NCC	Referral level health care organizations (public and private)
2.2.3. Develop and approve protocol on early detection of esophagus and stomach cancer	State budget, international programs and projects	Not available	Approved protocol on early detection of esophagus and stomach cancer	100%	-	-	-	-	-	-	-	-	MOH	NCC	-
2.2.4. Develop and approve protocol on early detection of colorectal cancer	State budget, international programs and projects	Not available	Approved protocol on early detection of colorectal cancer	100%	-	-	-	-	-	-	-	-	MOH	NCC	-
2.2.5.Provide endoscopy equipment to public hospitals in aimags and in the capital city for use in early detection of cancer	State budget, international programs and projects	As of 2024, there are 38 endoscopy sets in aimags, and 24 in the capital city, total 62	Number of newly supplied sets for gastro and colonoscopy, and endoscope washers and drying cabinets	25 gastroscopes, 35 colonoscopes. 23 endoscope washers, 8 drying cabinets	-	-	-	5,840.0	-	-	-	5,840.0	MOH	Local administration and paliaments, and health departments	Aimag and district general hospitals, RDTCs
2.2.6. Provide endoscopy equipment required for conducting early detection at local level	State budget, international programs and projects	As of 2024, there are 38 endoscopy sets in aimags, and 24 in the capital city, total 62	Number of newly supplied endoscopy sets	-	5 endoscopes	-	-	-	3,000.0	-	-	3,000.0	MOH	Local administration s and paliaments, and health departments	Aimag and district general hospitals, RDTCs

2.2.7. Train endoscopists of aimag and capital city health care organizations on endoscopic diagnostic of esophagus, stomach and colorectal cancer through continuous and regular short-term and on the job postgraduate training	State budget, international programs and projects	Currently there are 44 endoscopists in aimags, and 14 in districts	Number of trained endoscopists	40	40	Refresher training 40	Refresher training 40	40.0	40.0	40.0	40.0	160.0	MOH	CHD	Amag and district endoscopists and pathologists
2.2.8. Establish call and recall system for early detection of esophagus, stomach and colorectal cancer	State budget, international programs and projects	NCCs program on early detection used in 21 aimags and 9 districts	Number of health organizations that use the program	50%	100%	-	-	-	-	-	-	-	MOH, CHD, NCC	Aimag and capital city health departments	Public and private health organizations of all levels, National Statistics Office
2.3. Actions to improve capacity for diagnostic and treatment of esophagus, stomach and colorectal cancer															
2.3.1. Develop and approve new diagnostic and treatment protocol for esophagus and stomach cancer	State budget, international programs and projects	Clinical guideline on esophagus and stomach cancer appproved in 2017	Clinical protocol approved by the Minsiter of Health order	100%	-	-	-	-	-	-	-	0	MOH	NCC, professional committee	-
2.3.2. Develop and approve new diagnostic and treatment protocol for colorectal cancer	State budget, international programs and projects	Clinical guideline on colorectal cancer approved in 2017	Clinical protocol approved by the Minsiter of Health order	100%	-	-	-	-	-	-	-	0	MOH	NCC, professional committee	-
2.3.3. Organize measures for improving quality and accessibility, and centralized procurement of medicines and devices for early detection, diagnostic and treatment of esophagus, stomach and colorectal cancer	State budget, international programs and projects	-	Quality and access to medicines and devices, number of medicines and devices available at e-procurement shop	100%	-	-	-	-	-	-	-	0	MOH, MMDCRA	NCC, NCP	
2.4. Actions to decentralize care and services for stomach cancer															

