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**REGIONAL FRAMEWORK FOR INTEGRATING ESSENTIAL  
NONCOMMUNICABLE DISEASE SERVICES IN PRIMARY HEALTH CARE**

**Report of the Secretariat**

**EXECUTIVE SUMMARY**

1. Noncommunicable diseases (NCDs) are the leading causes of death worldwide. The four major NCDs, namely cardiovascular diseases, cancer, diabetes and chronic respiratory diseases, are largely preventable by addressing the four common modifiable risk factors - tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity. NCD deaths in the African Region show an increasing trend over the years. In 2015, of the 9.2 million total deaths, 3.1 million (33.7%) were due to NCDs compared to 2.7 million NCD deaths out of a total of 9.28 million deaths (29.1%) in 2010 and 2.4 million NCD deaths out of a total of 9.8 million deaths (27.6%) in 2005.
2. To address the high burden of NCDs, leaders have made commitments at the global and regional levels. Global commitments include the United Nations General Assembly Political Declaration on NCDs, the WHO Global Action Plan for the Prevention and Control of NCDs 2013–2020 and the United Nations Outcome Document. Regional commitments include the Brazzaville Declaration on NCDs, the Luanda Commitment on NCDs and disease-specific regional strategies adopted by the Regional Committee. To implement these commitments, WHO has developed population-wide strategies and policies to address the risk factors of NCDs and individual healthcare strategies for preventing and managing NCDs. The WHO Package of Essential Noncommunicable Disease Interventions for primary health care (PHC) in low-resource settings is a prioritized set of cost-effective interventions for integration of essential NCDs in PHC.
3. The Regional Framework for integrating essential NCD services in PHC aims at providing guidance to Member States on the integration of essential NCD interventions in PHC in order to scale up early detection, diagnosis and treatment. Its implementation is guided by the following principles: government leadership; universal health coverage; evidence-based approaches and cost-effective interventions; patient-centred and community-based approaches; simple tools; collaboration between the public and private sectors.
4. The proposed priority interventions and actions to integrate NCDs in PHC facilities include advocacy for political commitment for the utilization of the WHO guidelines; adapting WHO global guidelines to local contexts; improving NCD knowledge and skills of health workers in PHC facilities; ensuring the availability of simplified guidelines for NCD management in PHC facilities; strengthening technical leadership and managing PHC facilities, and promoting task shifting and sharing.
5. The Regional Committee is invited to examine and adopt the proposed actions in this regional framework: systems for monitoring and evaluation; NCD surveillance data integrated into Health management information system.



## CONTENTS

	<b>Paragraphs</b>
INTRODUCTION .....	1–5
CURRENT SITUATION.....	6–10
ISSUES AND CHALLENGES .....	11–21
THE REGIONAL FRAMEWORK .....	22–28
PRIORITY INTERVENTIONS AND ACTIONS .....	29–46

## ANNEXES

	<b>Page</b>
1. Targets and Milestones for 2020, 2025 and 2030 .....	8
2. The Global NCD Action Plan 2013–2020 at a glance .....	9
3. Evidence-based interventions for reducing morbidity and mortality from major NCDs to be implemented in primary health care in low resource settings .....	11

## **ACRONYMS**

CRD:	Chronic respiratory disease
CVD:	Cardiovascular disease
FEV1:	Forced expiratory volume in one second (Tiffeneau-Pinelli index)
HPV:	human papillomavirus
IMAI:	Integrated Management of Adult and Adolescent Illness
IT:	information technology
NCD:	noncommunicable disease
PHC:	primary health care
SDGs:	Sustainable Development Goals
TWG:	Technical Working Group
UNGA:	United Nations General Assembly
UHC:	universal health coverage
VIA:	Visual Inspection with Acetic Acid
WHO:	World Health Organization
WHO-PEN:	WHO Package of Essential Noncommunicable Disease Interventions for primary health care (PHC) in low-resource settings



