



World Health
Organization
Egypt

Egypt Multisectoral Action Plan For Noncommunicable Diseases Prevention and Control 2018 – 2022



**Egypt Multisectoral Action Plan for
Noncommunicable Diseases Prevention and
Control
2018 – 2022**

Table of Contents

List of Abbreviations	4
Executive Summary	6
SECTION I: INTRODUCTION	7
1 Status, Challenges and Opportunities	7
1.1 Burden of noncommunicable diseases	7
1.2 Global Response	7
1.2.1 UN political declaration on NCDs	7
1.2.2 WHO Global NCD strategies	8
1.2.3 Global NCD Action Plan, Voluntary Targets, and Monitoring Framework	8
1.3 National Response:	9
1.4 Rationale for action:	9
2. Linking Plans	10
3 Process of Development of the EgyptMAP-NCD	10
3.1 Ministry of Health and Population initiates the process.	10
3.2 Engage with all relevant stakeholders	10
3.3 Finalization of the Egypt MAP-NCD	10
3.3.1 Prioritization of action	15
3.3.2 Finalization of the EgyptMAP-NCD	15
SECTION II: EGYPT NATIONAL MULTISECTORAL ACTION PLAN FOR NCD PREVENTION AND CONTROL	17
1. National Strategic Agenda for NCDs	17
1.1 National Strategic Agenda for NCDs	17
1.1.1 Vision	17
1.1.2 Mission	17
1.1.3 National NCD Targets	17
1.2 National Action Framework	18
1.3 Guiding principles for action	19
1.4 Main strategies	19
1.4.1 Strengthen prevention	19
1.4.2 Improve NCD management through primary health care approach	20
1.4.3 Enhance national capacity for surveillance	20

1.4.4	Promote high quality NCD research.....	20
1.4.5	Strengthen national capacity for implementation.....	20
1.5	Strategic action areas and objectives and priority actions.....	20
1.6	Costing Egypt MAP-NCD and financing NCD prevention and control.....	22
1.6.1	Costing estimates for implementing the Egypt MAP-NCD.....	22
1.6.2	Financing NCD prevention and control in Egypt	23
2.	Implementation Plan	23
2.1	A detailed implementation plan	23
2.2	Guide to implementation	23
2.2.1	Coordination.....	24
2.2.2	National coordination mechanism.....	20
2.2.3	Implementation phases.....	26
2.2.4	Facilitate implementation of Egypt MAP-NCD at provincial and local level.....	26
2.2.5	Capacity building for implementation.....	26
SECTION III:	NATIONAL ACCOUNTABILITY FRAMEWORK	27
1A	national monitoring framework	27
2.	Monitoring impact and outcomes.....	27
3.	Monitor process and progress in implementing Egypt MAP-NCD	29
4.	Annual Progress Report	31
Annexes	31
1.	A detailed implementation plan	
2.	Roles and responsibilities of relevant sectors	
3.	Report of situation analysis	
4.	Appendix 3 of the Global NCD Action Plan 2013-20	
5.	Global NCD monitoring Framework	
References	76

FORWARD



Non-communicable diseases are major health threats that are responsible for more than 85% of all deaths over Egypt. A great percentage of these deaths results from consequently developed complications that could be avoided with early detection, diagnosis and proper management.

In Egypt, people are following a lifestyle, which is reflected negatively on their health. That includes; low engaging in physical activities, smoking, increase salt and sugar intake and consuming processed food rather than fresh vegetables and fruits. As a result, they suffer from obesity and many serious health problems.

The Egyptian ministry of health exerts enormous efforts in collaboration with other ministries, national and international organizations to minimize the risks and consequences of NCDs. We have the ability to decrease the incidence of NCDs through a collaborative approach, which includes cost-effective strategies. This plan provides a framework that clarifies the specific role of each ministry or involved partner.

Furthermore, these strategies outline the clear actions of Egyptian ministry of health and population to control the increasing challenge facing Egypt regarding Diabetes, Hypertension, heart diseases, cancer, and respiratory diseases.

Finally, I would like to confirm my complete support to implement the plan that aimed at achieving the nine national NCDs targets adopted by Egypt, based on the nine voluntary global targets. Besides, I would like to express my deep gratitude to all professors and experts who worked on this plan and their goal to improve public health of all Egyptians.

Minister of Health and Population

Professor. Hala Zayed



Today, noncommunicable diseases (NCDs), mainly cardiovascular diseases, cancers, chronic respiratory diseases and diabetes represent a leading threat to human health and development. These four diseases are the world's biggest killers, causing an estimated 41 million deaths each year, accounting for 70% of deaths worldwide, many of them are under the age of 70 years. NCDs kill 15 million women and men between the ages of 30 and 70 each year, with 80% in low- and middle-income countries.

In Egypt NCDs are responsible for 85% of total deaths. Prevalence of the preventable and avoidable common risk factors for NCDs are very high. However, evidence based feasible and cost effective interventions do exist to reduce the burden and impact of NCDs now and in the future.

The overall aim of this valuable document is to draw the road map for Egypt government in the next five years to reduce the preventable and avoidable burden of morbidity, mortality and disability due to NCDs by means of multi-sectoral collaboration and cooperation at national level. This will empower the government to fulfill its political commitment to achieve the Global NCD Targets by 2025 and SDGs Goals by 2030.

I send my sincere congratulations to the Government of Egypt represented by the Ministry of Health and Population under the directions and instructions of HE.Dr. Hala Zayed, Minister of Health and Population and to the people of Egypt for this important and crucial accomplishment. WHO applauds the joint efforts resulted in developing a 5 years multi-sectoral action plan for noncommunicable diseases prevention and control and look forward to the full implementation of the Action plan in Egypt.

Dr. Jean Yaacoub Jabbour

WHO representative, Egypt

ACKNOWLEDGEMENT

We would like to thank all efforts exerted to develop this valuable document, which had been conducted as a collaborative work between Egypt Ministry of Health and Population (MOHP) and World Health Organization's (WHO) three levels (HQ, EMRO and CO/Egypt). We would like to thank all participants for their invaluable work and inputs: Dr Ola Khairallah/ Director of NCDs Unit and the Unit's team; Dr Galal Elshishiney, Dr Ramy Alber, Dr Ahmed Belal and Dr Dina Nabih /Professor of Public Health/ Ein Shams University.

We also acknowledge delegates from MOHP different concerned sectors and other non-health collaborating government sectors; Ministry of Education, Ministry of Youth & Sports, Ministry of Finance, and Ministry of Supply and Internal Trade who shared their candid views to help strengthen the multi-sectoral structure of the document through multiple engagements.

Special thanks for the valuable technical support and guidance provided by Dr Rutai Shao/ Program Management Adviser/ WHO/ HQ and Dr Randa Abou El Naga/ NCD Technical Officer/ WHO/CO/Egypt.

We gratefully acknowledge the continuous support received from WHO Representative in Egypt Dr. Jean Jabbour and from Her Excellency Minister of Health and Population, Dr Hala Zayed for her political commitment and full support.

List of Abbreviations

CAPA	Central Administration of Pharmaceutical Affairs
COBs	Community Based Organizations
COPD	Chronic Obstructive Pulmonary Disease
CRD	Chronic Respiratory Diseases
CVDs	Cardio-Vascular Diseases
DALY	Disability Adjusted Life Years
EOS	Egyptian Organization for standardization and Quality
FCTC	Framework Convention on Tobacco Control
GCM	Global Coordination Mechanism
GD	General Department
GDP	Gross Domestic Product
GYTS	Global Youth Tobacco Survey
INGOs	International Non-Governmental Organization
Kcal	Kilo-calorie
MAP	Multi-sectoral Action Plan
MCIT	Ministry of Communications and Information Technology
MOE	Ministry of Education
MOF	Ministry of Finance
MOHESR	Ministry of Higher Education and Scientific Research
MOHP	Ministry Of Health and Population
MOHUUD	Ministry Of Housing and Utilities and Urban Communities
MOP	Ministry Of Planning
MOSIT	Ministry Of Supply and Internal Trade
MOSS	Ministry of Social Security
MOTI	Ministry of Trade and Industry
MOYS	Ministry of Youth and sports
NCD	Non-Communicable Disease

NGOs	Non-Governmental Organization
NNC	National Nutrition Committee
NNI	National Nutrition Institute
PHC	Primary Healthcare Centers
SDGs	Sustainable Development Goals
SMS	Short Messages Service
STEPS	The WHO STEPwise approach to Surveillance
SWOT	Strengths, Weaknesses, Opportunities, & Threats
TORs	Term Of References
UHC	Universal Health Coverage
UN	United nations
UNDAF	United Nations Development Assistance Framework
WHA	World Health Assembly
WHO	World Health Organization
WHO	World Health Organization
YLL	Years of Life Lost

EXECUTIVE SUMMARY

The National Multi-sectoral Action Plan for the Prevention and Control of Noncommunicable Diseases 2018- 2022(Egypt MAP-NCD) is the result of the unwavering efforts of the NCD unit of the Ministry of Health. This group led the process of consulting with relevant units in the health sector, as well as engaging all relevant non-health sectors and professional organizations, with the support of the World Health Organization. This plan has been developed in order to achieve the nine national NCD targets adopted by Egypt, based on the nine voluntary global NCD targets.

This plan is composed of the following three sections: (1) Introduction; (2) Egypt Multi-sectoral Action Plan for Prevention and Control of Noncommunicable Diseases; and (3) National Accountability Framework.

The Introduction section presents the key findings from the situation analysis on the status and trends of noncommunicable diseases and their determinants, global, regional, and national responses and challenges, and gaps and opportunities to tackle NCDs. This section also demonstrates engagement with all relevant stakeholders in the process of developing the Egypt MAP-NCD, as well as the methods and approaches that were used to prioritize actions/interventions. Links between the plan and other relevant policies, plans, and the development agenda are also discussed.

The Egypt MAP-NCD section includes the national strategic agenda for NCDs and implementation plan. In the national strategic agenda for NCDs, national NCD targets have been endorsed by all relevant sectors and five strategic areas were identified in order to achieve these targets. These five strategic areas are: NCD governance; risk reduction and health promotion; early detection and management of NCDs, surveillance, monitoring, and evaluation; and NCD research. The first strategic area, NCD governance, focuses on advocacy, partnership and collaboration, and leadership. Risk reduction and health promotion specifies the plans to reduce tobacco use, promote a healthy diet (high in fruits and vegetables and low in saturated fat/trans-fat, sugar, and salt), and promote physical activity. The NCD management strategic area strengthens early detection of NCDs through PHC and strengthens health systems for NCD management. NCD surveillance highlights the importance of strengthening national capacity building for improving information on NCDs and their risk factors. Finally, the plan addresses high quality NCD research for improving NCD prevention and control in the country.

The National Accountability Framework section addresses the establishment of a national monitoring framework, so as to assess the impact/outcomes and evaluate progress in implementing Egypt MAP-NCD.

The plan provides a comprehensive description of the outcomes to be achieved, specific activities to be implemented, the multi-stakeholder partnership that includes civil society, the timeframe by which the milestones/output are to be measured, and the targets to be achieved. Much like in the process of preparing the plan, the maximum cooperation of relevant

departments of the Ministry of Health and Population, non-health sectors, professional organizations, civil societies, and other relevant parties is vital for achieving the specified targets of NCD prevention and control in the plan.

SECTION I: INTRODUCTION

Status, Challenges and Opportunities

Burden of noncommunicable diseases

Noncommunicable diseases (NCDs) comprise mainly of cardiovascular diseases, cancers, diabetes and chronic respiratory diseases. Common modifiable risk factors of NCDs are unhealthy diet, physical inactivity, tobacco and alcohol use, and exposure to environmental pollutants. The underlying determinants for chronic diseases are globalisation, urbanisation, industrialisation and an ageing population.

Globally, NCDs are the leading cause of premature deaths and chronic disabilities and are responsible for almost 70% of all deaths worldwide. Almost three quarters of all NCD deaths, and 82% of the 16 million people who died prematurely, or before reaching 70 years of age, occur in low- and middle-income countries. The rise of NCDs has been driven by primarily four major risk factors: tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diets.

Non-communicable diseases (NCDs) are the current leading cause of mortality in Egypt, with NCDs estimated to account for 85% of all deaths¹. Cardiovascular diseases accounted for the most deaths of all non-communicable diseases (46%), followed by cancer (14%), chronic respiratory diseases (4%) and diabetes (1%)¹. Alarming, NCD-related premature mortality (between ages 30 to 70 years) is occurring at 25 percent¹.

Use of tobacco, consumption of alcohol, unhealthy dietary practices and physical inactivity are the leading behavioural risk factors for NCDs. The STEPS survey (MOHP and WHO, 2017) showed that 43.4% of males and 0.5% of females are current smokers. 24.9% of the Egypt population are physically inactive. Besides, 63% of adults with excess weight (overweight plus obesity, 53.8% of males and 74.1% of females) and raised blood pressure of 29.5% for the same group. Additionally, the impaired fasting glycaemia was found to be 6.3%.

NCDs are affecting more people in their prime economically productive years with death frequently preceded by years of disability². The current status and trends of noncommunicable diseases and their determinants is contained in a report of situation analysis (Annex 3 Report of situation analysis--Prevention and Control of noncommunicable diseases in Egypt).

Global Response

UN political declaration on NCDs

The Moscow Declaration on NCDs was endorsed by the Ministers of Health in May 2011 and the UN political declaration on NCDs was endorsed by the Heads of State and Government in September 2011. These documents recognized the vast body of knowledge and experience regarding the preventability of NCDs and the opportunities for global action to control them.

¹Noncommunicable Diseases Country Profiles 2014

² Global Status Report on noncommunicable diseases 2014

The UN political declaration was established to promote, establish and strengthen the multi-sectoral national policies and plans for the prevention and control of noncommunicable diseases³. As the social determinants of NCDs and their risk factors feature outside of the sector, the UN Political Declaration on NCDs recommended all countries to mobilize a “whole of government” and “whole of society” response to address NCDs. Therefore the involvement of non-health sectors including trade, finance, agriculture, education and urban development is imperative.

The WHO Framework Convention on Tobacco Control (WHO FCTC) was the first international public health treaty which was adopted by the World Health Assembly (WHA) in 2003⁴. This was a significant milestone towards tobacco and NCD prevention and control. Subsequently, a number of other important NCD related strategies have been endorsed by the WHA including the global strategy on diet and physical activity (2003) and the global strategy to reduce the harmful use of alcohol (2010).

WHO Global NCD strategies

In May 2000, World Health Assembly reaffirmed the Global Strategy for prevention and control of noncommunicable diseases in which four diseases were defined as major NCDs: cardiovascular disease, diabetes, cancer and chronic respiratory diseases. These conditions share modifiable risk factors including tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity. Prevention, health care for NCD management and surveillance were identified as three key pillars for NCD prevention and control.

Global NCD Action Plan, Voluntary Targets, and Monitoring Framework

The WHO Global Action Plan for the Prevention and Control of NCDs 2013 – 2020 provides member states, international partners and the WHO with a map and menu of policy options which will contribute to progress on the 9 global NCD targets. Appendix 3 in the Global Action Plan also provides a menu of policy options including a series of cost-effective interventions, so called “best buys” for low- and middle-income countries to address prevention, early detection and diagnosis and effective treatment. A copy of Appendix 3 of the Global NCD Action Plan 2013-20 is attached in Annex 1. This is a guide for selecting national priority actions for NCD prevention and control. Additionally the WHO “Global monitoring framework on NCDs” tracks implementation of the NCD global action plan through monitoring and reporting on the attainment of the 9 global targets for NCDs by 2025 (Table 1) against a baseline in 2010. The complete Global Monitoring Framework is contained within Annex 4. **Table 1: The 9 Voluntary Global NCD Targets**

Mortality	Risk factors	National systems response
Premature mortality reduction from NCDs (25% reduction)	Harmful use of alcohol (10% reduction) Physical inactivity (10% reduction) Salt/sodium intake (30% reduction) Tobacco use (30% reduction) Raised blood pressure (25% reduction) Diabetes/obesity (0% increase)	Drug therapy and counseling (50% coverage) Essential NCD medicines and technologies (80% coverage)

³ Global Action Plan for the prevention and control of noncommunicable diseases 2013 – 2020.