2.4.1. Develop and establish Uvs AGH as a stomach cancer surgery center for the Western Region	State budget, international programs and projects		Number of successful stomach cancer surgeries performed	At least 10	At least 20	At least 35	At least 40	-	-	-	-	0	MOH	NCC, FSCH, SSCH	Uvs aimag health department and RDTC
2.4.2. Bayangol, Songinokhairkhan, Khan-Uul, and Sukhbaatar (Selbe) district general hospitals to develop capacity for stomach cancer surgery	State budget, international programs and projects	Songinokhairkhan general hospital started stomach cancer surgery in 2023, Bayangol district general hospital doesn't perform stomach cancer surgery	Number of successful stomach cancer surgeries performed	At least 10	At least 20	At least 35	At least 40	-	-	-	-	0	MOH	NCC, FSCH, SSCH, governor's offices	Bayangol, Songinokhairkhan, Khan-Uul, and Sukhbaatar (Selbe) district general hospitals
2.4.3. Provide full sets of equipment and instruments, required for open and laparoscopic stomach cancer surgery for Uvs AGH and Bayangol district general hospital	State budget, international programs and projects	There are 2 surgery sets, which are outdated	Number of surgical sets supplied	Open surgery sets 2, endoscopic surgery sets 2	-	-	-	1,040.0	-	-	-	1,040.0	MOH	Local administrations and parliaments	Uvs AGH, and Bayangol district general hospita
2.4.4. The national team on stomach cancer surgery to conduct quaterly on the job training for Uvs AGH, Bayangol, Songinokhairkhan, Khan-Uul, and Sukhbaatar (Selbe) district general hospitals	State budget, international programs and projects	-	Number of successfully performed stomach cancer surgeries	Hospitals, except in Khan-Uul district, to perform at least 10 surgeries respectively	Each hospital at least 15	Each hospital at least 20	Each hospital at least 25	20.0	20.0	20.0	20.0	80.0	MOH, CHD	NCC, FSCH, SSCH, CCHD	Uvs AGH, Bayangol, Songinokhairkhan, Khan-Uul, and Sukhbaatar (Selbe) district general hospitals, professional societies
2.4.5. Train teams (stomach surgeons, anesthesiologists, intensive care doctors, nurses), required for stomach cancer surgery (2-3 specialists for each specialty)	State budget, international programs and projects	There is 1 trained doctor in Uvs aimag and Songinokhairkhan district hospital respectively, and no trained doctors in other aimags	Number of trained doctors and specialists	Stomach cancer surgeons 6, anesthisiologists 6, intensive care doctors 6, nurses 18	Stomach cancer surgeons 2, anesthisiologists 2, intensive care doctors 2, nurses 8	Refresher training 50%	Refresher training 50%	30.0	30.0	30.0	30.0	120.0	MOH	CHD, NCC	Uvs AGH, Bayangol, Songinokhairkhan, Khan-Uul, and Sukhbaatar (Selbe) district general hospitals, professional societies

2.4.6 .FSCH, SSCH and Uvs AGH to develop capacity for stomach lining removal surgery for treatment of stomach cancer	State budget, Health Insurance Fund	Currently, NCC and 4 private hospitals (total 5) use this method	Number of new health organizations capable to use the method	2	1	-	-	3,202.0	-	-	-	3,202.0	MOH	NCC	FSCH, SSCH, Uvs AGH
2.4.7. Train endoscopists in removal of stomach lining for treatment of stomach cancer	State budget, Health Insurance Fund	Currently, … doctors use this method	Number of doctors and specialists trained	8	Refresher training 8	-	-	30.0	30.0	-	-	60.0	MOH	NCC, CHD	FSCH, SSCH, TSCH, Uvs AGH
2.5. Actions to improve quality and access to chemo and radiation therapy of esophagus, stomach and colorectal cancer															
2.5.1. Expand combined chemo and radiation therapy for cases of inoperable esophagus cancer	State budget, Health Insurance Fund	Currently not available. Available for cases of cervical, colorectal and head and neck cancer only	Number of patients that had combined therapy	3	5	10	20	-	-	-	-	-	NCC	Chemotherapy units of other hospitals	-
2.5.2. Expand neoadjuvant chemo-radiation therapy for esophagus cancer	State budget, Health Insurance Fund	-	Number of pre-surgery neoadjuvant therapy cases	5	10	15	20	-	-	-	-	-	NCC	MMDCRA, chemotherapy units of other hospitals	-
TOTAL												**81,662.0**			

