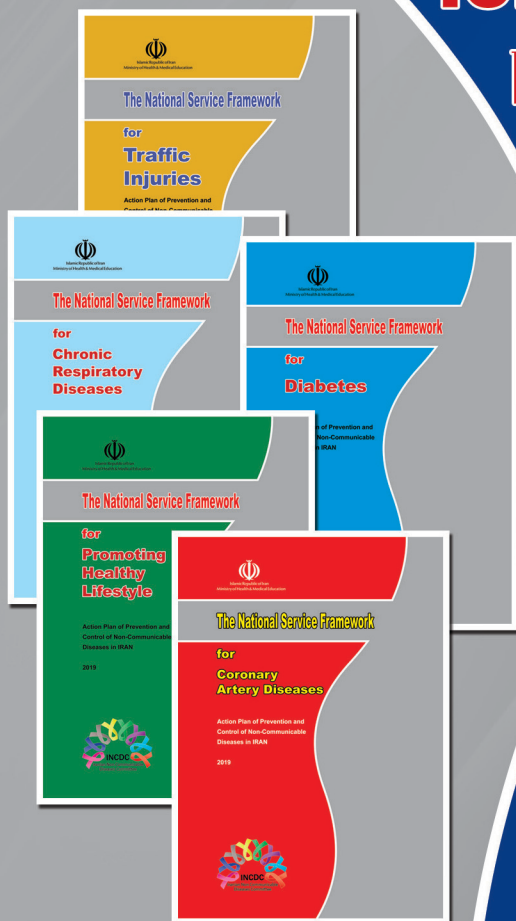




Islamic Republic of Iran
Ministry of Health & Medical Education

The National Service Frameworks

for Non-Communicable Diseases in IRAN





Statement of the Chair of the Iranian Non-Communicable Diseases Committee (INCDC)



**Dr. Saeid
Namaki**

Health
The Chair of
the Iranian
Non-
Communicable
Diseases
Committee

Noncommunicable diseases (NCDs) are responsible for 38 million deaths in the world each year, sixteen millions of which occurring before the age of 70. Cardiovascular diseases (myocardial infarction and stroke), malignancies, chronic respiratory diseases (obstructive pulmonary disease and asthma), and diabetes constitute the main four categories of non-communicable diseases. It is demonstrated that ageing population, urbanization, and sedentary lifestyle are the main underlying factors of the rampantly increasing global burden of NCDs during the recent decades.

To address the global threat of non-communicable diseases, international efforts are focused on targeting four known underlying behavioral risk factors, namely: tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol. Accordingly, World Health Organization (WHO) member states have declared a time-bound set of nine voluntary global targets to reduce mortality from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases by 2025 through addressing the responsible risk factors.

In pursuit of achievement of this international goal in a national scale in Iran, in 2015, Iranian Non-communicable Diseases committee (INCDC) was formed at the Ministry of Health and Medical Education (MOHME) of Islamic Republic of Iran. Subsequently, "National Action Plan for the Prevention and Control of Non-Communicable Diseases and Related Risk Factors for the Islamic Republic of Iran, 2015-2025" was established and national targets were set to be achieved in predefined timeframes.

With the divine assistance, during the past year INCDC have successfully forged all necessary inter and intra-sectoral collaborations needed for prevention and control of NCDs and their risk factors in the country. In this report, we aim to present a summary of the activities and main achievements of the health authorities in this regard. This progress report clearly demonstrates that close collaboration among different compartments of health system and sharing responsibilities with all stakeholders can play a key role in tackling noncommunicable diseases in a national scale. In fact, this collaborative effort can be considered as a historic opportunity for our national health system to achieve significant milestones in healthcare.

It the end, I wish to acknowledge relentless efforts of Professor Bagher Larijani, the deputy chair of the committee, and express my profound gratitude to all committee members and executive personnel for their professionalism, dedication, and commitment.

The Statement of the Deputy Chair of the Iranian Non-Communicable Diseases Committee (INCDC)

▼ **Dr. Bagher Larijani, M.D., F.A.C.E.**
Deputy Minister for Medical Education
Deputy Chair of the Iranian Non-Communicable Diseases Committee

With the main objective of implementation of the WHO voluntary global NCDs goals by 2025, Islamic Republic of Iran has taken concert steps towards setting national targets and progressing towards their achievement. Following months of regional and international negotiations and consultations, National Action Plan for Prevention and Control of Non-Communicable Diseases and Related Risk Factors in the Islamic Republic of Iran was drafted and unveiled in the presence of Dr. Chan and Dr. Alwan on 22nd July 2015. This national initiative also secured approval of the Supreme

Council for Health and Food Security and was endorsed by H.E. Dr. Rouhani, the president of Islamic Republic of Iran as well as the Speaker of the Parliament, Vice President, Head of Management and Planning Organization, Vice President for Environment Protection Department, Head of Iran's National Broadcasting Organization, and nine government ministers.

In addition to nine voluntary targets, Iranian action plan contains two modifications to WHO targets as well as integration of four national-specific targets. This report aims to present achievements of INCDC's sub-committees towards prevention and control of noncommunicable diseases and their risk factors in Iran based on the following national targets:

1. 25% reduction in the risk of premature death from cardiovascular disease, cancer, diabetes, chronic lung disease
2. At least 10% relative reduction in alcohol consumption
3. A 20% relative reduction in prevalence of insufficient physical activity
4. 30% relative reduction in the average salt intake in the population
5. 30% relative reduction in the prevalence of tobacco use in persons aged 15+ years
6. 25% relative reduction in the prevalence of high blood pressure or contain the prevalence of raised blood pressure
7. Halt the rates of diabetes and obesity
8. At least 70% of eligible people receive drug therapy and counselling to prevent heart attacks and strokes
9. An 80% availability of the affordable basic technologies and essential medicines, including generics in private and public sectors
10. Zero trans fatty acid in food & oily products
11. 20% Relative reduction in mortality rate due to traffic injuries
12. A 10% relative reduction in mortality rate due to drug abuse
13. 20% increase in access to treatment for mental diseases

In this report, we also wish to clarify INCDC expectations from medical universities all across the nation in terms of their responsibilities for provincial implementation of the action plan. I am quite sanguine that, with divine assistance, and through endeavors of the committee members, members of the secretariat office, and all involved in the national health system, we shall achieve remarkable milestones in prevention and control of non-communicable diseases in Iran.



Islamic Republic of Iran
Ministry of Health & Medical Education



The National Service Frameworks for Non-Communicable Diseases in IRAN

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Niloofer Peykari, The member of the National Secretariat for the Prevention and Control of Non-communicable Diseases of the Islamic Republic of Iran

Non-Communicable Diseases Prevention and Control in Iran

According to the National Action Plan of Prevention and
Control of Non-Communicable Diseases in IRAN

2019

Background

Alarming increase of premature mortality from non-communicable diseases across the world considered by Global action plan on NCDs and Sustainable Development Goals [1-3]. Also, the High-Level Meeting on NCDs in the United Nations emphasized on the need of all government policy response to this dramatic problem [4]. NCDs were responsible to more than 38 million deaths in the world and annually, non-communicable diseases responsible for 16 million premature death [5]. This staggering toll of non-communicable diseases and premature mortality leads policy makers to pay attention and instigate action across the globe [6].

Evidences indicate that, Iran threatened by NCDs too [7-10]. In Iran, during the recent decades, the socio-economic development and the successful function of Primary Health Care (PHC) bring out health promotion, child, and maternal mortality decrease [11]. In addition, life expectancy increased from 66 to 78 years in period of 1990 to 2013.

Following these progresses in health situation of Iranians, a remarkable revolution occurred in the health status of the country especially in the field of communicable diseases. Nevertheless, non-communicable diseases remained as the great health problem in Iran. In 2013, 236 thousand deaths in Iran occurred due to NCDs and there was 14.5% increase of NCDs' death during two past decades [12]. At the same time, mental disorders, substance abuse and traffic injuries were cause of 15821 deaths. It is remarkable, 82.2% of NCDs' death is due to cardiovascular diseases, cancers, chronic pulmonary diseases, and diabetes and these are top ranks of cause of death in the country [12]. In Iran, dietary risks are the first line of NCDs' risk factors and metabolic risk factors stand at second position. Tobacco smoke, air pollution, low physical activity, and alcohol and drug use are the next related risk factors, respectively [12].

In 2013, NCDs led to 7 million years lived with disability (YLD) in Iran [13]. It is considerable, NCDs accompanied with economical burden because of productivity reduction and diverting resources from productive purposes to NCDs treatment. Because of, the poor population struggled with health expenditure and living costs, they have been suffered from economic stress more than other people [12, 14]. It is remarkable; the first cause of catastrophic health expenditures is NCDs and this problem reinforce societal inequities [6, 15].

Non-communicable diseases ignored during the framing of the Millennium Development Goals in 2000, but clarification of the reality leads the policymakers to pay attention to it. The United Nations and the World Health Organization (WHO) have called for a 25% reduction by 2025 in mortality from non-communicable diseases among persons between

30 and 70 years of age, in comparison with mortality in 2010, adopting the slogan “25 by 25” [4].

Universal health coverage (UHC) as a critical component of sustainable development reduces poverty and social inequities through financial risk protection. It is important; the Key elements of the right to health are availability, accessibility, acceptability, quality [16]. By considering these rights and responding to significant burden of NCDs, the World Health Organization (WHO) developed the global action plan for the prevention and control of NCDs (2013-2020) which contain 9 targets by considering four main risk factors; including tobacco use, an unhealthy diet, lack of physical activity and harmful alcohol use. These behavioral risk factors are associated with four main disease clusters mentioned above [17]. As many NCDs’ death and disability are preventable by appropriate interventions, this action plan provides policy options for countries to strengthen them to reduce premature deaths from NCDs by 25% by 2025 [18].

The WHO has messaged; the countries could shift from political commitment to effective action by prioritizing affordable interventions. This organization emphasized on the need of all countries to set national NCDs targets and responsible to attain them [19-20].

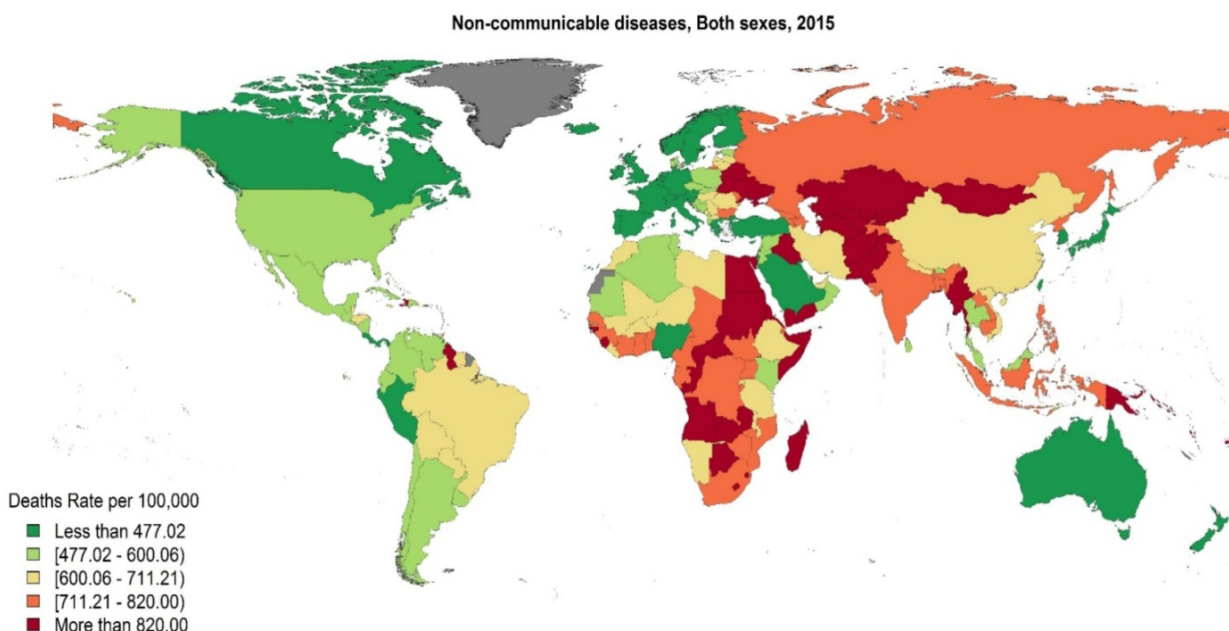


Figure 1: Non-communicable Diseases' Death Rate across the World

Response of IRAN to Emerging NCDs' Epidemic

Political Commitment

Mandate with the task of developing a national action plan for NCDs' prevention and control was the opportunity for Iran to commitment 25 by 25 NCDs goal [21]. In context of national action plans, we could arrange feasible, scalable, affordable, and cost effective interventions to reduce NCDs' mortality and morbidity and attain to the most efficient and equitable health system [22, 23].

Success in response to NCDs crisis depends on strong and effective leadership in high-level political statement [24]. In this way, health policies support regulatory, legislative and inter-sectoral collaborations to address equity and reduction NCDs' outcomes.

Establishment Sustainable National Leadership

Ministry of Health and Medical Education (MOHME) of Iran as strong and effective leadership in high-level political statement established Iranian non-communicable diseases committee (INCDC) with the aim of comprehensive policy making, planning, and monitoring of all activities in the area of non-communicable diseases in Iran.

The presented flow demonstrates the relationships between inter and intra-sectoral parts. The body of INCDC contains ministry of health deputies, supreme council of health and food security and related to medical sciences universities.

Iranian non-communicable diseases committee (INCDC)

INCDC set up by inter and intra-sectoral collaboration.

Intra-Sectoral Collaborators

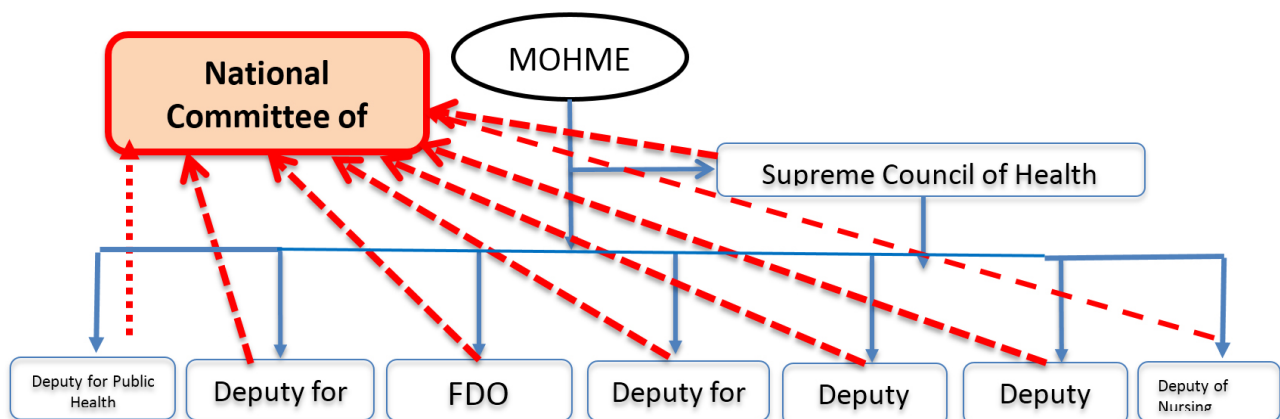


Figure 2: Intra-Sectoral Collaborators in INCDC

Inter-Sectoral Collaborators

- Interior Ministry
- Ministry of Agriculture
- Ministry of Cooperatives, Labor, and Social Welfare
- Ministry of Culture and Islamic Guidance
- Ministry of Economic Affairs and Finance
- Ministry of Education
- Ministry of Energy
- Ministry of Industry, Mine, and Trade
- Ministry of Roads and City Planning
- Islamic Republic of Iran Broadcasting
- Ministry of Sport and Youth
- Environmental Protection Organization
- Management and Planning Organization

Iranian non-communicable diseases committee has nine sub-committees according to various aspects of prevention and controls NCDs and their risk factors and national targets.

INCDC's sub-committees

- Cardiovascular Diseases
- Cancer
- Diabetes and Metabolic Risk Factors
- Chronic Respiratory Diseases
- Life Style related Risk Factors
 - Healthy Diet
 - Physical Activity
 - Prevention and Control Tobacco smoking
 - Mental Health
 - IraPEN Project
- Food and Medicine
- Traffic Injuries
- Inter-Sectoral Collaboration
- Monitoring & Evaluation

Move toward action

Setting clear and appropriate targets in national level

Planning is one of the key steps for responding to NCDs' dramatic epidemic [25]. "National Action Plan for Prevention and Control of Non-Communicable Diseases and the related risk factors in Iran, 2015-2025" was developed by considering our country's priorities, National and Sub-national Burden of Diseases, and WHO global targets [26-29,1]. The national action plan for NCDs Prevention and Control in Iran including 9 targets based on global action plan for NCDs and 4 special targets regarding trans fatty acid, traffic injuries, drug abuse, and mental diseases.