⁴http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf

In the outcomes document of the second UN High-level meeting on NCDs, the Member States committed to:

- Setting national NCD targets for 2025 based on national circumstances
- Developing multi-sectoral national NCD plans to reduce exposure to risk factors and enable health systems to respond in order to reach these national targets in 2025.
- Measuring results, taking into account the Global Action Plan.
- In September 2015, the global NCD movement gained further momentum after the adoption of Sustainable Development Goals (SDG) that included specific targets on NCDs to be achieved by 2030⁵:
 - Reduce by one third premature mortality from NCDs
 - Strengthen responses to reduce the harmful use of alcohol
 - Achieve Universal Health Coverage (UHC)
 - Strengthen the implementation of the WHO Framework Convention on Tobacco Control (FCTC)
 - Support the research and development of vaccines and medicines for NCDs that primarily affect developing countries

Provide access to affordable essential medicines and vaccines for NCDs.

National Response:

In response to the NCD burden in Egypt, a Ministerial Decree was issued in September 2014 to establish an NCD unit within the Egyptian Ministry of Health. This process involved the following activities:

- The creation of NCD unit within MOHP at the central level;
- Building a national NCD unit team that is well qualified and trained to conduct all the unit's activities;
- Development of the NCD Action Plan 2018-2022
- Developing a National Health Information System and Surveillance of NCDs, which has been implemented in the 4 major governorates successfully;
- Establishment of 2 Centers of Excellence for the Diagnosis and Management of Diabetes in cooperation with the private sector with plans for expansion;
- Establishment of 4 hypertension clinics in 4 major cities with plans for expansion;
- Production of national protocols and guidelines for diagnosis and management of hypertension, diabetes, and cancer;
- Scaling up of the National Cancer Registry;
- Preparation for the implementation of Egypt STEPwise Survey 2016 - 2017 to assess the current status of risk factors for NCDs;
- Implementation of the mDiabetes Global Initiative to spread awareness about diabetes complications and how to avoid them;
- Development of National Action Plans for tobacco control, and cancer prevention and control.

⁵<https://sustainabledevelopment.un.org/sdgs>

Rationale for action:

To take effective action in Egypt on these four risk factors and four main NCDs, it requires careful planning to ensure that limited resources are used effectively.

Egypt currently has strategies in place for specific risk factors such as tobacco and unhealthy diet/nutrition. However, it does not have a comprehensive strategy in place for NCD prevention and control in an integrated manner. The development of an integrated and comprehensive national multi-sectoral plan will allow Egypt to address the gaps in their current approach towards NCDs. This synergistic approach can also bring all relevant stakeholders to work together and will assist in ensuring resources are used efficiently to attain the best health outcomes for Egypt.

Linking Plans

The Egypt MAP-NCD is in line with the Global Action Plan for the Prevention and Control of NCDs 2013–2020 and voluntary global NCD targets and monitoring framework. This plan is aligned with the existing national health plan and disease specific plans for prevention and control of noncommunicable diseases and associated risk factors. It is also an instrument to support the implementation and achievement of the national sustainable goals.

Process of Development of the Egypt MAP-NCD

The Egypt MAP-NCD was developed through a multi-step process of consensus building between the different stakeholders. This process includes initiation, consultation, prioritization and finalization of the action plan.

Ministry of Health and Population initiates the process.

The Ministry of Health and Population (MOHP) established the NCD unit in late 2014. A situational analysis of existing strategies, policies, gaps and opportunities was conducted (see Annex 3). Through collaboration with WHO, national experts were recruited to collection information on development of an action plan with support of the MOHP. Subsequently a draft action plan was developed by the MOHP and reviewed using a WHO checklist to examine the completeness of a national multi-sectoral action plan for NCD prevention and control.

Engage with all relevant stakeholders

Given the complexities of tackling their modifiable risk factors, NCDs are a major health problem that requires a whole of government and whole of society approach. Egypt MAP-NCD is a result of collaboration between the NCDs unit of the Ministry of Health and Population with all relevant units/department in MOHP and non-health sectors along with the technical support of the World Health Organization. There were more than 13 non-health sectors involved in the process of developing and finalizing Egypt MAP-NCD.

Finalization of the Egypt MAP-NCD

With the technical assistance of the WHO Country Office the draft Egypt MAP-NCD was reviewed using a WHO checklist for assessing completeness of national MAP for NCD prevention and control. Review of the draft plan indicated that the draft plan included most of the core components of a complete national NCD MAP. Feedback from this process provided

an opportunity to align with global, regional and national NCD strategies, improve feasibility through prioritization and increase accountability through the establishment of a national monitoring framework.

Prioritization of action

During the process of finalizing Egypt MAP-NCD, the prioritization of actions was considered a key measure to improve the feasibility of the plan. Appendix 3 of the Global NCD Action Plan provides policy options (including evidence-based and cost-effective interventions) as a guide for selecting priority actions/interventions at different stages, from the situation analysis to potential priorities for future actions, as well as setting a national strategic agenda, identifying priority actions under each strategic area, and selecting priority activities within each priority action (Figure 1).

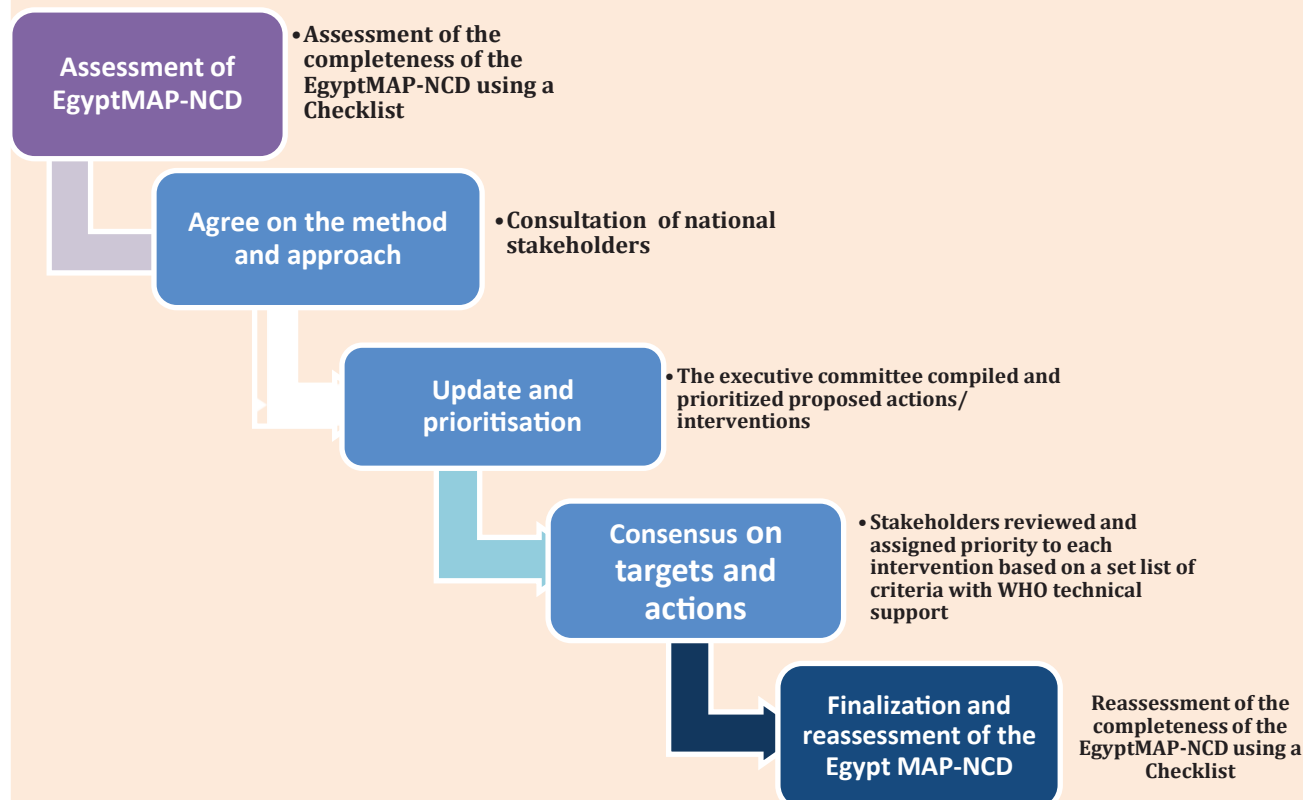
Figure 1 Process of Prioritization of NCD MAP



Finalization of the Egypt MAP-NCD

Group discussions were initiated to collect the opinions and suggestions of all stakeholders about proposed actions/interventions for the prevention and control of NCDs, based on the report of situation analysis. Then, working groups were held to select potential priority actions/interventions under each strategic action area in Appendix 3 of the WHO Global NCD Action Plan 2013-2020 (annex 1). This process was followed by group discussions to prioritize activities under each priority action/intervention. Prioritization was based on Appendix 3, as well as feasibility, affordability, integration, strengths of partnerships, capacity building, health systems strengthening, and accountability. At all steps, a consensus was reached among all relevant stakeholders. This process resulted in finalization of the Egypt MAP-NCD, which is comprised of the following sections: Introduction, National Action Plan (Strategic Agenda and Implementation), and National accountability framework. The process of finalizing Egypt MAP-NCD is demonstrated below in Figure 2.

Figure 1 Process of finalizing the Egypt Multisectoral NCD Action Plan 2018-22



SECTION II: EGYPT NATIONAL MULTISECTORAL ACTION PLAN FOR NCD PREVENTION AND CONTROL

(Egypt MAP-NCD)

National Strategic Agenda for NCDs

The objective of the Egyptian National Strategic Agenda for NCDs is to translate Egypt's long-term vision for NCD prevention and control into tangible components. The key components of the Strategic Agenda include the National Action Framework, the vision and mission, the national NCD targets, the guiding principles for action, the strategic areas and objectives, and priority actions for NCD prevention and control.

National Strategic Agenda for NCDs

Vision

For Egypt to be free from preventable morbidity and mortality due to noncommunicable diseases

Mission

To enhance multi-sectoral collaboration to alleviate the burden of avoidable morbidity and mortality due to NCDs so as to promote a healthier Egyptian population

National NCD Targets

Egypt set 9 national NCD targets for 2021 based on its national circumstances. In order to reach these national targets, the Egypt MAP-NCD aims to reduce exposure to risk factors and improve early detection and effective treatment of NCDs through primary health care approach. The Egypt national NCD targets for 2022 are outlined in Table 2.

Table 2: Egypt national NCD targets by 2021

Framework Element	Baseline	Target 2022	Target 2025
Premature mortality from NCD	25%	15% relative reduction	20% relative reduction
Physical inactivity	24.9%	5% relative reduction	10% relative reduction
Salt/sodium intake	8.9 g/day	20% relative reduction (10.0 g/day)	10% relative reduction (9.0g/day)
Tobacco use	22.7%	10% relative reduction (22.0 %)	20% relative reduction (20 %)
Raised blood Pressure	29.5%	15%relative reduction (33%)	10 %relative reduction (30%)

Framework Element	Baseline	Target 2022	Target 2025
Diabetes and obesity	15.5% diabetes 35.7% Obesity	Halt the rise in diabetes & obesity	Halt the rise in diabetes & obesity
Drug therapy to prevent CVD	*N/A %	10 % coverage	15% coverage
Essential NCDs medicines and basic technologies to treat major NCDs	60%	70% availability	80 % availability

*As there is currently no available baseline data, the approach will be piloted in selected PHC settings.

National Action Framework

The Egypt NCD National Action Framework consists of interrelated documents that are designed to address the Egyptian needs and priorities in policy development and action planning. Figure 3 is a visual representation of the National Action Framework for Egypt.

Figure 3: Egypt's National Action Framework

Vision	
For Egypt to be free from preventable morbidity and mortality due to non-communicable diseases.	
Mission	
To enhance multi-sectoral collaboration to alleviate the burden of avoidable morbidity and mortality due to NCDs so as to promote a healthier Egyptian population	
Goal: 15 % reduction of premature mortality from NCD by 2022	
National NCD targets to be achieved by 2022 (with a baseline value of 2010)	
5% reduction physical inactivity 20% relative reduction of Salt/sodium intake 10% relative reduction of tobacco use 15% relative reduction of raised blood Pressure Halt the rise in diabetes and obesity	At least 10% Drug therapy to prevent CVD 70% availability of Essential NCDs medicines and basic technologies to treat major NCDs
Strategic action area and objectives	
Strategic action area Governance for NCDs Reduction of risk factors Management of NCDs NCD Surveillance NCD research	Strategic objectives to strengthen national NCD Governance to reduce risk factors and protection of health to improve early detection and effective treatment of NCDs to strengthen national capacity for NCD surveillance to promote high quality NCD research
Implementation plan	
Monitoring and evaluation	

Guiding principles for action

Multi-sectoral collaboration

It should be recognized that effective noncommunicable disease prevention and control require leadership, coordinated multi-stakeholder engagement for health both at government level and at the level of a wide range of actors, with such engagement and action including health-in-all policies and whole-of-government approaches across sectors and partnership with relevant civil society and private sector entities.

Reducing inequity

To reduce the disparities in the health status of the community, while acknowledging the unequal distribution of NCDs. This disparity is a product of the inequitable distribution of social determinants of health; therefore, it is important to respond to the specific needs of those with a lower level of education and who reside in very remote or rural areas.

Ensure sustainable implementation and continuous monitoring and evaluation

To provide a strong infrastructure that supports individuals and communities in making and sustaining healthy choices to achieve targets.

Evidence based strategies and practices

Strategies and practices for the prevention and control of noncommunicable diseases need to be developed based on latest and local scientific evidence and/or best practice, cost-effectiveness, affordability and public health principles, taking cultural considerations into account.

Universal health coverage

All people should have access, without discrimination, to nationally determined sets of health promotion, preventive, curative and rehabilitative health services for NCD management. This equitable approach should include access to essential, safe, affordable, effective and quality medicines for NCD treatment.

Life-course approach

Opportunities to prevent and control noncommunicable diseases occur at multiple stages of life; interventions in early life often offer the best chance for primary prevention. The plan for the prevention and control of noncommunicable diseases needs to take account of health and social needs at all stages of the life course and promote best practices including promotion of breastfeeding and health promotion for children, adolescents and youth followed by promotion of a healthy working life, healthy ageing and care for people with noncommunicable diseases in later life.

Main strategies

Strengthen prevention

Research indicates that noncommunicable diseases can be prevented successfully at an individual and population level. Cost effective and comprehensive prevention strategies can include intervention aimed at the entire population to prevent the emergence of disease risk factors by providing early detection and diagnosis as well as through case management at healthcare facilities.

Improve NCD management through primary health care approach

Effective NCD prevention and management requires a robust health system that allows interaction between primary, secondary, and tertiary healthcare settings. Additionally, health promotion and prevention services, palliative care, and rehabilitation services need to be incorporated in health system for effective management of NCDs. An effective primary healthcare service is imperative for the successful management of chronic diseases. To best manage NCDs, integrated services should be provided through PHC services.