THREE. ACTION PLAN TO IMPLEMENT LUNG CANCER PROGRAM

Actions to implement the program objective	Financing source	Baseline	Indicator	Target level				Budget (million tugrug)				Total budget (million tugrug)	Implementing organizations		
				2025	2026	2027	2028	2025	2026	2027	2028		Main	Collaborative	Participating
3.1. Actions to prevent lung cancer															
3.1.1. Approve by the Steering Committee and implement annual plan of information and communication activities on lung cancer prevention and early detection	State budget, international programs and projects	-	Percentage of annual work plan implementation	100%	100%	100%	100%	-	-	-	-	-	MOH	NCPH, NCCD, NCC	Governmental and nongovernmental organizations
3.2. Actions to organize early detection and diagnostic of lung cancer, and to strenghen capacity of health organizations															
3.2.1. Enroll target population (people over 50, tobacco smokers for more than 15 years) in early detection of lung cancer	State budget, international programs and projects	-	Percentage of annual target population enrolled in early detection	-	20%	30%	40%	3,200.0	4,300.0	4,300.0	4,300.0	16,100.0	MOH	NCC	Referral level health care organizations (public and private)
3.2.2. Develop and approve protocol on early detection of lung cancer	State budget, international programs and projects	-	Approved protocol on early detection of lung cancer	100%	-	-	-	-	-	-	-	-	MOH	NCC	-
3.2.3. Make adjustement into computed tomography machines of public hospitals to enable low dose scans for early detection of lung cancer	State budget, international programs and projects	-	Number of machines that had undergone adjustment	50%	50%	-	-	35.00	35.00	-	-	70.0	NCC	MOH	Health organizations
3.2.4. Enroll radiologists in postgraduate training (short-term, on the job and etc.) on computed tomography	State budget, international programs and projects	There are 108 radiologists that work for public hospitals	Percentage of radiologists trained	80	80	Refresher training 80	Refresher training 80	30.00	30.00	30.00	30.00	120.0	MOH	CHD, society of radiologists	

3.2.5. Establish call and recall system for early detection of lung cancer	State budget, international programs and projects	-	Number of health organizations that use the program	100%	-	-	-	-	-	-	-	-	NCC	CHD	Public and private health organizations of all levels
3.3.Actions to improve capacity for diagnostic and treatment of lung cancer, and to decentralize care and services for lung cancer															
3.3.1. Develop and approve new clinical protocol on diagnostic and treatment of lung cancer	State budget, international programs and projects	Clinical protocol on lung cancer was approved in 2017	Clinical protocol approved by Minister of Health order	100%	-	-	-	-	-	-	-	-	MOH	NCC	Professional committee
3.3.2. Train surgeons required for bronchoplasty and segmentectomy surgery	State budget, international programs and projects	-	Number of surgeons trained	-	2	2	4	-	50.0	50.0	100.0	200.0	NCC	CHD	-
3.3.3. Organize measures for improving quality and accessibility, and centralized procurement of medicines and devices for early detection, diagnostic and treatment of lung cancer	State budget, international programs and projects	-	Quality and access to medicines and devices, number of medicines and devices available at e-procurement shop	100%	-	-	-	-	-	-	-	-	MOH, MMDCRA	NCC, NCP	
3.4. Actions to improve quality and access to radiation therapy of lung cancer															
3.4.1. Introduce 4-dimensional computed tomography-based ventilation imaging into radiation therapy of lung cancer	State budget, international programs and projects	0% (Abches based ventilation imaging was used for 1 patient's SBRT radiation treatment only)	Percentage of lung cancer patients that had 4-dimensional computed tomography-based ventilation imaging used for radiation therapy	-	-	50%	50%	-	-	-	-	-	NCC	SNC	IAEA

3.4.2. Train human resources (radiotherapy doctor 1, physicist 1) required for introduction of 4-dimensional computed tomography-based ventilation imaging into radiation therapy of lung cancer	State budget, international programs and projects	Request sent to IAEA to fund 2 month training in Australia	Number of trained specialists	-	2	-	-	-	-	-	-	-	NCC	SNC	IAEA
TOTAL												**16,490.0**			