Among nine global targets on prevention and control NCDs, target 3 and target 8 adapted for our country situation. According to WHO report, Prevalence of insufficient physical activity in Iranian adult was 24.1% among men and 42.9% among women [30-31]. The 3th target of NCDs global action plan set to reduce physical inactivity by 10% by 2025. According to our country situation, we considered 20% reduction of physical inactivity. In addition, the eighth target of global action plan set to receiving drug therapy and counseling to prevent heart attacks and strokes by 50% of eligible people. But we accelerate this desired measure to 70% because of access to medicines plays a vital role in universal health coverage goals achievement and already we stand up good point [32]. It is remarkable, the other targets were appropriate for Iran by considering our conditions and situation analysis.

In addition to glossary WHO targets, United Nation proposed Sustainable Development Goals (SDGs). The third sustainable development goal focused on health and considered UHC as a mean of health equity. It is needed to effective attention to non-communicable diseases [33].

By considering burden of diseases in Iran, targets 10 to 13 set for our country. UHC and health system goals are related to all NCDs targets and all of them are in the way of poverty reduction [36].



The NCD Targets for Iranian Population

The targets that are as the same as WHO targets:

Target 1. 25% reduction in the risk of premature death from cardiovascular disease, cancer, diabetes, chronic lung disease

Target 2. At least 10% relative reduction in alcohol consumption

Target 4. 30% relative reduction in the average salt intake in the population

Target 5. 30% relative reduction in the prevalence of tobacco use in persons aged 15+ years

Target 6. 25% relative reduction in the prevalence of high blood pressure or contain the prevalence of raised blood pressure

Target 7. Halt the rates of diabetes and obesity

Target 9. An 80% availability of the affordable basic technologies and essential medicines, including generics in private and public sectors

Different targets with the WHO targets:

Target 3. A 20% (10%) relative reduction in prevalence of insufficient physical activity

Target 8. At least 70% (50%) of eligible people receive drug therapy and counselling to prevent heart attacks and strokes

Iran's Specific Targets

Target 10. Zero trans fatty acid in food & oily products

Target 11. 20% Relative reduction in mortality rate due to traffic injuries

Target 12. A 10% relative reduction in mortality rate due to drug abuse

Target 13. 20% increase in access to treatment for mental diseases

Mobilization, inter & intra-sectoral collaboration and developing national action plan for NCDs Prevention and Control in Iran

In developing NCDs' national action plan of Iran, inter and intra-sectoral collaboration was considered. INCDC initiated dialogue with health system sectors and the other ministries to response NCDs' prevention and control. This multi-sectoral procedure and collaborating approach led to develop the national document based on recommended WHO framework contain four areas of governance, prevention and reduction of risk factors, health care, and surveillance, monitoring and evaluation.

Through collaborative planning, the time bounded national action plan was prepared based on clear policies with clarified targets, strategies and activities and determined stakeholders, desired outcome, evaluation criteria, and resources [34].

Enlist the support of national and international policy makers

Prepared NCDs' action plan supported by President, parliament speaker, Vice President, Head of Management and Planning Organization, Head of Environmental Protection Organization, Head of Islamic Republic of Iran Broadcasting, and nine Ministers in the government Cabinet. This holistic political support and responsibility might be unique in the region. It is remarkable, supreme council of health, chaired by president approved "National Action Plan for Non-Communicable Diseases Prevention and Control in Iran" and minister of health directed medical sciences universities to implement it in order to health promotion of community as the main stakeholder through sub-national NCDs' committee.

Participation of sub-national policy makers

Iran has 61 Medical Sciences University which their health services covered all provinces of Iran. Integration of medical education and health in the Ministry of Health and Medical Education create appropriate atmosphere for strengthening the health care system in Iran [37-38]. Towards realizing NCDs' prevention and control targets, INCDC invited Medical Sciences Universities' chancellors as the main authorities in sub-national health sectors. They could be directed provincial committees through collaborative arrangements to address local priorities and should be committed to multi-sectoral approach. This approach is essential among planning, implementation and accountability as key stages of response to NCDs' problem [25].

To accelerate country response to non-communicable diseases prevention and control, policy makers could follow these strategies to strengthen governance, risk reduction, health care, and surveillance. Generating national and sub-national information and monitor the trends of NCDs and their risk factors, establishing health promotion programs across the life course through primary health care system and universal health coverage components, and tackling issues through multi-sectoral approach are critical strategies be suggested.

National Service Frameworks

The sub-committees of INCDC formed as a responsible body for Policy making and presentation National Service and performance evaluation measures.

Iranian National Services Framework (NSF) is a component of the National Non-communicable Diseases Initiative, which deals with general concepts about different aspects of main NCDs and highlights the importance of confronting the disease. The national services framework consists of several main goals for prevention and control of NCDs. Following categories: combating rising the prevalence of NCDs and its contributed factors,

expanding health insurance coverage, promoting the quality of care offered to patients, encouraging patients for regular periodic clinical examinations, maximizing the number of patients registered in National Register System, and full insurance coverage of devices and instruments required by patients.

INCDC published three main NSF for Diabetes, Cardiovascular Diseases, and Traffic Injuries.

National Services Framework for Diabetes

National Services Framework for Coronary Artery Diseases

National Services Framework for Chronic Respiratory Diseases

National Services Framework for Traffic Injuries

National Services Framework for Healthy Life Style

Moreover, the framework contains some standards regarding strict regulations of clinical service delivery to be adhered to all across the county in different national, provincial, and regional levels.

In this framework, For effective service provision, it is imperative that standard research protocols are stringently adhered to and the required capacity is built. One of the most important goals of diabetes framework is to design a national framework to prioritize research based on the needs of patients, policy-makers, executive managers, and researchers. This will be implemented through provision of a comprehensive list of research (basic, clinical, policy-making) carried out in the field to illuminate the path for future research projects. It is noteworthy that this framework will also assist policy-makers in allocating and distributing health and research budget in a national level. Cancer and Chronic Respiratory Diseases would be published soon.

Conclusion:

The structured and stepwise approach of Iran towards NCDs prevention and control bring out a proposed way in the mixture of challenges and successes. Our experiences indicate that the Strong leadership needed to pass the way of fighting against NCDs. We emphasized on this principle; the successful response to NCDs need to multi-sectoral approach, the engagement of all health sectors and related stakeholders including other ministries and organizations [34].

Iranian Non-communicable Diseases Committee (INCDC) is an appropriate model in supreme level for mega coordination [39-40]. According to NCDs' progress monitor report of WHO, Iran stand up the first rank in Eastern Mediterranean region and could be share lesson learned to other countries [41].

President, parliament, supreme council of health members and cabinet ministers' support and collaboration with other ministries and organizations were unique experience in the region. Access to efficient epidemiological information, explicit views of national policy makers in various domains of public health, treatment, food and medicine, education, and research. Partnership of policy and decision makers, scientist, researchers and health experts in national action plan development, establishment national sub committees guided by national authorities and structuring the provincial committees as the frontline of health services were our strengths.

Finally, Similar to other experience, we suggest integration of NCDs' prevention and control in primary health care, enforce appropriate interventions led by provincial committee, technical use of existing infrastructure and human resources, innovative resource mobilization such as funding through nongovernmental resource, provide progress monitoring system and ensure accountability from the involved sectors, and actions to accelerate progress. [20, 36, 42- 46]

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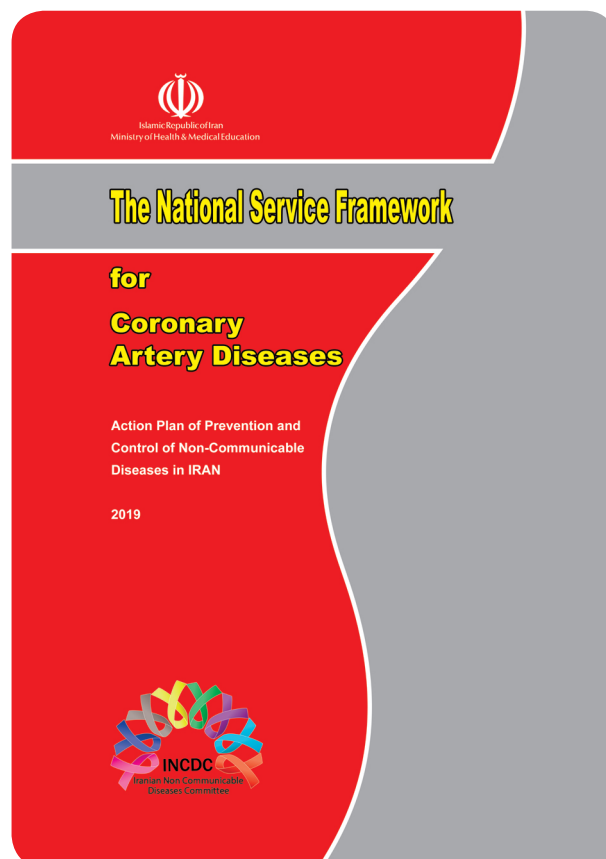
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The National Service Framework for Coronary Artery Diseases



Action Plan of Prevention and
Control of Non-Communicable Diseases in IRAN

2019

Introduction

Following the Declaration on Non-communicable Diseases (NCDs) adopted by the UN General Assembly in 2011, and calling for a 25% reduction in premature mortality from non-communicable diseases by 2025 by the World Health Assembly in May 2012, nine voluntary global targets were set to combat global mortality from the four main NCDs, accelerating action against the leading risk factors for NCDs and strengthening national health system responses at global level.

Inline with the global targets, Implementing policies that are health promoting, mandate interventions to prevent exposure from harm and provide quality care was the reasons behind preparing the “National Action Plan for Prevention & Control of Non- Communicable Disease and related risk factors in the Islamic republic of Iran, 2015-2025”.

Based on comprehensive literature review, health surveys and research studies including National and Sub- national burden of disease(NASBOD) study in our country a comprehensive situation analysis was done and 13 national target was adapted in Iran.

National Targets for prevention and control of NCDs

Target 1: 25% reduction in the risk of premature death from cardiovascular disease, cancer, diabetes, chronic lung disease

Target 2: At least 10% relative reduction in alcohol consumption

Target 3: A 20% relative reduction in prevalence of insufficient physical activity

Target 4: 30% relative reduction in the average salt intake in the population

Target 5: 30% relative reduction in the prevalence of tobacco use in persons aged 15+ years

Target 6: 25% relative reduction in the prevalence of high blood pressure or contain the prevalence of raised blood pressure

Target 7: Halt the rates of diabetes and obesity

Target 8: At least 70% of eligible people receive drug therapy and counselling to prevent heart attacks and strokes

Target 9: An 80% availability of the affordable basic technologies and essential medicines, including generics in private and public sectors

Iran's Specific Targets

Target 10: Zero trans fatty acid in food & oily products

Target 11: 20% Relative reduction in mortality rate due to traffic injuries

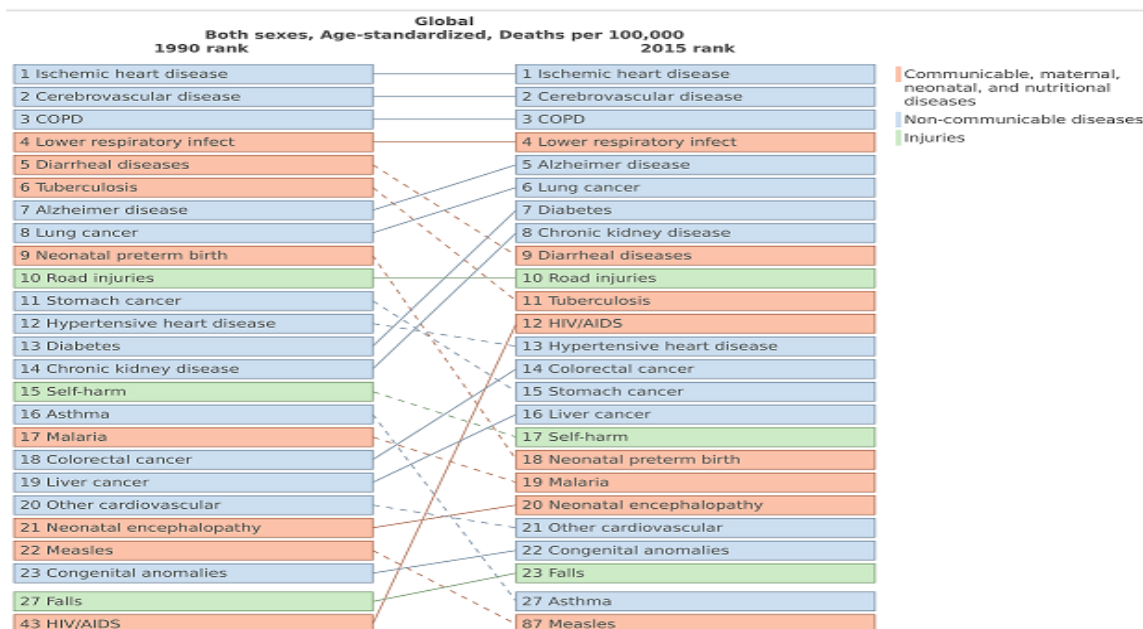
Target 12: A 10% relative reduction in mortality rate due to drug abuse

Target 13: 20% increase in access to treatment for mental diseases

In this regards, National Action Plan of Iran for Prevention & Control of Non-Communicable Disease and related risk factors developed and signed by all members of the supreme council of health & food safety.

Global Facts:

The cardiovascular Disease are the number 1 cause of death globally: more people die annually from CVDs than from any other cause. An estimated 17.5 million people died from CVDs in 2012, representing 31% of all global deaths. Of these deaths, an estimated 7.4 million were due to coronary heart disease and 6.7 million were due to stroke . Over three quarters of CVD deaths take place in low- and middle-income countries. It is estimated that 54% of deaths from noncommunicable diseases in the Eastern Mediterranean Region are due to cardiovascular diseases. It is estimated that cardiovascular disease, stroke and Diabetes reduces GDP of these countries between 1 to 5 percent.



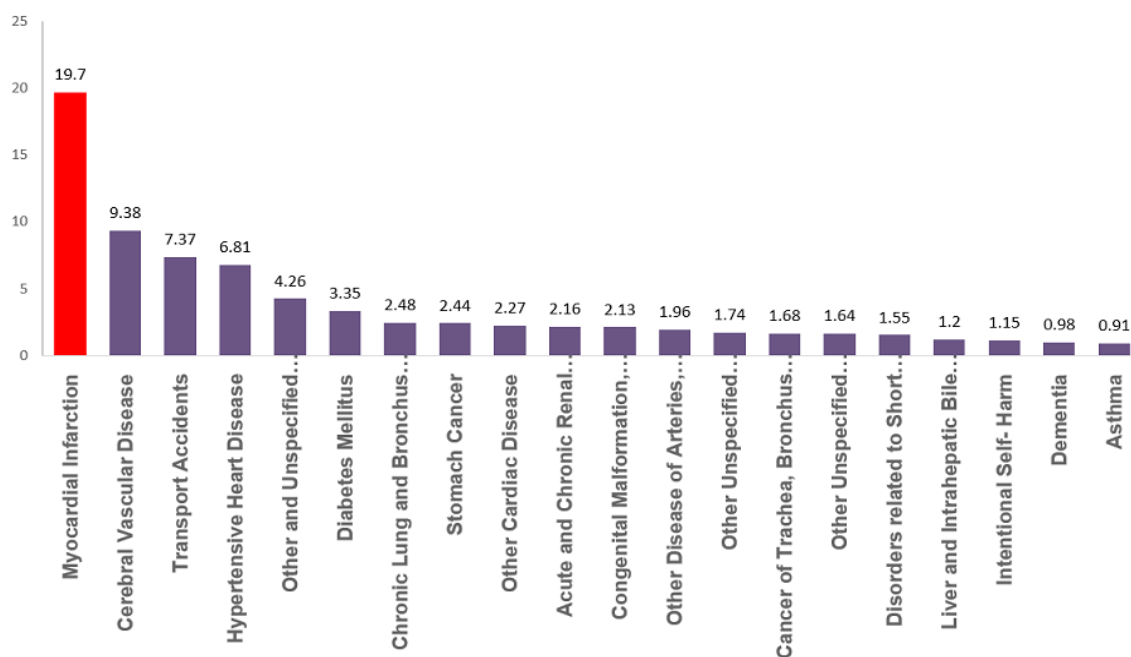
Institute for Health Metrics and Evaluation GBD 2015

National Facts:

The first causes of death according to the mortality profile in the Islamic Republic of Iran in 2011 is myocardial infarction (19.70% of total death).Based on this report the first causes of death in Iran are :Myocardial infarction, Stroke,Road injury,Hypertension, Diabetes mellitus and Cancers. The prevalence of cardiovascular diseases is due to sedentary lifestyles and common risk factors, such as hypertension , diabetes and hypercholesterolemia . I.R.IRAN has developed many programs for controlling this disease. These

programs are preventive approach for main risk factors, training specialists, procurement of necessary instruments and developing special heart sections in hospitals.