Enhance national capacity for surveillance

The primary objective of disease surveillance is to observe and predict disease patterns, so as to identify and minimize the harm from epidemic or outbreak situations. Disease surveillance also enables an assessment of the efficacy of a program or healthcare services. Surveillance is essential for comprehensive monitoring of risk factors and for reviewing the efficacy of interventions. Therefore, the surveillance system needs to be strengthened for NCDs in Egypt. The Egyptian system should comprise of: i) monitoring of exposure to NCD risk factors, ii) monitoring morbidity and mortality, iii) recording the response from health systems, including the capacity of healthcare providers, access to care, and quality of intervention programs. Performance can be measured against the core process and output indicators to monitor and evaluate the progress of the implementation of the Egypt MAP-NCD.

Promote high quality NCD research

Although effective interventions exist for NCD prevention and control, their implementation is often inadequate worldwide. Comparative, applied, and operational research that integrates both the social and biomedical sciences is required to enhance and maximize the impact of existing interventions, in order to meet the national NCD targets.

Strengthen national capacity for implementation

The development, implementation, and evaluation of the Egypt MAP-NCD need a “whole of society” and a “whole government” approach to ensure efficacy and efficiency. This approach will ensure that management of NCDs and their risk factors includes adequate financial and human resources. A higher level national coordination mechanism with support of an executive committee and scientific committee will ensure the successful implementation of the Egypt MAP-NCD.

Strategic action areas, objectives and priority actions

Table 3: Strategic action areas, objectives, and priority actions

Strategic area	Strategic objective	Priority actions/interventions ⁶
Governance:	To strengthen national governance for NCD prevention and control	Raise public and political awareness about prevention and control of NCD Integrate NCDs into the social and development agenda and poverty alleviation strategies Strengthen multi-sectoral coordination for NCD prevention and control Engage and mobilize civil society and private sector for NCD prevention and control

⁶Refer to the menu of policy options from Appendix 3 of the Global NCD Action Plan 2013-20

		<p>Strengthen international cooperation for resource mobilization</p> <p>Strengthen capacity building and health workforce training.</p> <p>Increase budgetary allocations for prevention and control of NCDs</p>
Reduction of risk factors	To reduce risk factors and protect health	<p><u>Tobacco:</u></p> <p>Monitor tobacco use⁷</p> <p>Raise tobacco taxes</p> <p>Provide health information and warnings about the dangers of tobacco</p> <p>Implement measures to minimize illicit trade in tobacco products</p> <p>Create Free-Smoking Zones at the workplace and public places</p> <p>Ban tobacco commercials, promotion and sponsorships.</p> <p>Provide health counseling for tobacco cessation</p> <p><u>Unhealthy diet:</u></p> <p>Establish a sub committee composed of all relevant stakeholders.</p> <p>Reduce of salt intake from meals</p> <p>Establish health education campaigns targeting schools on balanced diet and physical activities (Health Promotion Campaign through mass media on balanced diet and physical activities)</p> <p>Reduce sugar consumption through taxation on sugar sweetened beverages</p> <p>Promote and support exclusive breastfeeding for the first 6 months of life, including promotion of breast feeding.</p> <p>Replace trans fats and saturated fats with unsaturated fats through reformulation, labeling and fiscal and agricultural policies</p> <p>Label nutrition in order to improve macronutrient intake, and reduce total energy intake (kcal)</p> <p><u>Physical inactivity:</u></p> <p>Provide technical guidance on physical activity.</p> <p>Promote physical activity in selected settings in collaboration with relevant stakeholders</p> <p>Create enabling environments for promoting physical activity</p> <p>Strengthen collaboration with NGOs for physical activity</p>
Management of NCDs	To improve early detection and effective treatment of NCDs	<p><u>Early detection through PHC</u></p> <p>Improve early detection of CVD, diabetes, cancer and CRD through PHC</p> <p>Scaling up NCD management in PHC</p> <p><u>Strengthen NCD management through hospital</u></p> <p>Strengthen health care for NCD management through district hospitals/secondary health facilities</p> <p><u>Improve Palliative care</u></p>

⁷Interventions in bold and italics are very cost-effective interventions (Best buys) included in Appendix 3 of the Global NCD Action Plan 2013-20

		<p>Review and report of status of palliative care in the country hospital/secondary health facilities</p> <p><u>Strengthening health systems for NCD management</u></p> <p>Improve health workforce knowledge and skills on NCDs including addressing risk factors</p> <p>Protect from Financial risk caused by NCDs</p> <p>Improve sustained supply of drugs and equipment defined for NCD related services</p> <p>Improve Information system for NCD management</p>
Surveillance, Monitoring and Evaluation	To strengthen national capacity for surveillance	<p>Integrate NCD related information into national health information system.</p> <p>Improve cancer registry in selected area</p> <p>Establish and/or strengthen a comprehensive noncommunicable disease surveillance system</p> <p>Strengthen human resources and institutional capacity for surveillance, monitoring and evaluation</p>
NCD research	To promote high quality NCD research	<p>Develop a prioritized national research agenda for NCD prevention and control</p> <p>Promote research to generate local evidence related to the burden of diseases, health services and health economics</p> <p>Strengthen human resources and institutional capacity for research through cooperation with foreign and domestic research institutes.</p>

Costing Egypt MAP-NCD and financing NCD prevention and control

Financing NCD prevention and control is necessary for translating policies and plans into real actions. Adequate financing for NCD prevention and control activities will be ensured through rational cost estimation and a specific annual budgetary allocation at national and governorate levels. These budgetary provisions will be estimated systematically in line with the NCD strategic plan and resource requirements at all healthcare institutions.

Costing estimates for implementing the Egypt MAP-NCD

The cost of implementing the MAP-NCD will be estimated by considering the targets and activities defined in the MAP-NCD. Costs should be estimated separately for the activities that fall under the responsibility of the MOHP and for activities that many other line ministries will implement. The following suggestions are provided for costing:

The methodology will be based on the targets and actions, and on the country-specific data and reliable sources available, supplemented by data from global databases where necessary.

Implementation costs will be estimated through a consultative process that will be further refined following discussion with key divisions and units.

The estimation of the costs of delivering health services will consider the selected areas and take into account the existing network and capacity of health facilities, including the human resources profile.

Different cost scenarios will be considered for implementation of the MAP-NCD at national, sub-national, and local levels over the period 2018–2019 as the first implementation phase (initiation and pilot), and 2020-2022 as the second phase for scaling up interventions.

Financing NCD prevention and control in Egypt

Direct health and multi-sectoral action to address NCDs requires a combination of fiscal policy, and sustainable and predictable financing. This includes support for convening stakeholders and collaboration. The following measures are suggested to ensure sustainable financing mechanisms to support cost-effective and evidence-based interventions in NCD prevention and control:

Costing NCD prevention and treatment services and forecasting the required budget will be conducted in a systematic manner in order to meet the overall burden imposed by NCDs and their risk factors.

An adjustment to maintain a separate budget category for NCD prevention and control will be made to allow for earmarking of funds for related activities.

Given that NCD prevention is clearly cost-effective but likely to be costly, innovative sources of funding can come from funds from tobacco and soft drinking taxation. For instance, WHO recommended that NCD prevention and control can use a small “micro-levy” as part of national tobacco or soft drinking tax increase.

Implementation Plan

Egypt MAP-NCD provides a comprehensive description of the outcomes to be achieved, specific activities to be implemented, the multi-stakeholder partnership, and the time frame by which the targets are to be achieved. An implementation guide has been developed to coordinate stakeholders at various levels. The implementation of the plan will occur over 2 phases by the committees and the executive committee with support of a scientific committee. The first phase will implement population-based interventions for whole country and pilot policy options and interventions for NCDs management in the selected areas, in order to pre-test the cost-effectiveness of the proposed interventions and approaches. Then, after evaluating the results, the second phase will scale up cost-effective interventions for NCD management in large areas, while continuing to implement population-based prevention for reducing risk and promoting health. Finally, to ensure accountability, monitoring and evaluation framework was developed.

A detailed implementation plan

A detailed implementation plan, including priority actions/interventions, lead agency, relevant sectors, timeframe, process indicators, and output/milestones are included in annex 1: A detailed implementation plan for Egypt NCD MAP.

Guide to implementation

Effective prevention and control of NCDs is a multi-sectoral response involving multiple agencies. Coordination of stakeholders requires a strategic mechanism that can optimize

meaningful participation at the national and sub-national levels. Various overarching committees will coordinate the multi-sectoral cooperation and engagement with the agreement of all relevant sectors.

Coordination

The lead agency for the implementation of Egypt MAP-NCD is Ministry of Health and Population (MOHP). The Egypt MAP-NCD will be guided by national NCD committee composed of representatives from relevant sectors and other stakeholders and chaired by the Minister of Health and Population (figure 4). The Director from the NCD unit will be the Manager and will be supported by an executive committee. It is critical that full time staff with sufficient technical expertise is able to ensure dedicated coordination of the multi-sectoral response for NCDs make time to conduct the NCD committee and undertake effective coordination for multi-sectoral response initiatives.

Key functions of the Coordinating agency (MOHP) are to:

Organize the committee meetings

Develop the agenda for meetings in consultation with the Chair and other sectors

Follow up on decisions made by the coordinating body

Identify implementation gaps and propose measures to implement new strategies and programs

Support stakeholders in accessing required resource

Facilitate bilateral/ multi-lateral meetings to advance work on thematic issues and agreed NCD goals

Prepare consolidated reports on the implementation of the NCD response

Roles and responsibilities of relevant sectors are included in annex 2.

National coordination mechanism

National NCD committee

At the national level, a National NCD Committee will coordinate the multi-sectoral NCD response among various sectors. The National NCD Committee will be managed by MOHP. The Committee will be chaired by the Minister of Health and Population. The National NCD Committee will be comprised of experts from the various sectors, academic representatives, and civil society organizations. The table 4 outlines members of the committee:

Table 4: Egypt national NCD committee

Governmental sector	NGOs and civil society
Ministry of Health and Population	National health professional organizations
Ministry of Education	Private sectors including industry
Ministry of Youth and sports	Consumer organizations
Ministry of Supply and internal trade	
Ministry of Trade and industry	
Ministry of Finance	
Ministry of Justice	
Ministry of Higher Education	
Other relevant sectors	

The broad terms of reference for the committee are to:

- Guide the process of policy, plans and program development.
- Set national goals and objectives for NCD prevention and control.
- Select national strategies for NCD prevention and control.
- Guide and approve the work plans of working groups.
- Ensure the full engagement of partners and broad advocacy and communication.
- Oversee optimal use of existing resources and undertake resource mobilization for program implementation and research.
- Monitor progress of the partnership towards established goals (impact and coverage of cost-effective interventions).

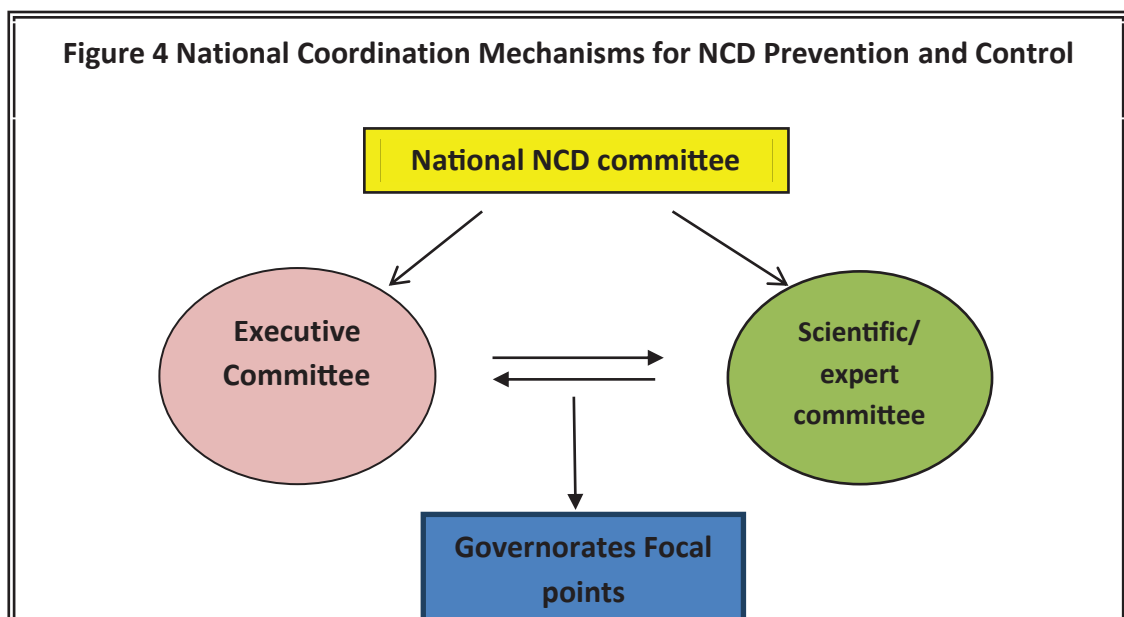
Executive Committee

The Executive Committee is a sub-committee under the National NCD Committee. It is composed of individuals from relevant sectors and representatives from NGOs and civil society. The Executive Committee will meet quarterly (at a minimum) to oversee the progress of ongoing projects and facilitate implementation. The NCD Director will provide a six-monthly progress report to the National NCD Committee.

National NCD scientific committee

The members of the scientific committee include:

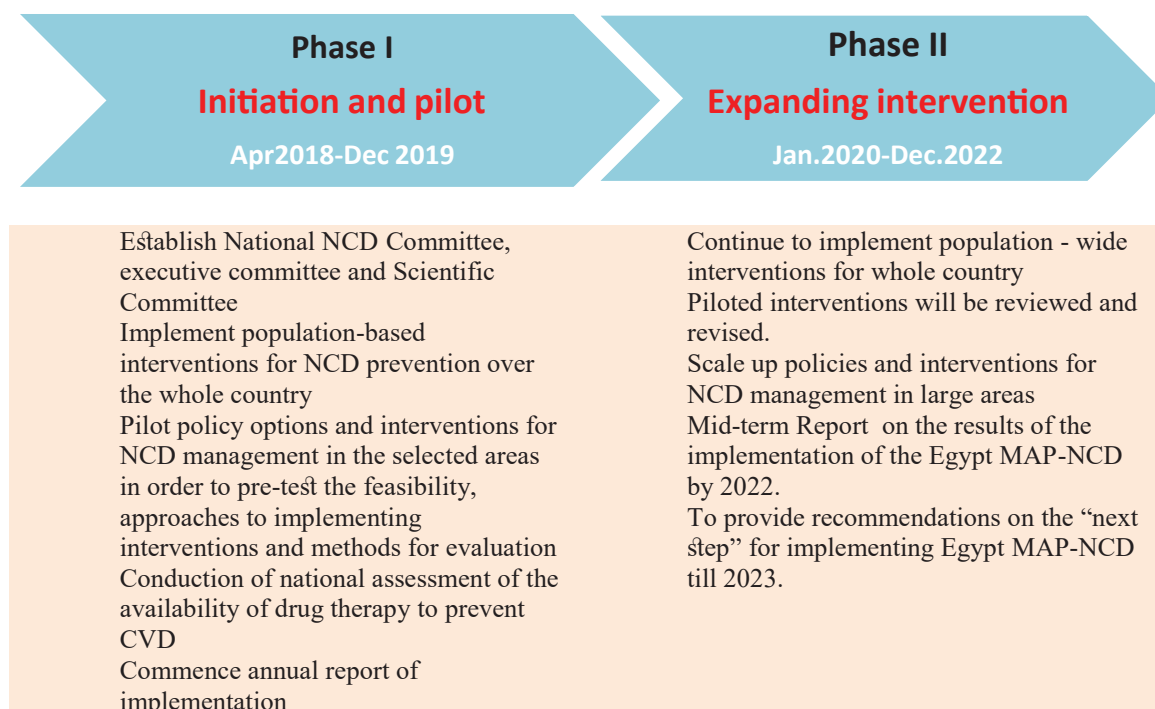
National NCD unit members.
Professor of internal medicine and endocrinology;
Public Health doctor/professional
Professor of CVD
Professor of Chest diseases
Professor of Oncology
Health researcher
Nutrition expert
Biostatistics professor



Implementation phases

The total implementation period for the Egypt MAP-NCD will be from 2018 to 2022. The implementation strategy called “rolling mode management” will be applied for the implementation plan. Therefore, the program work can be reviewed and adjusted where deemed necessary, in accordance with new technologies and evidence-based practices. This can be pre-tested in a small area before extending implementation to a large or national level. Figure 5 demonstrates the implementation phases of the Egypt MAP-NCD.