FOUR. ACTION PLAN TO IMPLEMENT CERVIX UTERI CANCER PROGRAM

Actions to implement the program objective	Financing source	Baseline	Indicator	Target level				Budget (million tugrug)				Total budget (million tugrug)	Implementing organizations		
				2025	2026	2027	2028	2025	2026	2027	2028		Main	Collaborative	Participating
4.1. Actions to prevent cervix uteri cancer															
4.1.1. Approve by the Steering Committee and implement annual plan of information and communication activities on cervical cancer prevention and early detection	State budget, international programs and projects	-	Percentage of annual work plan implementation	100%	100%	100%	100%	-	-	-	-	-	MOH	NCPH	Governmental and nongovernmental organizations
4.1.2. Intensify immunization against HPV	State budget, international programs and projects	-	Percentage of target groups of population vaccinated against HPV	50%	70%	90%	95%	50.00	50.00	50.00	50.00	200.0	MOH, NCCD	NCC, NCPH, MOES, capital city governor's office, nongovernmental organizations	Aimag and capital city health departments, public and private health organizations
4.2. Actions to organize early detection and diagnostic of cervical cancer, and to strenghen capacity of health organizations															
4.2.1. Enroll target groups of women (pap smear at age 27 and 45-63, PCR test at age 30 and 40)	State budget, Health Insurance Fund	38.60%	Percentage of target groups of women enrolled in early detection	30%	50%	60%	70%	800.0	1600.0	1600.0	1600.0	5,600.0	MOH	NCCD, NCC	Referral level health care organizations (public and private)
4.2.2. Develop and approve new protocol on early detection of cervical cancer	State budget, international programs and projects	Protocol on early detection approved in 20202	Early detection protocol approved	100%	-	-	-	-	-	-	-	-	MOH	NCCD, NCC	-

4.2.3. Train and build capacity of teams (gynecologic oncologists, cytologists and pathologists, nurses) required for early detection of cervical cancer for every AGHs and RDTCs, and district health alliances and general hospitals	State budget, international programs and projects	There are 16 gynecologic oncologists in aimags and 1 in districts, 23 pathologists in aimags and 5 in districts, 21 cytologists in aimags and 7 in districts	Number of teams trained	10	21	Nation wide refresher training for 31 teams	Nation wide refresher training for 31 teams	20.0	30.0	40.0	40.0	130.0	MOH	NCC, NCMCH, NCCD	Aimag and capital city health departments
4.2.4. Train primary health care doctors and specialists on obtaining and transporting specimen for cervical HPV and cytology tests	State budget, international programs and projects	There are 500 doctors and nurses at the primary health care level	Percentage of primary health care centers capable of obtaining specimen	60%	80%	100%	-	10.0	10.0	10.0	-	30.0	MOH	CHD, NCC, NCCD	Primary health care centers
4.2.5. Train aimag and district doctors on gynecologic oncology (examination, diagnostic, LEEP)	State budget, international programs and projects	-	Number of training and doctors capable of conducting diagnostic and treatment	60 doctors, 4 trainings	-	-	-	120.0	-	-	-	120.0	MOH	CHD, NCC	-
4.2.6. Establish call and recall system for early detection of cervical cancer	State budget, international programs and projects	NCCs program on early detection used in 21 aimags and 9 districts	Number of health organizations that use the program	50%	100%	-	-	-	-	-	-	-	MOH, CHD, NCC	Aimag and capital city health departments	Public and private health organizations of all levels
4.3. Actions to improve capacity for diagnostic and treatment of cervical cancer, and to decentralize care and services for cervical cancer															
4.3.1. Develop and approve clinical protocol on diagnostic and treatment of cervical cancer	State budget, international programs and projects	Clinical protocol on cervcial cancer approved in 2017	Clinical protocol approved by Minister of Health order	100%	-	-	-	-	-	-	-	-	MOH	NCC	Professional committee