20 first causes of death according to the mortality profile in the Islamic Republic of Iran 2011



Iranian National Service Framework on Coronary Artery Disease

For each target, the Ministry of health & medical education become responsible to prepare a service frame work.

This document shows main road plan of the country. The target of this plan will be 25% reduction in premature deaths from coronary heart disease by 2025. The specific objectives are 25% reduction in: mortality and morbidity of coronary heart disease and incidence of coronary heart disease and risk factors, At least 70% access to medication and counseling for the prevention of coronary heart disease, At least 80% access and provision of essential drugs and equipment for the diagnosis and treatment of coronary heart disease in all provinces, Improve registry and surveillance system of coronary artery disease and risk factors , Public empowerment on coronary heart diseases ,Improving country coverage of prevention and treatment services of coronary heart disease and Improving quality of pre-hospital and hospital care.

Steps taken to prepare this policy document are as below:

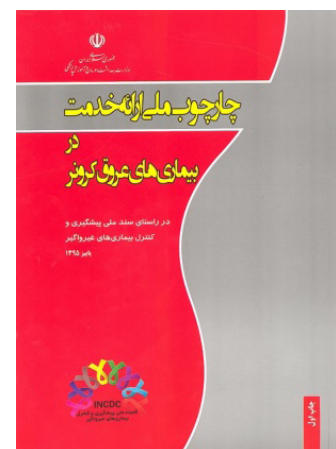
1. The issue that necessitates the development of a policy document was defined.

2. Deputy of treatment was assigned as the responsible person to prepare the Iranian national service framework on Coronary Heart Disease.
3. A working group was formulated including the most well-known Heart specialists and experts.
4. Head of Disease Management in the curative affairs deputy was appointed to coordinate the policy development process.
5. The policy development process was established.
6. Literature including all relevant national and international policy documents, annual and status report was reviewed.
7. The zero version of the Iranian National Service Framework on Coronary Heart Disease was drafted.
8. Draft policy was reviewed in monthly meetings.
9. Revised policy draft was circulated to key stakeholder.
10. Iranian National service framework on Coronary Heart Disease was submitted to the responsible authority(Head of Non communicable disease committee) within the Ministry of Health.
11. Passing the referee sessions with minor revision it was formally adopted by the Deputy of treatment and approved by the Minister of Health & Medical Education.
12. Iranian National Service Framework on Coronary Heart Disease was published and communicated with universities of medical science for implementation.

This document includes four chapters.(101 pages) The first chapter is the preface and the epidemiological aspect of this Disease. In this chapter, the main risk factors like tobacco, high blood pressure, obesity and low physical activity and preventive programs and economical aspects are discussed.

The second chapter is the service framework for this disease. This framework includes all Health network levels including health House, health centres, general hospitals and Heart Specialised Hospitals. For each level manpower, drugs and instruments and activities are well defined.

The Third chapter is about the training and education . based on the need assessment different forms of training including public awareness and service provider education are forecasted.



The fourth chapter discusses the research area about the coronary artery diseases. The applicability of the results are the important note in these researches.

The appendices include the role of other sectors and the expectations of the health sector from them (including, Ministry of Roads & Urban Development, , Ministry of Mine, Industry & Trade, Ministry of Interior, National Standard Organization, Ministry of Youth Affairs & Sports, Ministry of Education , Ministry of Culture & Islamic Guidance, Ministry of Labour & Social Welfare, Ministry of Agriculture, Ministry of Energy, Ministry of Economic Affairs & Finance, department of environment and Islamic republic of Iran Broadcasting).Also the substructures that are necessary for the implementation of program in the National Health Network are discussed.

Six strategic objectives were set to reach the “25% reduction in the risk of premature death from cardiovascular disease, cancer, diabetes, chronic lung disease” as below:

Strategic Objectives 1 : 25% reduction in: mortality and morbidity of coronary heart disease and incidence of coronary heart disease and risk factors.

Strategic Objectives 2 : At least 70% access to medication and counseling for the prevention of coronary heart disease

Strategic Objectives 3 : At least 80% access and provision of essential drugs and equipment for the diagnosis and treatment of coronary artery disease in all provinces

Strategic Objectives 4 : Improve registry and surveillance system of coronary artery disease and risk factors

Strategic Objectives 5 : Public empowerment on coronary artery diseases

Strategic Objectives 6 : Improving quality of pre-hospital and hospital care.

Strategic Objectives 1 : 25% reduction in: mortality and morbidity of coronary heart disease and incidence of coronary heart disease and risk factors.

Strategies:

- 1.Policymaking in the ministry of Health and medical education for Healthy Heart life style
- 2.Implementation of prohibiting smoking in public places
- 3.Development of national guidelines and standard treatment protocols
- 4.Defining national criteria for diagnosis of main risk factors
- 5.Implementation of IRAPEN for risk factor management

Strategic Objectives 2 : At least 70% access to medication and counseling for the prevention of coronary heart disease

Strategies:

1. Predicting drugs and medical instruments for prevention and diagnosis of coronary artery disease
2. Providing access to Primary PCI for at least 70% of ST Elevation Myocardial Infarction Patients

Strategic Objectives 3 : At least 80% access and provision of essential drugs and equipment for the diagnosis and treatment of coronary artery disease in all provinces

Strategies:

1. Advocating in supreme council of Insurance for financial supporting
2. Development and tooling of 247 Hospitals
3. Insurance coverage for new combinant thrombolitic drugs
4. Rationalization of Heart disease services in National Health network

Strategic Objectives 4 : Improve registry and surveillance system of coronary heart disease and risk factors

Strategies:

1. Reinforcement and Development of Heart registry and surveillance system
2. Monitoring and Evaluation of Heart care services
3. Planning and Implementation of integrated Death and Heart Disease
4. Planning and Implementation of Integrated Heart services registry system from Emergency to patient follow up

Strategic Objectives 5 : Public empowerment on coronary artery diseases

Strategies:

1. Public Education and training for Heart risk factors
2. Service Provider Education and training for Heart risk factors
3. Patient Education and training for Heart risk factors
4. Development of self care services in heart Disease

Strategic Objectives 6 : Improving quality of pre-hospital and hospital care.

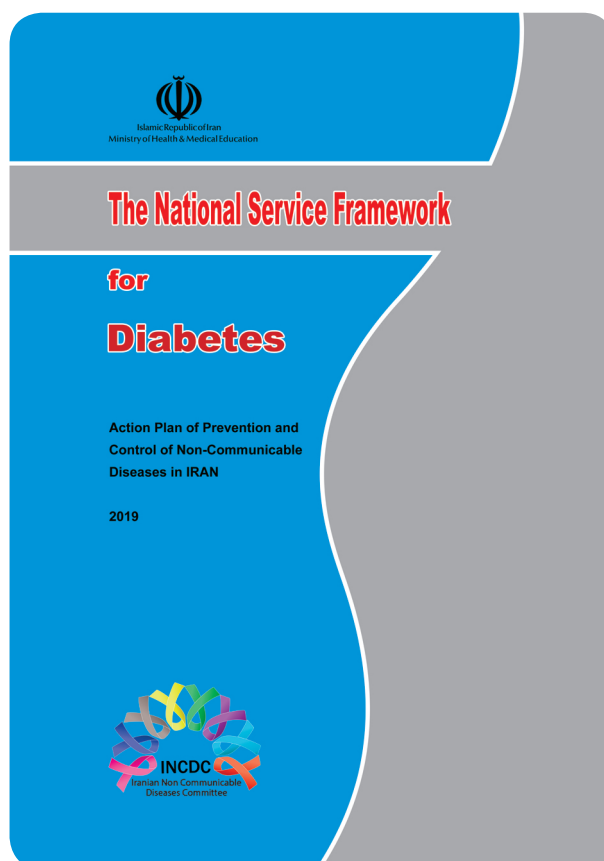
Strategies:

1. Reinforcement of substructures
2. Review and Reform of prehospital care
3. Standardization of prehospital services
4. Development and tooling hospitals for Heart Rehabilitation

Conclusion

The National Service Framework represents a determined agenda for CAD, applying the principles set out in the NHS Plan to health system. This will drive up health services coverage and quality of care and help to promote present service.

The National Service Framework for Diabetes



Action Plan of Prevention and
Control of Non-Communicable Diseases in IRAN

2019

Introduction

Following the Declaration on Non-communicable Diseases (NCDs) adopted by the UN General Assembly in 2011, and calling for a 25% reduction in premature mortality from non-communicable diseases by 2025 by the World Health Assembly in May 2012, nine voluntary global targets were set to combat global mortality from the four main NCDs, accelerating action against the leading risk factors for NCDs and strengthening national health system responses at global level.

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In this regards, National Action Plan of Iran for Prevention & Control of Non-Communicable Disease and related risk factors developed and signed by all members of the supreme council of health & food safety.

Prevalence of diabetes has alarmingly increased in the recent years and a sharp increase is forecast in both developed and developing countries from 2010 to 2030. Considering the consequences of diabetes which increase with low access to medications and insufficient control of complications, the world health organization has set a series of universal goals and milestones to achieve between 2010 and 2025 to control the disease.

Global Facts:

Diabetes is the most common metabolic disorder in the world, and according to an official report by the International Diabetes Federation, 425 million adults were affected by it in 2017. It is forecast that in 2045, this number will rise to 629 million. In 2017, the prevalence of diabetes in the EMRO region of the World Health Organization was reported as 9.6% and it is projected that it will increase to 12.1% in 2045. Unfortunately, more than half of the affected individuals remain undiagnosed and this leads to different diabetes complications such as atherosclerosis, retinopathy, neuropathy, and renal failure.

Mortality rate of diabetics is reported to be approximately two folds higher in comparison with their non-diabetic counterparts, and, in 2017, diabetes was claimed as the cause of 4 million (in 20-79 age group) deaths all across the world.

Medical costs of diabetic patients are estimated to be 2.3 fold higher in comparison with non-diabetic individuals and the disease poses a great economic burden on diabetic patients and their families as well as national health systems. Currently, 12% of all global health expenditure is spent on diabetes directly or indirectly.

National Facts:

In Iran, the prevalence of diabetes is 9.2% among men and 11.3% among women in 2016. This rate was higher in central regions in comparison with the other areas of Iran.

Iranian National service framework for Diabetes

Iranian National Diabetes Framework is a component of the National Non-communicable Diseases Initiative, which deals with general concepts about different aspects of diabetes and highlights the importance of confronting the disease. In this document, it is elaborated that this national framework is consisted of six main goals for prevention and control of diabetes. These objectives can be generally classified into the following categories: combating rising the prevalence of diabetes and its contributed factors, expanding health insurance coverage, promoting the quality of care offered to patients with diabetes, encouraging diabetic patients

for regular periodic clinical examinations, maximizing the number of diabetic patients registered in National Diabetes Register System, and full insurance coverage of devices and instruments required by diabetic patients.

Moreover, the framework contains 23 standards regarding strict regulations of clinical service delivery to be adhered to all across the county in different national, provincial, and regional levels.

In this framework, a new system called “Regional Diabetes Clinical Service and Education Network” is introduced with the main objective of providing synchronized and homogenous clinical services all across regional areas. For specialized clinical services, a university-led education, clinical service delivery, and research network is designed to carry out research as well.

For effective service provision, it is imperative that standard research protocols are stringently adhered to and the required capacity is built. One of the most important goals of diabetes framework is to design a national framework to prioritize research based on the needs of patients, policy-makers, executive managers, and researchers. This will be implemented through provision of a comprehensive list of research (basic, clinical, policy-making) carried out in the field to illuminate the path for future research projects. It is noteworthy that this framework will also assist policy-makers in allocating and distributing health and research budget in a national level.

Steps taken to prepare Iranian National service framework for Diabetes as below:

1. The issue that necessitates the development of a policy document was defined.
2. Diabetes Sub-committee of INCDC was responsible to develop related NSF.
3. A working group was formulated including the well-known Diabetes prevention and control experts.
4. Literate including all relevant national and international policy documents, annual and status report was reviewed.

5. The first draft of the Iranian National service framework for diabetes was developed.
6. Draft policy was reviewed in meetings.
7. Revised Diabetes' NSF was circulated to key stakeholder.
8. Iranian National service framework for Diabetes approved by INCDC.

This framework was prepared in 4 chapters (80 pages), containing 3 Goal, 6 objectives, 35 strategies and 23 standards.

Chapter 1, Diabetes in IRAN and the world

Chapter 2, Service Framework

Chapter 3, Research on Diabetes

Chapter 4, Education



Goals

1. 25% reduction in the risk of premature death from cardiovascular disease, cancer, diabetes, chronic lung disease
2. Halt the rates of diabetes and obesity
3. At least 70% of eligible people receive drug therapy and counseling to prevent heart attacks and strokes

Objectives

1. Zero increase in prevalence of diabetes and significant decrease in its risk factors
2. Expansion of diabetes health coverage to include 90% of all diabetics by 2025.
3. Decreasing HbA1c levels of patients with diabetes to lower than 7% in 2025.
4. Ensuring that 100% of diabetic patients regularly attend periodic diabetes health-checks by 2025.
5. 100% registration of diabetes patients on the national diabetes register by 2025.
6. Full insurance coverage of all basic diabetes medications and instruments (insulin, glucometers, syringes,...) by 2025

Key Priorities

Zero increase in prevalence of diabetes and significant decrease in its risk factors

Practical measures:

- Advance knowledge and understanding about the burden of diabetes and its risk factors in national and sub-national levels through a comprehensive national research effort
- Identification and reduction of risks for diabetes in the healthy population
- Adaptation of diabetes prevention strategies for high-risk individuals

Expansion of diabetes health coverage to include 90% of all diabetics by 2025:

- Expanding diabetes-care services to the whole nation
 - Access to optimal diabetes care and appropriate management of problems as they arise in all remote and rural areas
 - – Securing lifelong provision of diabetes-care for all diagnosed with diabetes
 - – Ongoing monitoring of all individuals with diabetes

Expansion of diabetes health coverage to include 90% of all diabetics by 2025:

Diabetes and Metabolic Disorders Clinic will be expanded with professional staffs at this clinics and update scientific information which providing the best specialized and subspecialized care and services for diabetic patients

Decreasing HbA1c levels of patients with diabetes to lower than 7% in 2025:

- Improve the capacity of the health system to deliver, manage and monitor services
- Provision of patient education and technical support
- Optimal care for hospitalized patients and diabetes emergencies
- Addressing special needs(children, adolescents, pregnant patients)
- Development of a functional diabetes referral system
- Prevention from severe hypoglycemia

Improvement of the quality of diabetes-care (Common guideline):

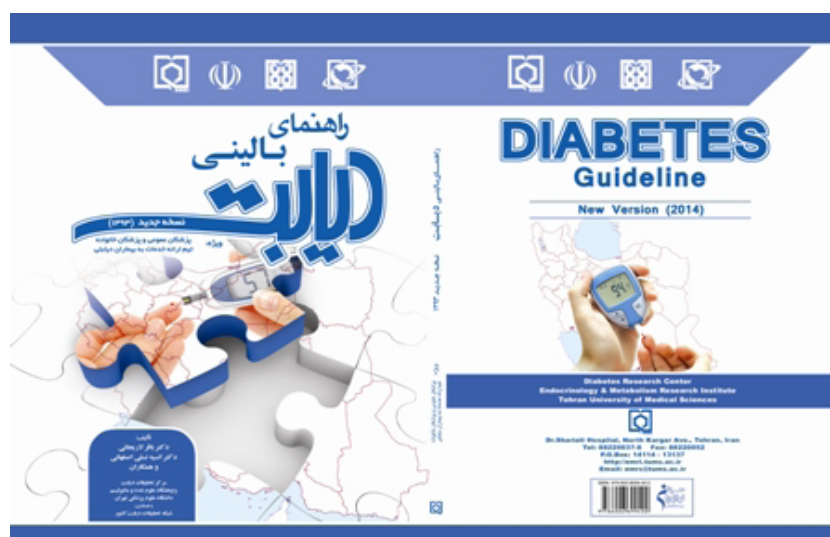


Figure 2: Diabetes guideline

Ensuring that 100% of diabetic patients regularly attend periodic diabetes health-checks by 2025:

- Development of diabetes complication-monitoring programs
- Publication of all necessary evidence-based guidelines for ongoing monitoring of diabetic patients under supervision and auspices of medical universities
- Design and implementation of performance evaluation processes by medical universities in all provinces of Iran

100% registration of diabetes patients on the national diabetes register by 2025

Practical measures:

- Development of a National Diabetes Register
- Complete registration of diabetic patients in both inpatient and outpatient settings
- enhancing record linkage in order to collect accurate and comprehensive diabetes and its complications data

National insurance coverage for diabetics (Insurance target)

- Producing evidence about the efficacy and effectiveness of specific health care interventions based on national research
- Development of a comprehensive list of all essential diabetes medications and instruments which are not yet covered by the insurance system
- Establishment of models to provide information about the cost of diabetes and cost effectiveness of specific interventions
- 100% coverage of all diabetes medications by 2025
- Forming collaboration between National Health, Social Security and armed forces insurance companies for covering diabetes medication costs

Full insurance coverage of all basic diabetes medications and instruments (insulin, glucometers, syringes,...) by 2025

- Producing evidence about the efficacy and effectiveness of specific health care interventions based on national research
- Development of a comprehensive list of all essential diabetes medications and instruments which are not yet covered by the insurance system
- Establishment of models to provide information about the cost of diabetes and cost effectiveness of specific interventions
- 100% coverage of all diabetes medications by 2025

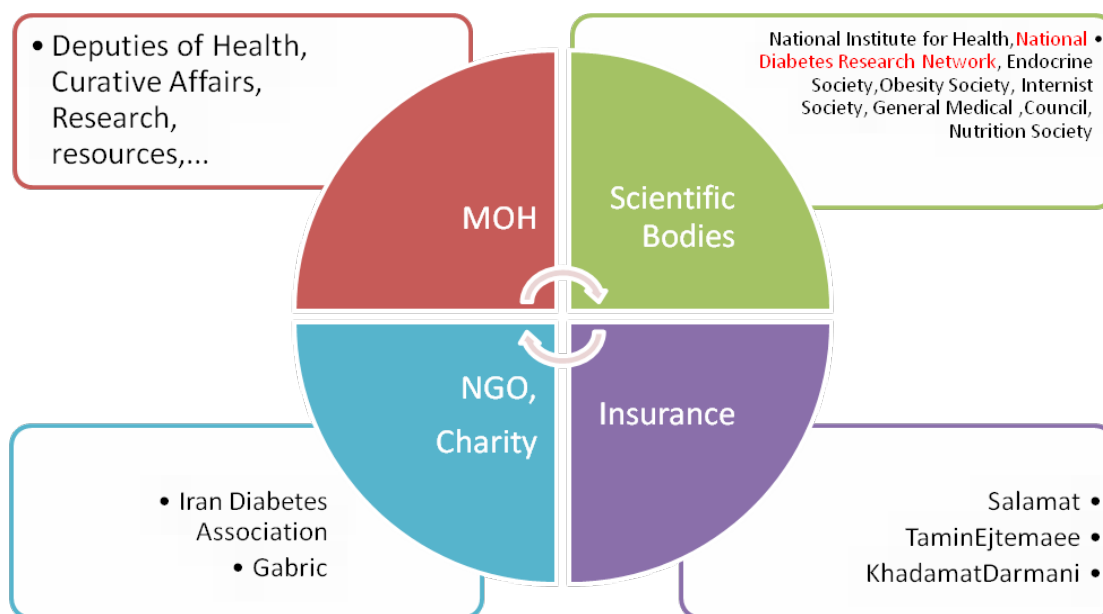


Figure 3: Inter and Intra-sectorial Partners

Target 1: Zero increase in prevalence of diabetes and significant decrease in its risk factors

- Advance knowledge and understanding about the burden of diabetes and its risk factors in national and sub-national levels through a comprehensive national research effort
- Identification and reduction of risks for diabetes in the healthy population
- Defining national diabetes indicators
- Implementation of national screening programs with high sensitivity by means of non-invasive screening tests
- Adaptation of diabetes prevention strategies for high-risk individuals based on the MOH guidelines

Target 2: Expansion of diabetes health coverage to include 90% of all diabetics by 2025.

- Expanding diabetes-care services to the whole nation
 - – Access to optimal diabetes care and appropriate management of problems as they arise in all remote and rural areas
 - – Securing lifelong provision of diabetes-care for all diagnosed with diabetes
 - – Ongoing monitoring of all individuals with diabetes using diabetes-control indicators

Target 3: Decreasing HbA1c levels of patients with diabetes to lower than 7% in 2025.

- Improve the capacity of the health system to deliver, manage and monitor services for the prevention of diabetes and the care of people with diabetes
- Provision of education and technical support for diabetic patients to control their blood glucose levels
- Preparedness for diabetes emergencies
- Optimal care for hospitalized patients
- Addressing special needs of children and adolescents with diabetes
- Professional support for pregnant diabetic patients
- Development of a functional diabetes referral system all across the country
- Prevention severe hypoglycemia

Target 4: Ensuring that 100% of diabetic patients regularly attend periodic diabetes health-checks by 2025.

- Development of complication-monitoring programs for diabetes complications all across the nation
- Publication of all necessary evidence-based guidelines for ongoing monitoring of diabetic patients under supervision and auspices of medical universities
- Design and implementation of performance evaluation processes by medical universities in all provinces of Iran

Target 5: 100% registration of diabetes patients on the national diabetes register by 2025.

- Development of a National Diabetes Register by the Ministry of Health and Medical Education
- National coordination and pooling diabetes data collection
- Complete registration of diabetic patients in both inpatient and outpatient settings
- mechanisms to enhance record linkage to ensure that accurate and comprehensive diabetes data are collected on diabetes and diabetes mortality and end stage complications such as cardiovascular disease, amputation, blindness and end stage renal disease
- Establishment of a diabetes data information clearing center to facilitate access to diabetes data information for patients, providers and researchers

Target 6: Full insurance coverage of all basic diabetes medications and instruments (insulin, glucometers, syringes,...) by 2025

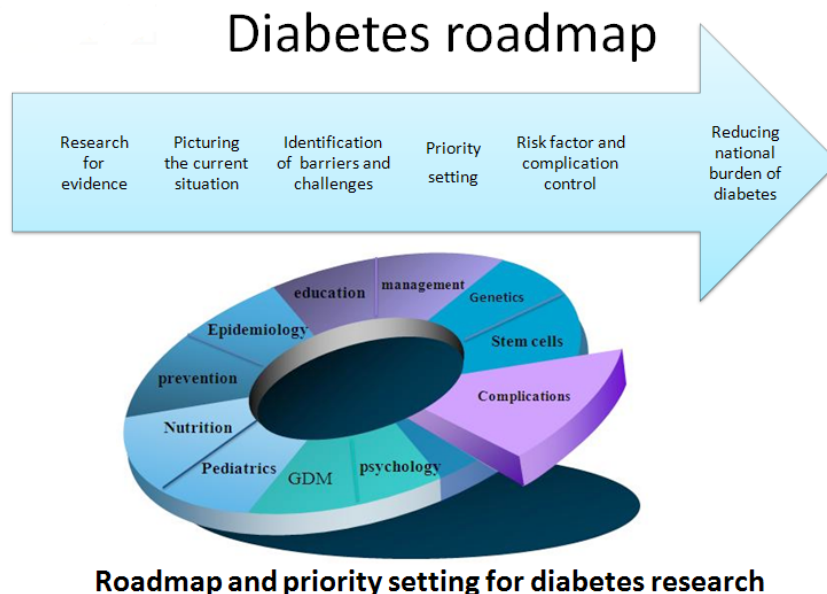
- Producing evidence about the efficacy and effectiveness of specific health care interventions based on national research
- Development of a comprehensive list of all essential diabetes medications and instruments which are not yet covered by the insurance system
- Establishment of models to provide information about the cost of diabetes and cost effectiveness of specific interventions
- 100% coverage of all diabetes medications by 2025.
- Forming collaboration between National Health, Social Security and armed forces insurance companies for covering diabetes medication costs

Key Intervention

- Foundation of all necessary infrastructures needed for the National Diabetes Register
- Holding a high-ranking national meeting with equal representation of the various stakeholders and policy-makers active in the field of diabetes
- Establishment of a national workgroup with the main objective of promotion of healthy lifestyle all across the nation
- Exploring mechanisms to provide incentives to increase participation of high-risk individuals in screening programs
- Research for measurement of performance indicators for monitoring progress of the system.
- Examining the clinical utility and cost effectiveness of different interventions for urban and rural Iranians
- Building all necessary IT infrastructure for the National Diabetes Register
- Updating all existing guidelines for screening, diagnosis, and referral of diabetic patients
- Update the National Diabetes Research Roadmap and priority setting for diabetes research in the country based on national demands
- Make collaboration with major health insurance companies

Research & development

Research and development (R&D) is vital to the development and successful implementation of this NSF.



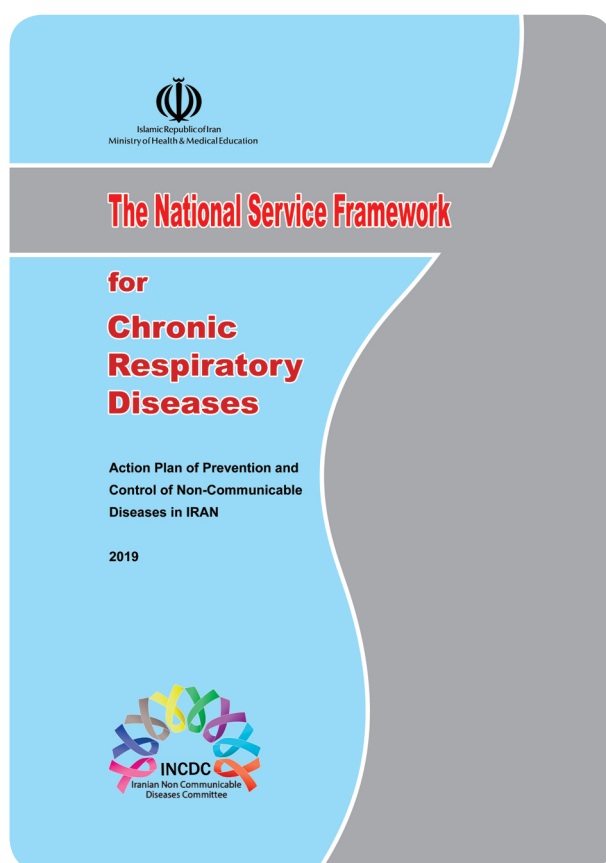
Conclusion

The National Service Framework represents a determined agenda for Diabetes, applying the principles set out in the NHS Plan to health system. Our opportunities for implementation of Diabetes’ NSF are as follow:

- Increasing national interest in diabetes and improved awareness among politicians and the public
- Existence of a competent rural primary health care (PHC) setting
- Activities of a functional National Diabetes Network in the country
- Competent medical universities in different provinces of the country (a robust educational foundation)
- Great potential for involvement of the national and international NGOs
- Established Diabetes Virtual Clinic and Diabetes Hotline with great potentials for expansion

This will drive up health services coverage and quality of care and help to promote present service.

The National Service Framework for Chronic Respiratory Diseases



Action Plan of Prevention and
Control of Non-Communicable Diseases in IRAN

2019

Introduction

The 21st century can be considered a transition from communicable diseases to non-communicable ones and these diseases can be regarded as the major health challenge in the new century. Scientific progress and the fight against communicable diseases have dramatically reduced the mortality rate of these diseases. Unfortunately, non-communicable diseases have been rising constantly, as these diseases have become the leading cause of mortality in the world, especially in middle- and low-income countries. Non-communicable diseases are the cause of 41 million cases of 57 million deaths recorded worldwide in 2016 (i.e. 71% of global mortality).

According to the World Health Organization, five types of diseases - including cardiovascular diseases (44%, equivalent to 17.9 million deaths), cancer (22%, equivalent to 9 million deaths), chronic respiratory diseases (9%, equivalent to 3.8 million deaths), diabetes (3.4%, equivalent to 1.4 million deaths), and mental disorders - along with five risk factors for non-communicable diseases (including smoking, physical inactivity, alcohol consumption, unhealthy diet, and air pollution) account for 66% of the deaths from non-communicable diseases. In Iran, 82% of recorded deaths are due to non-communicable diseases, of which cardiovascular diseases (43%), various types of cancers (16%), chronic respiratory diseases (4%), and diabetes (4%) have the biggest shares.

Chronic respiratory diseases - including asthma and COPD - are among the five major non-communicable diseases and the third leading cause of deaths worldwide. According to the World Health Organization, about 400 million people in the world are suffering from asthma and it is the most prevalent chronic disease in children. Also, nearly 400,000 deaths occur annually due to asthma. At present, 384 million people in the world are affected by COPD, and the prevalence of this disease is around 12% worldwide.

Each year, more than 3 million people die from COPD in the world, equivalent to 6% of all cases of deaths in the world, and it is estimated that this figure will reach 4.5 million by 2030. More than 90% of deaths from asthma and COPD occur in middle- and low-income countries. The most important causes of chronic respiratory diseases include tobacco smoking, air pollution, environmental factors, occupational exposure, nutritional factors, and genetic background.

According to various studies in Iran, the prevalence of asthma in different age groups, including children and adults, is at least 10%. Moreover, the prevalence of COPD is estimated at 9% in people over 40 years old in the whole population.

As the pioneer country in the field of prevention and control of non-communicable diseases, the Islamic Republic of Iran established the National Committee for the Prevention and Control of Non-Communicable Diseases and Related Risk Factors, chaired by Dr.

Ghazizadeh-Hashemi, the former Minister of Health, and with the participation of his deputies and a number of experts. Subsequently, the Document on the Prevention and Control of Non-Communicable Diseases and Related Risk Factors was provided by this committee.

The document was approved by President Hasan Rouhani and the Cabinet of Ministers, and then, Ms. Margaret Chan, the former Director-General of the WHO, approved it. To achieve the goals outlined in the document and the implementation of its phases, relevant working groups were established in the main areas of non-communicable diseases. One of these working groups was the Working Group on Chronic Respiratory Diseases, which in the first step provided the National Framework for Service Provision for Chronic Respiratory Diseases.

This framework is based on the Document on the Prevention and Control of Non-Communicable Diseases and Related Risk Factors in a program with a 10-15 year horizon with the goal of prevention, treatment, and control of chronic respiratory diseases, and includes education, research, and other fields related to this strategic document. This document is the result of continuous efforts of a group of physicians and experts in the field of chronic respiratory diseases and specialized managerial and executive units and more than 70 sessions with 4,000 people/hour of specialized work.

In preparing this document, all stakeholders, both within the Ministry of Health and Medical Education (various deputies) and outside it (such as the Ministry of Education, the Ministry of Oil, the Ministry of Industry & Trade, the Ministry of Energy, Islamic Republic of Iran Broadcasting, and the Municipality of Tehran) had been active. The document attempts to address the needs and requirements of all stakeholders and diverse operational and interventional programs.

We hope that with the cooperation and support of related units in the Ministry of Health and Medical Education and other stakeholders in related organizations, the measures set forth in this document will be implemented operationally, and the people of Iran will benefit from its fruitful outcomes.

Summary of the National Framework for Service Provision for Chronic Respiratory Diseases

Epidemiology of chronic respiratory diseases and their risk factors

Hundreds of millions of people in the world, of all ages and in all countries, suffer from preventable chronic respiratory diseases (whose prevalence is increasing). Numerous risk factors and predisposing factors have a critical role in the burden, incidence, prevalence, and mortality of CRD patients, especially asthma and COPD. In general, identified fac-

tors include demographic and individual factors and indoor or outdoor exposure. On a smaller scale, those exposures can be classified into more applied subgroups, each of which contains many cases.

Some of these identified factors include tobacco, air and environmental pollution, allergens and environmental factors, biological agents (animals and plants), micro-organisms and infective agents, occupational exposure, exposure to drugs, drug use, alcohol consumption, exposure to cold weather or a sudden change in temperature, and nutritional factors.