Figure 5: Implementation phases of the Egypt MAP-NCD



Facilitate implementation of Egypt MAP-NCD at provincial and local level

The NCD focal points at the governorates level will have the followings core functions:

- To provide cross sectoral coordination to mainstream NCD prevention and control at governorates level;
- To monitor the implementation of the Egypt MAP-NCD at the governorate level;
- To mobilize the community to build supportive environments for health promotion.

Capacity building for implementation

To operationalize the Egypt MAP-NCD, it is necessary to have sufficient numbers of trained and competent professionals across the health sector and other relevant sectors. The three main domains in facilitating capacity building for implementing the Egypt MAP-NCD include:

Promoting human resource development to ensure that staff have the knowledge and skills;
 Strengthening the systems and structures through promoting institutional and infrastructural capacity building;
 Facilitating networks and partnerships to support capacity building and multi-sectoral action for NCD prevention and control.

SECTION III: NATIONAL ACCOUNTABILITY FRAMEWORK

A national monitoring framework

The WHO "Global monitoring framework on NCDs" tracks the implementation of the Global NCD Action Plan by monitoring and reporting on the attainment of the 9 global targets for NCDs, using 2010 as a baseline. The Egypt MAP-NCD will be monitored through designated input, output, and outcome indicators, in line with the global monitoring framework. The comprehensive global monitoring framework will guide this process (Annex 4). The national monitoring framework for NCDs in Egypt can be seen in Table 5

Table 5: Egypt National NCD monitoring framework

Framework elements	Subjects
Input and process	Fund for NCDs Human resource development Health infrastructure for NCDs Coordination mechanism
Output	Agreement or declaration of coordination Products of activities Meeting reports Knowledge and Practice skills
Impact/Outcome	Changes in risk factors Mortality and morbidity Health system Quality of life

Monitoring impact and outcomes

Monitoring of the successful implementation of the NCD MAP is outlined in Table 5 to ensure success. Table 6 provides measurement techniques and data sources to monitor achievements of national NCD targets.

Table 6: Monitor and evaluate impact/outcomes

Framework Element	Baseline	Target 2022	Target 2025	Indicator	Measurement Technique
Premature mortality from NCD	25%	15% relative reduction	20% relative reduction	Mortality rate of NCD (unconditional probability of dying)	National Vital Civil registry
Physical inactivity	24.9%	5 % relative reduction (30.5%)	15% relative reduction (28.9%)	Prevalence of insufficiently physically active among adults	WHO STEPS
Salt/sodium intake	8.9 g/day	20% relative reduction	30% relative reduction	Mean population intake of salt in	Appropriate method should be developed

		(10.0 g/ day)	(9.0 g/ day)	persons aged 18+ years	
Tobacco use	22.7%	10% relative reduction (22.0 %)	20% relative reduction (20 %)	Prevalence of current tobacco use among adults	WHO STEPS
Raised blood Pressure	29.5%	15% relative reduction (33%)	25% relative reduction (30%)	Prevalence of raised blood pressure among adults	WHO STEPS
Diabetes and obesity	15.5% diabetes 35.7% Obesity	Halt the rise in diabetes & obesity	Halt the rise in diabetes & obesity	Prevalence of raised blood glucose/diabetes and obesity among adults	WHO STEPS
Drug therapy to prevent CVD	N/A* %	10 % coverage	15 % coverage	Proportion of eligible persons receiving preventive therapy	Appropriate method should be developed
Essential NCDs medicines and basic technologies to treat major NCDs	60%	70% availability	80% availability	Coverage of essential NCDs medicines and basic technology in PHC.	Appropriate method should be developed

*As there is currently no available baseline data, the approach will be piloted in selected PHC settings.

Monitor process and progress in implementing Egypt MAP-NCD

Table 7: Monitor process and progress in implementing Egypt MAP-NCD

Strategic objective	Input and process indicator	Output indicators	Data source
To strengthen national NCD governance	<p>Establishment of time-bound national targets and indicators based on WHO guidance (1) #</p> <p>An operational multi-sectoral national strategy/action plan that integrates the major NCDs and their shared risk factors (4) #</p> <p>Inclusion of NCDs in national development plan and health agenda</p> <p>National NCD Committee established</p> <p>Executive and scientific committee with adequate staff established</p> <p>Number of multi stakeholder meetings held</p> <p>NCD funding increased</p>	<p>Availability of National NCD targets</p> <p>Availability of National Multi-sectoral NCD Action Plan (Egypt MAP-NCD)</p> <p>Availability of Joint declaration of commitment to implement multi-sectoral action plan by multi-sectoral stakeholders.</p> <p>Availability of Annual report of implementing Egypt MAP-NCD</p> <p>Availability of national NCD advocacy package</p> <p>Inclusion of NCD in national SDG and health plan</p> <p>Increase in national NCD budget</p>	<p>Official documents</p> <p>Official records</p>
To reduce risk factors and protect health	<p>Reduce affordability of tobacco products by increasing tobacco excise taxes (5.a) #</p> <p>Create bylaw for smoke-free environments in all indoor workplaces, public places and public transport(5.b) #</p> <p>Warn people of the dangers of tobacco and tobacco smoke through effective health warnings and mass media campaigns (5.c) #</p> <p>Ban all forms of tobacco advertising, promotion and sponsorship(5.d) #</p> <p>Adopted national policies to reduce population salt/sodium consumption (7. a) #</p> <p>Adopted national policies that limit saturated fatty acids and virtually eliminate industrially produced trans fatty acids in the food supply (7. b) #</p> <p>A set of recommendations on marketing of foods and non-alcoholic beverages to children (7. c) #</p> <p>Legislation /regulations fully implementing the International Code of Marketing of Breast-milk Substitutes (7. d) #</p> <p>Public awareness on diet and/or physical activity(8)#</p>	<p>Increase of taxation on all tobacco products</p> <p>Number of smoking-free places</p> <p>Availability of breastfeeding guidelines and healthy school canteen guides.</p> <p>No. of public awareness campaigns on healthy diet and physical activity.</p> <p>Availability of national guidelines for promoting physical activity.</p> <p>Provision of school physical education approved and incorporated as part of National Curriculum.</p>	<p>Official documents</p> <p>Official records</p> <p>Report of national health surveys including STEPS</p>

To improve early detection and effective management of NCDs	Evidence-based national guidelines/protocols/standards for the management of major NCDs through a primary care approach, recognized/approved by government or competent authorities(9) # Provision of drug therapy and counseling for eligible persons at high risk to prevent heart attacks and strokes, (10) # and essential NCD medicine and basic technology with emphasis on the primary care level.	Availability of guidelines and protocols at PHC level Availability of national technical guidelines and protocols for improving quality and coverage of CVD and diabetes prevention, early detection and treatment Increase of new clinics for early detection and treatment of hypertension Increase of new clinics for early detection and treatment of diabetes Availability of national guidelines and protocols for early detection of cervical cancer Availability of national guidelines and protocols for COPD and asthma Coverage of people receiving drug therapy in the selected areas	Official documents Medical Record Adopt Appropriate method
To strengthen national capacity for NCD surveillance	Establishment of National surveillance working group at the governorate level Number of capacity building workshops on surveillance and monitoring for provincial staff	Number of the newly added health facilities adopting NCD surveillance Availability of national NCD status reports including risk factors	Publication Official documents
To promote high quality NCD research	Establishment of national research network Increase of research funding for NCD prevention and control	Establishment of National prioritized NCD research agenda Availability of documents or publications of the best practice for NCD prevention and control.	Official documents

Process indicators in bold and italics are included in the Global Process indicators

Annual Progress Report

The current reporting mechanisms of the Government are inadequate to report the multisectoral performance related to the Action Plan. Activity progress reports need to be collected vertically by the Executive committee from the stakeholders to monitoring progress in implementing the Egypt MAP-NCD.

The Executive committee (national NCD committee Secretariat, NNC) will collect a six monthly progress review from implementing agencies through the focal official using a simple reporting format. The activities will be compiled and submitted to the NNC for review and approval. At the end of one year, the Executive committee will compile a one year report. The National NCD Committee will submit an annual progress report of the Action Plan to the Prime Minister and head of relevant sectors.

Annex 1: Implementation Plan of EgyptMAP-NCD 2018-22

Strategic Objective 1 - To strengthen national governance for NCD prevention and control

Priority action	Activities	Lead agency	Relevant sector	Time frame	Milestones/Output 2019
Objective 1: to strengthen advocacy for NCD prevention and control					
Raise public and political awareness about prevention and control of NCDs	Develop investment case for NCDs showing clear links of NCDs to social and economic burden and needs	MOHP		2018	Report of investment case study for NCDs prevention and control
	Organize, high level seminars on NCDs at high governmental levels	MOHP			High level seminars on NCDs conducted
	Conduct advocacy on NCDs to local government and mayors on basic minimum standard of services			2018	Meetings with local government conducted
	Develop advocacy packages on prevention and control of NCDs for government sectors and non-state actors at national, provincial and district levels	MOHP		2018	Advocacy packages on prevention and control of NCDs available
	Advocate for inclusion of NCD interventions or link to existing programmes related to health and NCDs in relevant sectors	MOHP			Inclusion of NCD interventions or link existing interventions to NCDs in relevant sectors' work plan
Integrate NCDs into the social and development agenda and poverty alleviation strategies	Conduct various activities to advocate UN organizations and development partners to include NCDs in their plans	MOHP	Ministry of Planning Ministry of Foreign Affairs		Advocacy materials issued and meeting with UN organizations and development partners conducted

Objective 2: Strengthen national coordination for multisectoral action on the prevention and control					
Strengthen coordination for NCD prevention and control	Establish a national joint-secretariat (national committee) for coordinating and facilitating implementation of NCD MAP	MOHP	All relevant sectors	2018	Establishment of national NCD committee for coordinating and facilitating implementation of NCD MAP
	Establish a scientific committee to act as consulting committee to the national one in fields of guidelines, monitoring , surveillance , reporting				Establishment of scientific committee with clear TORS
	Convene regular meeting with relevant stakeholders to review progress in implementing NCD MAP	MOHP,	All relevant sectors		Report of stakeholder work progress in implementing NCD MAP through regular review meeting
	Set up provincial and district NCD governing body (task force) linked to the national NCD committee with clear terms of reference	MOHP			Establishment of provincial and district NCD governing body (task force)
	Identify non-state actors and assign NCD related advocacy and service delivery projects to NGOs, CBOs and INGOs	MOHP		2018	Report of identification of non-stakeholders and assignment of NCD related advocacy and service delivery projects to NGOs,
Engage and mobilize civil society and the private sector for NCD prevention and control	Engage with religious, civil society organizations to address NCDs organizations in advocating on key NCD risk factors				Agreement with all relevant organizations
	Build partnership with social media personalities and agencies to champion for NCD issues and Identify champions to generate public awareness on NCD issues	MOHP		2018	Agreement with social media and champions for NCDs identified
Strengthen international cooperation for	Participate in global dialogue and agenda building in NCDs including Global	MOHP			Participation in international dialogue on NCDs

resource mobilization	Coordination Mechanism (GCC) and other global forums on NCDs					
	Identify specific contribution to NCD response by UN agencies in the UNDAF within the context of SDGs	MOHP				NCDs included in UNDAF
Objective 3: Strengthen national NCD leadership						
Strengthen capacity-building and health workforce training	Assess health workforce, in particular at the grass root level to perform NCD activities.	MOHP	Ministry of Man Power			Report on health workforce to performance NCD activities
	Provide facilities and staff to support and monitor the implementation of the NCD MAP	MOHP				facilities and staff provided for NCDs
	Capacity building of the relevant staff	MOHP				Training programmes provided
Increase budgetary allocations for prevention and control of NCDs	Provide adequate fund to implement NCD MAP	Ministry of Finance	MOHP		2019	Fund for NCDs increased
	Explore additional financial resource to support implementation of NCD MAP	Ministry of Finance			2019	New investment mechanism for NCDs identified

Strategic Objective 2 to reduce risk factors and promote health

Priority action	Activities	Lead Sector	Relevant sector	Time frame	Milestones/ Output 2021
Objective 1: Reduce tobacco use					
Monitor tobacco use	Refer to action 3 in strategic objective 4				
Raise tobacco taxes	Return to the simple uniform tax system instead of the current tier system	MOHP Ministry of Finance	WHO	2018-2022	Number of workshops, missions held to raise issue of the simple uniform tax system
	Implement regular increase in tobacco tax rates on all tobacco products directly proportional to national inflation rate.	MOHP Ministry of Finance	WHO	2018-2022	Official governmental documents and fact sheets on tobacco tax status
	Health earmarking of a portion of the revenues from tobacco taxes, to funding national health system including national tobacco control programs.	MOHP Ministry of Finance	WHO	2018-2022	Amendment of legislations concerning Health earmarking to increase a portion of the revenues from tobacco taxes, to fund health system
Provide health Information and Warnings about the dangers of tobacco	Increase display area of pictorial health warning on all tobacco products packages	MOHP	WHO	2018- 2022	Number of workshops, missions held to raise issue of the Increase display area of pictorial health warning on all tobacco products packages
	Develop and run a Public awareness campaign using new emerging communication formats for mass media campaign as digital media, which includes, SMS, websites and social media tools such as YouTube, Facebook, Twitter, blogging platforms and mobile apps.	MOHP	MCIT WHO		By 2019 Available plan of public awareness campaigns using new emerging communication formats

	Produce Health education material and distribute in all possible facilities all over Egypt.				By 2019 Developed New health education materials for all possible facilities all over Egypt Numbers of new updated health education materials delivered in schools, PHC, youth centers,...
	Integrate awareness on tobacco control within the health awareness campaigns conducted by social change agents (Raedat Releyat)	MOHP		2018-2022	Number of social change agents (Raedat Releyat) trained/year for household awareness campaigns especially in rural areas
	Develop and implement community awareness campaigns with all concerned ministries targeting schools, youth centers, universities	MOHP	MOE, MOHESR, MOYS, MOSS, Egyptians Scout, WHO	2018-2022	Developed plan of awareness campaign on tobacco prevention and control for different target groups Number of implemented awareness campaigns in different sectors (schools, youth centers, faculties,...)
	Adaptation of educational curricular/extracurricular policies to include tobacco issue in schools, institutes and faculties.	MOHP	MOE, MOHESR		By 2019, curricular/extracurricular policies enacted to include tobacco issue in schools, institutes and faculties
	Using Official website of all relevant governmental ministries for promoting educational materials on tobacco control and prevention.	MOHP	MOE, MOHESR, MOYS, MOSS, Mass media, MCIT, Egyptians Scout,		By 2019 Promotional material on tobacco control and prevention developed and uploaded on Official website of relevant governmental ministries
	Capacity building on tobacco prevention and control targeting all concerned staff as teachers and social workers in schools , trainers from youth centres	MOHP	MOE, MOHER, MOYS, MOSS, Mass media, MCIT, Egyptians Scout,	2018-2022	Number of Capacity building workshops on tobacco prevention and control targeting all concerned staff as teachers and social workers in schools , trainers from youth centres,....