4.3.2. Provide complete set of intrauterine endoscopic equipment to improve capacity for early diagnostic and treatment of cervical cancer	State budget, international programs and projects	-	Intrauterine endoscopic set 1	100%	-	-	-	440.0	-	-	-	440.0	MOH	NCC, Amgalan maternity hospital	-
4.3.3. Provide aimag and district hospitals with complete sets for LEEP treatment of precancerous lesions	State budget, international programs and projects	0	Number of newly provided sets of equipment (21 aimags, 12 for the capital city)	31	-	-	-	1,320.0	-	-	-	1320.0	MOH, CHD	NCC	Aimag and district health departments, professional committee
4.3.4. Train gynecologists of aimag and capital city health care organizations on precancerous cervcial lesions and diagnostic and treatment of cervcial cancer through continuous and regular short-term and on the job postgraduate training	State budget, international programs and projects, Health Insurance Fund	Oncologic gynecologists in aimags 16, in districts 1	Number of doctors trained	20	20	Refresher training 50%	Refresher training 100%	30.00	30.00	30.00	30.00	120.0	MOH, CHD	NCC	Aimag and district health departments, professional committee
4.3.5.Introduce liquid-based cytology testing method for diagnostic of cervical cancer	State budget, international programs and projects	-	Number of health care organizations that introduced new method of liquid based cytology	-	100%	-	-	-	60.0	-	-	60.0	MOH	NCP, NCC	-

4.3.6. Organize measures for improving quality and accessibility, and centralized procurement of medicines and devices for early detection, diagnostic and treatment of cervical cancer	State budget, international programs and projects	-	Quality and access to medicines and devices, number of medicines and devices available at e-procurement shop	100%	-	-	-	-	-	-	-	-	MOH, MMDCRA	NCC, NCP	-
4.4. Actions to improve quality and access to chemo and radiation therapy of cervical cancer															
4.4.1. Introduce interstitial internal radiation therapy	State budget, international programs and projects	Equipment introduced for the treatment, specialists are attending ongoing training, according to the plan	Percentage of internal radiation therapy patients that had interstitial therapy	-	-	15%	20%	-	-	-	-	-	NCC	NEC, IAEA	-
TOTAL												**8,020.0**			

FIVE. ACTION PLAN TO IMPLEMENT BREAST CANCER PROGRAM

Actions to implement the program objective	Financing source	Baseline	Indicator	Target level				Budget (million tugrug)				Total budget (million tugrug)	Implementing organizations		
				2025	2026	2027	2028	2025	2026	2027	2028		Main	Collaborative	Participating
5.1. Actions to prevent breast cancer															
5.1.1. Approve by the Steering Committee and implement annual plan of information and communication activities on breast cancer prevention and early detection	State budget, international programs and projects	-	Percentage of annual work plan implementation	100%	100%	100%	100%	-	-	-	-	-	MOH, NCPH	NCC	Governmental and nongovernmental organizations
5.2. Actions to organize early detection and diagnostic of breast cancer, and to strenghen capacity of health organizations															
5.2.1. Enroll women over 40 in early detection of breast cancer	State budget, Health Insurance Fund	-	Percentage of target groups of women enrolled in early detection	-	50%	30%	70%	-	4,500.0	4,500.0	4,500.0	13,500.0	MOH	NCC	Referral level health care organizations (public and private)
5.2.2. Develop and approve new protocol on early detection of breast cancer	State budget, international programs and projects	Previous protocol approved in 2012	Approved protocol on early detection of breast cancer	100%	-	-	-	-	-	-	-	-	MOH	NCC	Professional committee
5.2.3. Provide mammography equipment, required for early detection of breast cancer, for public hospitals	State budget, international programs and projects	7	Number of newly supplied mammographs that used for early detection	-	9	5	-	3,600.0	2,000.0	-	-	5,600.0	MOH	NCC	RDTCs 6, district general hospitals 6, state hospital 1
5.2.4. Enroll radiologists and technicians in postgraduate training (short-term, on the job and etc.) on breast ultrasound and mammography	State budget, international programs and projects	There are 31 radiologists in aimag and 9 in districts, and 229 technicians	Percentage of radiologists and technicians trained	60%	100%	Refresher training 50%	Refresher training 100%	30.0	30.0	30.0	30.0	120.0	ЭМЯ	CHD, society of breast radiologists	Aimag and district health departments and general hospitals