## INTRODUCTION

1. The four major noncommunicable diseases (NCDs), namely cardiovascular diseases (CVDs), cancer, diabetes and chronic respiratory diseases (CRDs), are the leading causes of morbidity and mortality worldwide. They are largely preventable by addressing the four common modifiable risk factors: tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity.
2. The economic consequences of NCDs are of critical importance. At the household level, unhealthy behaviours and the high cost of NCD-related health care, lead to loss of household income. At the national level the impacts of NCDs include costly hospitalizations, loss of productivity due to absenteeism and inability to work, and ultimately a decrease in national income.<sup>1</sup>
3. To address the high burden of NCDs, leaders have made commitments at the global and regional levels. Global commitments include the United Nations General Assembly (UNGA) Political Declaration on NCDs,<sup>2</sup> the WHO Global Action Plan for the Prevention and control of NCDs 2013–2020<sup>3</sup> and the United Nations Outcome Document.<sup>4</sup> Regional commitments include the Brazzaville Declaration on NCDs<sup>5</sup> and the Luanda Commitment on NCDs<sup>6</sup> among others.
4. To implement these commitments, WHO has developed population-wide strategies and policies to address the risk factors of NCDs and individual health care strategies for preventing and managing NCDs. The WHO Package of Essential NCD Interventions for primary health care (PHC) in low-resource settings (WHO PEN) is a prioritized set of cost-effective interventions for integration of essential NCD services at PHC level.
5. This Regional Framework provides guidance to Member States on the integration of essential NCD interventions in PHC facilities.

## CURRENT SITUATION

6. NCD deaths in the African Region show an increasing trend over the years. In 2015, of the 9.2 million total deaths, 3.1 million (33.7%) were due to NCDs compared to 2.7 million NCD deaths out of a total of 9.28 million deaths (29.1%) in 2010.<sup>7</sup> More than three quarters of the deaths were caused by CVDs, cancer, CRDs and diabetes. The human, social and economic impact of NCDs is serious in all countries but disproportionately devastating in poor and vulnerable populations.

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<sup>1</sup> WHO, Global status report on NCDs 2010, Geneva, World Health Organization, 2010 [http://www.who.int/nmh/publications/ncd\\_report\\_chapter2.pdf](http://www.who.int/nmh/publications/ncd_report_chapter2.pdf) last accessed on 19 June 2017.

<sup>2</sup> 2011 High-level meeting on the prevention and control of NCDs, New York, United Nations, [www.un.org/en/ga/ncdmeeting2011/](http://www.un.org/en/ga/ncdmeeting2011/) last accessed on 12 April, 2017.

<sup>3</sup> WHO, Global Action Plan for the prevention and control of NCDs 2013-2020, Geneva, World Health Organization, 2013.

<sup>4</sup> High-level meeting of the UN General Assembly to undertake the comprehensive review and assessment of the 2011 Political Declaration on NCDs, World Health Organization, 2014 [www.who.int/nmh/events/2014/a-res-68-300.pdf](http://www.who.int/nmh/events/2014/a-res-68-300.pdf) last accessed on 12 April 2017.

<sup>5</sup> The Brazzaville Declaration on noncommunicable diseases prevention and control in the African Region, Brazzaville, World Health Organization Regional Office for Africa [www.afro.who.int/en/regional-declarations.html](http://www.afro.who.int/en/regional-declarations.html) accessed on 25 April 2017.

<sup>6</sup> First Meeting of African Ministers of Health jointly convened by the African Union Commission and the World Health Organization, 2014, Angola, World Health Organization [www.afro.who.int/index.php?option=com\\_docman&task=doc\\_download](http://www.afro.who.int/index.php?option=com_docman&task=doc_download) accessed on 25 April 2017.

<sup>7</sup> WHO, Global Health Estimates 2015, Geneva, World Health Organization, 2015 [http://www.who.int/healthinfo/global\\_burden\\_disease/estimates/en/index1.html](http://www.who.int/healthinfo/global_burden_disease/estimates/en/index1.html), last accessed on 16 May 2017.