Implement measures to minimize illicit trade in tobacco products	Support country to be a party to the WHO protocol for illicit tobacco trade illumination	MOHP	Ministry of Justice, Egyptian parliament, Ministry of Finance WHO	2018-2022	Number of workshops, missions held to support country to be a party to the WHO protocol for illicit tobacco trade illumination Country Sign and ratify the WHO protocol for illicit tobacco trade illumination
	Update legislations for rigorous enforcement of existing tobacco sales laws especially banning selling loose cigarettes and selling cigarettes to minors. . Through recruitment of Tobacco control legislative consultant to work on this update.	MOHP	Ministry of Justice, Egyptian parliament, WHO	2018-2022	Number of workshop held to raise issue of updating legislations concerning rigorous enforcement of existing tobacco sales laws especially banning selling loose cigarettes and selling cigarettes to minor By 2022 The updated legislation concerning the rigorous enforcement is communicated the health committee of the Egyptian parliament
	Update legislation on smoke-free places to expand coverage and compliance. Through recruitment of Tobacco control legislative consultant to work on this update.	MOHP	WHO		By 2021 Updated legislation on smoke-free places
Create Free-Smoking Zone at the workplace and public places	Communication of the new updates on the smoke free legislation policies with the health committee of Egyptian parliament	MOHP	Egyptian parliament,	2018-2022	By 2022 The updated legislation on smoke-free places is communicated to the health committee of Egyptian parliament
	Issue Ministerial decrees from concerned ministries to enforce the existing law using the “MOHP National Guidelines for Smoke Free hospitals and governmental buildings “ in primary health care centres, governmental, university, private hospitals, schools, universities, youth centres	MOHP	MOE MOHESR, MOYS		By 2019 issued Ministerial decrees from concerned ministries to enforce smoke free facilities

	Develop monitoring plans for the enforcement of the smoke-free facilities for each category.	MOHP	Ministry of Education and Ministry of Higher education and research, Ministry of youth and sport WHO		By 2019 Monitoring plans for different smoke free places are developed
Ban all forms of tobacco advertising, promotion and sponsorships	Through recruitment of Tobacco control legislative consultant to review and update current legislation on tobacco advertising to be submitted to parliament including new policy measures including as requiring "Adult" age ratings for films with tobacco using scenes, requiring strong anti-smoking advertisements to be shown before films containing tobacco smoking scenes in all channels (cinemas, televisions, online, etc) and requiring anti-tobacco warning to be displayed as news tickers during the tobacco smoking scenes.	MOHP	Egyptian Parliament, Ministry of Justice WHO	2018- 2022	Number of workshop held to raise issue of updating legislations concerning rigorous enforcement of existing tobacco sales laws especially banning selling loose cigarettes and selling cigarettes to minor Updated current legislation on tobacco advertising The updated legislation is communicated to the health committee of Egyptian parliament
Provide health counselling for tobacco cessation	Lengthen the service delivery time of the national help line/quit line to be 24 hours 7 days a week.	MOHP		2018- 2022	the service delivery time of the national help line/quit line
	Regular training of Help line personnel in counselling for behavioural change and provision of support.	MOHP		2018- 2022	Number of trainings held for help line personnel in counselling for behavioural change and provision of support.
Objective 2: to promote Healthy Diet					
To establish a sub committee composed of all relevant stakeholders	Issue Ministerial Decree to establish a multi-sectoral executive sub-committee composed of all relevant stakeholders	MOHP/ NCD	NNI/ MOSIT/ EOS	2018- 2022	By 2019, a multi-sectoral executive sub-committee composed of all relevant stakeholders

To Reduce salt intake from meals	Issue and implement ministerial decree to reduce 30% of salt content of subsidized Baladi Bread develop and implement ministerial decree to reduce sodium content in industrial foods, cheese, chips, tomato paste improve monitoring system to monitor progress in implementing interventions on unhealthy diet by Setting a monitoring system to monitor and follow salt reduction in bread and different foods	MOHP/ NNI	MOSIT	2018- 2022	By 2019, a ministerial decree to reduce 30% of salt content of subsidized Baladi Bread To be 25 % by 2023 To be 30 % by 2025
To establish Campaign targeting schools on balanced diet and physical activities	Provide technical guidance on healthy diet by Development of healthy school canteen guidelines in collaboration with ministry of education develop policy for school meals specifications by revising and updating healthy school meals' specifications in collaboration with the Ministry of Education Integrating principles of healthy nutrition and balanced diet within house management classes' curricula in collaboration with ministry of education provide health counselling on healthy diet improve monitoring system to monitor progress in implementation of the baby friendly hospitals standards in different hospitals	MOHP/ NNI	MOE	2018- 2022	BY 2019, Development of healthy school canteen guidelines By 2021, adoption of healthy school meals' specifications
To reduce sugar consumption through taxation on sugar sweetened beverages	develop, issue and implement legislations to restrict marketing of unhealthy foods and non-alcoholic beverages to children	MOHP/ NNI	MOHP/ NNI/ MOSIT/ EOS	2018- 2022	BY 2019

	Review governments subsidies program to remove unhealthy items develop, issue and implement legislations to raise taxes on soft drinks and sugar sweetened beverages				By 2023, taxes on soft drinks and sugar sweetened beverages raised By 2021, A report of reviewing government subsidies program to remove unhealthy items submitted
To promote and support exclusive breastfeeding for the first 6 months of life, including promotion of breast feeding	Provide technical guidance on healthy diet by establishing breastfeeding guidelines to be used in increasing capacity of PHC workers, develop and implement regulations to improve breast feeding by Adoption of code for complimentary feeding nutrition and fully endorsement by MOHP into effective national measures Issue a new legislation to expand maternity leave to six months To improve capacity of health workers on promoting healthy diet Provide training programmes/ workshops for health workers on best practice of complimentary feeding and exclusive breast feeding Provide training programmes for health workers on guidelines for complementary feeding	MOHP / NNI	MOHP/ PHC	2018- 2022	By 2019, issuing of breastfeeding technical guideline By 2019, Adoption of code for complimentary feeding nutrition From 30 to 40 % by 2023 To 55% by 2025

To replace trans fats and saturated fats with unsaturated fats through reformulation, labelling and fiscal and agricultural policies	adopt and implement legislation to reduce Trans Fatty Acids content to less than 1 % of the total calorie contents adopt and implement of reg to reduce Saturated Fatty Acids content to less than 10% of the total calories content	MOHP / NNI	MOHP/ NNI/ MOSIT/ EOS	2018- 2022	By 2019, adoption of legislation to reduce Trans Fatty Acids content to less than 1 % of the total calorie contents and
To label nutrition in order to improve macronutrient intake, and reduce total energy intake (kcal)	develop and implement ministerial decree to improve health diet	MOHP / NNI	MOHP/ NNI/ MOSIT/ EOS	2018- 2022	By 2019, a ministerial decree issued and implemented
Objective 3: Promote Physical Activity					
To provide technical guidance on physical activity	Develop technical recommendations for physical activity on National level in collaboration with relevant stakeholders (1)	MOHP	All relevant ministries	2018-2023	By 2020
To promote PA in selected settings in collaboration with relevant stakeholders	Promoting physical activities in schools and universities (2)	MOHP	MOYS MOE MOHE	2018-2023	By 2019, the policy developed By 2019, 270 schools infrastructure increased
To create enabling environment for promoting physical activity(3)	To mobilize communities to adopt healthier lifestyles and promoting physical activities through creation of additional public spaces and walking trails	MOHP	MOYS, MOHP, MOHUUD	2018-2023	By 2023 3 workshops/year

	Building the capacity of relevant stakeholders to promote physical activity.				By 2019: 3 workshop for NCD prevention and control with relevant sectors held
To strengthen collaboration with NGOs	Organization of national sports days with NGOs (Ex. Cairo runners	MOYS	MOSS	2018-2023	2 events/year

Strategic objective 3: Improve early detection and effective treatment of people with NCDs or at high risk early detection through primary care approach

Priority action	Target diseases	Current Status	Setting/Target group/.	Guidance/Protocols	Interventions/Operational plan	Referral system/patient pathway	Responsible unit	Indicators	Milestones by end of 2019
Objective 1: to improve early detection of NCDs through primary health care approach									
Improve early detection of CVD, diabetes and cancer through PHC	CVD	4 centres for early detection of CVD in district hospitals Lack of national guidelines for CVD.	District hospitals catchment areas	To implement National protocols for hypertension To develop national guidelines for CVD.	Implement national CVD package in 4 and additional 2 new CVD centres.	Using algorithm. Those that are screened & at high risk will receive counselling/life style modifications. Detected cases will be referred to district hospital in case of PHC.	NCD unit + PHC + curative sectors	Number of population covered. Number of screened population Number of detected cases Number of detected and controlled	6 centres
	Cancer	Available new manual for social change agents (Raeda Refeyya) for raising awareness on breast self-examination.	PHCs catchment areas	To implement National protocols for cancer diagnosis and management	Training & raising capacity of social change agents to raise public awareness about early signs and symptoms of cancer breast (breast cancer early detection awareness)	Implement a dual way referral system for suspected cases Suspected cases referred to general hospital for confirmation of diagnosis. Refer back with feedback for following up at PHC	PHC sector	Number of covered population Number of suspected & referred Cases Number of diagnosed and managed cases.	Trained 4000 social change agents (Raada Refeyya).

[illegible]

Diabetes	12 centers for early detection in PHCs and district hospitals	PHCs & district hospitals catchment areas	Implement National protocols for diabetes diagnosis and management	Implement Diabetes screening programme in 24 centres for early detection, including lifestyle interventions	Using algorithm. Those that are screened & at high risk will receive counselling/life style modifications. Detected cases will be referred to district hospital in case of PHC	NCD unit + PHC sector MOH +	Number of population covered. Number of screened population Number of detected cases Number of detected and controlled.	participants of the program from 50000 to 200000 participants
Diabetes	Implemented m-diabetes awareness program	All diabetic patients	Raising public awareness about diabetes & its complications	Development of data base of diabetic patients Sending mobile SMSs to diabetic patients		MOHP MOC IT	Monitoring and evaluation report of m-diabetes Number of diabetic patients receiving educational SMSs Number of disseminated SMSs Level of awareness	200000 recruited diabetic patients

	CRD	Available specialized chest hospitals distributed all over the country	- PHC (family medicine units), School, Chest dispensaries and Outpatient clinics in chest hospitals	To develop National protocols for management of chronic respiratory diseases	Staff training and orientation on the updated guidelines of case finding/management	develop algorithm for CRD	GD of chest diseases	Availability of national protocol for CRD	Available National guideline for CRD
Scaling up NCD management in PHC	CVD	Limited capacity of PHC to manage NCDs due to insufficient equipment and untrained health care workers	Healthcare workers in selected PHC	Unavailability of CVD protocols	Training of healthcare workers. Review and update the national essential drug list and Ensuring its availability.	Integrate NCD management in the basic benefit package of PHC.	NCD + Curative Care Sector	Number of trained healthcare workers in the CVD centres. Ensure availability of essential drug list in 200 Family Health Centres	Trained healthcare workers in 6 centres for CVD in district hospitals. Fully equipped 6 centres.
	diabetes	PHC equipped to deliver diabetes management in PHC	Healthcare workers in PHC	To train and implement diabetes guidelines	Review and update the national essential drug list and Ensuring its availability.		NCD + PHC	Ensure availability of essential drug list in 200 Family Health Centres	National protocols for diabetes available

Strategic objective 3: Improve early detection and effective treatment of people with NCDs or at high risk--Strengthen NCD management through hospital/secondary health facilities

Priority action	Target diseases	Current situation	Guidance/ Protocols	Interventions /Operational plan until 2019	Responsible unit	Indicators	Expected coverage
Objective 2: to strengthen health care for NCDs through hospital/secondary health facilities							
Strengthen NCD management through hospital/secondary health facilities	CVD	5 specialized hypertension clinics delivering services of management and follow up for hypertension according to the national guidelines	National protocol for hypertension for diagnosis and management is available	Implement hypertension prevention and control program in additional 5 hospitals	MOHP (NCD + Egyptian Hypertension Society + Private sector)	Number of specialized hypertension clinics	The programme implemented in 10 hospitals
	Diabetes	2 centers of excellence for diabetes diagnosis and management and follow up according to the national guidelines.	National protocol for diabetes for diagnosis and management is available	Implement diabetes diagnosis and management programme in 4 excellence centres.	MOHP (NCD unit National Diabetes Institute + Private sector)	Number of centres of excellence	Diabetes diagnosis and management programme in 4 excellence centres.
	Cancer	10 specialized cancer hospitals that provide all medical services to cancer patients.	National protocol for cancer for diagnosis and management is available	implement cancer control programmes in 12 specialized cancer hospitals	MOHP (Specialized Medical Centers)	Number of specialized cancer hospitals	Cancer control programs in 12 specialized cancer hospitals
Improve palliative care		There is limited information on palliative care	N/A	Review and report of status of palliative care in the country	MOHP	Availability of review report	N/A

Strategic objective 3: Improve early detection and effective treatment of people with NCDs or at high risk--Strengthening health systems for NCD management

Strategic action area	Activities	Leading agency	Relevant agencies	Indicators	Output/outcomes
Objective 3: to strengthen health system for improving early detection and NCD management					
Improve health workforce knowledge and skills on NCDs including addressing risk factors	Develop National guidelines for CVS	MOHP	MOHP& MOHE	Number of trained health care workers	Approved CVS guidelines
	-Establish National Program for raising capacity of Health care workers (doctors , nurses, social workers) on risk factors , early detection, management and follow up of NCDs	MOHP	MOHP& MOHE	Number of trained health care workers	Developed national program for raising capacity of health care workers.
Protect from Financial risk caused by NCDs	Strengthening the role of department of “treatment on the expense of the state “ to expand coverage of all conditions related to NCDs	MOHP	Ministry of finance	Number of patients covered	Allocated budget
Improve sustained supply of drugs and equipment defined for NCD related services	Develop National technical guidelines for essential drug list for NCDs in PHC .	MOHP		Availability of national guidelines for essential drug list	Availability of essential drugs in PHC
	Develop National survey for monitoring availability of essential drug list	MOHP		number of facilities that have all essential medicines and basic technologies from the minimum list availability	Available essential drugs in a number of health care facilities

Improve Information system for NCD management	Incorporate national NCD risk factors surveillance system in PHC & district hospitals	MOHP		Number of trained taskforce of the national cancer registry program	By end of 2019 inclusion of NCD risk factor surveillance system in 50 PHC & district hospital
	Strengthen cancer registry national program by capacity building of task force (doctors ,data collectors)	MOHP		Number of trained task force on data collection an entry	Annual reports
	Strengthen National death registry system among all levels of data registration, collection and analysis	MOHP		Available reports on death by cause	Annual reports

Strategic Objective 4 - To strengthen national capacity for surveillance and monitoring

Priority action	Activities	Lead agency	Relevant sectors	Time frame	Outputs
Strategic Objective 4 - To strengthen national capacity for surveillance and monitoring					
Integrate NCD related information into national health information system	Strengthen facilities for health information system, particular at district level			2021	NCD profiles at district, provincial and national level established
	Improve NCD information collection from district through province to ministry of health				
	Incorporate NCD information into "national health profile"			2018	
	Strengthen population level cancer registry	MOHP		2019	Report of cancer registry
Establish and or strengthen a comprehensive NCD surveillance system	Conduct STEPS survey.	MOHP /NCD unit		2019	Report of STEPS
	Conduct GYTS	MOHP /NCD unit		2020	Report of GYTS
	Adapt the SARA (Service Availability & Readiness Assessment) for monitoring essential medicines and basic technologies for NCDs.				Report of coverage of essential medicine and basic technologies for NCDs
	Improve data collection and surveillance to monitor NCD risk factors and supervise progress in coverage of NCD management in the pilot areas.	MOHP /NCD unit	MOHP /Local Health directorates		Incorporate NCD management data into health medical record
	Establishment of NCD website for user friendly and informative				Create a website for NCD.