5.2.5. Establish call and recall system for early detection of breast cancer	State budget, international programs and projects	NCCs program on early detection used in 21 aimags and 9 districts	Number of health organizations that use the program	50%	100%	-	-	-	-	-	-	-	MOH, CHD, NCC	Aimag and capital city health departments	Public and private health organizations of all levels
5.3. Actions to improve capacity for diagnostic and treatment of breast cancer, and to decentralize care and services for breast cancer															
5.3.1. Develop and approve new protocol on diagnostic and treatment of breast cancer	State budget, international programs and projects	Clinical protocol on breast cancer approved in 2017	Clinical protocol approved by Minister of Health order	100%	-	-	-	-	-	-	-	-	MOH	NCC	Professional society
5.3.2. Improve capacity for breast cancer rehabilitative and organ saving surgery	State budget, international programs and projects	In 2023 - 42%	Percentage of breast saving surgery in overall breast cancer surgery	55%	60%	65%	65%	-	-	-	-	-	NCC	-	-
5.3.3. Provide for hospitals that specialize in provision of cancer care and services mammography machine for 3 dimensional stereotactic biopsy	State budget, international programs and projects	-	Mammography machine installed and used for daignostic	-	100%	-	-	650.0	-	-	-	650.0	MOH	NCC	-
5.3.4. Organize measures for improving quality and accessibility, and centralized procurement of medicines and devices for early detection, diagnostic and treatment of breast cancer	State budget, international programs and projects	-	Quality and access to medicines and devices, number of medicines and devices available at e-procurement shop	100%	-	-	-	-	-	-	-	-	MOH, MMDCRA	NCC, NCP	-
TOTAL												**19,870.0**			

SIX. ACTION PLAN TO IMPLEMENT BLOOD CANCER PROGRAM

Actions to implement the program objective	Financing source	Baseline	Indicator	Target level				Budget (million tugrug)				Total budget (million tugrug)	Implementing organizations		
				2025	2026	2027	2028	2025	2026	2027	2028		Main	Collaborative	Participating
6.1. Actions to improve capacity for diagnostic and treatment of blood cancer															
6.1.1. Train and build capacity of specialists required for blood stem cell transplantation	State budget, international programs and projects	Currently, there are 9 doctors, 20 nurses, 2 assistants available	Number of newly trained doctors and specialists	-	-	5 doctors	5 doctors	-	-	20.0	20.0	40.0	MOH	CHD, FSCH	-
6.1.2. Develop and approve guideline on diagnostic and treatment of blood cancer	State budget, international programs and projects	-	Newly developed and approved guideline	-	100%	-	-	-	-	-	-	-	MOH	FSCH	
6.1.3. Organize postraduate capacity building training for doctors and other specialists on diagnostic and treatment of blood cancer	State budget, international programs and projects	-	Number of doctors trained	-	20	20	20		100.0	100.0	100.0	300.0	MOH	CHD, FSCH	-
6.1.4. Introduce immune therapy for blood cells, and CAR-T treatment	State budget, international programs and projects	-	Newly introduced treatment method	-	-	100%	-	-	-	200.00	-	200.0	MOH	FSCH	-
6.1.5. Improve diagnostic capacity by provision of SPECT-CT required for diagnostic of some blood cancers	State budget, international programs and projects	Facilities are prepared	Number of newly supplied equipment	100%	-	-	-	-	-	-	-	-	MOH	IAEA	FSCH
6.1.6. Provide equipment required for assessmnet of platelet function	State budget, international programs and projects	-	Number of newly supplied equipment	-	-	-	Electro-graphy equipment 1	-	-	-	200.00	200.0	MOH	FSCH	-
6.1.7. Train and build capacity of human resources required for assessment of platelet function	State budget, international programs and projects	2 doctors, 1 technician	Numer of trained doctors and technicians	-	-	2 doctors, 2 technicians	-	-	-	100.00	-	100.0	MOH	CHD	FSCh
6.1.8. Improve availability of medicines required for treatment of blood cancer	State budget, international programs and projects	-	Number of new medicines available	-	-	At least 3	At least 3	-	-	-	-	-	MOH	MMDCRA	FSCH
6.2. Actions to improve capacity of hematologist oncologists, and to expand online consulation on diagnostic of blood cancer															