7. The high burden of NCDs is due to an ageing population, urbanization and consumption of harmful products such as tobacco and alcohol, unhealthy diets and a sedentary lifestyle. In 2012, the average prevalence<sup>8</sup> of tobacco smoking was estimated at 12% while the prevalence of heavy episodic drinking of alcohol was 5.7% in the population aged 15 years and above and 16.4% among drinkers. The prevalence of physical inactivity was estimated to be 21%. The adult prevalence of raised blood pressure was 30%, which is the highest in the world.

8. Thirty-five Member States<sup>9</sup> participated in the WHO Country Capacity Survey (CCS)<sup>10</sup> in 2015. Fifteen of these had operational national multisectoral integrated NCD policies, strategies or action plans. Guidelines for the management of NCD conditions were available in 20 of them for diabetes, 19 for CVDs, 18 for cancer and 16 for CRDs. No Member State reported having a national screening programme for cancer of the cervix, colon and prostate reaching 70% or more of the general population.

9. Since 2012, nine Member States<sup>11</sup> adapted WHO PEN tools in pilot districts and among them, Benin and Togo have rolled them out nationally. South Africa has piloted the Integrated Chronic Disease Management Model (ICDM) in selected PHC facilities aiming at leveraging the innovations of the HIV/AIDS programme in scaling up NCD services. WHO is working with the Integrated Management of Adolescent and Adult Illness (IMAI) Alliance to incorporate WHO PEN in the IMAI Acute and Chronic Care guidelines.

10. In addition to the four major NCDs, the Region faces other conditions, which include sickle cell disease, mental health and substance abuse, oral diseases, eye and ear health problems, violence and injuries. These conditions, which are linked to this framework, are addressed in different policy and technical documents such as the Regional Oral Health Strategy 2016–2025,<sup>12</sup> Promoting Oral Health in Africa<sup>13</sup> and the Regional Strategy for Sickle Cell Disease<sup>14</sup> among others.

## ISSUES AND CHALLENGES

11. There are several challenges that hamper the introduction and scale-up of WHO PEN and other tools aimed at integrating essential NCD services at PHC level in Member States.

12. **Advocacy and policy guidance:** Advocacy for prioritization of NCD prevention and control in Member States is insufficient. Furthermore, there is insufficient policy guidance on how the available guidelines can be adapted at country level.

13. **Human resources for health:** The shortage of skilled human resources for health (HRH) in many Member States impacts negatively on delivery of services in general and NCD services in

<sup>8</sup> WHO, Global status report on NCDs 2014, Geneva, World Health Organization, 2014.

<sup>9</sup> Algeria, Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, Congo, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, Swaziland, Togo, Uganda, Zambia and Zimbabwe.

<sup>10</sup> WHO, 2015 Assessing National capacity for the prevention and control of NCDs, Geneva, World Health Organization, 2015. [www.who.int/chp/ncd\\_capacity/en/](http://www.who.int/chp/ncd_capacity/en/) last accessed on 26 March 2017.

<sup>11</sup> Benin, Botswana, Côte d'Ivoire, Eritrea, Ethiopia, Guinea, Malawi, Sierra Leone, and Togo.

<sup>12</sup> [http://apps.who.int/iris/bitstream/10665/250994/1/AFR\\_RC66\\_5-eng.pdf](http://apps.who.int/iris/bitstream/10665/250994/1/AFR_RC66_5-eng.pdf) WHO, Regional Oral Health Strategy 2016–2025: addressing Oral diseases as part of NCDs, Brazzaville, World Health Organization, Regional Office for Africa, 2016 (AFR/RC66/5).

<sup>13</sup> <http://apps.who.int/iris/bitstream/10665/205886/1/9789290232971.pdf>.