Strengthen human resources and institutional capacity for surveillance and monitoring and evaluation	Conduct workshop and training for surveillance personnel on NCD surveillance, data management and analysis			
	Provide facilities and staff to support and monitor the implementation of the NCD MAP			

Strategic objective 5: to promote high quality research for NCD prevention and control

Priority action	Activities	Lead sector	Relevant sector	timeframe	Milestones/ Output 2020
Objective 1: to promote high quality research					
Develop and implement a prioritized national research agenda for NCD prevention and control promote research to generate local evidences related to burden of diseases, health services and health economics	Develop and implement a prioritized national research agenda for noncommunicable diseases in collaboration with relevant stakeholders	MOHP	MOHE	2020	Available prioritized national NCD research agenda
	Conduct national studies to analyse fat contents in common food consumed	MOHP/NNI	NNI	2020	Report of fat contents in common food consumes
	Conduct national studies to detect fat consumption pattern among Egyptians	MOHP/NNI	NNI	2020	Report of fat consumption pattern among Egyptians
	Conduct national studies to detect salt content and consumption pattern among Egyptians	MOHP/NNI	NNI	2020	Report of detect salt content and consumption pattern among Egyptians
Strengthen human resources research capacity through cooperation with foreign and domestic research institutes	Facilitate international cooperation for NCD research	MOHP	MOHE	2020	Proposal for international cooperation for NCD research available

Annex 2: Roles and responsibilities of relevant sectors in implementing Egypt MAP-NCD

Table 1: Roles and Responsibilities of Ministry of Health and Population

Sector	Roles and Responsibilities
Ministry of Health and Population	<p>Strategic Objective 1</p> <ul style="list-style-type: none"> Raise public and political awareness about prevention and control of NCD Strengthen capacity-building and health workforce training Strengthen international cooperation for resource mobilization Engage and mobilize civil society and the private sector for NCD prevention and control <p>Strategic Objective 2</p> <ul style="list-style-type: none"> Health information and warnings Monitor tobacco use Provide health counselling for tobacco cessation Strengthen collaboration with NGOs Promote and support exclusive breastfeeding for the first 6 months of life, including promotion of breast feeding Adopt global technical recommendations on physical activity in the national context Campaign through mass media on balanced diet and physical activities <p>Strategic Objective 3</p> <ul style="list-style-type: none"> Improve availability of affordable basic technologies and essential medicines Train health workforce and strengthen capacity of health system particularly at primary care level Scale up early detection and coverage of HEARTS and diabetes <p>Strategic Objective 4</p> <ul style="list-style-type: none"> Strengthen human resources and institutional capacity for surveillance and monitoring and evaluation Improve cancer registry in selected area Establish and or strengthen a comprehensive NCDs surveillance system

	<p>Strategic Objective 5</p> <p>Develop a national research agenda for NCDs</p> <p>Generate local evidences related to burden of diseases</p> <p>Strengthen institutional capacity for research</p> <p>Strengthen research capacity through cooperation with foreign and domestic research institutes</p>
--	--

Roles and Responsibilities of relevant sectors

	Sector	Roles and Responsibilities
1	Ministry of Education	<p>Strategic Objective 1</p> <p>Advocate for inclusion of NCD interventions or link to existing programmes related to health and NCDs in relevant sectors</p> <p>Establish a local joint-secretariat for coordinating and facilitating implementation of NCD MAP</p> <p>Convene regular meeting with relevant stakeholders to review progress in implementing NCD MAP</p> <p>Explore additional financial resource to support implementation of NCD MAP</p> <p>Strategic Objective 2</p> <p>Create enabling environment for promoting physical activity in educational institutions</p> <p>Reduction of salt intake in school meals</p> <p>Promote physical activity in educational institutions in collaboration with relevant stakeholders</p>
2	Ministry of Youth and sports	<p>Strategic Objective 1</p> <p>Raise public awareness about prevention and control of NCD</p> <p>Integrate NCDs into the social and development agendas</p> <p>Engage and mobilize civil society for NCD prevention and control</p> <p>Establish a local joint-secretariat for coordinating and facilitating implementation of NCD MAP</p> <p>Convene regular meeting with relevant stakeholders to review progress in implementing NCD MAP</p> <p>Explore additional financial resource to support implementation of NCD MAP</p> <p>Strategic Objective 2</p>

		<p>Free-Smoking Zone at the youth centres</p> <p>Provide health counselling for tobacco cessation</p> <p>Campaign through mass media on balanced diet and physical activities</p> <p>Adopt global technical recommendations on physical activity in the national context</p> <p>Strengthen collaboration with NGOs</p> <p>create enabling environment for promoting physical activity</p>
3	Ministry of Supply and internal trade	<p>Strategic Objective 1</p> <p>Establish a local joint-secretariat for coordinating and facilitating implementation of NCD MAP</p> <p>Convene regular meeting with relevant stakeholders to review progress in implementing NCD MAP</p> <p>Strategic Objective 2</p> <p>Reduction of salt intake from meals</p> <p>Nutrition labelling to improve macronutrient intake, and reduce total energy intake (kcal)</p> <p>Replace trans fats and saturated fats with unsaturated fats through reformulation, labelling and fiscal and agricultural policies</p>
4	Ministry of Trade and industry	<p>Strategic Objective 1</p> <p>Establish a local joint-secretariat for coordinating and facilitating implementation of NCD MAP</p> <p>Convene regular meeting with relevant stakeholders to review progress in implementing NCD MAP</p> <p>Strategic Objective 2</p> <p>Nutrition labelling to improve macronutrient intake, and reduce total energy intake (kcal)</p> <p>Replace trans fats and saturated fats with unsaturated fats through reformulation, labelling and fiscal and agricultural policies</p>
5	Ministry of Finance	<p>Strategic Objective 1</p> <p>Integrate NCDs into the social and development agenda and poverty alleviation strategies</p> <p>Increase budgetary allocations for prevention and control of NCDs</p> <p>Strategic Objective 2</p> <p>Tax increases</p> <p>Reduce sugar consumption through taxation on sugar sweetened beverages</p>
6	Ministry of Justice	<p>Strategic Objective 1</p> <p>Organize parliamentary briefings, high level seminars on NCDs</p> <p>Conduct advocacy on NCDs to local government and mayors on basic minimum standard of services</p> <p>Strategic Objective 2</p>

	Free-Smoking Zone at the workplace and public places Banning of cigarette commercials, promotion and sponsorships Implement measures to minimize illicit trade in tobacco products
--	--

Egypt NCD multi-sectoral national plan has divided consideration of capacity building activities into the following three domains:

- 1. Human resources:** people and the knowledge and skills they require.
- 2. Institutional and infrastructural capacity:** the systems and structures necessary to allow the concerned people referred to the plan to be effective.
- 3. Networks and partnerships:** a means by which capacities can be strengthened within and across settings and important for using resources effectively and priority setting

Domain 1 : Human Resources			
Objectives	Input	Activities	
Improve and gain the political support and more access knowledge base for NCDs to the political agenda	Orientation to the policy makers and relevant ministers	Establishment of concept notes to the policy makers and relevant ministers regarding the importance of implementation of NCD national plan Arrange for personnel meetings to the concerned policy makers	Established by
			To their excellences
			Minister of Health and/or his/ her representative NCD Director
			Ministry of Education Ministry of Youth and sports Ministry of Supply and internal trade Ministry of Trade and industry Ministry of Finance Ministry of Justice Parliament Representatives to the health committee

Adoption of NCDs committee	Holding meetings to adopt NCD committees	Establishment, and issuing a ministerial decree to adoption of NCD committee's Assign tasks to the committee's as mentioned in the plan		
Specifying agenda for Plan implementation	Workshops to all the NCD committees	Incorporation of all committee representatives to implement, continuous monitor , evaluation Egypt NCD multi-sectoral national plan and related activities		
Adoption of required regulation required in the implementation of Egypt NCD national plan	Holding workshops to develop the required regulations and by-laws from all relevant ministries	Develop and issue a ministerial decrees draft to be approved by their excellencies , the required ministerial decrees are as follow		
		Relevant Ministry	Required regulations	
		Ministry of Health and population	Establish a multi-sectoral executive sub-committee composed of all relevant stakeholders Reduce 30% of salt content of subsidized Baladi Bread Reduce sodium content in industrial foods, cheese, chips, tomato paste Reduce Trans Fatty Acids content to less than 1 % of the total calorie contents Reduce Saturated Fatty Acids content to less than 10% of the total calories content Update legislation on smoke-free places to expand coverage and compliance and coverage. Through recruitment of Tobacco control legislative consultant to work on this update.	

		<p>enforce the existing law using the "MOHP National Guidelines for Smoke Free hospitals and governmental buildings " in health care facilities</p> <p>Establish regulatory measures to limit interactions with the tobacco industry and ensure the transparency of those interactions that occur.</p>
	Ministry of Education	<p>Update legislation on smoke-free places to expand coverage and compliance and coverage. Through recruitment of Tobacco control legislative consultant to work on this update.</p> <p>Develop and implement policies to promote physical activity in workplaces</p>
	Minister of Sports and youth	<p>Update legislation on smoke-free places to expand coverage and compliance and coverage. Through recruitment of Tobacco control legislative consultant to work on this update.</p> <p>Develop and implement policies to promote physical activity in workplaces</p>
Adoption of required legislation required in the implementation of Egypt NCD national plan	<p>Holding workshops between Parliament Representatives and NCD committee to develop the required legislations</p>	<p>Develop and issue a legislation to be approved by the Parliament, the required legislation are as follow:</p> <p>Restrict marketing of unhealthy foods and non-alcoholic beverages to children</p> <p>Raising taxes on soft drinks and sugar sweetened beverages</p> <p>Expand maternity leave to six months</p> <p>new updates on the smoke free legislation policies with the health committee of Egyptian parliament</p> <p>Enforce implementation of new policy measures including: Requiring "Adult "age classification ratings for films with tobacco using scenes, requiring strong anti-</p>

		<p>smoking advertisements to be shown before films containing tobacco smoking scenes in all channels (cinemas, televisions, online, etc) and requiring anti-tobacco warning to be displayed as news tickers during the tobacco smoking scenes.</p> <p>Regular increase in tobacco tax rates so that they result in increases in tobacco product prices that are at least as large as inflation.</p> <p>Include new emerging tobacco products such as shisha and other smokeless tobacco products in regular increase of tobacco taxes.</p> <p>Encourage country to sign and ratify WHO illicit tobacco trade protocol to protect governmental revenues from increased tobacco taxes.</p> <p>Update legislation concerning licensing of tobacco retailers and establishment of the Egyptian Tobacco Retailer Register It will make illegal for anyone who is not registered to sell tobacco products. This has already been proving to be a useful tool in enabling enforcement agencies.</p> <p>Update legislations for rigorous enforcement of existing tobacco sales laws especially banning selling loose cigarettes and selling cigarettes to minors.</p>		
<p>Issuing the required specifications, guidelines and codes regarding NCD risk factors Prevention and control</p>	<p>Holding workshops to issue and implement the required guidelines and specifications further training to relevant workers in different sectors</p>	<p>Issuing and update the related specifications, guidelines and codes related to NCD risk factors</p> <p>Increased capacity to effectively workers and use of national approved guidelines, through a defined map (representative governorates and districts)</p>		
		The required document	Implemented by	Trainers
		Revise and update healthy school meals' specifications	MOHP/NNI reprehensive	School social workers
		Adoption of code for complimentary feeding nutrition	MOHP/NNI reprehensive	PHR workers
		Develop national guidelines for promoting physical activity in collaboration with relevant stakeholders	MOHP/ PA	PHR workers School social workers MOYS representatives

		Development of healthy school canteen guidelines in collaboration with ministry of education	MOHP/NNI reprehensive	PHR workers School social workers
		Establishing breastfeeding guidelines to be used in increasing capacity of PHC workers.	MOHP/NNI reprehensive	PHR workers
		Collaborate in the enforcement of the most recent drama commitment document (ميثاق) performed under auspice of the Ministry of Social Solidarity and try to involve in it most of media regulators especially private sector and the entertainment industry. This will maintain governmental pressure to address the representation of tobacco use in the media in order to deglamorize tobacco use.	MOHP/MOSS	Media staff
Increased capacity to effectively workers and public regarding	Holding a training programs, campaigns, and TOT programs	Adoption of a more fully developed skills among individuals working in various sectors regarding NCD risk factors prevention and control,		
		Activities	Held by	Held to
		Integrate NCD prevention topics within other training initiatives such as ministry		

		of education and ministry of youth and sports activities	NCD Committee / NCD Unit representatives / Minister representatives and concerned personnel	Relevant ministries workers
		Strength workers and training courses.		
		Utilization of Training of Trainers and other opportunities to disseminate information regarding the various sectors		

Domain 2 : Institutional and infrastructural capacity

Objectives		Activities	Held by
Improved and more systematic support for institutional and infrastructural elements of capacity building for NCD risk factor prevention and control	Better understanding of the institutional needs and potential sources of support for institutional and infrastructural capacity building	Mapping exercise to identify institutional needs specifically for each governorates and potential sources of support and how these may be incentivized Advocacy with relevant ministries to assure resources are identified for infrastructural components of capacity building	NCD scientific committee NCD stakeholders Committee Nutrition and health diet sub committee NCD Unit
	Strategic communications to better position institutional and infrastructural capacity building needs on agendas of donors, NGOs and actors working in sectors	Consultations with donors, NGOs and other relevant stakeholders affecting different sectors relevant to NCD prevention to sensitize them to needs, gaps in current processes, and how they might better respond and support these More systematic messaging and publicly available documentation by NCD committee highlighting importance of infrastructural and institutional support in capacity building for NCD prevention Making the scientific committee and defining the value of investments in research in such areas	

	relevant to NCD prevention and Control	
	Increased integration of institutional and infrastructural support for capacity building with other relevant initiatives	<p>Ensuring NCD prevention is integrated into other relevant (e.g. urban planning and development, national financial strategic planning,... etc) institutional and infrastructural development (for physical activities grounds for examples in new cities and newly established schools)</p> <p>Creation of a number of strategic linkages with other agendas (e.g., industrial health, environmental plans, etc.)</p> <p>Wherever possible, highlight and address the institutional and infrastructural capacity building implications (e.g. WHO recommendation)</p>

Domain 3 : Networks and partnerships			
Objectives	Input	Activities	Responsible
More effective use of networks and partnerships to advance capacity building for NCD prevention and control	Improved coordination and integration of capacity building needs within agendas of those working in areas related NCD prevention and control in other general capacity building efforts	<p>Strengthen the relationship with the public health, prevention sector, private health, NGOs, and research sectors of academia to engage them more effectively in contributing to capacity building and to assist with advocating and enabling effective implementation of Egypt NCD Plan.</p> <p>Establishment of a central communications channel to facilitate technical exchange about existing, planned, and potential capacity building efforts of partner</p>	NCD Committee's / NCD Unit members
	Better understanding of the context and strategic opportunities for improved	Mapping of major potential partners who can help advance capacity building	

	networking and partnerships	Identification of opportunities for collaboration with a number of entities whose core work involves capacity building (e.g. NGOs, training centers, schools, youth centers, etc..)	
--	-----------------------------	---	--