6.2.1. Organize orientation training on hematology for aimag and district internal medicine doctors	State budget, international programs and projects	-	Number of doctors trained	30	30	Refresher training 50%	Refresher training 50%	50.00	50.00	50.00	50.00	200.0	MOH	CHD, FSCH	Aimag and district internal medicine doctors
6.2.2. Implement 'Online Doctor" program that provides consultation in the capital city and aimags	Health Insurance Fund	Consultations provided for 10 people	Number of clients that hadonline consultation, number of health organizations that provide online consultation	60	100	150	260	2.00	4.00	5.00	7.00	18.0	MOH	CHD, FSCH	Aimag and district internal medicine doctors
TOTAL												**1,058.0**			

SEVEN. ACTION PLAN TO IMPLEMENT CHILDHOOD CANCER PROGRAM

Actions to implement the program objective	Financing source	Baseline	Indicator	Target level				Budget (million tugrug)				Total budget (million tugrug)	Implementing organizations		
				2025	2026	2027	2028	2025	2026	2027	2028		Main	Collaborative	Participating
7.1. Actions to organize information, training, communication and advocacy activities on childhood cancer															
7.1.1. Organize information training, communication and advocacy activities on childhood cancer	State budget, international programs and projects	-	Percentage of annual work plan implementation	100%	100%	100%	100%	100.0	100.0	100.0	100.0	400.0	MOH	NCMCH, NCPH	-
7.1.2. Organize measures to increase number of teachers and volunteers to ensure access to education for children with cancer during their stay at hospital or treatment at home	State budget, international programs and projects	-	Percentage of annual work plan implementation	-	100%	100%	100%	-	-	-	-	-	MOH, MOES	NCMCH, international organizations	
7.2. Actions to improve capacity for provision of childhood cancer care and services															
7.2.1. Develop protocol on childhood cancer diagnostic and treatment	State budget, international programs and projects	-	Protocol on diagnostic and treatment of childhood cancer	1	2	-	-	-	-	-	-	-	MOH	NCMCH	Professional committee
7.2.2. Complete preparations and build capacity of human resources for stem cell transplantation for children	State budget, international programs and projects	-	Percentage of work completed	30%	60%	100%	-	90.0	90.0	90.0	-	270.0	MOH	NCTM, NCMCH	-
7.2.3. Implement global platform to improve access to childhood cancer medicines	State budget, international programs and projects	Implementation of the annual work plan for 2023 is 100%	Percentage of annual work plan implementation	100%	100%	100%	-	-	-	-	-	-	MOH	MMDCRA	NCMCH

7.2.4. Introduce home palliative care for cancer	State budget, international programs and projects	Develop guideline and training module on home palliative care for cancer	Percentage of annual work plan implementation	-	100%	-	-	-	-	-	-	-	MOH	NCMCH	Professional society
7.3. Actions to improve capacity of doctors and other specialists on childhood cancer															
7.3.1. Organize continuous training of multi-specialist teams for childhood cancer	State budget, international programs and projects	-	Number of teams trained	1	2	2	2	50.0	50.0	50.0	50.0	200.0	MOH	CHD	NCMCH
7.3.2. Organize short-term on the job training for aimag and district oncologists and pediatricians at childhood cancer and hematology departments of NCMCH	State budget, international programs and projects	-	Number of doctors trained	-	20	20	20	-	150.0	150.0	150.0	450.0	MOH	NCMCH	-
7.3.3. Enroll imaging and laboratory doctors in training on childhood cancer diagnostic	State budget, international programs and projects	-	Number of doctors trained	-	20	20	20	-	70.0	70.0	70.0	210.0	MOH	NCMCH	-
НИЙТ												**1,530.0**			