<sup>14</sup> WHO, Sickle Cell Disease: A Strategy for the WHO African Region, Brazzaville, World Health Organization, Regional Office for Africa, 2010 (AFR/RC 60/8), <http://www.afro.who.int/en/health-topics/topics/4405-sickle-cell-disease.html>, accessed on 25 April 2017.

particular. Thirty-six<sup>15</sup> Member States face human resources for health crises. Health workers in PHC facilities have insufficient knowledge of NCDs and limited time to detect, diagnose and treat NCDs; and provide counselling on NCDs.

**14. Financing for NCDs:** Inadequate financial resources for NCDs from both domestic and external sources limit the capacity of Member States to implement WHO PEN and other NCD tools. Seven Member States that have piloted WHO PEN have not rolled it out nationwide due to many factors, including insufficient financial resources.

**15. Integration of NCD interventions:** In many Member States, NCD services are weak, fragmented and of poor quality. The adaptation of available guidelines has been slow. Consequently, NCD interventions are not adequately integrated within PHC services.

**16. Essential medicines and technologies for NCDs:** Diagnostic technologies and lifesaving essential NCD medicines are not always available at PHC level. Stock outs and poor quality medicines are common. Barriers to access to essential medicines include poor implementation or inadequate use of standard treatment guidelines, poor supply chain management systems, weak surveillance and health information systems.

**17. Information for decision-making:** Health information systems remain weak and do not provide accurate and reliable data on the burden of NCDs and the prevalence of risk factors. There is limited capacity in collecting, analysing and disseminating information on NCD risk factors. In the past five years, only 11 Member States<sup>16</sup> have conducted the STEPwise surveys.

**18. Interference of tobacco, alcohol and food industry:** The tobacco and alcohol industries continue to influence government policy both directly and through their affiliates, taking advantage of weak industry regulation. Commercial and economic interests continue to drive key risk factors due to weak regulatory capacity to monitor the activities of these industries.

**19. Chronic nature of NCDs:** NCDs are chronic in nature and require long-term care to prevent complications and premature death. Unfortunately, health systems in the African Region are designed for short-term curative care and are unable to cope with the impact of NCDs.

**20. Rehabilitative and palliative care:** Limited access to good quality rehabilitative and palliative services in Member States leads to unnecessary suffering of people with NCDs. Barriers include lack of policies on palliative care, lack of skilled human resources particularly at PHC level, inadequate medicines and lack of simple protocols for health workers.

**21. Community participation in NCD prevention and care:** Effective NCD prevention requires multistakeholder engagement including individuals, families, communities, civil society, religious institutions, traditional leaders, media, policy-makers and voluntary associations. Unfortunately, in some Member States, NCDs are still largely seen as a health issue and this limits the involvement of other sectors and communities.

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<sup>15</sup> Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Togo, South Sudan, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

<sup>16</sup> Benin, Burkina Faso, Ethiopia, Kenya, Lesotho, Mozambique, Rwanda, Seychelles, Swaziland, United Republic of Tanzania and Uganda.



## **THE REGIONAL FRAMEWORK**

### **Vision, Goal and Objectives, Targets and Milestones:**

22. The Vision is a Region free of preventable illnesses and deaths from NCDs.
23. The Goal is to provide essential NCD services in PHC in the context of universal health coverage in all Member States.
24. There are four objectives:
  - (a) To provide support on the adaptation and utilization of WHO guidance documents for the prevention and control of NCDs within PHC services.
  - (b) To strengthen the capacity of human resources for health in PHC facilities to deliver NCD prevention and control services.
  - (c) To improve access to essential NCD services in PHC facilities.
  - (d) To strengthen and integrate NCD surveillance systems into health management information systems.

### **Targets and Milestones**

#### **25. Targets by 2030**

- (a) All Member States have adapted and are using the WHO PEN.
- (b) More than 80% of HRH trained in managing NCDs at PHC level (Baseline 2020 data).
- (c) All Member States have essential medicines and basic technologies for NCDs in PHC facilities.
- (d) All Member States have systems for collecting mortality data on a routine basis.

#### **26. Milestones by 2020**

- (a) Twenty-four Member States have adapted and are using the WHO PEN.
- (b) 50% of HRH trained in managing NCDs at PHC level.
- (c) 50% of Member States have essential medicines and basic technologies for NCDs in PHC facilities.
- (d) 60% of Member States have systems for mortality data on a routine basis.

#### **27. Milestones by 2025**

- (a) Thirty-eight Member States have adapted and are using the WHO PEN.
- (b) 80% of HRH trained in managing NCDs at PHC level (Baseline 2020 data).
- (c) 80% of Member States have essential medicines and basic technologies for NCDs in PHC facilities.
- (d) 80% of Member States have systems for monitoring mortality data on a routine basis.

### **Guiding principles**

28. The following principles will guide the implementation of the Regional framework in the African Region:

- (a) **Government leadership:** The Ministry of Health will provide leadership and take decision for the provision of essential NCD services at PHC level and advocate for them with all stakeholders.
- (b) **Universal health coverage:** Deliberate efforts will be made to provide access to quality NCD services that are appropriate, accessible and affordable for all people, particularly those living in poor and disadvantaged communities.
- (c) **Evidence-based approaches and cost-effective interventions:** Interventions need to be based on the latest available evidence and best practices while ensuring cost-effectiveness.
- (d) **Patient-centred and community-based approaches:** A patient-centred and community-based approach will be promoted to empower individuals, families and communities in the prevention and management of NCDs.
- (e) **Updated and user-friendly tools:** Simplified and user-friendly tools for the prevention and control of NCDs will be available for health workers to use in PHC facilities.
- (f) **Collaboration between the public and private sectors:** Collaboration between the public, private sector and nongovernmental organizations sectors will be promoted in order to strengthen integration of NCD services in PHC.

## **PRIORITY INTERVENTIONS AND ACTIONS**

### **Adaptation and utilization of WHO guidance documents for the prevention and control of NCDs at PHC level**

29. **Advocating for political commitment for utilization of the WHO guidelines:** Political commitment is crucial for the adoption of the WHO Global NCD Action Plan 2013–2020 and the WHO PEN. This could be achieved through policy dialogue, including dissemination of policy briefs and conduct of advocacy seminars on NCD prevention and control in PHC.
30. **In adapting global guidelines,** the following key steps are recommended:
- (a) **Adapt the WHO PEN and other tools:** The first step is identifying evidence-based guidelines or specific elements that are suitable for the national context. This process begins with the establishment of a Technical Working Group (TWG), which will oversee the adaptation process.
  - (b) **Assess national system readiness and feasibility:** The TWG should assess the readiness of the health system to implement the guidelines. This requires assessment of the availability and capacity of human resources, equipment, infrastructure/services and medicines for NCD management and other issues.
  - (c) **Pilot-test the project:** The TWG identifies one subnational area with PHC facilities that will implement the pilot project. The facilities should have sufficient health workers, appropriate equipment, medicines and diagnostics and be close to a referral facility. The global guidelines should be transformed into simple clinical protocols for use at the local level. Health workers should be trained on the use of these clinical protocols. The TWG should monitor and evaluate implementation of the pilot project. A system for monitoring and evaluation should be used to collect and analyse data, review and assess progress, including coverage and quality of care for individual patients as well as health facility performance.
  - (d) **Ensure review by a Multistakeholder group:** Once implementation of the pilot project is complete, it is necessary to convene a multistakeholder group to review and assess the success of the project and make changes to the guideline, based on the national context. The group should also consider the cost of a national roll-out of the guidelines.

- (e) **National roll-out:** The national authorities must issue a formal endorsement of the adapted guidelines as national guidelines. Capacity for a national roll-out should be built. The national roll-out can be done either through (i) a phased implementation in different regions, starting with regions that are most capable of implementing the guidelines or (ii) a national roll-out if there is sufficient capacity in all regions of the country.

### **The capacity of human resources for health strengthened to deliver NCD prevention and control services at PHC level**

**31. Improving the knowledge and skills of health workers in PHC facilities:** The health workers' knowledge and skills in NCD prevention and control should be strengthened through systematic training (workshops, seminars and facility-based training) and other updates. This will facilitate early detection, diagnosis and treatment of patients and referral of complicated cases to higher levels.

**32. Ensuring availability of simplified guidelines for NCD management in PHC facilities:** Simple clinical protocols should be developed, based on the WHO PEN and other tools. The use of simplified and standardized diagnostic and treatment guidelines will improve the knowledge and skills of health workers.

**33. Strengthening technical leadership and management of PHC facilities:** Leaders and managers of PHC facilities must be oriented in NCD prevention and control. Strengthened technical leadership of the PHC facilities will improve supervision and ensure quality NCD services.

**34. Promoting task shifting and sharing:** Task shifting and sharing should be promoted to ensure efficient utilization of skills by delegating some non-clinical tasks to community health workers and other cadres. This will provide more time for health professionals to focus on early detection, diagnosis and treatment of NCDs.

**35. Incorporating NCD prevention and control in pre-service training curricula:** NCD prevention and control in PHC should be incorporated in the pre- and in-service curricula of medical, nursing, allied health professionals and community health workers. This will ensure that graduates have basic understanding of NCD prevention and treatment in PHC.

**36. Promoting use of information technology:** Information technology (IT) tools such as eHealth and mHealth should be used to improve access to information on NCD prevention and control for health workers. This will facilitate sharing of information on patient care among health workers and contribute to improved prevention and care.

**37. Providing compensation and incentives for health workers:** There should be adequate compensation and financial and non-financial incentives for health workers at PHC level. This should include incentives for best performing health workers in NCD services at PHC level.

### **Improved access to essential NCD services in PHC facilities**

**38. Increasing access to affordable, safe, effective and quality medicines and diagnostic technologies:** Access to affordable, safe, effective, quality medicines and diagnostic technologies should be promoted. Strategies to improve access may include revising lists of national essential medicines, controlling wholesale and retail mark-up prices and exempting NCD medicines and diagnostics from import duties and other forms of tax.

39. **Improving procurement and supply management systems:** The procurement and supply of safe, quality, efficacious and affordable NCD medicines, including generics, in PHC facilities should be strengthened. There should be an efficient system for distribution and storage of medicines; and monitoring utilization to ensure rational use in PHC facilities.

40. **Strengthening prevention of NCDs in PHC facilities:** PHC facilities should be strengthened to deliver interventions for prevention of NCDs, including counselling patients on tobacco cessation, harmful use of alcohol, regular physical activity, salt reduction in diet and increased fruit and vegetable consumption. Vaccination against human papillomavirus for cancer prevention and Hepatitis B immunization for prevention of liver cancer should be provided.

41. **Preventing secondary complications of NCDs:** PHC facilities should provide a set of interventions for the prevention of NCD complications. These interventions include: (a) appropriate diet and drug therapy for diabetes, heart attacks and stroke; (b) antibiotic treatment for rheumatic heart disease; (c) bronchodilators for asthma; (d) screening and treatment of pre-cancerous cervical cancer lesions, using Visual inspection with Acetic Acid (VIA). NCD cases that cannot be managed effectively in PHC facilities should be referred to higher levels of the health system.

42. **Strengthening the referral system:** An effective referral system will ensure that patients that cannot be adequately managed at PHC level are referred to the nearest referral hospital within the area/district. There should be clear guidelines for referring patients.

43. **Strengthening community participation in prevention and control of NCDs:** Linkages between the community and health facilities should be strengthened to promote participation of individuals, families and communities in reducing exposure to NCD risk factors and in caring for people with NCDs. Community health workers should be able to empower communities with knowledge about NCDs and their risk factors and should work closely with health workers in PHC facilities to ensure a continuum of care.

#### **NCD surveillance systems integrated into health management information systems**

44. **Institutionalizing systems for monitoring and evaluation:** Capacity to collect, analyse and use NCD data at national and local PHC level should be strengthened. A minimum set of NCD indicators, patient records and reporting tools should be used for measuring performance at PHC and referral health facilities.

45. **Integrating NCD surveillance data into health management information system:** Routine health information system should be adapted to collect NCD morbidity and mortality data, and risk factors. This information should be used to track the NCD burden and risk factors.

#### **Actions proposed**

46. The Regional Committee is invited to examine and adopt the priority interventions and actions proposed in this Regional framework.

**ANNEX 1: Targets and Milestones for 2020, 2025 and 2030**

The Targets and Milestones for 2020, 2025 and 2030 are related to each of the four objectives:

<i>Objectives</i>	<i>Milestones and Targets</i>		
	<i>2020</i>	<i>2025</i>	<i>2030</i>
1. To provide support on the adaptation and utilization of WHO guidance documents for the prevention and control of NCDs within PHC services.	Twenty-four Member States have adapted and are using the WHO-PEN (Baseline 9 MS in 2014).	Thirty-eight Member States have adapted and are using the WHO-PEN.	Forty-seven Member States have adapted and are using the WHO-PEN.
2. To strengthen the capacity of human resources for health in PHC facilities to deliver NCD prevention and control services.	50% of HRH in Member States trained in managing NCDs at PHC level (Baseline 2017 data).	80% of HRH trained in managing NCDs at PHC level (Baseline 2020 data).	All HRH trained in managing NCDs at PHC level (Baseline 2020 data).
3. To improve access to essential NCD services in PHC facilities.	50% of Member States have defined a list of essential medicines and basic technologies for NCDs in PHC facilities (Baseline 2017).	80% of Member States have essential medicines and basic technologies for NCDs in PHC facilities (Baseline 2025).	All Member States have essential medicines and basic technologies for NCDs in PHC facilities.
4. To strengthen and integrate NCD surveillance systems into health management information systems.	50% of Member States have a system for collecting NCD mortality data on a routine basis.	80% of Member States have a system for collecting NCD mortality data on a routine basis.	All Member States have a system for collecting NCD mortality data on a routine basis.

## ANNEX 2: The Global NCD Action Plan 2013-2020 at a glance

<b>Vision:</b> A world free of the avoidable burden of noncommunicable diseases					
<b>Goal:</b> To reduce the preventable and avoidable burden of morbidity, mortality and disability due to noncommunicable diseases by means of multisectoral collaboration and cooperation at national, regional and global levels, so that populations reach the highest attainable standards of health and productivity at every age and that those diseases are no longer a barrier to well-being or socioeconomic development.					
<b>Objectives of the Global NCD Action Plan:</b>					
1. To raise the priority accorded to the prevention and control of NCDs in global, regional and national agendas and internationally agreed development goals, through strengthened international cooperation and advocacy.	2. To strengthen national capacity, leadership, governance, multisectoral action and partnerships to accelerate country response for the prevention and control of NCDs.	3. To reduce modifiable risk factors for NCDs and underlying social determinants through creation of health-promoting environments.	4. To strengthen and orient health systems to address the prevention and control of NCDs and the underlying social determinants through people-centred primary health care and universal health coverage.	5. To promote and support national capacity for high-quality research and development for the prevention and control of NCDs.	6. To monitor the trends and determinants of NCDs and evaluate progress in their prevention and control.
<b>Voluntary global targets for the prevention and control of NCDs to be attained by 2025:</b>					
<p>(1) A 25% relative reduction in the overall mortality from CVDs, cancer, diabetes or CRDs.</p> <p>(2) At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context.</p> <p>(3) A 10% relative reduction in prevalence of insufficient physical activity.</p> <p>(4) A 30% relative reduction in mean population intake of salt/sodium.</p> <p>(5) A 30% relative reduction in prevalence of current tobacco use.</p> <p>(6) A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances.</p> <p>(7) Halt the rise in diabetes and obesity.</p> <p>(8) At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes.</p> <p>(9) 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.</p>					

### **ANNEX 3: Evidence-based interventions for reducing morbidity and mortality from major NCDs to be implemented in PHC in low resource settings**

#### **Primary prevention of heart attacks and strokes:**

- (a) Tobacco cessation, regular physical activity 30 minutes a day, reduced intake of salt <5 g per day, fruits and vegetables at least 400 g per day.
- (b) Aspirin, statins and anti-hypertensives for people with 10-year cardiovascular risk >30%.
- (c) Anti-hypertensives for people with blood pressure  $\geq 160/100$ .
- (d) Anti-hypertensives for people with persistent blood pressure  $\geq 140/90$  and 10-year cardiovascular risk >20% unable to lower blood pressure through lifestyle measures.

#### **Acute myocardial infarction:**

- Aspirin.

#### **Secondary prevention (post myocardial infarction):**

- (a) Tobacco cessation.
- (b) Aspirin, angiotensin-converting enzyme inhibitor, beta-blocker, statin.

#### **Secondary prevention (post-stroke):**

- (a) Tobacco cessation, healthy diet and regular physical activity.
- (b) Aspirin, anti-hypertensive (low dose thiazide, angiotensin-converting enzyme inhibitor), and statin.

#### **Secondary prevention (Rheumatic Heart Disease):**

- Regular administration of antibiotics to prevent streptococcal pharyngitis and recurrent acute rheumatic fever.

#### **Type 1 Diabetes:**

- Daily insulin injections;

#### **Type 2 diabetes:**

- (a) Oral hypoglycemic agents for type 2 diabetes, if glycemic targets are not achieved with modification of diet, maintenance of a healthy body weight and regular physical activity.
- (b) Metformin as initial drug in overweight and non-overweight patients.
- (c) Other classes of anti-hyperglycemic agents, added to metformin if glycemic targets are not met.
- (d) Reduction of cardiovascular risk for those with diabetes and 10-year cardiovascular risk >20% with aspirin, angiotensin-converting enzyme inhibitor and statins.

#### **Prevention of foot complications through examination and monitoring:**

- Regular (3-6 months) visual inspection and examination of patients' feet by trained personnel for the detection of risk factors for ulceration (assessment of sensation, palpation of foot pulses, inspection for any foot deformity, inspection of footwear) and referral as appropriate.

#### **Prevention of onset and delay in progression of chronic kidney disease:**

- (a) Optimal glycemic control in people with type 1 or type 2 diabetes.
- (b) Angiotensin-converting enzyme inhibitor for persistent albuminuria.

**Prevention of onset and delay of progression of diabetic retinopathy:**

- (a) Referral for screening and evaluation for laser treatment for diabetic retinopathy.
- (b) Optimal glyceemic control and blood pressure control.

**Prevention of onset and progression of neuropathy:**

- Optimal glyceemic control;

**Bronchial asthma:**

- (a) Relief of symptoms: Oral or inhaled short-acting B2 agonists.
- (b) Inhaled steroids for moderate/severe asthma to improve lung function, reduce asthma mortality and frequency and severity of exacerbations.

**Prevent exacerbation of Chronic Obstructive Pulmonary Disease (COPD) and disease progression:**

- Smoking cessation in COPD patients.

**Relief of breathlessness and improvement in exercise tolerance:**

- Short-acting bronchodilators.

**Improvement in lung function:**

- (a) Corticosteroids when FEV1<50% predicted.
- (b) Long-acting bronchodilators for patients who remain symptomatic despite treatment with short-acting bronchodilators.

**Cancer:**

- Identify cases presenting features of cancer and refer for confirmation of diagnosis.