Annex 3: Prevention and Control of Noncommunicable Diseases in Egypt

Situation Analysis Report

Egyptian NCD MAP

Contents

1.....	Status and trends of noncommunicable diseases and risk factors	3
1.1	Global Burden of Noncommunicable Diseases	3
1.2	Burden of Non-Communicable Diseases in Egypt	4
1.2.1	Mortality	4
1.2.2	Morbidity	5
1.2.3	Prevalence of Risk Factors for NCDs in Egypt	6
1.3	Social Determinants	6
1.4	Households and individuals.....	8
1.5	Health sector responses	8
1.5.1	Policy and plan for NCD prevention and control	8
1.5.2	Health system	9
2.....	Barriers, challenges, gaps, and opportunities	74
2.1	Barriers, challenges, gaps, and opportunities	74
2.2	Recommendations for action	74

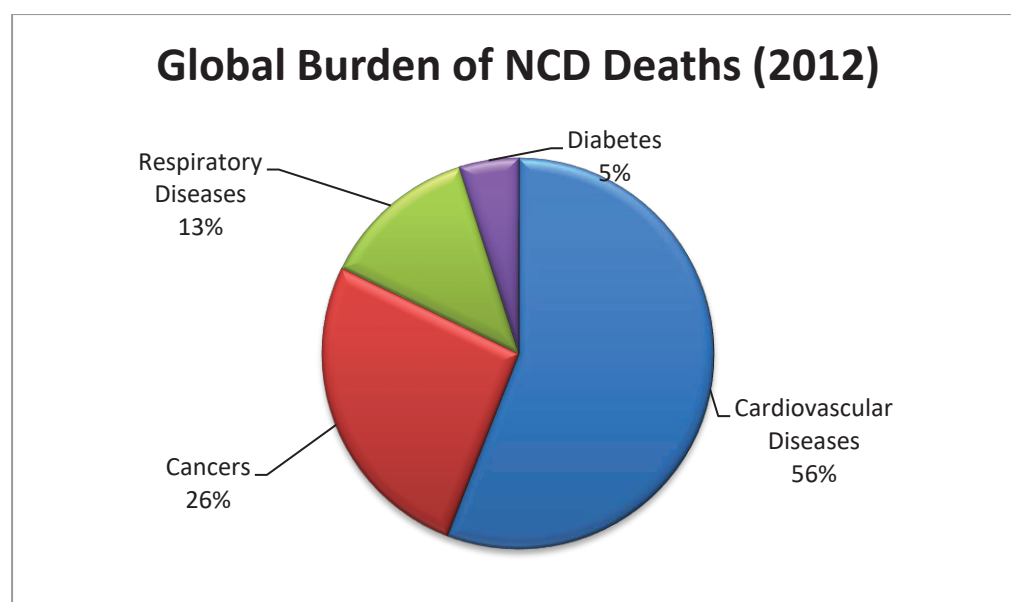
Status and trends of noncommunicable diseases and risk factors

Global Burden of Noncommunicable Diseases

Worldwide, a total of 56 million deaths occurred in 2012. Of these, 38 million were due to NCDs, principally cardiovascular diseases, cancer, and chronic respiratory diseases.¹ Nearly three quarters of these NCDs deaths (28 million) occurred in low- and middle-income countries. While the annual number of deaths due to infectious diseases is projected to decline, the total annual number of NCD deaths is projected to increase to 52 million by 2030.^{2,3}

The leading causes of NCD deaths in 2012 were: cardiovascular diseases (17.5 million deaths or 46.2% of NCD deaths), cancers (8.2 million, or 21.7% of NCD deaths), respiratory diseases, including asthma and chronic obstructive pulmonary disease (4.0 million, or 10.7% of NCD deaths), and diabetes (1.5 million, or 4% of NCD deaths). These four major NCDs were responsible for 82% of NCD deaths (see Figure 1 for a visual representation of the Global Burden of NCD Deaths in 2012).⁴ The human, social, and economic consequences of NCDs are felt by all countries, but are particularly devastating in poor and vulnerable populations. Reducing the global burden of NCDs is an overriding priority and a necessary condition for sustainable development. In 2012, more than 40% of NCD deaths (16 million) were premature deaths (under age 70 years). Almost three quarters of all NCD deaths (28 million) and the majority of premature deaths (82%) occur in low- and middle-income countries.⁴

Figure 1: Non Communicable Disease Global Burden (2012)



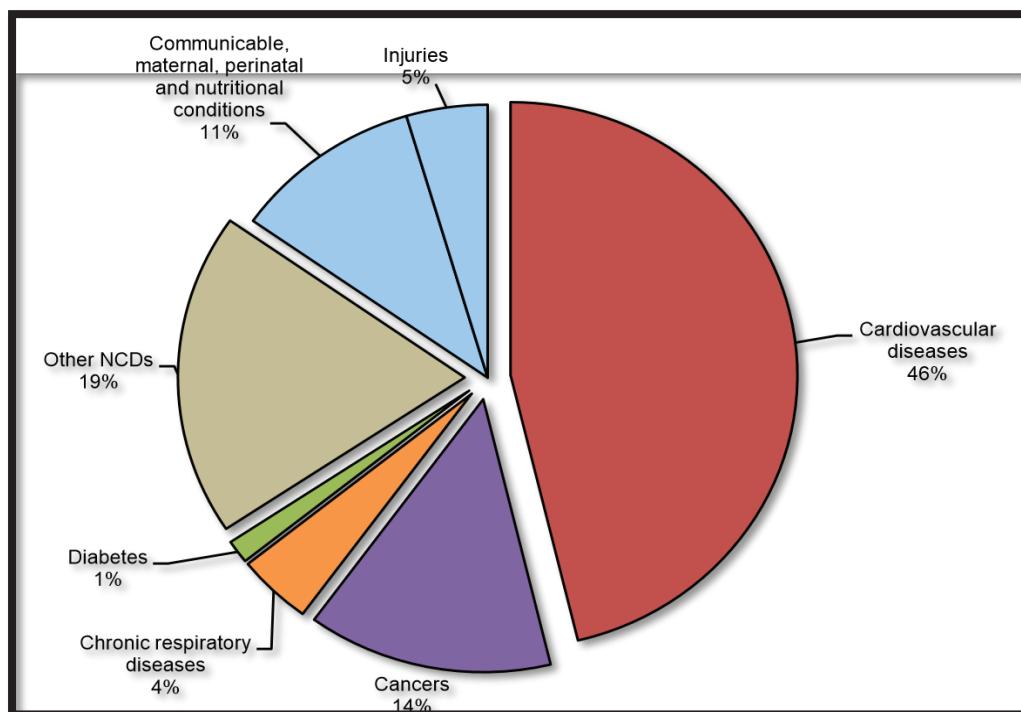
Burden of Non-Communicable Diseases in Egypt

Mortality

NCDs are currently the leading national cause of death in Egypt. In 2014, NCDs accounted for 84% of all deaths in Egypt; cardiovascular diseases represented the largest burden of NCD

deaths (46%), followed by cancer (14%), chronic respiratory diseases (4%), and diabetes (1%). See Table 2 below for the leading causes of mortality in Egypt.

Figure 2: Causes of mortality in Egypt, 2014



Further analysis of the data showed that NCDs mortality exceeds that of communicable diseases, maternal mortality, perinatal mortality, nutritional conditions, and injuries.⁹ A meaningful measure of the impact of NCDs is the number of healthy years of life lost as a result of the diseases. That measure can be calculated in terms of disability-adjusted life years (DALYs), which is the sum of productive life years lost to premature mortality and disability. In 2010, ischemic heart disease, cerebrovascular disease, and liver cirrhosis were responsible for the largest number of DALYs lost. These diseases were also the top three causes of years of life lost (YLL). Ischemic heart disease contributed to 13.7% of YLL, while cerebrovascular disease and liver cirrhosis were 10.5% and 7.1% of total YLL, respectively.¹⁷

Table 2: Leading causes of death in Egypt

Rank	Cause of death**	Death rate (per 100 000)
1	Ischaemic Heart Disease	107.2
2	Stroke	69.8
3	Cirrhosis of the liver	41.4
4	Hypertensive heart disease	21.3
5	Cardiomyopathy, myocarditis	17.5
6	Liver Cancer	16.8
7	Kidney Diseases	15.8
8	Chronic Obstructive Pulmonary Disease	14.9
9	Lower Respiratory Infections	14.1
10	Endocrine, blood, immune disorders	12.4

Alarmingly, NCD-related mortality is occurring at earlier ages in Egypt; the probability of dying between ages 30 and 70 years from cardiovascular diseases, chronic respiratory diseases, cancer, and diabetes is 25%.⁹ NCDs are now impacting more people who are in their prime economically productive years, and these deaths are frequently preceded by years of disability.

Morbidity

Morbidity data showed that, in 2006, hypertension was detected among 26.7% of the surveyed sample; however, in 2011, the percentage increased to 39.4%. Diabetes also increased. According to the International Diabetes Federation, there were 7.5 million cases of diabetes in Egypt in 2013. The data suggest that Egypt ranks among the top ten countries in the world with the highest prevalence of diabetes.

Obesity increased between 2008 and 2011 among both males and females; 62% of the adult Egyptian population was overweight and about half them were obese (31.3%), with higher levels of obesity among females than males (42.6% and 22.4% respectively).

The first published incidence rates for cancer in Egypt on a national and regional level clearly demonstrated the severity of cancer in Egypt. The number of cancer cases increased by approximately 115,000 cases during this period. Liver cancer and breast cancer represented the largest burden of disease. Projections for the year 2050 estimate that the incidence of cancer in Egypt will increase almost 3-fold (more than 331,000 cases). Age-standardized incidence rates per 100,000 were 166.6 (both sexes), 175.9 (males), and 157.0 (females). The most common sites for cancer for both sexes were liver (23.8%), breast (15.4%), and bladder (6.9%). Liver (33.6%) and bladder (10.7%) cancers were most common among men, while breast (32.0%) and liver (13.5%) cancers were most prevalent among women.

Updated data on cardiovascular (CVD) and chronic respiratory disease morbidity are unavailable. There is no settled NCD surveillance system. Data used in the previous section to show the morbidity burden of the NCDs depends on national surveys.

Prevalence of Risk Factors for NCDs in Egypt

Cardiovascular diseases, chronic respiratory diseases, cancer, and diabetes are caused mainly by four behavioral risk factors that stem from economic transition, rapid urbanization, and 21st century lifestyles. These four behavioral risk factors are tobacco use, unhealthy diet, insufficient physical inactivity, and the harmful use of alcohol. In an effort to investigate this problem in Egypt, the Ministry of Health, with the support of WHO, has adopted the WHO STEPwise survey to NCD risk factor surveillance. The last STEPwise survey was successfully conducted in Egypt in 2016- 2017.

The survey results revealed frightening figures, which place Egypt on the high rank of NCD risk factors prevalence. Regarding the percentage of current smokers, almost one quarter of Egyptian adults are currently smoking, with a very high rate among men (43.4%) compared to women (0.5%). Among current smokers, almost 83.4% were cigarettes smokers, while 19.9% were shisha smokers.¹³

The percentage of the Egyptian population that ate less than 5 servings of fruits and vegetables on average per day was very high, reaching 90.3%, and three quarters of the Egyptian population (79.1%) was not engaged in vigorous physical activity. The average time spent in sedentary activities was 80 minutes per day, while work-related physical activity was only 107.5 minutes.

The above mentioned risk factors are closely connected to westernization or the adoption of western culture and values as defined by materialism, consumerism, individualism, urbanization globalization, and trade liberalization (including the food market). Increased access to education and international aid may have been responsible for the increasing urbanity and rural-urban migration in Egypt. Young people are more inclined to undertaking service-based (white-collar) jobs and deserting agrarian life. Consequently, they become sedentary (physically inactive) and adopt western lifestyles, which are associated with significant risky health behaviours (chronic disease risk factors). The change in the Egyptian diet is partially explained by the relatively easy access to staples via the subsidy program. This change was accelerated in the 1970s with the liberalization of the economy.

Social Determinants

Economic Impact of Noncommunicable Diseases in Egypt

Egypt experiences double the burden of disease (communicable and non-communicable), which continues to threaten progress towards the UN Millennium Development Goals. The cost of treatment for chronic noncommunicable diseases can have significant impacts on impoverished people and families in low income groups. Additionally the behaviours associated with risk factors, such as tobacco use, can stress family incomes. Therefore, this multi-sectoral action plan aims to reduce noncommunicable diseases and the main modifiable risk factors, which will provide the highest return on investment. The exorbitant costs of NCDs, particularly for lengthy and expensive treatments, and the impact on the work force continue to threaten Egypt's capacity for development. See Figure 2 for the key areas of economic impact for NCDs. A number of key drivers account for the high and broad-reaching cost of NCDs. These drivers constitute specific effects on economies, health

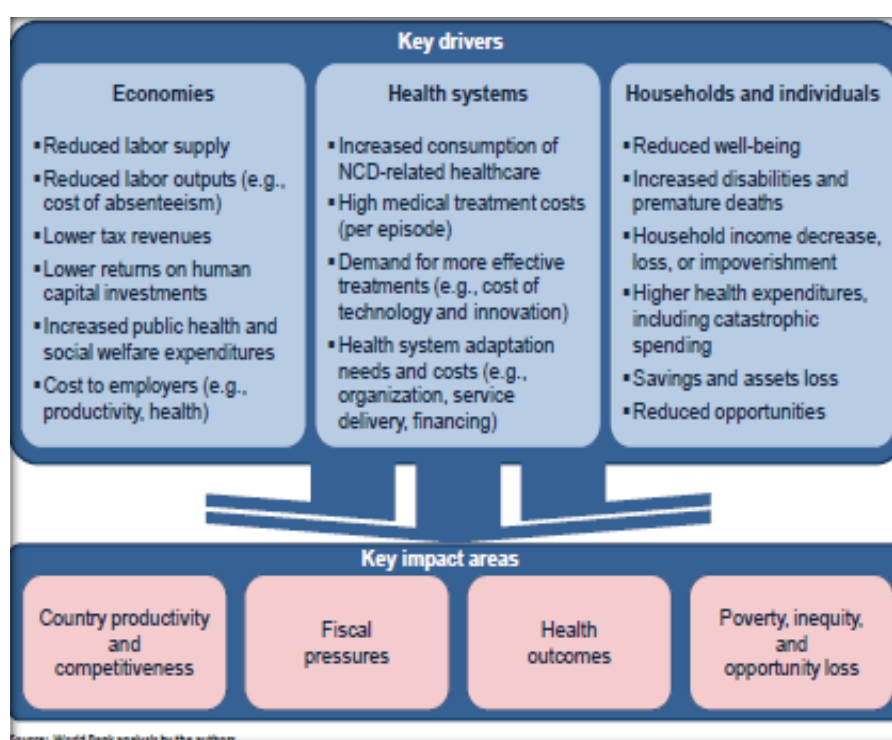
systems, households, and individuals, which combine to have substantial impacts on top-line economic and human development outcomes.

For 2011 – 2015, the accumulated economic loss due to NCDs in low- and middle-income countries has been estimated at USD 7 trillion. This amount significantly outweighs the annual USD 11.2 billion cost of implementing a set of high impact interventions to reduce the NCD burden.⁸ During 2011–2025, cumulative economic losses due to NCDs under a “business as usual” scenario in low- and middle-income countries have been estimated at USD 7 trillion. This sum far outweighs the annual USD 11.2 billion cost of implementing a set of high-impact interventions to reduce the NCD burden.