It is estimated that nowadays around 300 million people in the world suffer from asthma and its prevalence increases by 50% every decade. In general, the prevalence of asthma in different societies is estimated to be between 1% and 18%. Based on available resources, the overall prevalence of asthma in the region is about 38.9% and about 39.5% for COPD. In addition to tobacco, exposure to indoor air pollution, the use of biomass fuels (for cooking), and poverty are among the main causes of COPD in developing countries. It seems that the prevalence of asthma in Iran, like other developing countries, is increasing. Generally, according to various statistics, the prevalence of asthma in Iran is about 5.5% in all ages, about 9% based on the signs of asthma in the adult population, and 11% in children and adolescents. However, there is not enough information on asthma mortality and its trend.

The overall prevalence of COPD in people over 40 years of age living in the city of Tehran is estimated at 9.2%. This prevalence is related to smoking, especially smoking in the past, and increases with age (especially, over 55 years of age). Also, although 12.6% of COPD patients smoked or had been smoking in the past (18.3%), 69% of them had no history of smoking.

According to the WHO estimation, in 2050, the proportion of Iran's older population will be higher than in the United States, which means more exposure to chronic respiratory diseases and a higher burden of these diseases in Iran.

The overall cost of asthma and COPD can be divided into two categories: direct costs (such as the cost of referring to a physician, receiving medication, and hospital admission), and indirect costs (such as school and workplace absence, premature death, reduced productivity, premature retirement, and loss of quality of life) in relation to the patient or his relatives (spouse, parents, etc.). Unfortunately, there is no accurate statistics and information on the cost and burden of diseases in Iran, especially in terms of direct and indirect costs.

Due to the shortcomings of the health-care system in Iran, the long-term nature and

the slow development of chronic respiratory diseases, and the diversity of perspectives, protocols, and diagnostic methods, providing accurate statistics for CRDs in Iran is very difficult. However, based on available data, it seems that the prevalence of asthma in Iran is between 5% and 10% in adults and 10% to 15% in children. This figure is estimated to be between 5% and 20% for COPD.

The national response to chronic respiratory diseases

The Comprehensive National Tobacco Control Law, which was presented initially as the Comprehensive National Tobacco Control and Fighting Plan, was ratified by the Iranian Parliament and the Guardian Council of the Constitution in 2006. Subsequently, on the recommendation of the Ministry of Health and Medical Education, and on the basis of the Comprehensive National Tobacco Control Law, the Cabinet of Ministers approved the executive regulation of the Comprehensive National Tobacco Control Law. However, the process of implementing this regulation has not been satisfactory in the years since the communication of it. Hence, the officials should do their best to implement this regulation properly and accurately.

Article 92 of the Labor Law refers to the necessity of conducting occupational health examinations on a regular basis (e.g. annually) by the employers. For the implementation of this law, a regulation for occupational health examinations has been provided by the Center for Work and Environmental Health, affiliated to the Ministry of Health and Medical Education, and has been communicated to health deputies of the universities of medical sciences throughout the country. According to this regulation, occupational health examinations must be carried out by licensed centers, clinics, and physicians (including specialists in occupational medicine and experienced general practitioners) under the supervision of the Center for Work and Environmental Health. Also, the health deputies of the universities of medical sciences have a duty to monitor these activities and the provision of satisfactory services.

The Comprehensive Document on the Control of Air Pollution and Reducing Its Effects on Health was developed and published by the Iranian Academy of Medical Sciences in 2016. According to this document, the access of the public to clean air has been emphasized in the general health and environment policies communicated by the Supreme Leader, the Horizon Document, the Five-Year Development Plans, the current laws, the approvals of the Cabinet of Ministers, the comprehensive air pollution reduction programs, and national standards. The most important national law in relation to the prevention of air pollution is the Law on How to Prevent Air Pollution, which was ratified in the Iranian Parliament in 1995.

Also, for the first time in the country, the clean air standards were approved and communicated by the Cabinet of Ministers on the proposal of the Environmental Protection Organization and based on the Fourth Development Plan. Moreover, in the Fifth Development Plan, the Environmental Protection Organization was required to provide the necessary measures to reduce air pollution to the level of global standards, prioritizing the identification of the sources of haze and its containment. However, due to the numerous barriers and the need for close and integrated cooperation between different ministries and organizations, the actions taken so far have not been satisfactory.

Regarding the Health Map of the Islamic Republic of Iran in the Fifth Five-Year Development Plan, and the need to reduce the burden of chronic respiratory diseases (including asthma and COPD) by 5% compared to the initial year, the First Five-Year Strategic Plan (2013–2017) for the prevention and control of asthma, COPD, and chronic respiratory diseases was developed by the Office of Non-Communicable Diseases Management at the Ministry of Health and Medical Education. Subsequently, a series of guidelines on diagnosis, treatment, and care of chronic respiratory diseases have been provided and communicated.

The Document on the Prevention and Control of Non-Communicable Diseases

Regarding the importance of the issue and the need for accountability for general health policies and the coherence of decision-making, implementation, monitoring, and evaluation of all activities, the National Committee for the Prevention and Control of Non-Communicable Diseases in the Ministry of Health and Medical Education provided a comprehensive national document aiming at the fulfilling the legal obligations of the Islamic Republic of Iran at the national and international levels. All the stakeholders within the Ministry of Health and Medical Education and outside of it (including various deputies of the Ministry of Health and Medical Education, other ministries, and governmental agencies) who are involved in the prevention and control of non-communicable diseases and their risk factors have been included in this document.

Provided based on the WHO documentation, this document emphasizes on reducing the number of premature deaths caused by non-communicable diseases (in particular, the four main non-communicable diseases with the highest mortality rates) by at least 25% by 2025, through achieving 13 goals. Each of these 13 goals focuses on some of the risk factors (such as tobacco use, alcohol consumption, unhealthy diet, and physical inactivity) that increase the risk of non-communicable diseases among people. In order to achieve these goals, a series of memorandums of understanding between the Ministry of Health

and Medical Education and other stakeholders have been provided and cooperation areas have been set up to implement prevention and control interventions for non-communicable diseases and related risk factors.

The main prioritized goals, policies, and strategies for the prevention and control of chronic respiratory diseases (Iran 2025)

Reducing mortality and morbidities of asthma and COPD in developing countries is one of the goals of the WHO to combat CRDs globally. Therefore, the design and implementation of strategic plans to combat these two diseases are necessary. In this regard, the Document on the Prevention and Control of Chronic Respiratory Diseases has been prepared, aiming at the formulating a roadmap and policy framework for comprehensive measures coordinated with the goal of reducing the burden of chronic respiratory diseases and also, improving the quality of life of the Iranian people. The goals, policies, and measures outlined in this document are as follows:

The perspective of chronic respiratory diseases on the Horizon of Iran 2025

Providing equitable access to the prevention, control, treatment, and care of chronic respiratory diseases for the general population and improving the quality of life of patients by the year 2025

The ultimate goal

It is expected that by the year 2025, through the proper implementation of the Document on the Prevention and Control of Chronic Respiratory Diseases, premature mortality due to chronic respiratory diseases will be reduced by 25%.

Strategic goals

By implementing the key strategies, policies, and actions in the Document on the Prevention and Control of Chronic Respiratory Diseases, in the short- and long-term, the following achievements will be realized:

The first strategic goal: Strengthening the care system for chronic respiratory diseases

- Identifying all cases suspected of chronic respiratory diseases in the existing health system programs
- An annual detection of at least 10% of affected people in targeted populations with an emphasis on the occupational exposure
- Recording and reporting at least five key indicators of chronic respiratory diseases from the first year of the program

The second strategic goal: Reducing the exposure to risk factors related to chronic respiratory diseases

- Reducing smoking prevalence in people over 15 years of age by 30% of the baseline
- Fifteen percent increase in the number of days per year in which the air quality index is in the safe range (AQI < 100)
- Ten percent decrease in the number of days per year in which, due to the occurrence of dust phenomena, the average rate of the particle-pollutant index would be 300 micrograms per cubic meter hourly, and the daily air quality index would be over 200
- Identification and gradual replacement of allergic plants with more adaptable and less harmful species in the region by 10% annually
- Reducing the exposure to biological allergens by 10% annually
- Reducing the exposure to pollutions derived from energy carriers (livestock excrement, wood and similar products, oil, etc.) and chemical and physical agents by 10% annually
- Reducing the exposure to food, cosmetic, health, and occupational risk factors related to chronic respiratory diseases by 10% annually

The third strategic goal: Increasing the access to emergency care and stability of maintenance care

- Increasing the coverage of services provided to identified patients at the level of comprehensive health-care centers (at least 80%)
- Increasing the access of patients to emergency services through the referral system and service leveling (at least 80%)
- Increasing the access of patients to specialized services through the referral system and service leveling (at least 80%)
- Establishing units with potential for providing maintenance care (reliever and mediator) related to chronic respiratory care in at least 80% of targeted units
- Increasing the access to specialized and ultra-specialized services for chronic respiratory diseases by at least 80% of the expected burden of disease
- Creating home-based health-care teams for chronic respiratory patients with at least 80% of expected teams
- Increasing the access of home-based health-care and rehabilitation teams and affiliated centers related to chronic respiratory diseases to NGOs and health benevolent persons (at least 20%)

The fourth strategic goal: Increasing the utilization of pharmaceutical products, standard equipment, and new technologies based on a preventive and reactive approach (diagnosis, treatment, and care)

- Increasing the access of population groups at risk for chronic respiratory diseases to

- appropriate preventive, protective, and high-quality equipment (at least 80%)
- Increasing the access of population groups at risk for chronic respiratory diseases to appropriate and high-quality diagnostic equipment aiming at the early identification of chronic respiratory diseases with an emphasis on knowledge-based firms (at least 80%)
- Increasing the access of identified chronic respiratory patients to appropriate advanced diagnostic equipment aiming at the optimal control of disease (at least 80%)
- Increasing the access of identified chronic respiratory patients to appropriate care equipment aiming at improving the quality of life of patients (at least 80%)
- Increasing the access of identified chronic respiratory patients to appropriate rehabilitation equipment aiming at improving the quality of life of patients (at least 80%)
- Increasing the access of identified chronic respiratory patients to medical and rehabilitation equipment and appropriate drugs distributed with the cooperation and support of specialized NGOs and health benevolent persons (at least 10%)

The fifth strategic goal: Good governance, trusteeship, and leadership of programs for the prevention and control of chronic respiratory diseases

- Modifying and revising the Ministry of Health and Medical Education/medical universities organizational charts with an emphasis on the strengthening programs related to the prevention and control of chronic respiratory diseases
- Integrating prevention and control programs for chronic respiratory diseases in the existing health system
- Policy-making and joint cooperation on trusteeship and leadership of reducing the burden of chronic respiratory diseases through the approvals of the High Council for Health and Food Security (Working Group on Environmental Health Risks)

The sixth strategic goal: Capacity-building and mobilization of resources

- Increasing health literacy in the field of prevention, control, and rehabilitation of chronic respiratory diseases
- Increasing the skills of health-care workers in the fields of prevention, diagnosis, treatment, and maintenance care for chronic respiratory diseases
- Attracting participation and utilization of the capacities of the non-governmental sector and voluntary patient-oriented organizations in the programs related to the prevention and control of chronic respiratory diseases

Key and prioritized interventions

In order to achieve the aforementioned goals, a list of key and prioritized measures should be designed and implemented in an appropriate manner with the cooperation of all key

stakeholders within the Ministry of Health and Medical Education and related institutions outside the Ministry. These actions should be divided into four areas: education (public education and information dissemination, the empowering of health workers), services (prevention, treatment, rehabilitation, and maintenance care), research, and resources and infrastructure.

Education

Public education and information dissemination

- Preparation of public information dissemination and awareness-enhancing programs on indoor pollutants (tobacco, energy carriers, etc.) based on native and geographical features
- Preparation of public information dissemination and awareness-enhancing programs on nutritional, cosmetic, health, and occupational risk factors for chronic respiratory diseases
- Preparation of public information dissemination and awareness-enhancing programs, especially for identified patients, to benefit from the services of emergency services providers for chronic respiratory diseases

Increasing health literacy in relation to the prevention and control of chronic respiratory diseases

- Training the School Health Ambassadors
- Training the Family Health Ambassadors
- Training the University Health Ambassadors
- Implementing the Organizational Self-Care Program

Attracting participation and utilization of the capacities of the non-governmental sector and voluntary patient-oriented organizations in programs related to the prevention and control of chronic respiratory diseases

- Providing instructions for the participation and support of voluntary patient-oriented organizations for the purpose of securing health-care protective services for chronic respiratory diseases
- Providing a regulation to support the establishment of centers by the non-governmental sector for the provision of preventive, diagnostic, therapeutic, and care services for chronic respiratory diseases

Increasing the skills of health-care workers in the fields of prevention, diagnosis, treatment, and maintenance care for chronic respiratory diseases

- Implementation of training and empowering programs for health-care staff in relation to the provision of emergency services for chronic respiratory diseases
- Holding professional skill courses on the management of chronic respiratory diseases

- Strengthening the items associated with chronic respiratory diseases in the syllabus of various medical groups with an emphasis on domesticated guidelines

Preventive services

Performing screening programs in the general population

- Performing screening of asthma in students based on their health records
- Performing screening of chronic respiratory diseases in workers with high-risk jobs
- Performing screening of chronic respiratory diseases in employees with high-risk jobs
- Performing screening of chronic respiratory diseases in the population living in air-polluted cities

Conducting a rapid opportunistic assessment of chronic respiratory diseases in targeted population groups

- Opportunistic assessment of asthma at the age of 30 years in people referring to health-care centers
- Opportunistic assessment of COPD in people over 40 years old in people referring to health-care centers
- Opportunistic assessment of chronic respiratory diseases in people referring to health-care centers in areas with bad weather (according to the instruction)

Integration of chronic respiratory diseases registration and reporting system in the existing health information system

- Creating an integrated information system for chronic respiratory diseases in the Electronic Health Record
- Creating a chronic respiratory diseases registration and reporting system for workers who refer for recruitment-initial and periodic examinations

Reducing tobacco use

- Increasing the price of tobacco products through increasing taxes and duties
- Tightening control over the smuggling of tobacco products
- Tightening the ban on tobacco use in workplaces
- Designing and implementing the National Campaign for Tobacco Control and Prevention
- Developing an indirect incentive mechanism for abstaining from tobacco use and an indirect punishment mechanism for tobacco use

Decreasing the outdoor environmental exposure to the underlying or exacerbating factors of chronic respiratory diseases

- Revision of existing executive regulations and approvals for reducing air pollution
- Identification and control of polluting industries according to approved and revised regulations

- Identification and gradual replacement of allergic plants with more adaptable and less harmful species in the region

Decreasing the indoor environmental exposure to the underlying or exacerbating factors of chronic respiratory diseases

- Providing, approving, and communicating a law on the prevention and control of the underlying or exacerbating factors of chronic respiratory diseases in governmental organizations
- Implementation of a law on the prevention and control of the underlying or exacerbating factors of chronic respiratory diseases in workplaces
- Tightening the ban on the use of tobacco products in public places

Reducing exposure to food, cosmetic, health, and occupational risk factors that cause chronic respiratory diseases

- Identification (listing) and organizing (gradual removal, import control, the prohibition of advertising, etc.) food, cosmetic, health, and occupational risk factors that cause chronic respiratory diseases
- Revision of existing laws and regulations on the use of protective equipment and preventive measures in case of exposure to occupational risk factors that cause chronic respiratory diseases

Increasing the access of various groups at risk for chronic respiratory diseases to appropriate high-quality preventive and protective equipment

- Equipping workplaces having high-risk occupational factors with preventive and protective equipment and systems (according to the instructions)

Increasing the access of demographic groups at a higher risk for chronic respiratory diseases to appropriate, advanced, and high-quality diagnostic equipment for the early identification of chronic respiratory diseases

- Preparation of a regulation on protecting domestic producers for the purpose of producing medical, therapeutic, and rehabilitative equipment and appropriate medication aiming at the optimal disease control
- Preparation of a regulation on facilitating the import of medical, therapeutic, and rehabilitative equipment and appropriate medication aiming at the optimal disease control
- Preparation of a regulation on facilitating the import of appropriate, advanced and high-quality diagnostic equipment
- Providing the health-care centers at different levels with appropriate, advanced, and high-quality diagnostic equipment according to the standardization regulation
- Increasing the insurance coverage for advanced diagnostic services

Therapeutic services

Increasing the access of identified chronic respiratory patients to therapeutic, care, and rehabilitative equipment and appropriate medications for optimal disease control

- Providing a regulation for supporting domestic producers with the goal of producing therapeutic, care, and rehabilitative equipment and appropriate medications for optimal disease control
- Providing a regulation for simplification of import of therapeutic, care, and rehabilitative equipment and appropriate medications for optimal disease control
- Equipping medical centers at different levels to therapeutic, care, and rehabilitative equipment and appropriate medications for optimal disease control according to the standardization regulation
- Increasing the insurance coverage of therapeutic, care, rehabilitative, and medical services

Increasing the coverage of providing emergency and maintenance care for identified patients at the level of comprehensive health services centers

- Increasing comprehensive health services centers with the aim of providing emergency and maintenance care appropriate to the demographic and geographical needs
- Equipping and upgrading standards for comprehensive health services centers appropriate to the guideline for providing services to chronic respiratory patients
- Providing information dissemination programs for people and identified patients with the aim of using services delivered by emergency and maintenance care services centers

Increasing patients' access to emergency services through a referral system and service leveling

- Equipping health centers and comprehensive health services centers with the facilities needed for providing emergency services for chronic respiratory diseases

Maintenance and rehabilitation services

- Increasing the access of identified chronic respiratory patients to medical and rehabilitative equipment and appropriate medications distributed with the participation and support of specialized NGOs and health benevolent persons
- Utilization of voluntary medical, rehabilitative, and diagnostic coverage with the participation and support of specialized NGOs and health benevolent persons

Increasing the patients' access to specialized services through referral and service leveling

- Equipping the health centers with the facilities needed to provide specialized ser-

vices related to chronic respiratory diseases

Establishing units with the capability to provide maintenance care (reliever and mediator) for chronic respiratory care

- Providing a guideline for creating units with the capability to provide maintenance services (reliever and mediator) for chronic respiratory care
- Establishing units in order to provide maintenance services (reliever and mediator) for chronic respiratory care in the universities of medical sciences

Increasing the access to specialized and ultra-specialized services for chronic respiratory diseases

- Establishing the Helper Centers for specialized and ultra-specialized services for chronic respiratory diseases in Types I & II of the universities of medical sciences

Creating home-based health-care teams for chronic respiratory patients

- Providing a guideline for delivering home-based health-care services for chronic respiratory patients by the private sector

Increasing the use of NGOs and health benevolent persons by health and rehabilitation home-based health-care teams and affiliated centers for chronic respiratory patients

- Providing a guideline for delivering home-based health-care services for chronic respiratory patients with the cooperation and support of NGOs and health benevolent persons

Research

- Designing and implementing research related to the recognition of the burden of diseases and exacerbating and effective epidemiologic factors
- Carrying out studies on the effectiveness of diagnostic, therapeutic, and rehabilitative measures for improving the quality of life of chronic respiratory patients
- Carrying out cost-effectiveness studies to evaluate the best and most effective preventive, diagnostic, and therapeutic interventions and care for chronic respiratory diseases

Resources and infrastructures

- Modifying and revising the organizational chart of the Ministry of Health and Medical Education/medical universities with an emphasis on strengthening prevention and control programs for chronic respiratory diseases
- Revising the organizational positions in the health-care sector
- Creating a special group for chronic respiratory diseases in the Office of Non-Communicable Diseases in the Health Deputy of the Ministry of Health and Medical

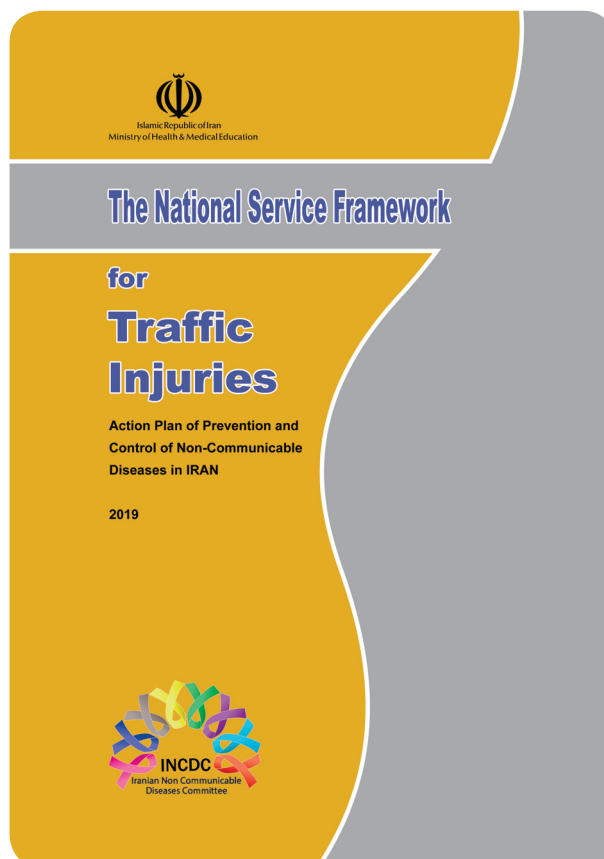
Education

- Providing necessary human resources at the organizational level of the Ministry/Universities

Launching policies and collaborative efforts to manage the burden of chronic respiratory diseases through the approvals of the High Council for Health and Food Security (Working Group on Environmental Health Risks)

- Activation of the Technical Committee on Non-Communicable Diseases within the framework of the Working Group on Environmental Health Risks

The National Service Framework for Traffic Injuries



According to the Action Plan of Prevention and
Control of Non-Communicable Diseases in IRAN

2019

Global Facts:

Approximately a quarter of the 5 million deaths from injuries are the result of Road Traffic Injuries (RTIs). Annually, 1.35 million people die from RTIs, and 20–50 million people sustain nonfatal injuries as a result of road traffic collisions or crashes.

Many of those who survive from road traffic crashes are left with temporary or permanent disabilities and health consequences beyond the physical injury.

Low and middle income countries share a disproportionately high burden with 90% of road traffic deaths.

RTIs and falls are predicted to rise in rank compared to other causes of death. RTIs was the 9th leading cause of death in 2012, it's the 8th leading cause in 2016 and is predicted to become the 7th by 2030.

Majority of road traffic deaths and injuries are predictable and preventable, so based on the decade of action on road safety¹ “2011-2020” and sustainable development goals² there is an international commitment to reduce the number of road traffic death.



Total 2012	Total 2030
1 Ischaemic heart disease	1 Ischaemic heart disease
2 Stroke	2 Stroke
3 Chronic obstructive pulmonary disease	3 Chronic obstructive pulmonary disease
4 Lower respiratory infections	4 Lower respiratory infections
5 Trachea, bronchus, lung cancers	5 Diabetes mellitus
6 HIV/AIDS	6 Trachea, bronchus, lung cancers
7 Diarrhoeal diseases	7 Road traffic injuries
8 Diabetes mellitus	8 HIV/AIDS
9 Road traffic injuries	9 Diarrhoeal diseases
10 Hypertensive heart disease	10 Hypertensive heart disease
11 Preterm birth complications	11 Cirrhosis of the liver
12 Cirrhosis of the liver	12 Liver cancer
13 Tuberculosis	13 Kidney diseases
14 Kidney diseases	14 Stomach cancer
15 Suicide	15 Colon and rectum cancer
16 Birth asphyxia and birth trauma	16 Suicide
17 Liver cancer	17 Falls
18 Stomach cancer	18 Alzheimer's disease and other dementias
19 Colon and rectum cancers	19 Preterm birth complications
20 Alzheimer's disease and other dementias	20 Breast cancer
21 Falls	21 Endocrine, blood, immune disorders

Source: WHO Global Health Estimates, 2014.

1- The goal is to stabilize and then reduce the forecasted level of road traffic fatalities around the world which means saving 5 million lives, 50 million serious injuries and US\$ 5 trillion over the Decade.

2- Sustainable Development Goals:

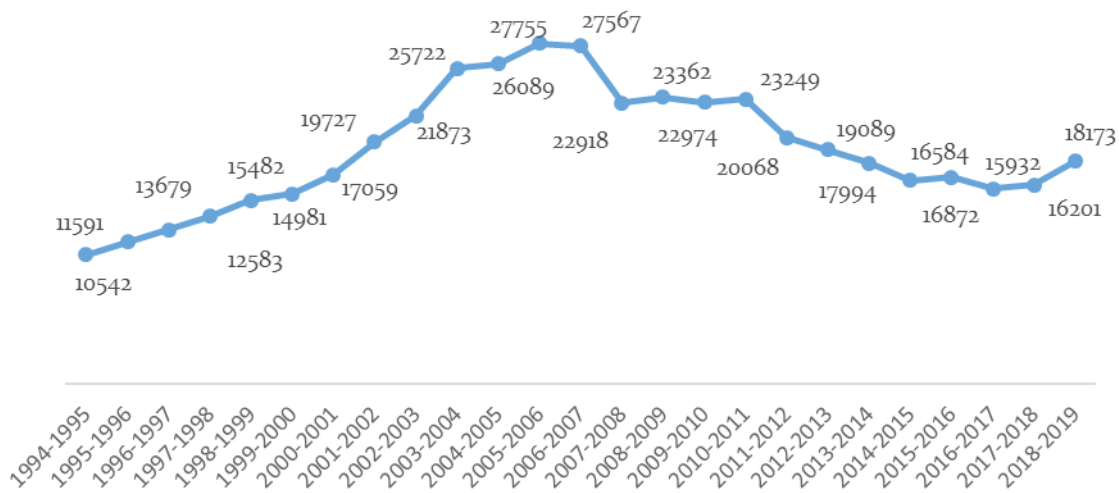
Target 3.6 calls for a 50% reduction in the number of road traffic deaths and by 2020, relative to a baseline estimate from 2010 and target 11.2, aims to provide access to safe, affordable, accessible and sustainable transport systems for all by 2030.

National Facts:

Although there was a downward trend in the number of road traffic death since commencing the decade of action on road safety, in the recent 2 years again, the number of road traffic deaths has increased in our country.

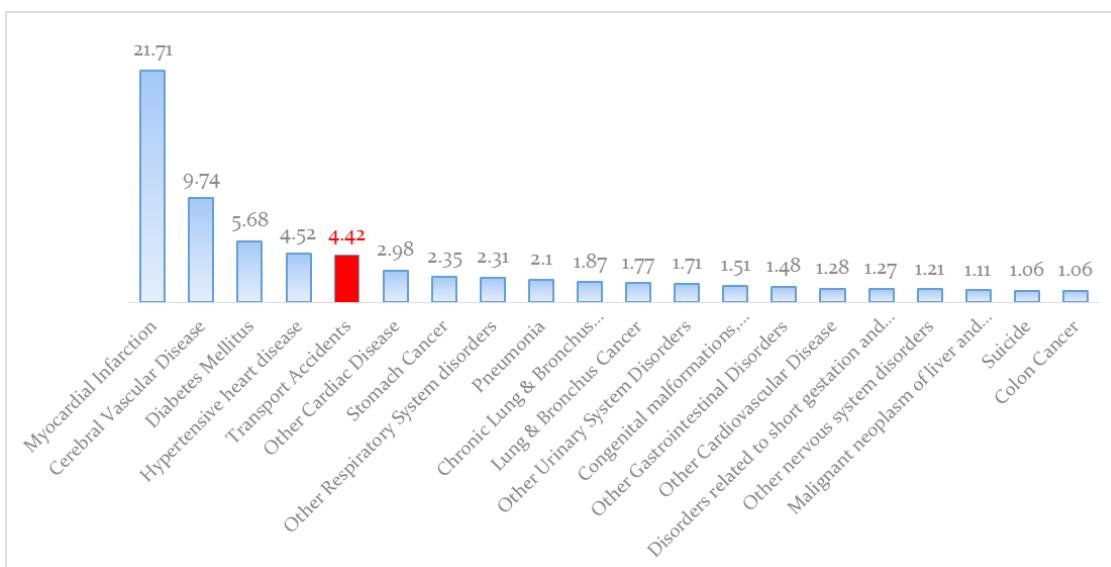
Road traffic injuries is now the 5th leading cause of death and still cost national precious resources, diverting it from other pressing health and development challenges.

Number of road traffic death in Iran



Source: Legal Medicine Organization

20 leading causes of Deaths in Iran



Source: Legal Medicine Organization

Action Plan for Prevention & Control of Non- Communicable Disease and related risk factors:

Following the Declaration on Noncommunicable Diseases (NCDs) adopted by the UN General Assembly in 2011, and calling for a 25% reduction in premature mortality from noncommunicable diseases by 2025 by the World Health Assembly in May 2012, nine voluntary global targets were set to combat global mortality from the four main NCDs, accelerating action against the leading risk factors for NCDs and strengthening national health system responses at global level.

Inline with the global targets, Implementing policies that are health promoting, mandate interventions to prevent exposure from harm and provide quality care was the reasons behind preparing the “National Action Plan for Prevention & Control of Non- Communicable Disease and related risk factors in the Islamic republic of Iran, 2015-2025”.

Based on comprehensive literature review, health surveys and research studies a comprehensive situation analysis was done and 13 national target was adapted in Iran.

For each target, the Ministry of health & medical education become responsible to prepare a service framework.

Iranian National service framework on road safety:

As in Iran, the 10 years national strategic plan was adopted by the road safety commission as the lead agency all 3 phase of road safety is covered in it. the Iranian National service framework on road safety aims to determine the role of health sector in collaboration of other relevant stakeholders for road traffic injury prevention.

This framework is prepared in 5 chapters, containing 1 Goal, 8 Strategic objectives and 64 strategies

Chapter 1, Facts, national and international commitments (Policy documents)

Chapter 2, Service Framework

Chapter 3, Research in Road safety

Chapter 4, Education in Road safety

Chapter 5, Intersectoral collaboration, Expectations from other stakeholders

Goal: 20% relative reduction in mortality rate due to road traffic injuries by 2025.

Eight targets were set to reach the 20% relative reduction in mortality rate due to road traffic injuries by 2025 as below:

Target 1: Road traffic risk factor's Identification & Management.

Target 2: Raising awareness and positive changes in attitude, behavior & skills of all road users.

Target 3: Equitable health care coverage for road traffic injured in hospital & pre hospital settings.

Target 4: Improving quality of pre hospital care.

Target 5: Improving quality of hospital care.

Target 6: Road traffic injury, Mortality & disability surveillance system.

Target 7: Improving knowledge and skills of health care providers to improve quality care.

Target 8: Financial Support of road traffic injured.

Strategic objectives were set for different targets to cover injureis in all 3 phase:

Pre event, event and post event

Target 1: Road traffic risk factor's Identification & Management.

By 2020, Identify and prioritize risk factors in the catchment area and recognize at risk groups.

By 2020, Identify risk factors in Mass Casualty Incidents(MCI).

By 2020, Identify risk factors among professional drivers.

By 2020, Revise the minimum requirements (mental & physical) for applying a driving license & necessity of re-approval incase of traffic crashes leading to injury or death.

By 2020, Support random check for DUI(Driving Under Influence of drug/Alcohol) and revise the diagnostic criteria in traffic law.

By 2020, Develop service package(health screening tests) for professional drivers.

By 2020, Review current traffic law & regulations and asking responsible authorities for revision.

Target 2: Raising awareness and positive changes in attitude, behavior & skills of all road users.

By 2020, Launching risk reduction & preventive campaigns.

By 2018, Integrating self care education in the training manual of "Health ambassadors".

By 2020, Raising public awareness through Mass media and social networks on injury prevention, first aid, safe transport.

By 2020, Integrating self care education in the formal training curriculum (from primary to high schools).

By 2020, Training courses and risk reduction campaigns(special focus of professional drivers and motorcycle riders).

Target 3: Equitable health care coverage for road traffic injured in hospital & pre hospital settings.

By 2020, Universal access number and integrated dispatch center in 15 provinces.

By 2020, Coordinating with fire- fighting centers, to allocate special places for EMS stations.

By 2020, Increasing pre hospital coverage to 90%. (EMS coverage)

By 2019, Increasing the number of EMS stations to 2804. (land stations)

By 2020, Increase the number of Air Ambulance- stations to 50.

By 2020, Increase the number of Motor lances to 500.

By 2020, Increase the number of land ambulances to 5158.

By 2020, Increase number of 4WD land ambulances to 800.

By 2021, Equip 370 health stations in rural areas and small cities with less than 50.000 population (special focus in rural places and cities with less than 20.000 population)

By 2025, Adjust the number of hospital trauma-beds based on the number of injured patients in different catchment areas. (Resource allocation)

Target 4: Improving quality of pre hospital care.

By 2019, Establish National Emergency Care Organization.

By 2020, Improve response time 21 to 8 minutes in big cities, 7 minutes in small cities and 14 minutes in rural places in 90% of all pre hospital missions.

By 2020, Improve transfer time from scene to hospital to 20 minutes in 90% of all pre hospital missions.

By 2020, Train and certify 90% of technicians in trauma management.

By 2020, Improve EMS fleet (100 MICU & 50 NICU).

By 2020, Apply Global Positioning System (GPS) in all Ambulances.

By 2020, Running Medical Care Monitoring Center in all Medical Universities.

By 2025, Provide 15 Air medical ambulances capable of flying in night. (Night Vision Imaging System)

By 2020, Implement function- based payment system in pre- hospital setting.

By 2020, Provide incentives for employees to boost productivity. (Spirit of self sacrifice)

By 2025, Provide Tariff coddling in pre hospital setting.

Target 5: Improving quality of hospital care.

By 2020, Ranking hospitals based on their capabilities to provide quality care to trauma patients.

By 2025, Establishing 5 level I Trauma Centers.

By 2020, Reduce hospital hand- over time(between pre- hospital and hospital setting) to less than 10 minutes.

By 2020, Running integrated dispatch center(between pre- hospital and hospital setting) for online medical directing.

By 2020, Improve quality of hospital triage in 90% of admissions.

By 2025, Physical reconstruction in all hospital emergency departments based on national standards.

By 2020, Capacity building for integrated trauma team.

By 2020, Reduce disposition time in emergency department to less than 6 hours in 90% of all hospitals and all hospitals which provide advanced trauma care.

By 2020, Prepare and apply clinical practice guidelines for trauma management and apply to all hospitals which provide advanced trauma care.

By 2020, Adequate supply of experienced nurses for all hospitals which provide advanced trauma care.

By 2020, Improve quality of trauma care in 70% of all hospitals and all hospitals which provide advanced trauma care.

By 2020, Adequate supply of attending emergency medicine physicians (24 hours a day) for all hospitals which provide advanced trauma care.

By 2025, Establish rehabilitation centers for trauma patients.

Target 6: Road traffic injury, Mortality & disability surveillance system.

By 2021, Update and expand road traffic data banks in all public & private hospitals.

By 2025, Prepare and publish injury, disability and death profile annually.

By 2025, Running trauma registration system in selected university hospitals.

By 2025, Establish 30 days follow up system for road traffic admissions in all hospitals which provide advanced trauma care.

Target 7: Improving knowledge and skills of health care providers to improve quality care.

By 2020, Mandatory training courses on trauma management for all health sectors.

By 2020, Mandatory training courses on trauma management for EMS technicians.

By 2020, Mandatory pre- employment training courses on trauma management for all nurses.

By 2020, Mandatory pre- employment training courses on trauma management for medical doctors.

By 2022, Provide and admit students in 3 majors related to road safety(at least 1 for managers in related authorities)

By 2022, Running PH.D courses in road safety (multidisciplinary approach)

By 2022, Integrating a 2 syllabus lesson for graduated students in different diciplines such as disaster, emergency medicine and (optional or mandatory) based on the university interests and capabilities.

By 2025, Integrating trauma management in the formal curriculum of medical students.

Target 8: Financial Support of road traffic injured.

By 2018, Sustainable resources to continue free of charge care to all road traffic injured patients in all hospitals, compensated by insurance companies.

By 2020, Expanding free of charge care to all road traffic injured patients(including rehabilitation services)

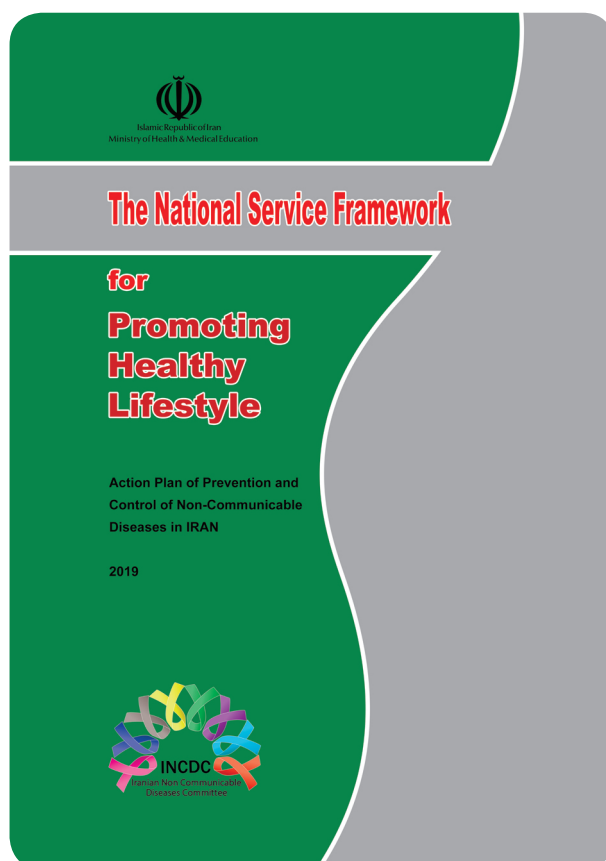
By 2025, Expanding free of charge care to all road traffic injured patients(including legal non Iranian injured people)

By 2025, Increase financial support (for under coverage services) and decrease the out of pocket payments.

By 2025, Estimate the real cost of services and adjust the third party insurance based on it.

By 2025, Improve and facilitate the process of reimbursement.

The National Service Framework for Promoting Healthy Lifestyle



Action Plan of Prevention and
Control of Non-Communicable Diseases in IRAN

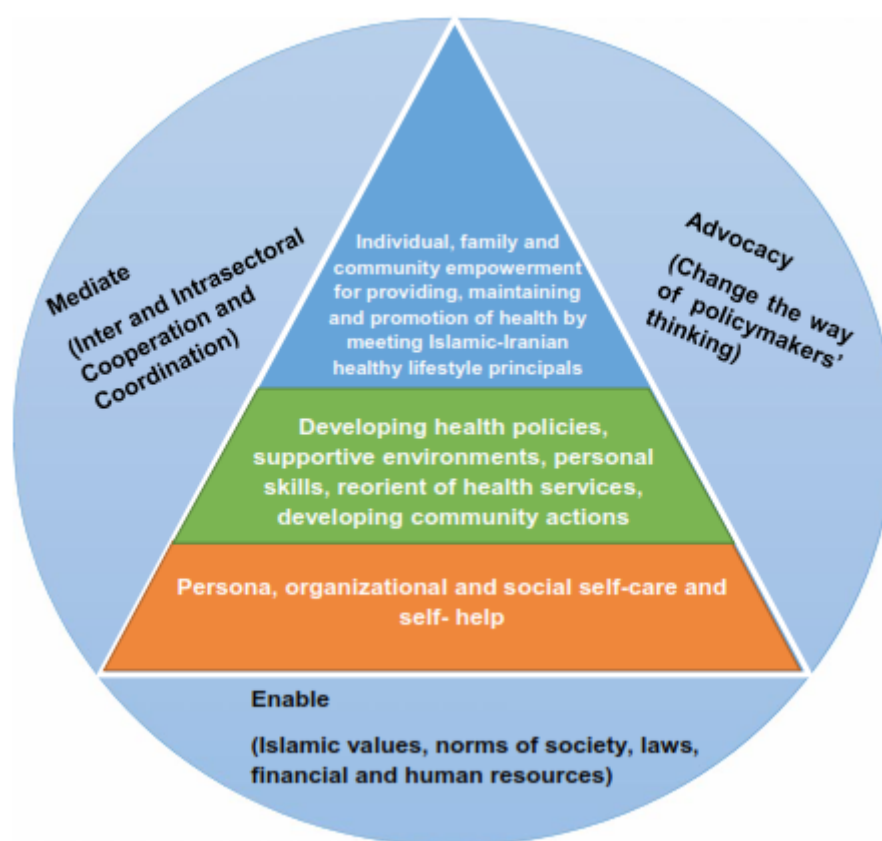
2019

National Service Framework for Promoting Healthy Lifestyle

Health promotion is the process of empowering people to enhance their ability to control and promote their health. Health Promotion supports individual and social development, through providing information, health education and increasing life skills. Doing this intervention, will make people more likely to control over their health and environment and choices to improve their health. It is necessary to provide an environment where people can have adequate health literacy and are prepared for caring their health in all stages of their lives. Achieving these goals, requires effective implementation of targeted interventions in places like home, school, workplace and community.

The World Health Organization described a healthy lifestyle is a way of living that lowers the risk of being seriously ill or dying early.

Conceptual model to promote healthy lifestyle



The main focus of the “National Framework for Delivering Services to Promote Healthy Lifestyle” document is to increase the health literacy and empowering people, organizations and communities to follow healthy lifestyle principals. In this document, effective strategies have been developed based on the participation of various levels of society in the three areas of service provision, education and research. These strategies are include:

A) Service delivery:

- National self-care program with four self-care approaches of individual, organizational, social and self- help
- A comprehensive school health education curriculum

B) Education:

- Public health education
- Patient education
- Technical training of health care providers

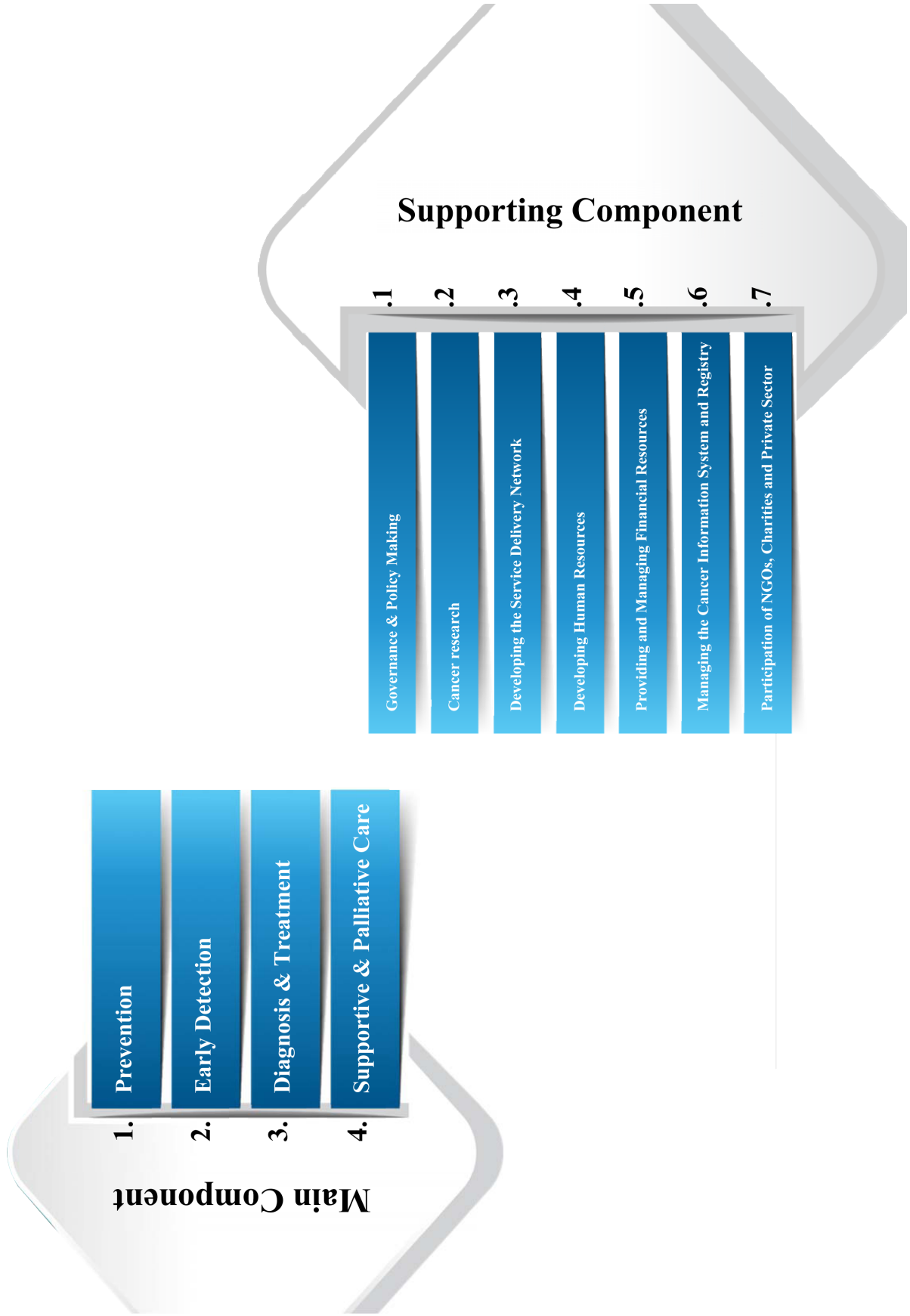
C) Research:

- Health literacy measurement
- Lifestyle measurement

Iran National Cancer Control Program (NCCP)

2013-2025

Summary of Goals, Strategies, Main Programs and Performance Indicators



Domain
Governance & Policy Making

<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ having the “National Cancer Control Program” (NCCP) document ▪ Organizing National Cancer Control Center (NCCC) ▪ Organizing cancer committees and sub-committees 	
<p>Goal 1: Comprehensive management of cancer</p>	
<p>Strategy 1: Having a national program</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparing the “ national cancer control program” (NCCP)
<p>Strategy 2: Having the appropriate organizational structure</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Having an appropriate organizational structure for cancer program management at ministry of health (National Cancer Control Center) and university level ○ Organizing cancer committees and sub-committees

Domain

Cancer Research

<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Preparing and publishing the priorities of applied research on cancer ▪ Providing access to research biobanks ▪ Membership in international Agency for Research on Cancer (IARC) ▪ Publishing the results of prioritized applied studies ▪ Having annual budget for cancer research 	
<p>Goal 1: Targeted research to meet the national needs</p>	
<p>Strategy 1: Applying the cancer research results</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Determining the priorities of applied research on cancer ○ Interpreting the applied research projects for target groups
<p>Strategy 2: Developing the infrastructure for cancer research</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Developing the research biobanks ○ Developing the quality and quantity of cancer research laboratories ○ Increasing the funds for research on cancer ○ Developing the national and international cooperation in cancer research
<p>Strategy 3: Extending the research on cancer field</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Developing epidemiologic researches (cancer risk factors and determining the high-risk groups) ○ Developing clinical researches including clinical trials in cancer field ○ Developing basic science research in cancer field

Domain

Developing the Service Delivery Network

<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Providing Access to the document for developing national cancer care network ▪ Providing access to the document for standard equipment of cancer centers ▪ Providing access to the regulations of establishing and exploiting the “centers for early detection of cancer”, “outpatient chemotherapy centers”, “centers for diagnosis and treatment of cancer”, comprehensive cancer centers”, “outpatient supportive and palliative care centers” and implementation of the standards in them ▪ To construct, equip and initiate 90% of Centers for early detection of cancer (type 1) ▪ To construct, equip and initiate 70% of centers for diagnosis and treatment of cancer (type 2) ▪ To construct, equip and initiate 50% of comprehensive cancer centers (type 3) ▪ improving the physical structure of available cancer centers to 50% ▪ Replacement and completion of the equipment in available cancer centers to 70% ▪ Launching the outpatient supportive and palliative care centers in 50% of available cancer centers ▪ Providing access to oral opioids ▪ Launching the national reference cancer laboratory 	
<p>Goal 1: Equitable access to appropriate infrastructures</p>	
<p>Strategy 1: Needs assessment for cancer infrastructures</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Spatial program for cancer infrastructures ○ Preparing the document for developing National Cancer Care Network

<p>Strategy 2: Standardization of the structures</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation of regulations and standardization of centers for early detection of cancer (type 1) ○ Preparation of regulations and standardization of outpatient chemotherapy centers ○ Preparation of regulations and standardization of centers for diagnosis and treatment of cancer (type 2) ○ Preparation of regulations and standardization of comprehensive cancer centers (type 3) ○ Preparation of regulations and standardization of outpatient supportive and palliative care centers
<p>Strategy 3: Developing the infrastructures for service delivery</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Developing the Centers for early detection of cancer (type 1) ○ Developing the centers for diagnosis and treatment of cancer (type 2) ○ Developing the comprehensive cancer centers (type 3) ○ Developing and extending infra structure of the available cancer centers to meet the standards
<p>Goal 2: Equitable access to facilities and equipment</p>	
<p>Strategy 1: Needs assessment for cancer equipment</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Spatial program for cancer equipment ○ Preparing the document of standard equipment for cancer centers
<p>Strategy 2: Access to appropriate diagnostic-therapeutic equipment</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ To equip the centers for early detection of cancer (type 1) ○ To equip the centers for diagnosis and treatment of cancer (type 2) ○ To equip the comprehensive cancer centers (type 3) ○ To equip the available cancer centers ○ Providing access to necessary equipment for home care
<p>Strategy 3: Access to appropriate medications</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Providing the effective therapeutic agents for cancer treatment ○ Facilitating access to opioids
<p>Strategy 4: Access to appropriate diagnostic tests</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Providing new and effective tests for cancer diagnosis ○ Developing the national reference cancer laboratory
<p>Strategy 5: Access to new technologies in cancer treatment and diagnosis</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Providing personalized methods for cancer diagnosis and treatment ○ Providing diagnostic and therapeutic radiopharmaceuticals in cancer field ○ Providing gene therapy for cancer

Domain **Developing Human Resources**

<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Providing access to the document for development of human resources ▪ Preparing curriculums for short term professional course ▪ Holding short-term professional courses to dissolve at least 50% of the needs ▪ Holding educational courses on cancer control program management 	
<p>Goal 1: Employing workforce empowered in cancer care</p>	
<p>Strategy 1: Needs assessment for human resources in cancer care and management</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Spatial program for human resources in cancer care and management ○ preparing the document for developing human resources
<p>Strategy 2: Extending cancer knowledge</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparing educational curriculums ○ Preparing the educational content
<p>Strategy 3: Educating the human resources</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Implementing the educational courses ○ Continued Medical Education
<p>Goal 2: Employing workforce empowered in cancer control program management</p>	
<p>Strategy 1: Empowering the human resources for cancer control program management</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparing and implementing the training course for cancer control program management

Domain

Providing and Managing Financial Resources

Performance Indicators <ul style="list-style-type: none"> ▪ Covering the cost-effectiveness programs ▪ Implementing the tariff system based on service packages in selected centers ▪ Implementing the package payments of insurance companies based on leveling of services ▪ Having and implementing the financial support package 	
Goal 1: To secure sustained financial resources	
Strategy 1: Providing the financial resources	Programs: <ul style="list-style-type: none"> ○ Estimating the program funds ○ Estimating the prime cost of services
Goal 2: Optimization of the financial resources	
Strategy 1: Cost-effectiveness based approach	Programs: <ul style="list-style-type: none"> ○ Evaluating the Cost-effectiveness of the services
Strategy 2: Approach based on widely used services	Programs: <ul style="list-style-type: none"> ○ Preparing the basic insurance package
Strategy 3: Approach based on service package payment model	Programs: <ul style="list-style-type: none"> ○ Implementing the tariff packages based on cancer type ○ Targeted coverage of services based on leveling of centers
Goal 3: Patient financial support	
Strategy 1: Management of financial support	Programs: <ul style="list-style-type: none"> ○ Preparing and implementing the financial support package

Domain

Managing the Cancer Information System and Registry

<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Having the cancer registry program agreement and secretariat at national and university levels ▪ Having the comprehensive cancer care bank ▪ publishing the annual reports of 2014-2025 at national and international levels ▪ Improving the quality index of cancer registry including MV% and DCO% ▪ The number of provinces registered in CI5 (cancer incidence in 5 continents) ▪ Implementing the comprehensive and integrated cancer information management system completely ▪ Access to the GIS system for cancer care infra-structures, human resources, incidence and risk factors ▪ Having the protocol for access to population-based cancer registry information ▪ Launching the software for requesting cancer registry information ▪ Electronic implementation of the national practice guidelines of cancer ▪ Electronic implementation of cancer supportive package ▪ Having the information on cancer care and disease free survival 	
<p>Goal 1: Co-ordination in policy making</p>	
<p>Strategy 1:</p> <p>Integrated policy making</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Co-ordinated management of cancer registry program
<p>Goal 2: Having valid information on cancer diagnosis</p>	
<p>Strategy 1:</p> <p>Creating a "Comprehensive Cancer Case Bank"</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Population Based Cancer Registry (PBCR) ○ Clinical Based Cancer Registry (CBCR) ○ Creating the information system for personal profile of cancer patients ○ Online acquisition of the pathology information

Goal 3: Having an electronic cancer care record	
Strategy 1: Registration of diagnostic-therapeutic cancer services	Programs: <ul style="list-style-type: none"> ○ Registration of diagnostic-therapeutic care ○ Registration of early detection services ○ Registration of supportive and palliative care services
Goal 4: Having an integrated cancer information system	
Strategy 1: Communicating with other information systems	Programs: <ul style="list-style-type: none"> ○ Preparing the documents for cancer data exchange ○ Implementation of cancer data exchange with other information systems
Goal 5: Supervising the implementation of cancer care programs with information system facilities	
Strategy 1: Decision making based on national protocols and data	Programs: <ul style="list-style-type: none"> ○ Creating and implementing the Comprehensive Cancer Rules Bank
Strategy 2: Supervising financial support allocations	Programs: <ul style="list-style-type: none"> ○ The patients' financial support program based on information system and registry
Strategy 3: Supervising the implementation of protocols and practice guidelines	Programs: <ul style="list-style-type: none"> ○ The program for supervising the implementation of guidelines based on information system and registry
Goal 6: Having an integrated information infrastructure	
Strategy 1: Designing an integrated software	Programs: <ul style="list-style-type: none"> ○ Designing and preparing the Integrated Cancer Information System (Simay-e-Saratan)
Goal 7: Facilitating access to cancer information and data	
▪ Strategy 1: Access to aggregated and Geo-Spatial information	Programs: <ul style="list-style-type: none"> ○ Designing the Cancer Control Geo-Spatial Information System
▪ Strategy 2: Access to raw information of cancer registry	Programs: <ul style="list-style-type: none"> ○ Preparing a protocol for access to cancer information ○ Designing and preparing the Cancer Information Request System

Domain

Participation of NGOs, Charities and Private Sector

Performance Indicators <ul style="list-style-type: none"> ▪ Defining the role of the non-governmental and private sector in cancer care ▪ Outsourcing 10% of services to the private sector 	
Goal 1: Increasing the Participation of NGOs, charities and private sector	
Strategy 1: Encouraging the contribution of the private sector	Programs: <ul style="list-style-type: none"> ○ Program for determining the role of the private sector in cancer care
Strategy 2: Encouraging the contribution of NGOs and charities	Programs: <ul style="list-style-type: none"> ○ Program for determining the role of NGOs and charities in cancer care

Domain

Cancer Prevention

<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Designing and implementation of general information packages in society, work environments and public health network with 50% coverage ▪ Holding at least one annual national campaign for public information and advocacy for cancer and its risk factors ▪ Designing and implementation the package of care of specified risk factors in public health networks with 70% coverage including Hepatitis B vaccination ▪ Achieving the 5 domains of Tobacco demand reduction measures including Increased excise taxes and prices; smoke-free policies; large graphic health warnings/plain packaging; bans on advertising, promotion and sponsorship; mass media campaigns ▪ Achieving the 4 criteria for Unhealthy diet reduction measures including: salt/sodium policies; saturated fatty acids and trans-fats policies; marketing to children restrictions; marketing of breast-milk substitutes restrictions 	
<p>Goal 1: Awareness about cancer risk factors based on geographic regions</p>	
<p>Strategy 1: Needs assessment for Regional interventions based on associated risk factors</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Spatial program for evaluating cancer risk factors based on more incident cancers of each region
<p>Goal 2: Health promotion and public education</p>	
<p>Strategy 1: Education and promoting health based on national needs</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Promoting public awareness at the society level based on national needs ○ Increasing individual awareness at public health network level based on national needs
<p>Strategy 2: Education and promoting health based on regional priorities</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Promoting public awareness at the society level based on regional priorities ○ Promoting individual awareness at work environment level based on regional priorities ○ Increasing individual awareness at public health network level based on regional priorities

Goal 3: Promoting individual health	
Strategy 1: Individualized interventions based on national programs	<p>Programs:</p> <ul style="list-style-type: none"> ○ Care of common risk factors at public health network level (DM, HTN etc....) based on national programs ○ Care of cancer specified risk factors in public health network (HBV, HCV, HPV) based on national programs
Strategy 2: Individualized interventions based on regional priorities	<p>Programs:</p> <ul style="list-style-type: none"> ○ Care of cancer specified risk factors at public health network level (including HP infection) based on regional priorities ○ Care of cancer specified risk factors at work environment level based on regional priorities
Goal 4: Decreasing the burden of cancer risk factors	
Strategy 1: Determining the framework for promotion of inter-sectoral collaboration	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparing a comprehensive document for promotion of inter-sectoral collaboration to decrease burden of cancer risk factors
Strategy 2: Extending the inter-sectoral collaboration for tobacco control	<p>Programs:</p> <ul style="list-style-type: none"> ○ Implementation of Framework Convention on Tobacco Control (FCTC)
Strategy 3: Extending the inter-sectoral collaboration to improve nutrition	<p>Programs:</p> <ul style="list-style-type: none"> ○ Implementation of the Iran sixth development program about the quality of food production especially the percentage of saturated fats, salt, sugar, food additives and packaging methods
Strategy 4: Extending the inter-sectoral collaboration to improve physical activity	<p>Programs:</p> <ul style="list-style-type: none"> ○ Improving physical activity in the society
Strategy 5: Extending the inter-sectoral collaboration to control	<p>Programs:</p> <ul style="list-style-type: none"> ○ Reducing exposure to work and environmental risk factors (asbestos, Arsenic, Radon, Radiation exposure)

<p>occupational and environmental risk factors</p>	
<p>Strategy 6: Extending the inter-sectoral collaboration to control infectious risk factors</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Managing exposure to infectious risk factors
<p>Strategy 7: Extending the inter-sectoral collaboration to control risk factors based on regional priorities</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Extending the inter-sectoral collaboration to control risk factors based on regional priorities

Domain **Early Detection**

<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Implementation of the national early detection program for Breast, Cervical and Colorectal cancers at the public health network level with 70% coverage ▪ Implementation of the national early detection program for Breast, Cervical and Colorectal cancers at the second level of services with 70% coverage ▪ Proportion of Breast, Cervical and colorectal cancer patients diagnosed in early stages ▪ Reduction in cancer mortality rates of Breast, Cervical and colorectal cancer patients ▪ Proportion of Breast, Cervical and colorectal cancer patients who receive timely diagnosis within one month of symptomatic presentation at primary health care services ▪ Proportion of women between the ages of 30–69 evaluated in the early detection program for breast cancer at least once ▪ Proportion of women between the ages of 30–49 evaluated in the early detection program for cervical cancer at least once ▪ Proportion of women between the ages of 50-69 evaluated in the early detection program for colorectal cancer at least once ▪ Preparation and complete implementation of national practice guidelines for early detection of breast, cervical and colorectal cancers 	
<p>Goal 1: Providing high quality services</p>	
<p>Strategy 1: Prescription management</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation and implementation of national practice guidelines for early detection of Breast cancer ○ Preparation and implementation of national practice guidelines for early detection of cervical cancer ○ Preparation and implementation of national practice guidelines for early detection of colorectal cancer ○ Preparation and implementation of national practice guidelines for early detection of selected cancers based on regional priorities
<p>Strategy 2: Standardization of the services</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation and implementation of service management protocol for early detection of breast cancer divided into level 1 and 2 services

	<ul style="list-style-type: none"> ○ Preparation and implementation of service management protocol for early detection of cervical cancer divided into level 1 and 2 services ○ Preparation and implementation of service management protocol for early detection of colorectal cancer divided into level 1 and 2 services ○ Preparation and implementation of service management protocol for early detection of selected cancers based on regional priorities cancer divided into level 1 and 2 services
<p>Strategy 3: Auditing and accrediting the centers</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation, education and implementation of the program for auditing and accrediting centers for early detection of cancer
<p>Strategy 4: Leveling cancer related services</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation and implementation of the leveling for cancer early detection services

Domain

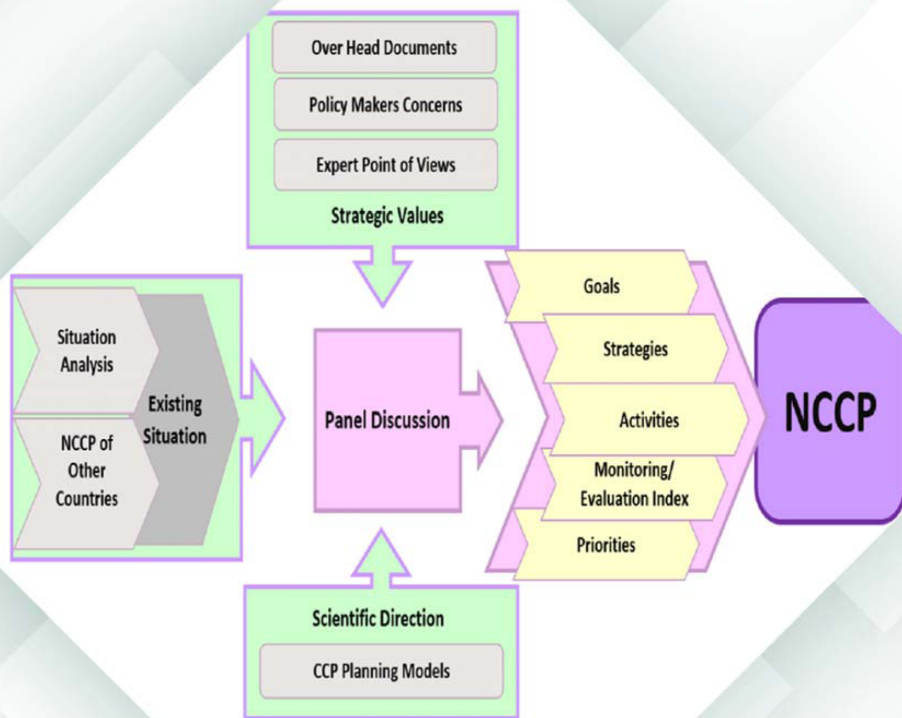
Diagnosis and Treatment

<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Preparation and complete implementation of national practice guidelines for prescribing of 20 costly drugs and diagnosis and treatment of 10 common cancers ▪ Providing access to the “Chemotherapy services management protocol” and implementing its standards for all centers ▪ Providing access to the “radiotherapy services management protocol” and implementing its standards for 70% of the centers ▪ Providing access to the document of cancer diagnosis and treatment services leveling and implementing its standards for all centers 	
<p>Goal 1: Providing high quality services</p>	
<p>Strategy 1: Prescription management</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation and implementation of cancer diagnosis and treatment national practice guidelines
<p>strategy 2: Standardization of the services</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation and implementation of the Chemotherapy services management protocol ○ Preparation and implementation of the radiotherapy services management protocol ○ Preparation and implementation of the cancer surgery services management protocol ○ Preparation and implementation of the cancer pathology services management protocol ○ Preparation and implementation of the cancer radiology services management protocol ○ Preparation and implementation of the cancer nuclear medicine services management protocol
<p>Strategy 3: Auditing and accrediting the centers</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation, education and implementation of the program for auditing and accrediting cancer diagnosis and treatment centers
<p>Strategy 4: Leveling cancer related services</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation and implementation of the leveling for cancer diagnosis and treatment services

Domain

Supportive and Palliative Care

<p>Performance Indicators</p> <ul style="list-style-type: none"> ▪ Preparation and complete implementation of national practice guidelines for supportive and palliative care ▪ Providing access to the “supportive and palliative care protocol” ▪ implementing the supportive and palliative care program in 70% of the hospitals delivering cancer services ▪ Access to palliative care assessed by morphine-equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer 	
<p>Goal 1: Providing high quality services</p>	
<p>Strategy 1: Prescription management</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation and implementation of supportive and palliative care national practice guidelines
<p>Strategy 2: Standardization of the services</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation and implementation of Hospital based supportive and palliative care program ○ Preparation and implementation of Home based supportive and palliative care program ○ Preparation and implementation of Supportive and palliative care program in public health network
<p>Strategy 3: Auditing and accrediting the centers</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation, education and implementation of the program for auditing and accrediting cancer supportive and palliative care centers
<p>Strategy 4: Leveling cancer related services</p>	<p>Programs:</p> <ul style="list-style-type: none"> ○ Preparation and implementation of the leveling for cancer supportive and palliative care services





Islamic Republic of Iran
Ministry of Health & Medical Education



National Action Plan for Prevention and Control of Non-Communicable Diseases and the Related Risk Factors in the Islamic Republic of Iran, 2015-2025

22 July 2015