Table 3: Examples of economic and health expenditure indicators (NCD MAP tool, 2016)

Indicators	Indicators value
Gross national income	282242 (2014) ²
Inflation rate (%)	10.4% ⁹
Unemployment rate (%)	13% Error! Bookmark not defined.
Public (general government) expenditure on health per capita	68 (US \$, 2014) ¹⁰
Total expenditure on health per capita	594 (US \$, 2014) ¹¹
Total expenditure on health as percentage of GDP	6% (2014) ¹²

Figure 2: Key areas of economic impact for Noncommunicable Diseases



Cost of illness studies separate the costs of illness into three components (of which, in most cases, only the first two are actually measured)²³: (1) Direct costs are the costs of medical

care related to prevention, diagnosis, and treatment of disease. They include costs such as ambulances, inpatient or outpatient care, rehabilitation, community health services, and medication, (2) Indirect costs seek to measure the loss of human resources caused by morbidity or premature death, and (3) Intangible costs that capture the psychological dimensions of illness including pain, bereavement, anxiety, and suffering. This cost category is typically hardest to measure.²⁴

Several studies have examined the general link between NCDs and economic prosperity. In Egypt, where one in three people reports suffering from at least one NCD, a study estimated the impact of seven NCDs (cancer, heart disease, hypertension, mental disorders, diabetes, pulmonary conditions, and stroke) at over USD 1 trillion in lost economic outputs in 2003 (mostly in productivity losses) compared to an impact of less than USD 300 billion in health expenditures. The study concluded that the avoidable impact on GDP linked to reduced labor supply and lower rates of investment is gigantic.

Another study of Egypt found the aggregate labor supply to be approximately 19% below its potential, driven by lost employment and reduced numbers of hours worked by those reporting chronic conditions. The findings implied an overall production loss of roughly 12% of Egypt's national GDP.

Households and individuals

NCDs can have serious social and economic effects on the well-being and development potential of affected individuals and their households. Among people suffering from chronic diseases in Egypt, the probability of being employed is 25 percentage points lower than the average, and their working time is reduced by 22 hours per week on average.

NCDs can also have significant economic impacts on wealthier individuals and households. A recent analysis of the labor market in Egypt found that individuals with a university degree suffering from an NCD can expect their probability of being employed to be reduced by about 10 %. In some cases, family members must also give up jobs or forgo formal education in order to take care of an ill person. The premature death of a household member not only impacts the economic welfare of a family, but also may influence family members' prospects.

Additionally, given the existing health financing patterns in Egypt with high out-of-pocket expenditure representing 72% of total health expenditure, the costs associated with chronic disease are likely to weigh more heavily upon those least able to afford them. This situation increases the risk of economic loss and impoverishment for the families' concerned.

Health sector responses

Policy and plan for NCD prevention and control

A number of key efforts have been made to control noncommunicable diseases. A noncommunicable diseases unit has been established within the Ministry of Health and Population. A national cancer committee has been established with a remit to develop and implement a national plan for cancer control and national guidelines for the diagnosis and management of cancer patients. The national diabetes committee has been re-established and

has developed national guidelines for the diagnosis and management of diabetes. This group has also implemented a national training program for all physicians (at primary, secondary, and tertiary health care levels) in all four governorates. The Ministry of Health and Population, in collaboration with the Ministry of Communication and the Ministry of Higher Education and Scientific Research, is implementing the global BeHealthy- BeMobile mHealth initiative in collaboration with the WHO and the International Telecommunication Union. Egypt has also adapted a national mDiabetes program. The Ministry of Health and Population, in collaboration with the Ministry of Youth and Sports, is also implementing a program on health promotion focusing on the prevention of noncommunicable diseases through public campaigns using model youth parliaments in all governorates. The campaign has been piloted in Cairo, Giza, and Fayoum governorates.

Health system

NCDs are generally more expensive to treat than communicable diseases. The chronic nature of NCDs requires patients to have multiple interactions with health systems, frequently in more expensive inpatient settings and over long time periods. These interactions include costly and advanced medical technologies, and pharmaceuticals. For example, because of the high prevalence of hypertension in Egypt, the treatment of hypertension puts economic pressure on Egyptian economy. The drug cost of hypertension (total antihypertensive market) during the year 2011 was more than one billion Egyptian pounds, a dramatic increase from 600 million in 2007.

Current situation for drug supply and basic technologies:

Function of Central Administration of Pharmaceutical Affairs (CAPA):

Bring pharmaceutical & health care products to Egypt that improve lives & deliver real and true value to our people

Function of Pharmaceutical Supply Chain department in CAPA:

Provide executional support that would result in improved effectiveness and efficiency, and greater alignment between supply chain partners

Adaption of WHO Essential Drug list in Egypt:

Adaption can be done by supply chain stockholders. The main players in the MOHP supply chain: patient (customer), decision maker (physician or therapeutic committee), pharmacist, suppliers (pharmaceutical suppliers), and the Tenders Department at CAPA (the main mediator and coordinator between the different healthcare facilities and pharmaceutical suppliers).

Table 6: Current Egyptian Initiatives on Prevention and Control of NCDs

	Current management system and policy, plan	Recommendations
Drugs	Existing management structure	Work with drug administrators Develop a diseases guideline Select essential medicines and basic technologies
	Existing policy, programme for selecting and implementing the essential medicine list	Discuss proposed list with drug administrators to incorporate the proposed drug list into the national essential list
	Monitor coverage using questionnaires through drug management department to local health facilities to collect information on availability of the drug	Incorporate NCD drugs in the essential medicine list
Health services	Current health service delivery system: NCDs health services delivered through many levels of health care facilities: PHC centers deliver screening services and early detection, and manage uncomplicated cases of diabetes and hypertension Secondary health care levels deliver services for complicated cases of diabetes and controlled CVDs, in addition to screening and early detection of diabetes & CVDs Tertiary health care levels deliver services for complicated CVD and diabetes cases that need surgical interference, in addition to all services of cancer diagnosis & management One of the major challenges for incorporating NCD services in the national health system is the limited capacity of PHC with regards to technology, and limited capacity and continuous turnover of health care workers	Encourage health workers at PHC level to adopt NCD package health service for NCDs and counseling for prevention through training program Facilitate PHC and referral hospital use Parallel/double referral paths to improve early detection and management of people with NCDs and/or at high risks Adopt national technical guidelines on early detection, treatment Pilot feasibility and affordability of early detection and management, as well as explore methods and approaches to monitoring identified NCD cases Promote financing NCD through innovative ways, such as collaborating with NGOs & private sector Strengthen family health model (folder) as key to integrating NCD services in existing national health system Establish dual-way referral system to ensure appropriate health care according to level of service delivery
	Health financial protection scheme: Essential medicines covered by government PHC covered by government	

	<p>National health insurance organization delivers funds to all government workers</p> <p>Treatments for those not covered by NHIO are supported by the state</p>	<p>Strengthen health information centers</p> <p>Raise capacity of the staff</p> <p>Develop a form of data collection for early detected cases and follow-up management</p>
	<p>Health/medical information collection</p> <p>Early detection and treatment (NCD target 8) and cancer screening</p> <p>Collection of data for early detection of diabetes and hypertension: done on a limited scale, not through NHIS, but using a specific program for data collection from the acting centers</p> <p>The process is done through an online data collection form and data is registered either by trained data entry personnel or by the physician</p>	
Financing NCD	<p>The existing financial health system</p> <p>Policy and plans</p> <p>Currently, NCD unit has a limited fund only to support supplying equipment to centers of early detection for diabetes & CVDs; no funds allocated for health promotion or raising capacity. More funding is allocated for diagnosis and management of NCDs at the secondary and tertiary care level</p> <p>Fund raising through collaboration with private sector in activities of health promotion (mDiabetes national program), raising capacity of health workers (training programs), printing guidelines and health education materials, and screening campaigns</p>	<p>Request to higher authorities to allocate more funds for NCDs activities (surveillance – health education – raising capacity of staff)</p> <p>Strengthen collaboration with private sector for sustainable support of NCDs prevention and control activities through protocols & MOUs</p>

Barriers, challenges, gaps, and opportunities

Barriers, challenges, gaps, and opportunities

An analysis of these factors should be included in the action plan, based on the context of a specific country. SWOT (strengths, weaknesses, opportunities, and threats) analysis is a tool for reviewing and planning interventions that specifically addresses these areas. Country-specific strengths, weaknesses, opportunities, and threats should be illustrated from various perspectives: socio-demographic and economic conditions, NCD burden, prevalence of risk factors, experience in NCD prevention and control, current national strategies, policies/programs and plans, capacity of health system for NCD prevention and control, and existing partnerships and coordination between different sectors.

Strengths <p>The last STEPwise Survey was successfully conducted in Egypt in 2016 - 2017.</p> <p>Well established health system with strong infrastructure</p> <p>Has a national, population based cancer registry</p> <p>Mortality statistics are available at the National Information Center of Health and Population.</p> <p>Some diabetes-related deaths have been prevented due to previous diabetes-related health expenditures</p> <p>Sound current national responses</p>	Weaknesses <p>No data available on CVD morbidity and chronic respiratory disease</p> <p>Lack of morbidity data on national level due to no NCD surveillance system – currently using national surveys</p> <p>Accuracy of current data and available data is not collected from private hospitals</p>
Opportunities <p>Cost-effective solutions available to be implemented from the WHO</p> <p>Lower economic impact of NCDs</p> <p>Implementation of surveillance of morbidity and mortality</p>	Threats <p>Huge gap in mortality between high income countries and low income countries</p> <p>Tobacco company control within country</p> <p>Highly fragmented services posing major challenges to governance</p>

Recommendations for action

Like other member states, Egypt currently has strategies in place for specific risk factors, such as nutrition; however, it does not have a comprehensive strategy in place for NCD prevention and control. The development of a comprehensive national Multisectoral Action Plan (MAP) will allow Egypt to address the gaps in their current approach to NCDs. This synergistic

approach will assist in ensuring that resources are used efficiently to promote the best health outcomes for Egyptians. For effective action on these 4 risk factors and 4 main NCDs in Egypt, careful planning is required to ensure that limited resources are used effectively.

Based on the situation analysis, a national list of potential policy options/interventions should be established to encourage prioritization of action in order to effective use limited resource and achieve objectives and targets. In the national NCD Action Plan, all interventions listed should: respond to main NCDs and their risk factors reported in the situation analysis; demonstrate the quantifiable size of the impact(evidenced by at least one peer-reviewed published study); have a clear link to the outcomes described by the vision and goals; and link to national NCD targets. The WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013 – 2020 Appendix 3 examines existing interventions and identifies interventions that are high impact and cost-effective.

As the Health Authority, the Ministry of Health and Population will be responsible for providing policy direction and coordination including the development and implementation of needed legislation, programmes and protocols. Since NCD prevention and control exceeds the wherewithal of the health sector, the Ministry of Health and population will continually foster partnerships with and encourage support from a wide range of organizations locally, regionally and internationally. The network of health partnership includes but is not limited to:

Other government sectors such as Education, Social and Community Services, Agriculture, Trade, Labour, Physical Planning and Urban Development, Finance and Sustainable Development, Private sector, Industry and commercial sector, health professionals (e.g. Hypertension, Diabetes, Cancer Association) Users of the health services and /or representative groups Non-governmental organizations–faith-based organizations, service organizations The media.

Annex 4: Voluntary global targets for the prevention and control of noncommunicable diseases

Table 1 provides nine voluntary global targets for consideration by Member States. Achievement of these targets by 2025 would represent major progress in the prevention and control of noncommunicable diseases.

Table1. A set of voluntary global targets for the prevention and control of noncommunicable disease

Relative reduction in harmful use of alcohol among persons 15+ years

Mortality and morbidity	Indicator
Target: A 25% relative reduction in overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.	<ul style="list-style-type: none"> Unconditional probability of dying between ages 30 and 70 from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.
Risk factors	Indicators
<i>Behavioural risk factors</i>	
Harmful use of alcohol¹	
Target: At least a 10 % relative reduction in the harmful use of alcohol, ² as appropriate, within the national context	<ul style="list-style-type: none"> Total (recorded and unrecorded) alcohol per capita (15+ years old) consumption within a calendar year in litres of pure alcohol, as appropriate, within the national context.
	<ul style="list-style-type: none"> Age-standardized prevalence of heavy episodic drinking among adolescents and adults, as appropriate, within the national context.
	<ul style="list-style-type: none"> Alcohol-related morbidity and mortality among adolescents and adults, as appropriate, within the national context
Physical inactivity	
Target: A 10% relative reduction in prevalence of insufficient physical activity	Prevalence of insufficiently physically active adolescents defined as less than 60 minutes of moderate to vigorous intensity activity daily
	Age-standardized prevalence of insufficiently physically active persons aged 18+ years (defined as less than 150

	minutes of moderate-intensity activity per week, or equivalent
Salt/sodium intake	
Target: A 30% relative reduction in mean population intake of salt/sodium	Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years.
Tobacco use	
Target: A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years	Prevalence of current tobacco use among adolescents
	Age-standardized prevalence of current tobacco use among persons aged 18+ years
<i>Biological risk factors</i>	
Raised blood pressure	
Target: A 25% relative reduction in the prevalence of raised blood pressure or contain prevalence of raised blood pressure according to the national circumstances	Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure ≥ 140 mmHg and/or diastolic blood pressure ≥ 90 mmHg).
Diabetes and obesity	
Target: Halt the rise in diabetes and obesity	Age-standardized prevalence of raised blood glucose/ diabetes among persons aged 18+ years (defined as fasting plasma glucose value ≥ 7.0 mmol/L (126 mg/dl) or on medication for raised blood glucose (126 mg/dl) or on medication for raised blood glucose).
	Prevalence of overweight and obesity in adolescents defined according to the WHO growth reference for school-aged children and adolescents, overweight – one standard deviation body mass index for age and sex and obese – two standard deviations body mass index for age and sex).
	• Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as body mass index ≥ 25 kg/m ² for overweight and body mass index ≥ 30 kg/m ² for obesity).
National systems response	Indicator
Drug therapy to prevent heart attacks and strokes	
Target: At least 50% of eligible people receive drug therapy and counseling (including glycaemic control) to prevent heart attacks and strokes.	Proportion of eligible persons (defined as aged 40 years and over with a 10-year cardiovascular risk $\geq 30\%$, including those with existing cardiovascular disease) receiving drug therapy and counseling (including glycaemic control) to prevent heart attacks and strokes.

Essential noncommunicable disease medicines and basic technologies to treat major noncommunicable diseases	
Target: An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities.	Availability and affordability of quality, safe and efficacious essential noncommunicable disease medicines, including generics, and basic technologies in both public and private facilities

References

Global strategy for the prevention and control. (2000). In Fifty-third World Health Assembly. Geneva. Retrieved from http://apps.who.int/gb/archive/pdf_files/WHA53/ea14.pdf?ua=1

Sustainable Development Knowledge Platform. (2017). Sustainabledevelopment.un.org. Retrieved 6 March 2017, from <https://sustainabledevelopment.un.org/sdgs>

World Health Organization,. (2005). WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL. Geneva: WHO Press.

World Health Organization(2011). Global Strategy and Plan of Action on Public Health, Innovation and Intellectual Property. Geneva: WHO Press.

World Health Organization(2012). Egypt STEPS Survey 2011 - 2012. http://www.who.int/chp/steps/2011-2012_Egypt_FactSheet.pdf.

World Health Organization(2013). Global Action Plan for the prevention and control of noncommunicable diseases. Geneva: WHO Press.

World Health Organization(2014). GLOBAL STATUS REPORT on noncommunicable diseases.. Geneva: WHO Press.

World Health Organization(2014). Noncommunicable Diseases Country Profiles 2014. Geneva: WHO Press.

World Health Organization (2017). From Burden to “Best Buys”: Reducing the Economic Impact of Non-Communicable Diseases in Low- and Middle-Income Countries. Geneva: WHO Press.

World Health Organization. (2015). Noncommunicable diseases progress monitor. Geneva: WHO Press

Notes:

