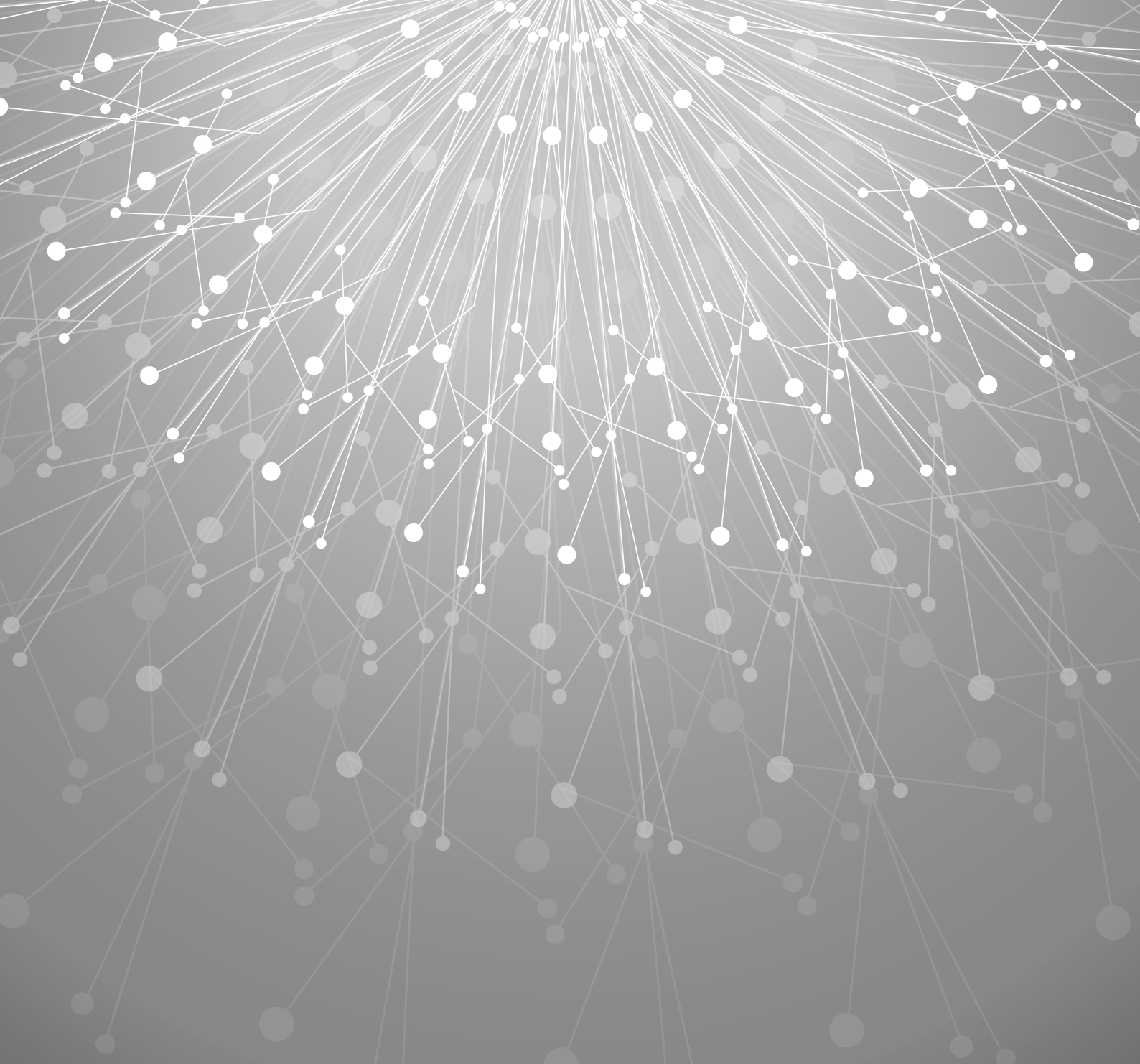
ASSESSING NATIONAL CAPACITY FOR THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES

Report of the 2017 Global Survey

World Health Organization



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LIST OF ACRONYMS

AFR	WHO African Region
AMR	WHO Region of the Americas
CCS	Country capacity survey
EMR	WHO Eastern Mediterranean Region
EUR	WHO European Region
MOH	Ministry of health
NCD	Noncommunicable disease
SEAR	WHO South-East Asia Region
WPR	WHO Western Pacific Region

FOREWORD

Noncommunicable diseases (NCDs) are the leading cause of death globally, and one of the largest health and development threats of the 21st century. They cause 15 million premature deaths each year (between the ages of 30 and 70), mainly as a result of the four main NCDs: cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes. The NCD burden is uneven, disproportionately affecting the low- and lower-middle income countries, and the poorest individuals within countries.

NCDs are largely preventable, and a growing set of political commitments have been made for their prevention and control. Most recently, in September 2018, Heads of State and Government committed at the United Nations General Assembly to provide strategic leadership and personally oversee the process of putting their country on a sustainable path to attain SDG target 3.4 on NCDs (by 2030, reduce by one third premature mortality from NCDs through prevention and treatment).

Crucial to achieving this target is to strengthen individual country capacity to implement a set "WHO best buys and other recommended interventions for the prevention and control of NCDs" based on domestic public health needs.

National progress in country capacity to address NCDs is monitored periodically by WHO, with detailed information recorded on NCD infrastructure, policy action, surveillance and health-system response within countries. This sixth national NCD country capacity survey 2017 provides the most recent review of the situation in relation to national capacity to prevent and control NCDs.

The purpose of this report is to provide an updated snapshot of the progress countries are making to beat NCDs, recognizing that the level of progress and investments to date are insufficient to meet SDG target 3.4 and that the world has yet to fulfil its promises made at the High-level Meetings of the General Assembly on NCDs in 2011, 2014 and 2018. The global proportional NCD mortality (both overall and premature) actually rose between 2010 and 2016, and unless domestic efforts are intensified during the next 3-5 years, the SDG target 3.4 on NCDs will not be met. It is hoped that this report will help to identify gaps in NCD prevention and control efforts, so that political leaders will accelerate their commitments to taking action following the third High-level Meeting in 2018.

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EXECUTIVE SUMMARY

Noncommunicable diseases (NCDs), including cardiovascular diseases, cancer, diabetes and chronic respiratory diseases are linked with 41 million global deaths a year, accounting for 71% of all deaths worldwide. Several factors increase the risk of developing NCDs, such as tobacco use, harmful use of alcohol, consuming an unhealthy diet, and being physically inactive. In addition, differences in social determinants of health have been shown to affect the outcomes of NCDs. For instance, individuals living in low- and middle-income countries are more likely to develop NCDs compared with those living in high-income countries. Over time, the awareness of the urgent need to address NCDs and their associated risk factors has become an increasingly important topic among the global public health community and national leaders. In September 2015, the 2030 Agenda for Sustainable Development Goals was adopted at the United Nations Summit on Sustainable Development. The SDGs recognized the critical public health importance of addressing NCDs, and included a goal to reduce the premature mortality from NCDs by one third, along with targets to address its associated risk factors such as harmful use of alcohol, use of tobacco, and achievement of universal health coverage by 2030. Achieving these targets for NCD prevention and control requires strong action at the national level. In May 2017, delegates at the World Health Assembly endorsed an updated set of policies that were targeted to aid countries in meeting global targets. The policies include 16 "Best Buy" interventions within WHO's global action plan that emphasizes cost-effective measures, such as taxation of tobacco and sugar-sweetened beverages, to reduce individuals' exposure to key risk factors associated with NCDs and treatment and care for those with existing NCDs.

To assess the capacity of countries to respond to NCDs, WHO carries out periodic global country capacity surveys. The first of these was conducted in 2001. Subsequent surveys, intended to assess progress and overall trends over time, were conducted in 2005, 2010, 2013, and 2015. The sixth, and most recent, survey was conducted in early 2017. In the 2017 survey, countries were asked to provide detailed information on their capacity to address NCDs, and to determine current strengths and weaknesses in terms of their NCD infrastructure, policy response, surveillance and health-systems response. Comparisons with results from previous surveys will help to determine if overall global progress is being made and effectively plan improved solutions to achieve global targets.

A web-based questionnaire hosted on the WHO website was used to collect data from NCD focal points or designated colleagues within the ministry of health, national institute, or agency responsible for NCDs in all WHO Member States (194 countries). The survey tool comprised of four modules and included questions addressing: (i) public health infrastructure, partnerships and multisectoral collaboration; (ii) policies, strategies and action plans; (iii) health information systems and surveillance; and (iv) health-system capacity for detection treatment and care. Data collection was conducted between February and June 2017. For validation and verification of responses, countries submitted supporting documentation for a select number of questions. These were then reviewed by the WHO Secretariat at WHO regional offices and WHO headquarters. Additional validation was carried out against other known data sources.

The overall response rate for the survey was 100% with all 194 Member States responding. Trends in national capacity for NCDs were derived from comparing the results of the 2017 survey with those from the capacity surveys conducted in previous years (2015, 2013 and 2010). For the comparison of responses across these surveys, analyses were limited to the 160 WHO Member States that completed all four

surveys and were focused only on the questions which appeared in all four surveys.

Analysis of results revealed that in 2017, 86% of countries reported having a unit, branch or department responsible for NCDs within their ministry of health, with 84% having at least one full-time technical or professional staff member working within the unit, branch or department. Funding allocated in government budgets were most prevalent for health care and treatment, (91% of countries) followed by health promotion activities (89%), primary prevention (87%), early detection and screening (87%), surveillance, monitoring and evaluation (85%), capacity building (76%), palliative care (68%), and research (64%). Major sources of funding included government revenues (92% of countries), international donors (62%), health insurance (62%), national donors (44%), and earmarked taxes (39%).

Thirty-seven per cent (37%) of countries reported having an operational national multisectoral commission, agency, or mechanism to oversee NCD engagement, policy coherence and accountability of sectors beyond health. Some 51% reported having an operational, multisectoral national policy, strategy or action plan that integrates all four main NCDs and their risk factors.

While countries most frequently reported that responsibility is shared across several offices, departments or administrative divisions within the ministry of health (40% of countries), only 23% of countries reported having an office, department, or administrative division within the ministry of health exclusively dedicated to NCD surveillance. Some 90% of countries reported having a system for collecting mortality data by cause of death on a routine basis. Fifty-one per cent (51%) of countries reported having a population-based cancer registry, and 16% a population-based diabetes registry. Nineteen per cent (19%) of countries had not conducted a recent (i.e. conducted in 2012 or later) national adult risk factor survey, while nearly half of countries (49%) reported conducting recent, national adult surveys for eight or nine of the nine types of NCD risk factors.

Evidence-based guidelines were available for all four NCDs in only 46% of countries, with guidelines for chronic respiratory diseases being the least available, reported by only 59% of countries. Chronic respiratory disease guidelines were also least likely to be reported as being utilized in at least 50% of health facilities, with only 40% of countries reporting this level of utilization, compared to just over half of countries for cardiovascular disease (52%) and diabetes (59%).

Many basic technologies for early detection, diagnosis and monitoring of NCDs were reported as generally available in the public health sector by the vast majority of countries: in 97% of countries for blood pressure measurement; 96% for weight measurement; and 90% for height measurement. Blood glucose measurement was also widely available, with 82% of countries reporting general availability in primary care facilities in the public health sector. However, less than two thirds of countries reported that essential technologies for cholesterol measurement (59%) and urine strips for albumin assay (62%) were generally available in the public health sector.

Around three quarters of countries reported having a national screening programme for cervical cancer (76%) or breast cancer (73%). While just over half of countries with these screening programmes described them as organized, population-based screening programmes, less than a third of the programmes reached more than 50% of the target population.

Regarding cancer diagnosis and treatment services, around two thirds of countries (69%) reported having cancer centres or cancer departments at the tertiary level that reached the majority of patients in need. While pathology services and cancer surgery were often reported as reaching the majority of patients in need (75% and 72% of countries, respectively), subsidized chemotherapy was generally available in only 68% of countries. Radiotherapy was still less available, with only 58% of countries reporting that it reached the majority of patients in need. Most countries reported having essential medicines generally available in the public sector for the management of the four main categories of NCDs. The most readily available medicines were thiazide diuretics in 90% of countries and aspirin (100mg) in 88%; the least

available medicine was oral morphine (in 32% of countries) and nicotine replacement therapy (in 29% of countries).

In general, palliative care for patients with NCDs was not widely available, with only 35% of countries reporting general availability of palliative care in primary health care and 37% in community- or home-based care.

Thirty-two per cent (32%) of countries indicated that cardiovascular risk stratification for the management of patients at high risk for heart attack and stroke was offered in more than 50% of primary health-care facilities. Meanwhile, general availability of acute stroke services in the public health system was reported by 68% of countries, and rehabilitation services for stroke patients by 64%.

While the majority of high-income countries reported availability of retinal photocoagulation, renal replacement by dialysis, renal replacement by transplantation, coronary bypass, stenting and thrombolytic therapy services, less than a quarter of low-income countries reported that these were available, with the exception of renal replacement dialysis services (26% of countries).

To illustrate progress and trends over time, wherever possible, the report includes comparisons with results of the 2010, 2013, and 2015 surveys. Explicit comparisons, were made, are among the 160 countries that participated in all four surveys.

The results of the 2017 NCD CCS provide further evidence of the challenges in addressing NCDs globally and at the national level. These challenges include poor implementation of policies; inadequate action plans that are inclusive to all four main NCDs and their risk factors; low utilization of cost-effective policies; limited funding and policies for NCD research; limited funding and provision of care for NCD palliative care; disparities between income groups regarding public awareness programmes; lack of routine population-based surveillance; inadequate provision of NCD treatment and management; and poor targeting of cancer screening programmes. In general, global capacity to respond to NCDs has improved over time since the 2010 survey was conducted, prior to the first UN High-Level Meeting on NCDs; however, gaps remain among different regions and income groups. Several opportunities for improvement were revealed by the survey analysis, including the need for additional funding for NCDs, particularly research and palliative care; underutilization of “Best Buys” and other cost-effective interventions; the high number of countries without broad, multisectoral, integrated NCD action plans or sustained NCD risk factor surveillance; and the limited availability of enhanced NCD screening, diagnosis and treatment services.

INTRODUCTION

Noncommunicable diseases (NCDs) including cardiovascular diseases, cancer, diabetes and chronic respiratory diseases are responsible for 41 million deaths annually and account for 71% of all deaths worldwide – the majority occurring in low- and middle-income countries (1). Several modifiable lifestyle factors increase the risk of developing NCDs, such as tobacco use, harmful use of alcohol, unhealthy diet, and physical inactivity. In addition, differences in non-modifiable risk factors, such as gender, age and poverty level, have been shown to affect the outcomes of NCDs; data from 2016, for example, show that males aged 30–69 years have a higher rate of premature deaths due to NCDs than females in the same age group. Over time, awareness of the critical need to address NCDs and their associated risk factors has become an increasingly important topic among the global public health community and national leaders.

There is consensus among world leaders that NCDs pose a global burden, threat and challenge for development in the 21st century. Thus, conferences and meetings have occurred increasingly in recent years in the interest of developing goals and agendas to prevent, control and treat NCDs globally. Two United Nations High-level Meetings, in 2011 and 2014, served to keep NCDs as the focus of national and international attention and reflect their significant public health burden (2). A Political Declaration agenda was drafted during the 2011 meeting (3); further discussions in the following years influenced the development of newer and more effective solutions to the declaration. As such, in May 2013, the 66th World Health Assembly adopted the WHO Global Action Plan for the Prevention and Control of NCDs 2013–2020. The action plan has six overall objectives at the country level and supports the attainment of nine ambitious targets covering NCD mortality, risk factors and national systems performance by 2025 (4). In addition to a global monitoring framework to track progress, the action plan includes an appendix with a menu of policy options as well as cost-effective and recommended interventions for countries to employ. Since then, newer evidence of cost-effective interventions and policies have emerged and prompted an updated version of the menu entitled "Best Buys and other recommended interventions." This updated menu, endorsed by the 70th World Health Assembly in May 2017, comprises 88 interventions, 16 of which are considered the most effective interventions determined by a cost-effective analysis.

As a further step in addressing the critical public health importance of tackling NCDs, in September 2015, the United Nations Summit on Sustainable Development adopted the 2030 Sustainable Development Goals[1] which included a goal to reduce the premature mortality from NCDs by one third, along with targets to address risk factors such as alcohol and tobacco use, and the achievement of universal health coverage by 2030. Achieving these targets for NCD prevention and control requires committed action at the national level.

In 2001, WHO conducted the first NCD country capacity survey (NCD CCS) to assess national capacity for the prevention and control of NCDs (5). The survey was repeated in 2005, allowing the first assessment of progress made by countries in this area. Since 2001, the survey questionnaire has been modified and developed to assist countries assess their current strengths and weaknesses relating to NCD infrastructure, policy response, surveillance, and the response of health systems to address NCDs at the national level. The adoption of the NCD Global Action Plan in 2013 and the national commitments made during the two UN High-level Meetings on NCDs, increased interest in reporting the progress made by countries.

1 See: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E

The survey has since been conducted more frequently: following a third round in 2010, it was repeated in 2013, 2015 and 2017.

This report summarizes the results of the 2017 NCD CCS and identifies limitations and challenges for national capacity for NCD prevention and control. Where possible, comparisons were made with the results of the 2010, 2013 and 2015 surveys. The report also provides information to monitor progress and trends relating to the objectives and recommendations of the Global NCD Action Plan (6), and to some of the 10 progress indicators to monitor national commitments from the UN High-level Meetings on NCDs.

METHODS

Data collection, review and validation

A web-based questionnaire hosted on the WHO website was used to collect data from NCD focal points or designated colleagues within the ministry of health or national institute or agency responsible for NCDs in all WHO Member States (194 countries). Each country received their unique details to access the website in February 2017, and the focal points were requested to submit their completed questionnaire through the WHO website by the end of June 2017. In order to improve the quality and breadth of information provided, instructions specified that a team of people, led by the NCD focal point, must complete the responses, so that topic-specific experts could provide a more detailed assessment. Furthermore, for validation and verification of responses, countries were asked to submit supporting documentation for a select number of questions; the question on the existence of treatment guidelines for the major NCDs, for example, requested copies of each guideline.

Upon receipt of each questionnaire, the WHO Secretariat reviewed the responses for completeness, validating them against existing data sources and the supporting documentation submitted. Assessment was also made against previous responses for the same indicators. Responses relating to the collation of mortality data were checked against information on vital registrations systems held within WHO in the Department of Health Statistics and Informatics. Information on recent NCD risk factor surveys was checked against the internal survey tracking systems for WHO-supported risk factor surveys. These included WHO STEPS (adult risk factor surveillance)[2], the Global School-based Student Health Survey (GSHS)[3], the Global Youth Tobacco Survey (GYTS)[4], and the Global Adult Tobacco Survey (GATS)[5].

Where discrepancies were noted between the country response and these other sources, a request for clarification was submitted to the country for their consideration and for an updating of their response. Likewise, if the review revealed missing documentation or incomplete questions, the country focal point was asked to supply the missing information. In most cases, suggested modifications were adopted and the missing data and documents were added to the country's response on the website.

Questionnaire

The web-based questionnaire consisted of four modules: (i) public health infrastructure, partnerships and multisectoral collaboration; (ii) policies, strategies and action plans; (iii) health information systems, monitoring, surveillance and surveys; and (iv) health system capacity for detection, treatment and care (the full questionnaire can be found in Annex 3). Questions were developed through a consultative process with relevant technical departments in WHO headquarters and all WHO regional offices, with the intent of obtaining objective information about each of these four components, rather than opinions about adequacy of capacity. Specific components of the questionnaire were as follows:

I. The infrastructure component asked questions relating to the presences of a unit or division within the ministry of health dedicated to NCDs, staffing and funding, fiscal interventions including taxation and subsidies and the motivation

2 See: http://www.who.int/ncds/surveillance/steps/en/
3 See: http://www.who.int/ncds/surveillance/gshs/en/
4 See: http://www.who.int/tobacco/surveillance/gyts/en/
5 See: http://www.who.int/tobacco/surveillance/survey/gats/en/

for the fiscal interventions, and if there was a high-level national multisectoral commission, agency or mechanism to oversee NCD-related work.

II. The policies, strategies and plans component asked questions relating to the presence of policies, strategies, or action plans. The questions differentiated between integrated policies, strategies, or action plans addressing several risk factors or diseases and policies, strategies, or action plans for a specific disease or risk factor. Ministries of health were asked to name the policy and indicate if the plan was currently in operation. Additionally, this component covered cost-effective policies for NCDs, such as policies to reduce population salt consumption.

III. The information systems and surveillance module asked questions addressing the routine collection of mortality data, patient information, facility surveys, the existence of cancer and diabetes registries and risk factor surveillance activities.

IV. The health system capacity component asked countries to assess the capacity of their health system related to NCD prevention, early detection, and treatment and care within the primary health-care sector. Specific questions focused on the existence of guidelines or protocols to treat major NCDs, the availability of the tests, procedures and equipment related to NCDs within the health system, cancer screening programmes and diagnosis and treatment services, and the availability of palliative care services for NCDs.

The survey included a set of detailed instructions on how to complete the questionnaire and a glossary defining the terms used. The questionnaire was translated into Spanish, French, and Russian to facilitate completion in all countries. Each country followed their own review process before submitting their response to WHO.

Response rate

All Member States (194 countries) responded to the survey. A complete list of Member States by region is given in Annex 1.

Analysis

Data were downloaded directly from the web-based platform to an Excel-readable file. Data cleaning was performed by the WHO Secretariat to ensure consistency with responses within a question and its sub-questions. All statistical analyses, including analysis by WHO region and World Bank income groups (for 2017 groupings, see Annex 2), were carried out using STATA 15 software (Stata Corporation, 2017). All data extraction, cleaning and analysis were performed at WHO headquarters.

For all analyses, the denominator used was the total number of responding countries, either overall or within the subgroup of interest. To avoid fluctuating denominators, percentages reported were based on the positive responses from countries to the survey items. Non-positive responses (i.e. "No", "Don't know", and items left unanswered) were treated equally. Trends in national capacity for NCDs were derived from comparing the results of the 2017 survey with those from the capacity surveys conducted in 2015, 2013 and 2010. For the comparison of survey responses across these four surveys, analyses were limited to the 160 Member States that completed all four surveys and focused only on those questions which appeared in all four surveys.

Survey results were examined in relation to the objectives and key recommendations made to WHO Member States in the Global NCD Action Plan (see Box 1), as well as the progress monitoring indicators adopted in 2015, later updated in 2017, and included in the 2014 United Nations Outcome Document on NCDs [6] (see Box 2).

6 See: http://www.who.int/nmh/events/2014/a-res-68-300.pdf

Box 1: Key objectives of the WHO Global NCD Action Plan 2013–2020

Objective 1: To raise the priority accorded to the prevention and control of noncommunicable diseases in global, regional and national agendas and internationally agreed development goals, through strengthened international cooperation and advocacy.

Objective 2: To strengthen national capacity, leadership, governance, multisectoral action and partnerships to accelerate country response for the prevention and control of noncommunicable diseases.

Objective 3: To reduce modifiable risk factors for noncommunicable diseases and underlying social determinants through creation of health-promoting environments.

Objective 4: To strengthen and orient health systems to address the prevention and control of noncommunicable diseases and the underlying social determinants through people-centred primary health care and universal health coverage.

Objective 5: To promote and support national capacity for high-quality research and development for the prevention and control of noncommunicable diseases.

Objective 6: To monitor noncommunicable diseases and their determinants, and evaluate progress at national, regional and global levels.

Box 2: Progress monitoring indicators

Indicator 1: Member State has set time-bound national targets based on WHO guidance.

Indicator 2: Member State has a functioning system for generating reliable cause-specific mortality data on a routine basis.

Indicator 3: Member State has a STEPS survey[a] or a comprehensive health examination survey every five years.

Indicator 4: Member State has an operational multisectoral national strategy/action plan that integrates the major NCDs and their shared risk factors.

Indicator 5: Member State has implemented the following five demand-reduction measures of the WHO FCTC[b] at the highest level of achievement:

a. Reduce affordability of tobacco products by increasing excise taxes and prices on tobacco products;

b. Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places and public transport;

c. Implement plain/standardized packaging and/or large graphic health warnings on all tobacco packages;

d. Enact and enforces comprehensive bans on tobacco advertising, promotion and sponsorship;

e. Implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second hand smoke.

Indicator 6: Member State has implemented, as appropriate according to national circumstances, the following three measures to reduce the harmful use of alcohol as per the WHO Global Strategy to Reduce the Harmful Use of Alcohol[c]:

a. Enact and enforce restrictions on the physical availability of alcohol (via reduced hours of sale);

b. Enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising (across multiple types of media);

c. Increase excise tax increases on alcoholic beverages.

Indicator 7: Member State has implemented the following four measures to reduce unhealthy diets:

a. Adopted national policies to reduce population salt/sodium consumption;

b. Adopted national policies that limit saturated fatty acids and virtually eliminate industrially produced trans-fatty acids in the food supply;

c. WHO set of recommendations on marketing of foods and non-alcoholic beverages to children;

d. Legislation/regulations fully implementing the International Code of Marketing of Breast-milk Substitutes.

Indicator 8: Member State has implemented at least one recent national public awareness programme on physical activity, including mass media campaigns for physical activity behavioural change.

Indicator 9: Member State has evidence-based national guidelines/protocols/standards for the management of major NCDs through a primary care approach, recognized/approved by government or competent authorities.

Indicator 10: Member State has provision of drug therapy, including glycaemic control, and counselling for eligible persons at high risk to prevent heart attacks and strokes, with emphasis on the primary care level.

[a] http://www.who.int/ncds/surveillance/steps/en/ ; [b] http://www.who.int/fctc/en/ ; [c] Global strategy to reduce the harmful effects of alcohol. World Health Organization, Geneva, 2010.

RESULTS

INFRASTRUCTURE, GOVERNANCE AND FINANCING

Unit, branch or department responsible for NCDs

Eighty-six per cent (86%) of countries reported having a unit, branch or department within their ministry of health with responsibility for NCDs and their risk factors; 84% of countries reported having at least one full-time technical or professional staff member working within this unit, branch or department. As shown in Table 1, this includes 74% of low-income countries and 82% of lower-middle-income countries.

Table 1

Percentage of countries with units, branches or departments within the ministry of health (or equivalent) with responsibility for NCDs and their risk factors and percentage of countries that have at least one full-time technical or professional staff member working in the unit, branch or department

		with NCD units/ Branches/ Departments	with Full-time staff
WHO Region	AFR	79	77
	AMR	83	83
	EMR	90	90
	EUR	89	83
	SEAR	82	82
	WPR	93	93
World Bank Income Group	Low-income	77	74
	Lower-middle-income	82	82
	Upper-middle-income	86	86
	High-income	93	87
ALL		86	84

AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

The availability of a national unit, branch or department responsible for NCDs within the ministry of health was already high in 2010 in all regions (88% overall) and showed further improvements between 2010 and 2013 (94%), with a slow decline occurring between 2013 and 2015 (93%), and a larger decline between 2015 and 2017 (86%). More than 90% of countries in the African Region, the Region of the Americas, the South-East Asia Region and the Western Pacific Region reported having an existing unit, branch or department in their ministry of health with responsibility for NCDs in 2010 (Table 2). However, percentages have fluctuated over the years, resulting in only the Eastern Mediterranean Region, European Region and Western Pacific Region having more than 90% of countries with an existing unit, branch or department responsible for NCDs within their ministry of health in 2017.

Table 2

Percentage of countries* with units, branches or departments within the ministry of health (or equivalent) with responsibility for NCDs by WHO region, 2010, 2013, 2015 and 2017

		2010	2013	2015	2017
WHO Region	AFR	93	97	100	77
	AMR	93	96	85	81
	EMR	85	90	95	90
	EUR	79	92	94	90
	SEAR	100	100	90	80
	WPR	92	96	88	92
ALL		88	94	93	86

AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

** of 160 countries that responded to all 4 surveys.*

NCD staffing capacity levels improved between 2010 and 2015, before declining in 2017 (Table 3). In 2010, 79% of countries reported having at least one full-time technical or professional staff member working in the unit, branch or department responsible for NCDs within the health ministry. This proportion increased to 83% in 2013 and 91% in 2015, yet declined to 84% in 2017. With the exception of the Western Pacific Region, countries in all other regions reported an increase in the availability of full-time staff dedicated to NCDs from 2010 to 2015 and, subsequently, a decrease from 2015 to 2017. As shown in Table 3, the South-East Asia Region had the most notable decline in the availability of full-time technical or professional staff working in the NCD unit, branch or department within the ministry of health, which had decreased by 20% since 2010. The African Region was the only other WHO region to have a lower percentage in 2017 compared with 2010.

Table 3

Percentage of countries* with at least one full-time technical or professional staff member working in the unit, branch or department, by WHO region, 2010, 2013, 2015 and 2017

		2010	2013	2015	2017
WHO Region	AFR	83	93	100	77
	AMR	78	78	85	81
	EMR	80	80	95	90
	EUR	69	75	88	83
	SEAR	100	90	90	80
	WPR	84	92	88	92
ALL		79	83	91	84

AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

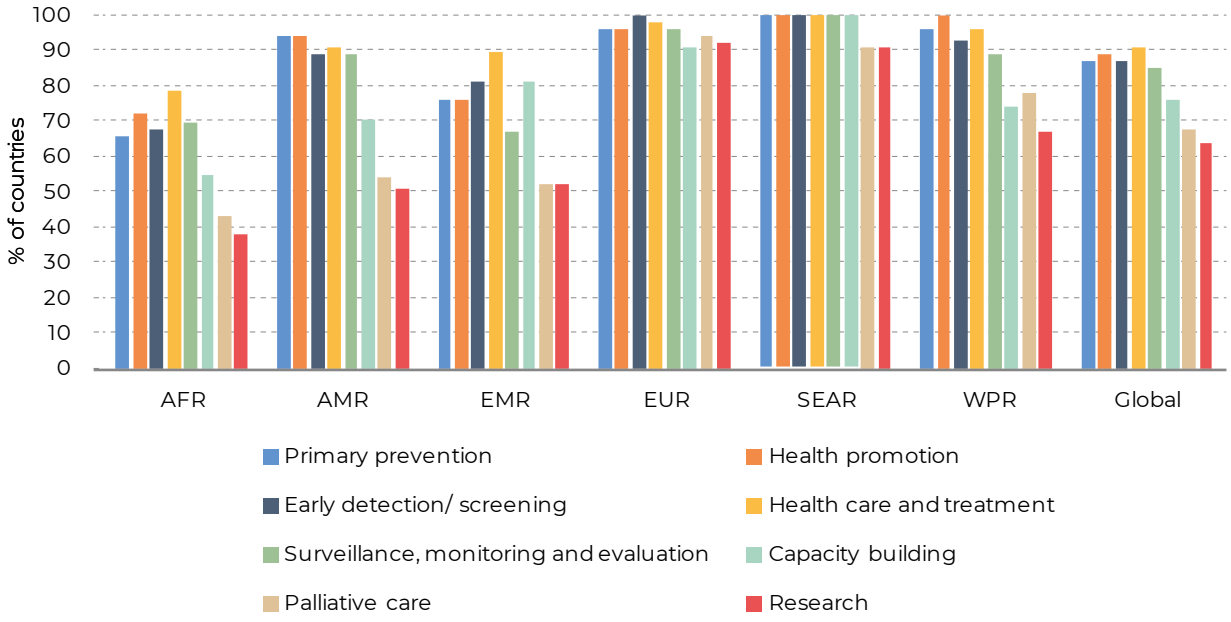
** of 160 countries that responded to all 4 surveys.*

Funding mechanisms

Countries were asked to report on the availability of funding for eight key activities or functions. Funding for health care and treatment was the most prevalent (91% of countries) in addition to health promotion activities (89%), primary prevention of NCDs (87%) and early detection and screening (87%) (Figure 1). The prevalence of funding for surveillance, monitoring and evaluation, as well as for capacity-building, was slightly lower overall, with only 85% and 76% of countries, respectively, reporting funding for each of these. Palliative care and research funding were considerably less prevalent: just over two thirds (68%) of countries reported having funding for palliative care, while less than two thirds (64%) reported having funding for research. Levels were low for both in low-income countries (both with 29% of countries) but were more than twice as high in other income groups. In particular, the African Region, the Region of the Americas and the Eastern Mediterranean Region had low funding for these areas. By contrast, the European Region reported that palliative care and research were more widely funded (94% and 92%, respectively); likewise the South-East Asia Region (91% and 91%) and the Western Pacific Region (78% and 67%). Countries in the South-East Asia Region reported 100% funding for all categories, with the exception of palliative care (91%) and research (91%).

Figure 1

Percentage of countries with funding for NCD activities by function, by WHO region



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

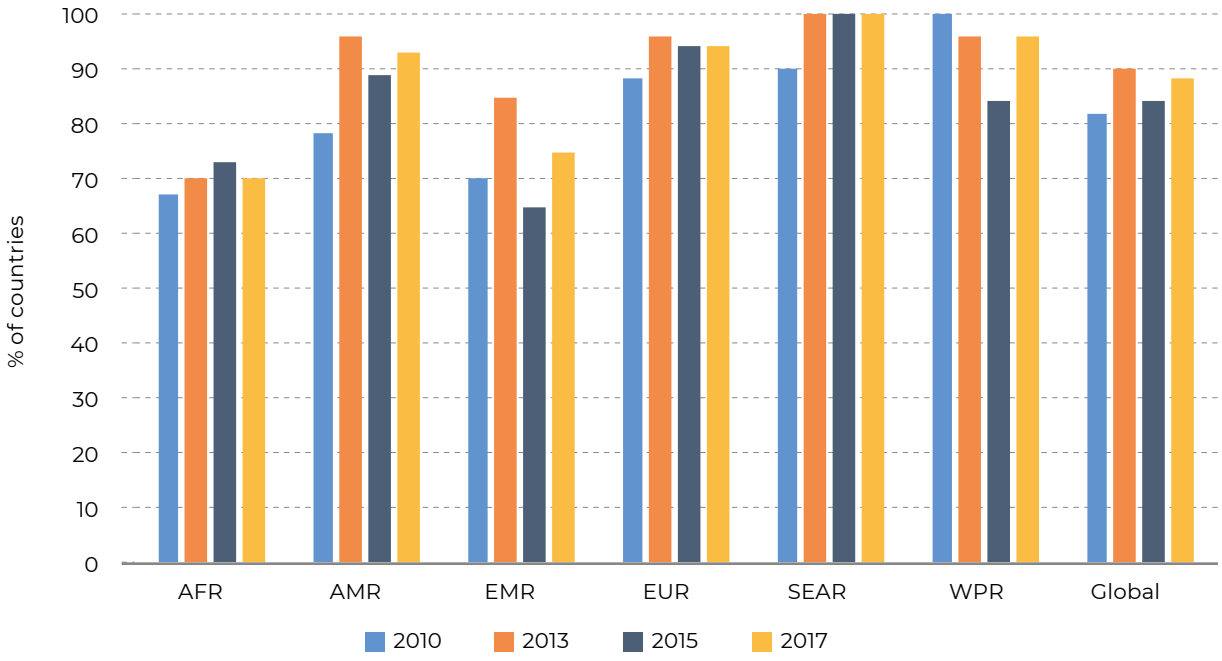
Between 2010 and 2017, only two areas within NCD funding were available for trend analysis: primary prevention and health promotion; and surveillance, monitoring and evaluation. Analysis showed mixed results. The availability of funding for primary NCD prevention and health promotion increased overall in all WHO regions between 2010 and 2017, with the exception of the Western Pacific Region (Figure 2a). The most notable improvement was evident among countries in the Region of the Americas (from 78% in 2010 to 93% in 2017). While the availability of funding for NCD surveillance, monitoring and evaluation was generally lower than for primary NCD prevention and health promotion, its global availability increased steadily from 72% of countries in 2010, to 78% in 2013, 82% in 2015, and 87% in 2017 (Figure 2b).

These positive trends were most notable among countries in the African Region and the Region of the Americas. Although the rate had improved from 55% in 2010 to 65% in 2017, availability of funding for NCD surveillance, monitoring and evaluation was lowest in the Eastern Mediterranean Region.

Figure 2

Percentage of countries* with funding for NCD-related activities, by WHO region, 2010, 2013, 2015 and 2017

a) For primary prevention and health promotion



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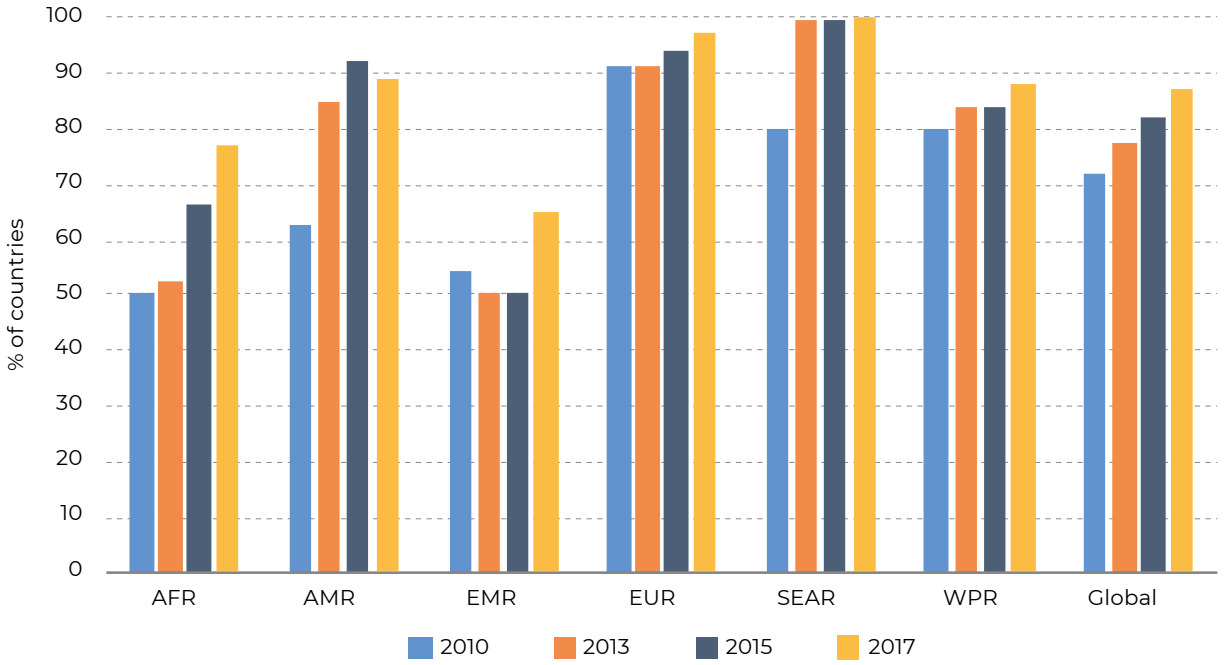
b) For surveillance, monitoring and evaluation



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In descending order of prevalence, the following are among the major sources of funding for NCDs: government revenues (92% of countries); health insurance (62%); international donors (62%); national donors (44%); earmarked taxes (39%); and other sources (26%) (Table 4). The national donors' category was not included in the earlier surveys, but was added to the 2017 survey.

As shown in Table 4, low-income countries reported receiving less funding from all sources: approximately 68% of low-income countries received government revenues compared with 97% of countries in all other income groups; 58% received funds from international donors, compared with 86% in lower-middle-income groups; 32% received funds from national donors compared with 47% in other income groups; and 29% received funds from health insurance relative to 68% in other income groups. The least likely funding source for low-income countries was earmarked taxes, with only 16% of countries receiving funds relative to 44% in other income groups. Furthermore, of note is that while health insurance was reported as being a funding source for less than a third (29%) of low-income countries, the majority of middle- and high-income countries reported health insurance as a major source of funding.

Table 4

Major funding sources for NCDs

		Funding sources for NCDs (Percentage of countries with funding source)					
		General Government revenues	Health insurance	International donors	National Donors	Earmarked taxes on alcohol, tobacco, etc.	Other
WHO Region	AFR	83	49	72	47	30	23
	AMR	97	66	66	46	46	26
	EMR	81	52	48	48	24	19
	EUR	98	77	42	38	38	28
	SEAR	100	64	73	45	45	27
	WPR	96	56	85	48	59	30
World Bank Income Group	Low-income	68	29	58	32	16	19
	Lower-middle-income	94	61	86	57	43	27
	Upper-middle-income	96	70	68	44	46	18
	High-income	100	73	35	40	42	36
ALL		92	62	62	44	39	26

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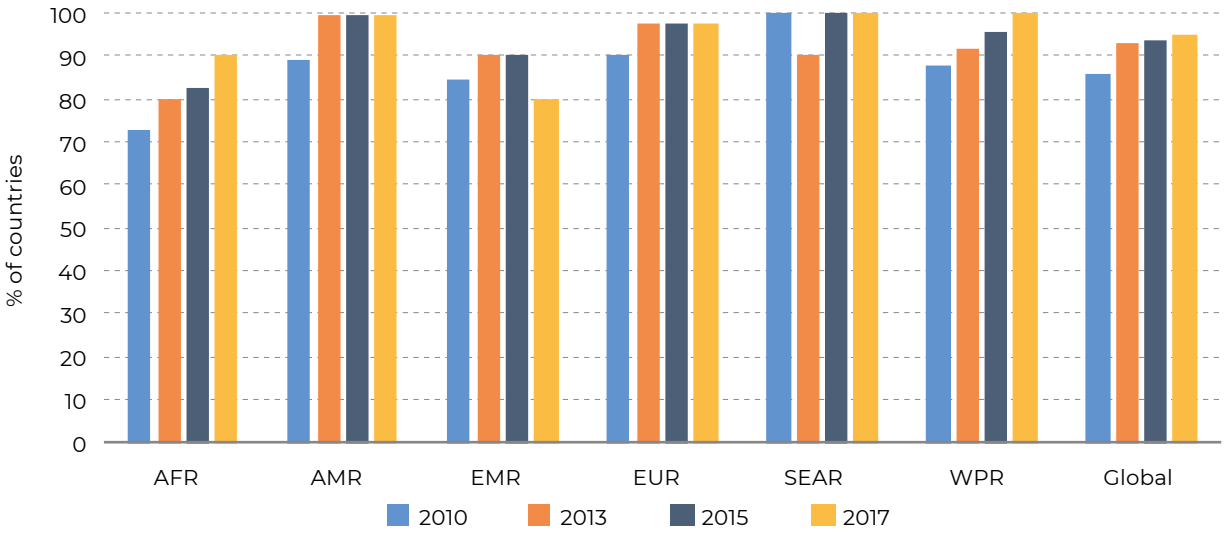
Since 2010, government revenues have been reported as a major source of funding for NCDs for an increasing number of countries. While many countries reported this as a major source of funding in 2010 (86%), more reported this as a major funding source for NCDs in 2017 (95%) (Figure 3a). Increases were most notable in the African Region (from 73% in 2010 to 90% in 2017), the Western Pacific Region (from 88% in 2010 to 100% in 2017), and the Region of the Americas (from 89% in 2010 to 100% since 2013). The use of health insurance funds to support NCD-related activities has increased steadily, growing from 42% of countries identifying this as a major source of NCD funding in 2010, to 54% in 2013, 61% in 2015, and 63% in 2017 (Figure 3b). Regions that saw the greatest increases were the African Region, the European Region and the Western Pacific Region. While the percentage of countries in the Region of the Americas increased overall since 2010, prevalence decreased from 85% in 2015 to 67% in 2017. The reliance on international donors for the funding of NCD prevention and control activities slightly increased overall (from 56% in 2010 to 63% in 2017). These increases were most notable among countries in the Western Pacific Region. Although the Region of the Americas and the African Region also saw increases in international donor funding, prevalence had declined since 2015 (Figure 3c). Results from countries in the Eastern Mediterranean Region showed various results in their reliance on international donors for funding NCD activities (from 45% in 2010, 65% in 2013, 55% in 2015, and a drop back to 45% in

2017). Survey responses from countries in the European Region were similarly varied: 42% in 2010, 48% in 2013, 29% in 2015, and a return to 42% in 2017. Although reported as a major funding source in less than half of the countries, the use of earmarked taxes as a source of funding to support NCD prevention and control increased to 43% in 2017 compared with 23% in 2010 (Figure 3d). Countries in the Region of the Americas reported the largest increase in the use of earmarked taxes to fund NCD prevention and control activities (from 15% in 2010 to 56% in 2017). The Western Pacific Region and the African Region also reported increases in the use of earmarked taxes (from 24% and 7% in 2010 to 60% and 33% in 2017, respectively).

Figure 3

Percentage of countries* ranking each of the following sources of funding in the top three major funding sources for NCDs, by WHO region, 2010, 2013, 2015 and 2017

a) General government revenues



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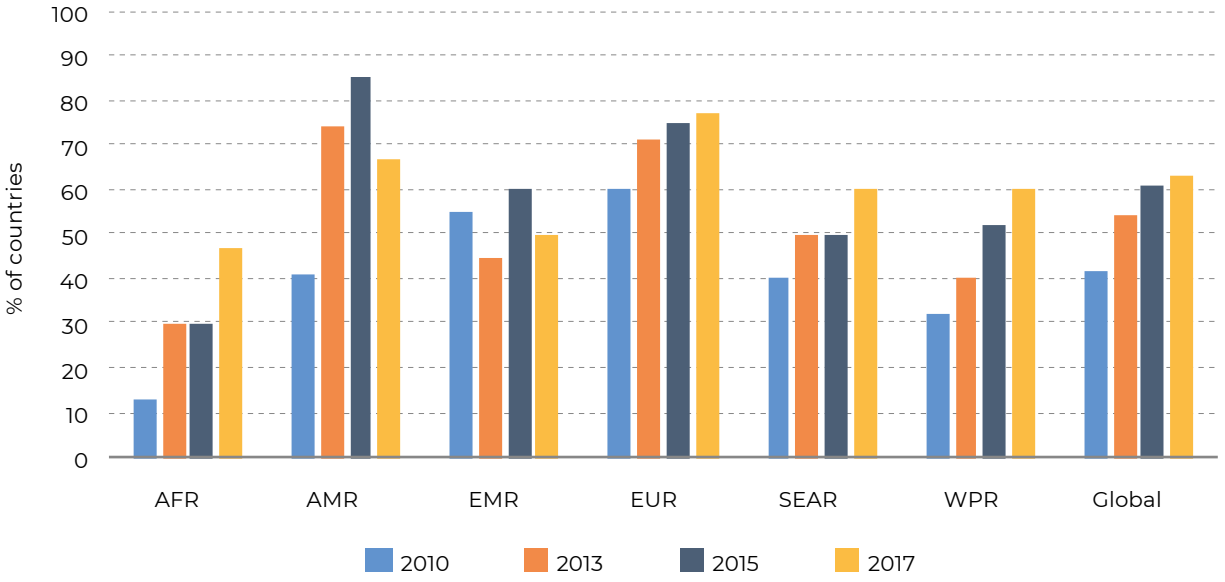
b) Health insurance



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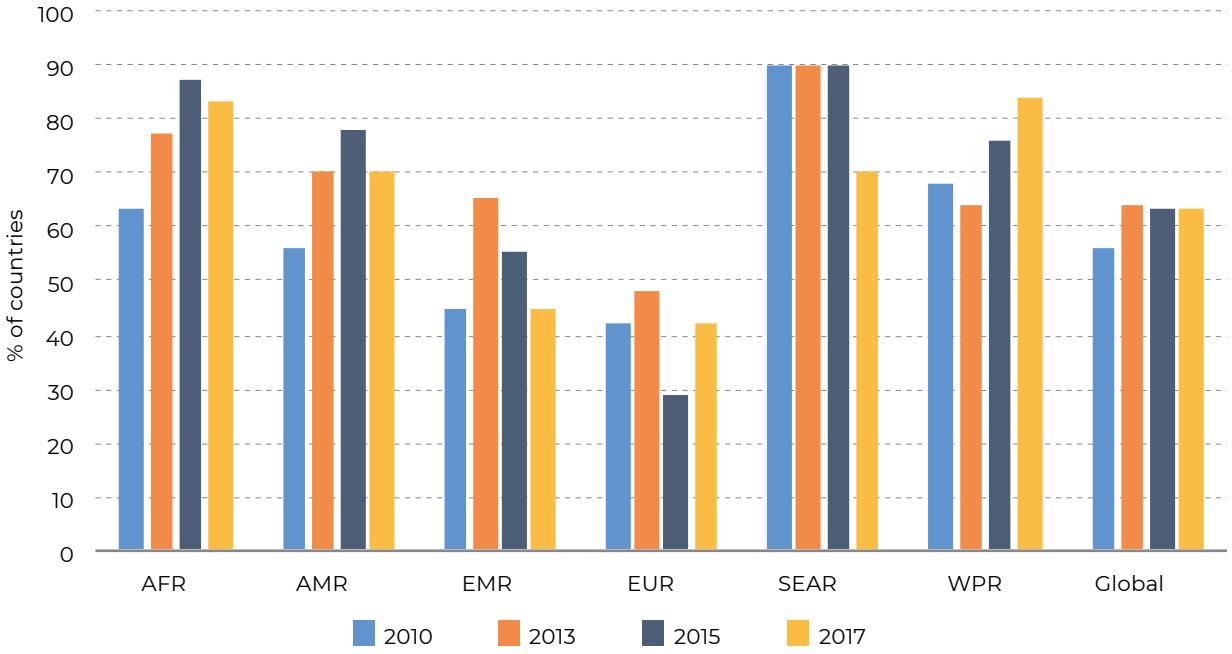
c) International donors



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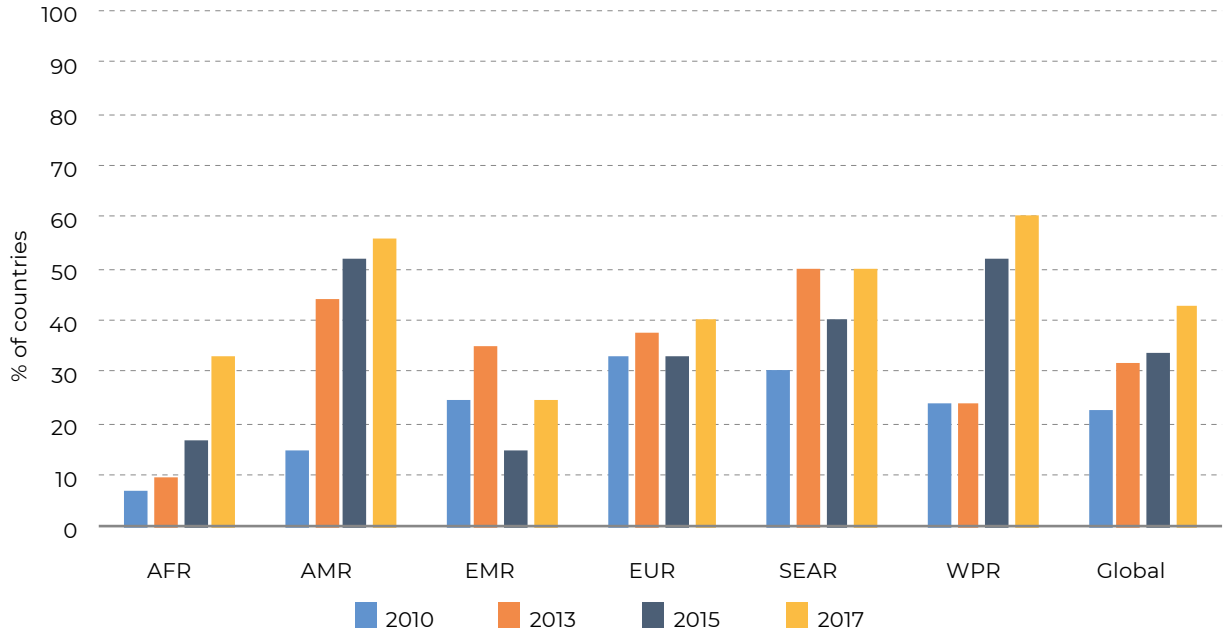
d) Earmarked taxes on alcohol, tobacco, etc.



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Fiscal interventions

Ninety-four per cent (94%) of countries indicated that they had implemented taxation on tobacco (excise and non-excise taxes), with the highest prevalence of tobacco taxation in the European Region (100% of countries) followed by the Region of the Americas (97%) and the Eastern Mediterranean Region (95%). Alcohol

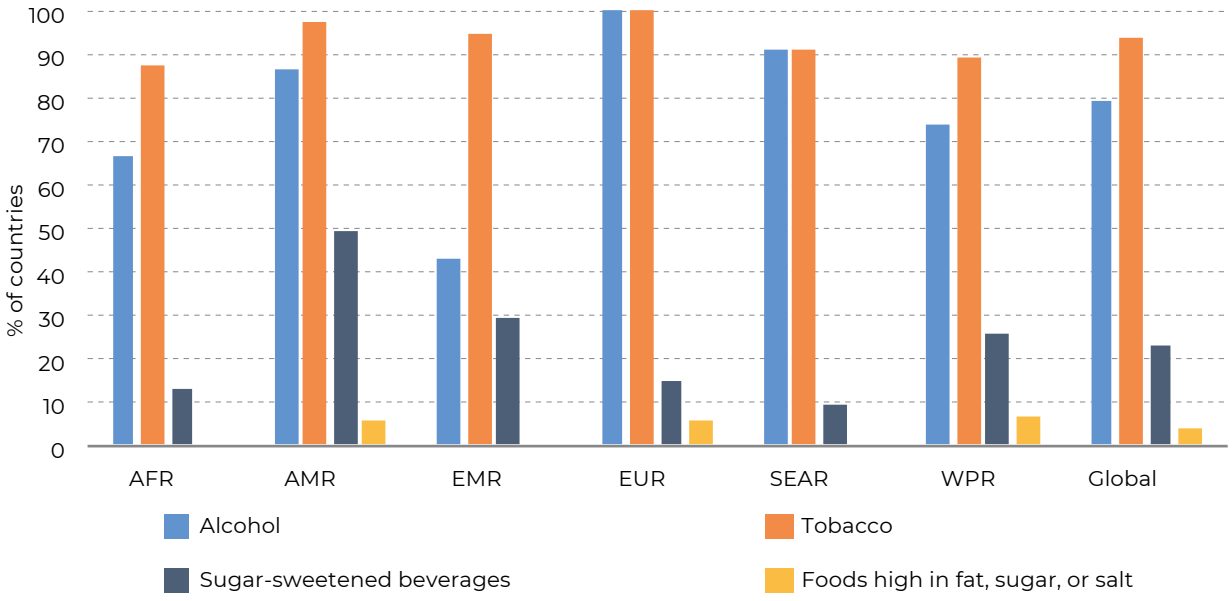
taxation was the second most widespread fiscal intervention, with 79% of countries reporting this type of intervention. All countries in the European Region reported taxation on alcohol, compared with only 66% of countries in the African Region (Figure 4a). Based on the results provided, sugar-sweetened beverages (23%) and foods high in fat, sugar or salt (4%) were far less likely to be taxed globally. Just over a quarter of countries (27%) indicated that funds raised through fiscal interventions were used for health promotion or health services provision.

As shown in Figure 4b, price subsidies for healthy foods and taxation incentives to promote physical activity were relatively low globally. Some 18% of countries in the South-East Asia Region subsidized healthy foods, followed by 15% in the Western Pacific Region and 14% in the Region of the Americas compared with 10% or less of countries in other regions. Taxation incentives to promote physical activity were even less widespread, with only 7% of countries globally and no countries in the Eastern Mediterranean Region or low-income group engaging in this type of fiscal intervention.

Figure 4

Percentage of countries implementing fiscal interventions by category, by WHO region

a) Taxation on products



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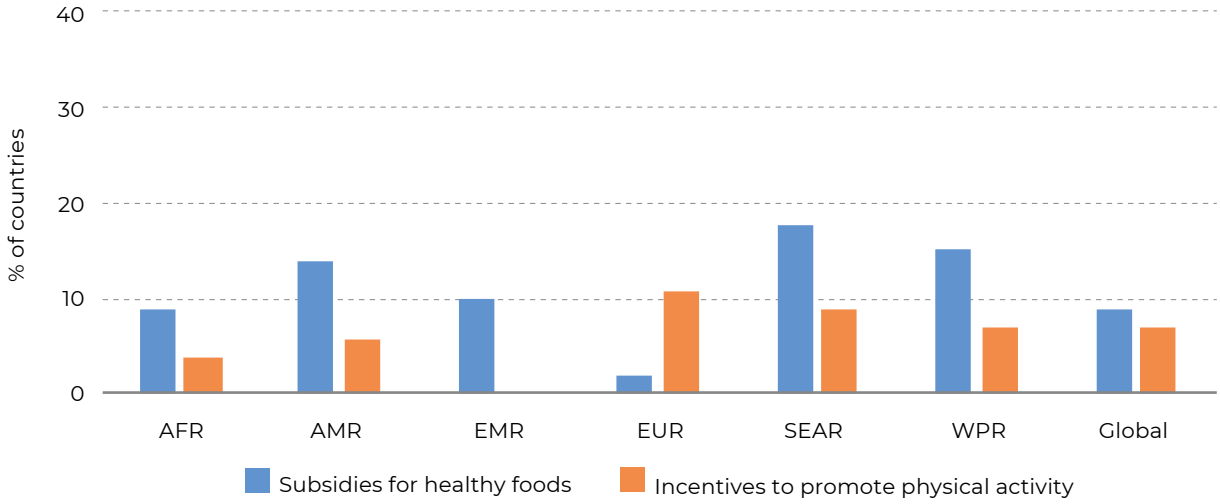
b) Subsidies and incentives



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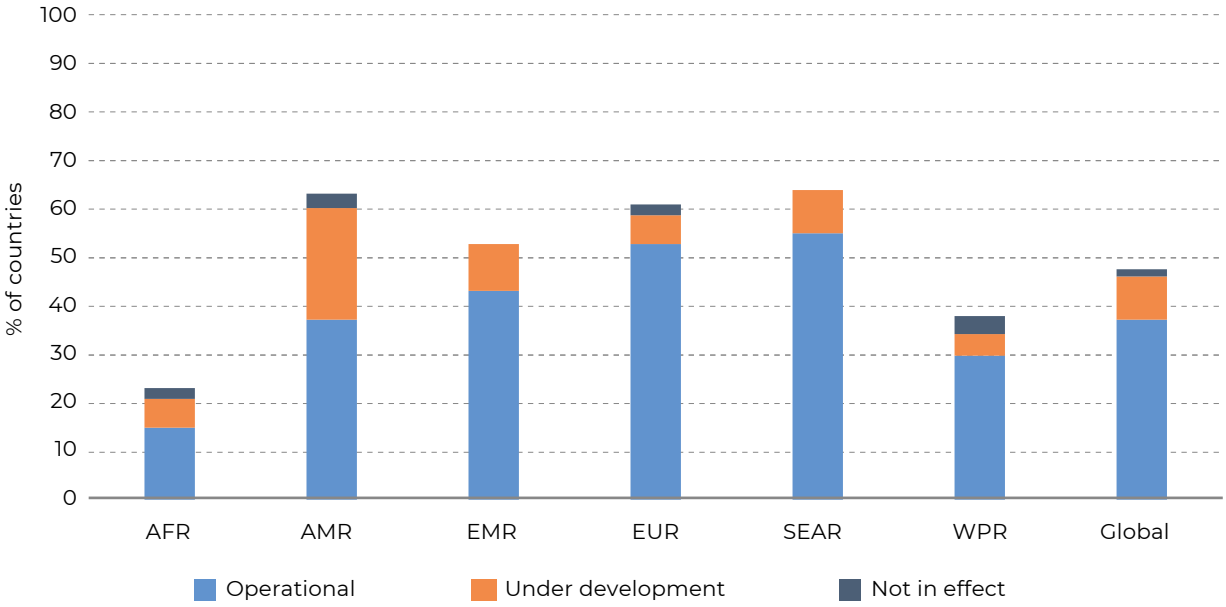
Multisectoral commissions, agencies, or mechanisms

Forty-eight per cent (48%) of countries reported having a national multisectoral commission, agency, or mechanism to oversee NCD engagement, policy coherence and accountability of sectors beyond health.

However, only 37% of countries confirmed that this was operational, 9% indicated it was under development and 2% reported that it was not in effect. Operational multisectoral commissions were most prevalent in the South-East Asia Region (55% of countries) and the European Region (53%), compared with 15% of countries in the African Region (Figure 5).

Figure 5

Percentage of countries with a national multisectoral commission, agency or mechanism to oversee NCD engagement, policy coherence and accountability of sectors beyond health and the stage of implementation, by WHO region



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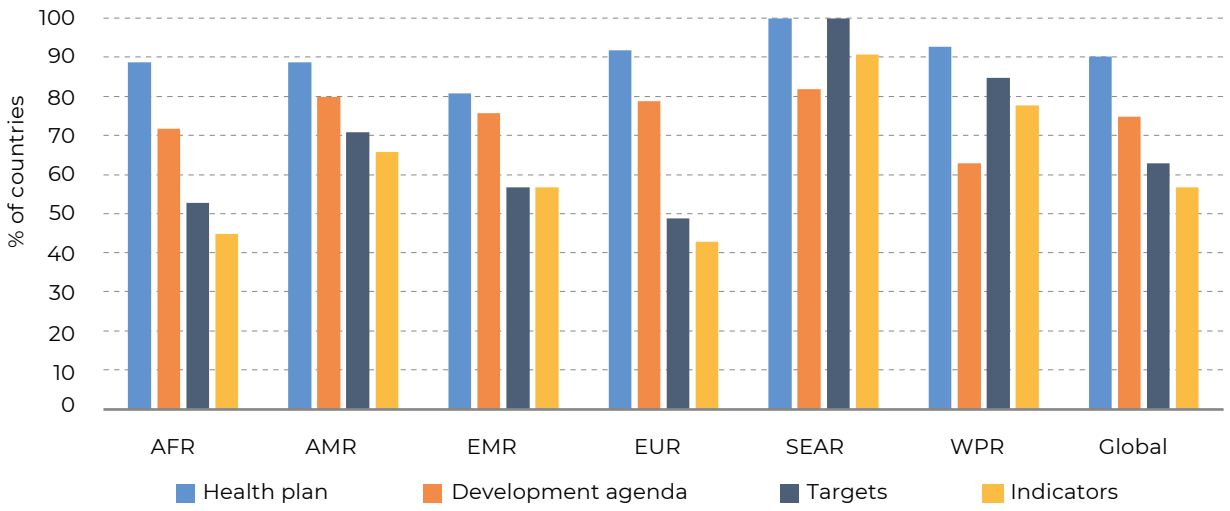
PLANS, POLICIES AND STRATEGIES

National health plans

Across all six WHO regions, 90% of countries had included NCDs in the outcomes or outputs of their national health plan, with the South-East Asia Region reporting 100%. Three quarters (75%) of countries had included NCDs in their national development agenda, with minor differences seen between WHO regions and World Bank income groups (Figure 6). Some 63% of countries reported having a set of time-bound national targets for NCDs based on the nine voluntary global targets of the WHO Global Monitoring Framework; 57% of those countries also specified having a set of national indicators for the targets.

Figure 6

Percentage of countries with NCDs in their national health plan; NCDs in their national development agenda; a set of national NCD indicators; and a set of time-bound national targets for those indicators, by WHO region



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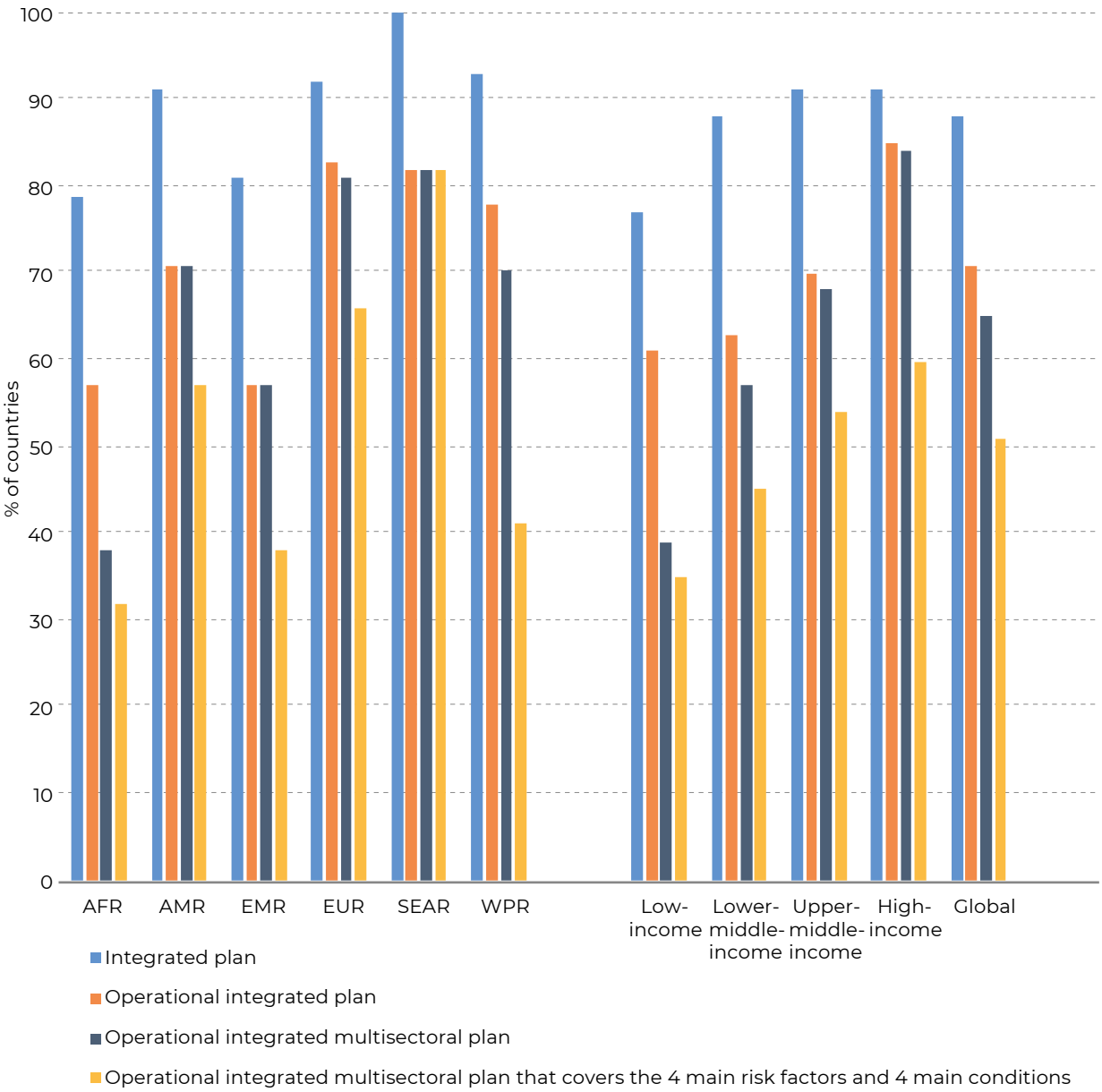
Policies addressing the major NCDs and/or their risk factors

While 88% of countries reported having a national policy, strategy or action plan that integrated several NCDs and their risk factors, only 71% reported that these were operational. A further reduction was observed in the proportion of countries having operational, integrated and multisectoral NCD plans (65%). Furthermore, approximately half of all countries (51%) achieved NCD progress monitoring indicator 4, which refers specifically to the existence of operational, multisectoral integrated NCD policies, strategies or action plans that cover the four main NCDs (cardiovascular disease, diabetes, cancer, chronic respiratory disease) and their four main associated risk factors (tobacco use, unhealthy diet, physical inactivity, harmful use of alcohol[7]). The rate of achievement was highest in the South-East Asia Region where 82% of countries achieved this indicator, followed by 66% of countries in the European Region. Among the remaining WHO regions, 30–60% of countries achieved the indicator. Across income categories, countries in the high-income group achieved higher rates than those in the low-income group (Figure 7).

7 Exception made for alcohol according to national context.

Figure 7

Percentage of countries with a national NCD policy, strategy or action plan which integrates several NCDs and their risk factors and their level of plan integration, by WHO region



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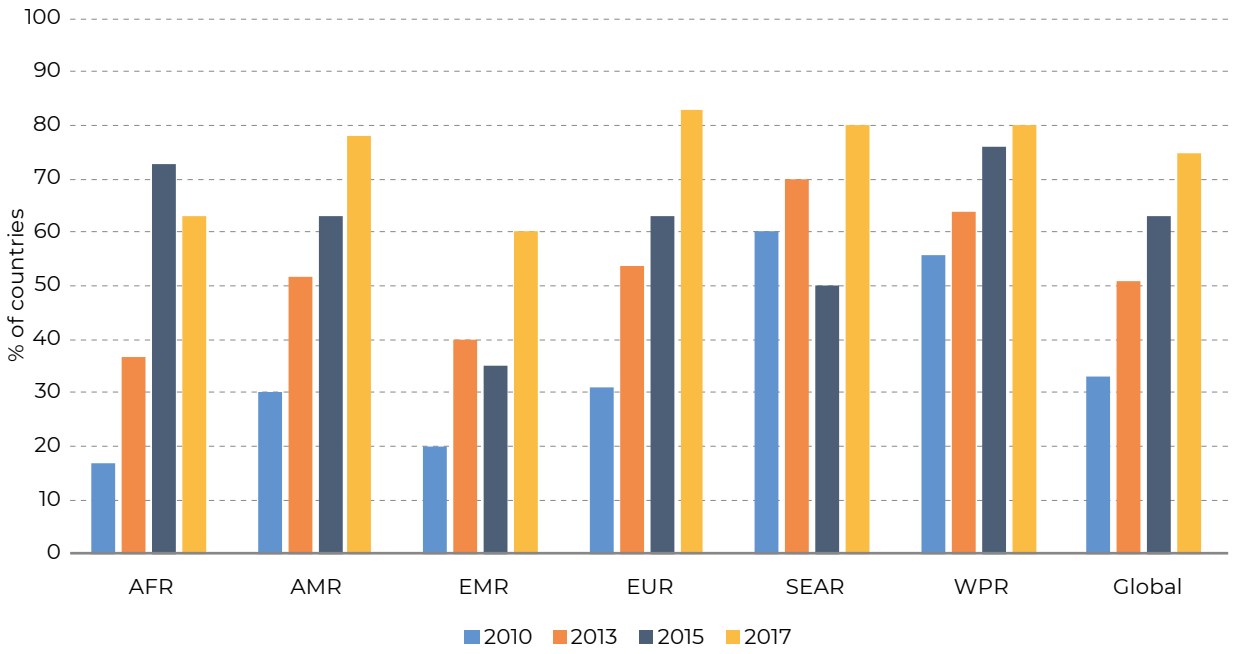
Since 2010, the availability of operational integrated national policies, strategies or action plans globally has increased from 33% in 2010 to 75% in 2017 (Figure 8). The most marked increase was observed among countries in the European Region, where 83% of countries reported having an operational integrated NCD policy, strategy or action plan in 2017, compared with 31% in 2010. Improvements were also substantial among countries in the South-East Asia Region where an additional 30% of countries introduced national integrated policies, strategies or action plans between 2015 (50%) and 2017 (80%). A similar improvement was seen in the Region of the Americas with 78% of countries having operational integrated NCD policies, strategies or action plans in 2017 compared with only 30% in 2010.

Figure 8

Percentage of countries* with an operational integrated national NCD policy, strategy or action plan, by WHO region, 2010, 2013, 2015 and 2017



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The overall percentage of countries with a policy, strategy or action plan for each major NCD or risk factor is shown in Table 5. The figures represent the percentage of countries that either included an NCD or risk factor in their integrated policy, strategy or action plan, or had a specific policy, strategy or action plan for an NCD or risk factor.

More than three quarters of countries reported having a policy, strategy or action plan for each major NCD and their associated risk factors, with the exception of overweight and obesity (43% of countries). Although fewer countries reported having policies, strategies or action plans that were operational, the majority of countries addressed each main NCD and their risk factors, with the exception of overweight and obesity (34% of countries). Tobacco use was the most widely addressed risk factor, with 83% of countries reporting having an operational policy, strategy or action plan. In contrast, harmful use of alcohol was the least addressed risk factor, with only 71% of countries having such a policy, strategy or action plan. Regarding NCDs, operational policies, strategies and action plans for cancer (including policies, strategies or action plans that only addressed a specific cancer) were the most widely implemented (79% of countries); chronic respiratory diseases were the least addressed, with only 62% of countries reporting operational policies, strategies or action plans.

Table 5

Percentage of countries with a policy, plan or strategy addressing the major NCDs and/or their risk factors

		% of countries with a policy, strategy or action plan	% of countries with an operational policy, strategy or action plan
NCDs	Cardiovascular disease	85	71
	Diabetes	88	76
	Cancer or particular cancer types	92	79
	Chronic respiratory disease	75	62
Risk factors	Tobacco use	92	83
	Physical inactivity	90	77
	Unhealthy diet	91	78
	Harmful use of alcohol	85	71
	Overweight and obesity	43	34

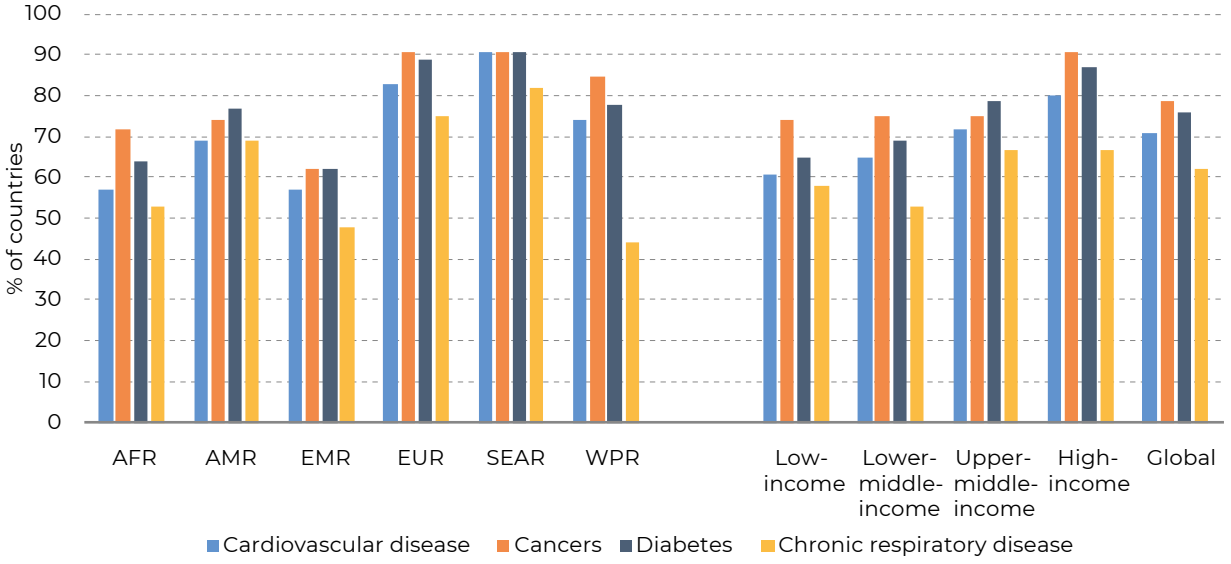
Across all WHO regions, the majority of countries reported having an operational policy, strategy or action plan for each of the leading NCDs and their associated risk factors, with the exception of the Eastern Mediterranean Region and Western Pacific Region, where just under half of countries in each region had operational policies on chronic respiratory diseases.

A positive association was apparent between increasing income group and increasing prevalence of operational plans for each of the major NCDs and risk factors. Among all World Bank income groups, countries in the low-income group were least likely to have operational plans for each of the major NCDs and risk factors; the exception to this were chronic respiratory diseases for which operational plans were least widespread among lower-middle-income countries (Figure 9a). Operational policies addressing overweight and obesity, were by far the least prevalent in the majority of WHO regions and World Bank income groups compared with other risk factors and NCDs. Policies, strategies or plans addressing overweight and obesity reached a high of 60% of countries in the European Region and 64% of high-income countries, while policies addressing oral health achieved high prevalence in less than half of countries in the Region of the Americas (46%) and in high-income countries (42%) (Figure 9b).

Figure 9

Percentage of countries with operational plans, strategies or action plans for the leading NCDs and risk factors, by WHO region and World Bank income group

a) Operational policies, strategies or action plans for leading NCDs



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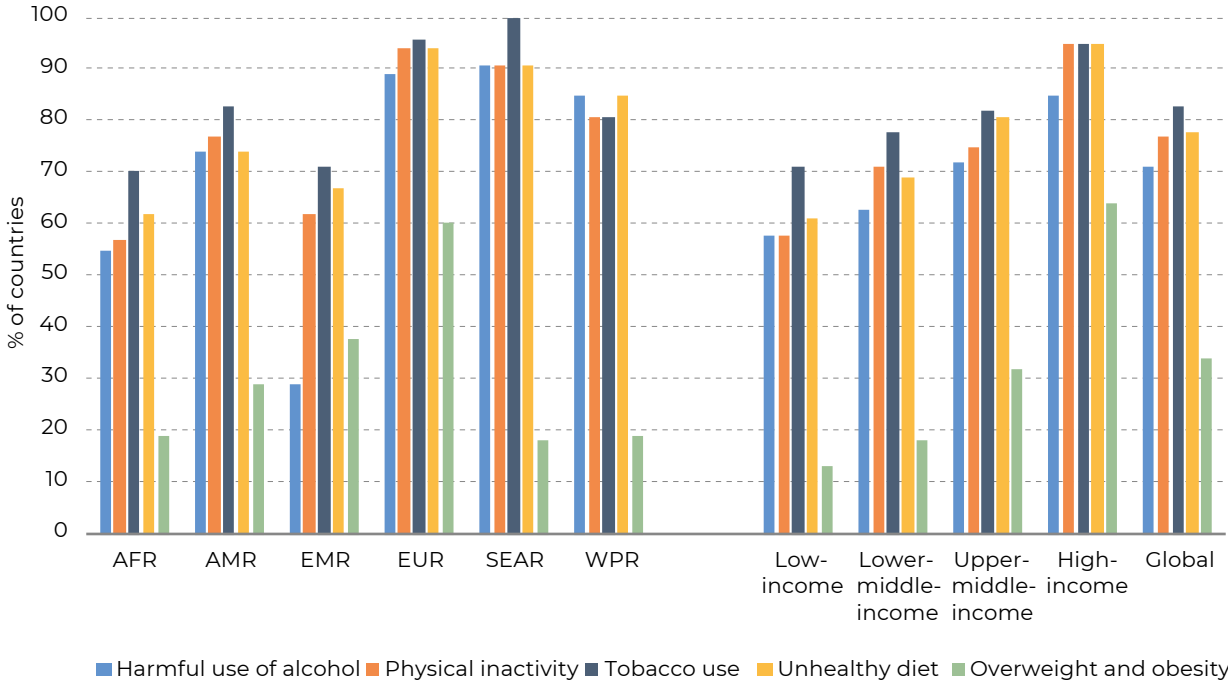
b) Operational policies, strategies or action plans for leading NCD risk factors



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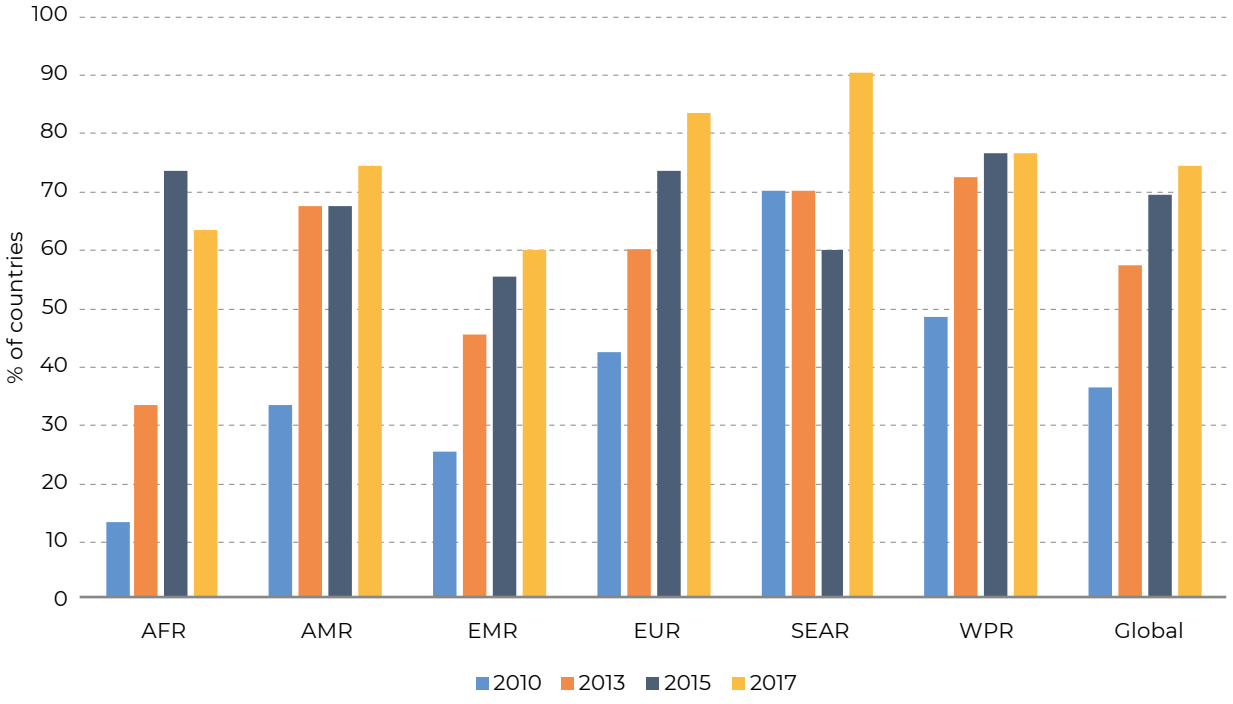
Trends in the availability of operational policies, strategies or action plans addressing the four major categories of NCDs are shown in Figure 10. Between 2010 and 2017, the availability of an operational plan, policy or strategy increased rapidly for each of the four major NCDs.

Even with chronic respiratory diseases – the NCD least addressed by operational policies, strategies or action plans – prevalence increased more than threefold, from 19% in 2010 to 64% in 2017. Furthermore, within the same time frame, the percentage of countries reporting operational plans for cardiovascular diseases more than doubled, from 36% in 2010 to 74% in 2017). Some 80% of countries reported having an operational plan addressing diabetes in 2017, compared with 46% in 2010; and for cancer, 83% of countries reported having an operational plan in 2017, compared with 50% in 2010. This trend of considerable progress has been evident in most WHO regions since 2010. Although the African Region reported fewer operational policies in 2017 than in 2015 for all NCDs except cancer, it remained, with the Region of the Americas, the region with the largest improvements overall since 2010.

Figure 10

Percentage of countries* with operational plans, policies or strategies or action plans for the four main NCDs, by WHO region, 2010, 2013, 2015 and 2017

a) Cardiovascular diseases



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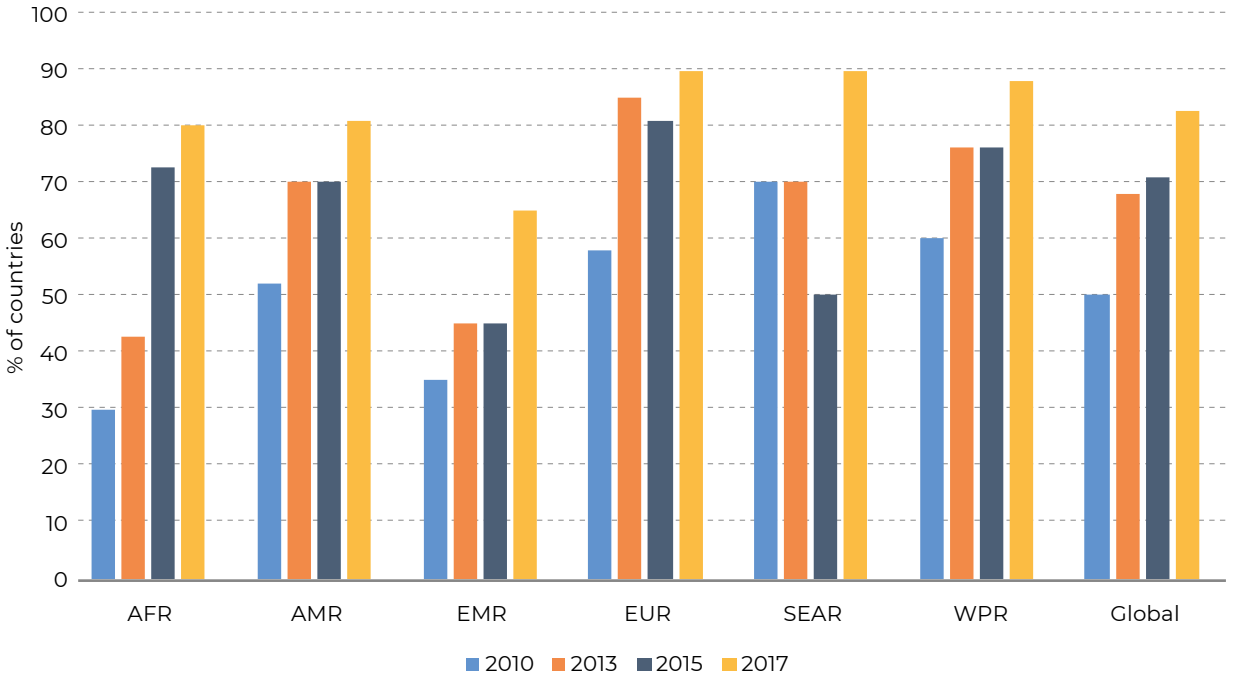
b) Cancers



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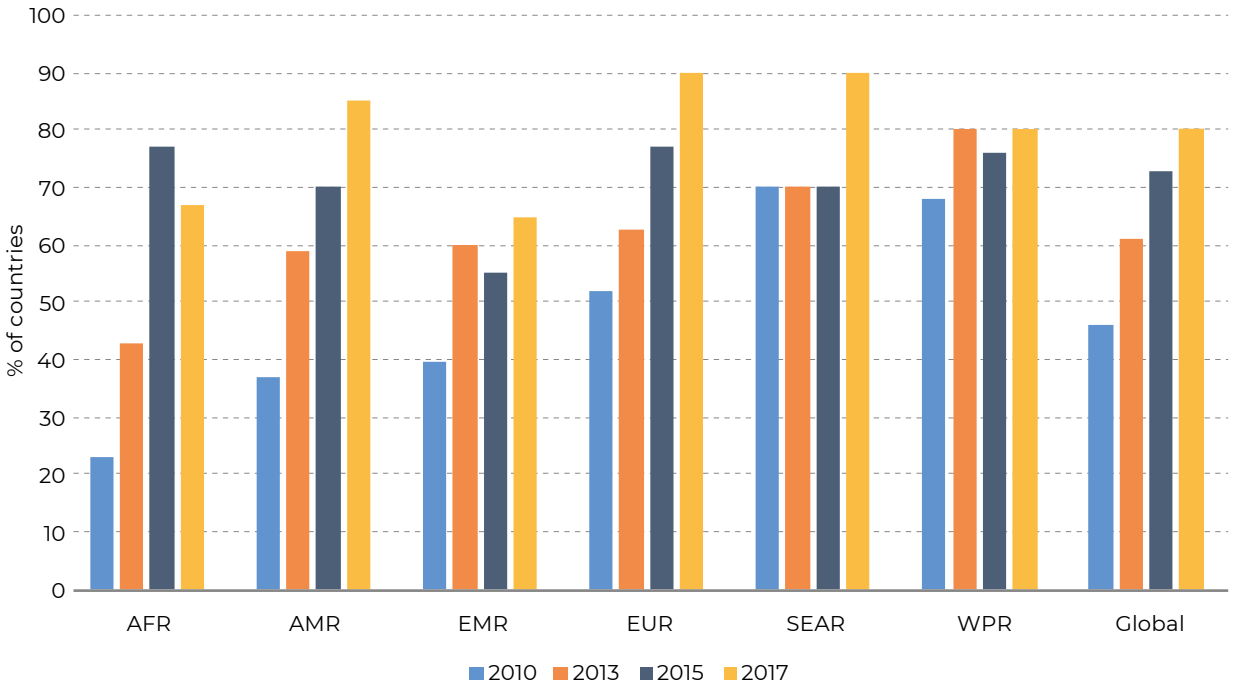
c) Diabetes



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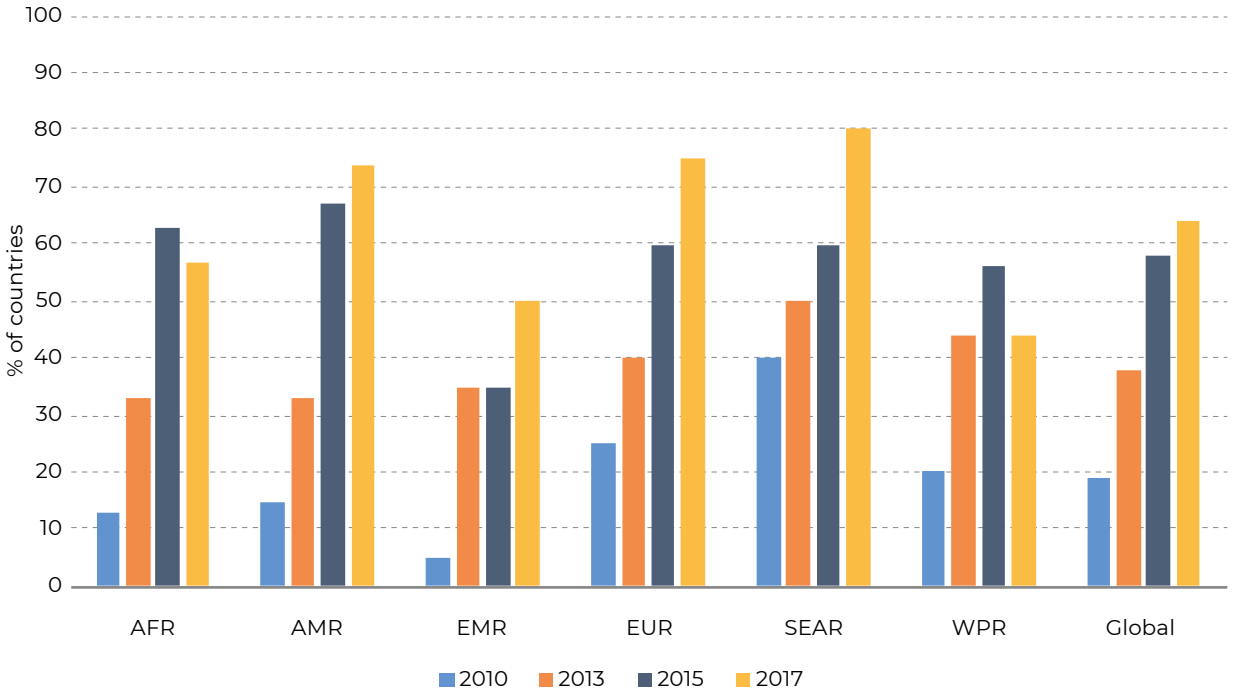
d) Chronic respiratory diseases



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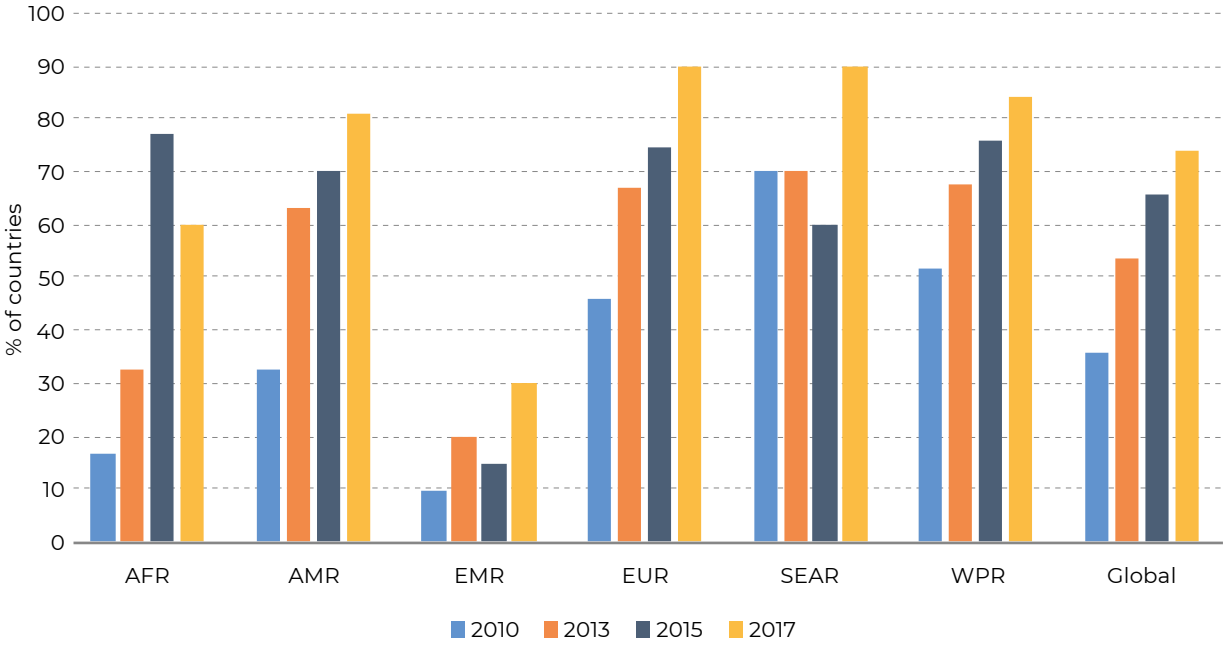
Trends in the availability of operational plans policies, strategies or action plans addressing each of the four main NCD risk factors (Figure 11) were similarly positive. From 2010 to 2017, the percentage of countries that reported having an operational plan for each risk factor increased substantially: 36% in 2010, to 74% in 2017 for reducing the harmful use of alcohol; 44–81% for reducing physical inactivity, 53–86% for decreasing tobacco use, and 44–82% for reducing unhealthy diet. Despite showing a decrease since 2015, countries in the African Region have improved the availability of operational policies, plans or strategies targeting each of the four main risk factors by as much as threefold since 2010. Within the same time frame, countries in the Region of the Americas more than doubled their operational policies, plans or strategies targeting each of the four key NCD risk factors. Likewise, countries in the Eastern Mediterranean Region tripled their operational plans for reducing the harmful use of alcohol risk factor and more than doubled them for reducing unhealthy diet.

Figure 11

Percentage of countries* with operational plans, policies or strategies or action plans for the main NCD risk factors, by WHO region, 2010, 2013, 2015 and 2017

a) Reducing the harmful use of alcohol



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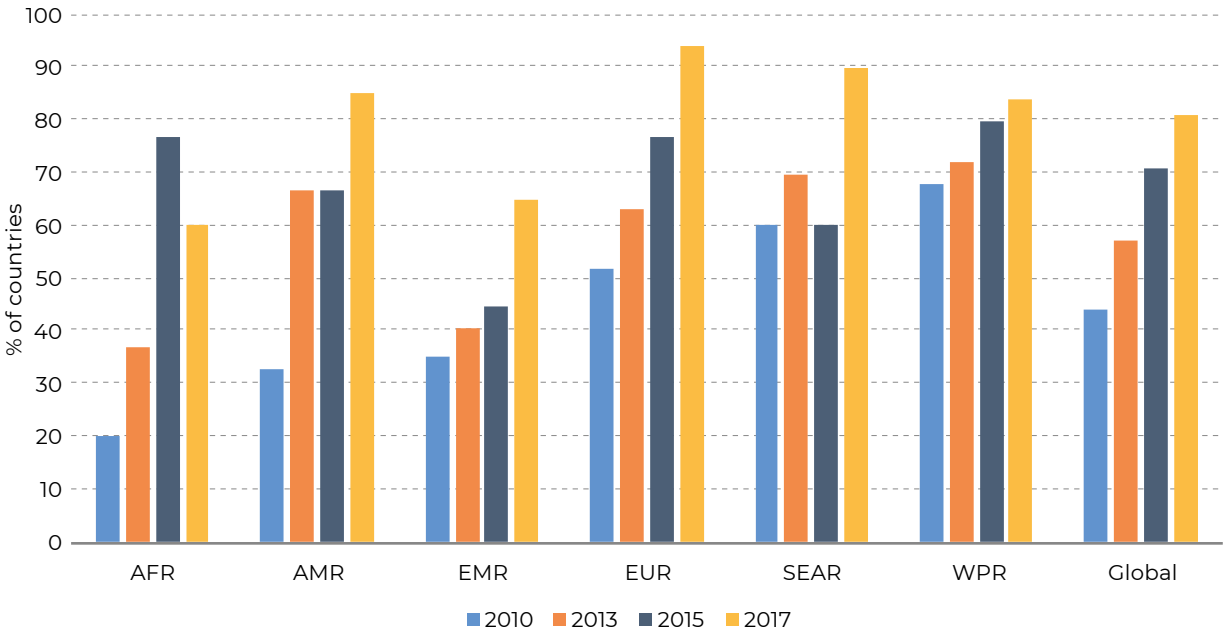
b) Reducing physical inactivity



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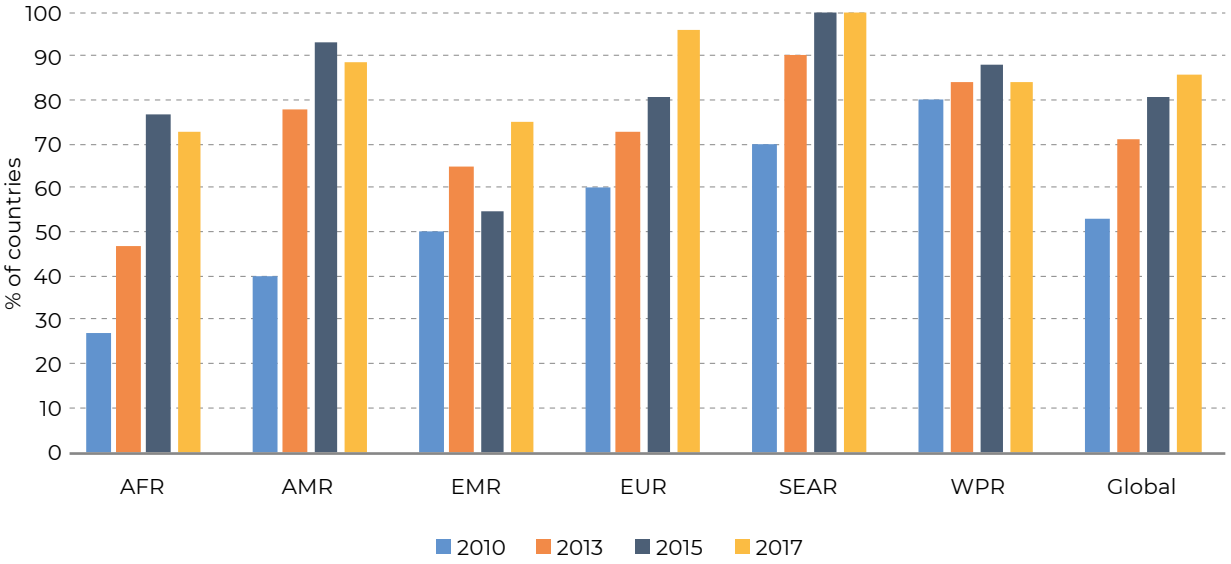
** of 160 countries that responded to all 4 surveys.*

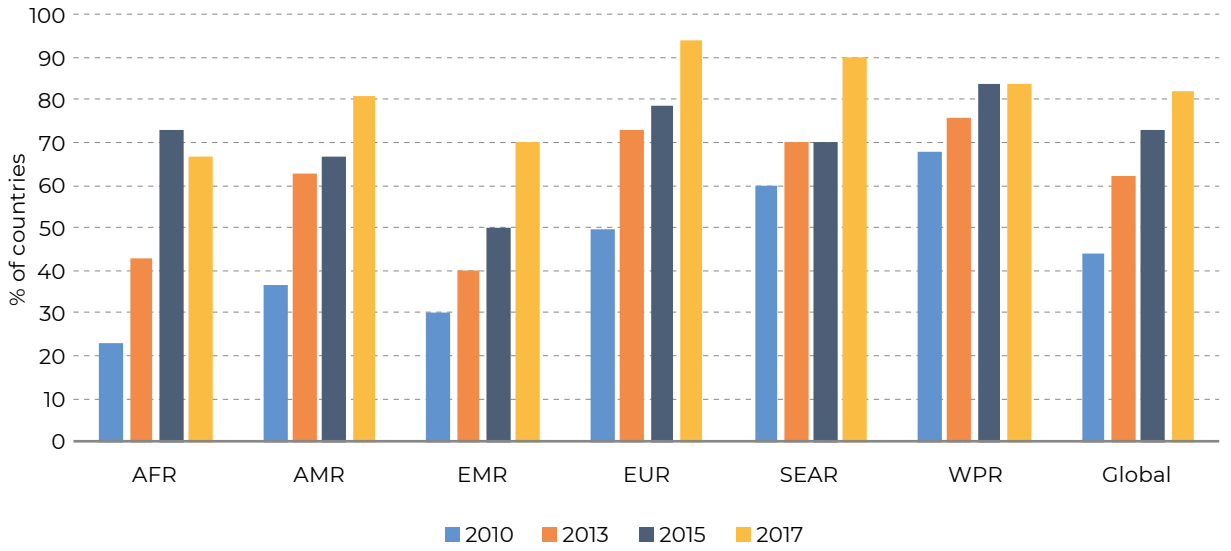
c) Decreasing tobacco use



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

** of 160 countries that responded to all 4 surveys.*

d) Reducing unhealthy diet related to NCD



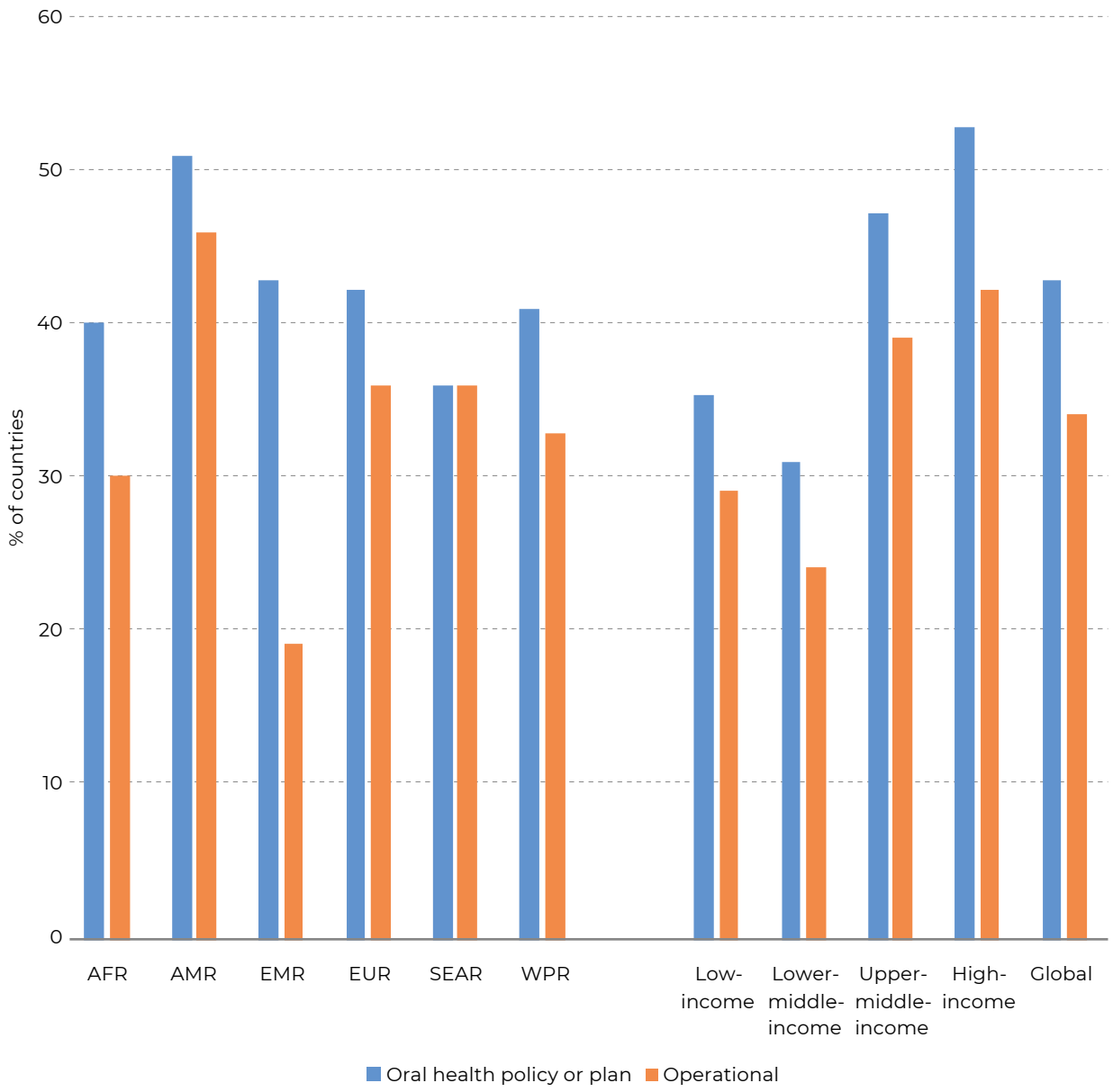
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

** of 160 countries that responded to all 4 surveys.*

In the 2017 survey, Member States were asked for the first time to report on the existence of oral health policies, strategies or action plans. While 43% of countries reported having an oral health policy, only 34% reported that the policy was operational. There was little variation in availability of these policies by region or income group. About a third of countries in each region had an operational plan; the Region of the Americas was an exception, having the highest rate (46%), and the Eastern Mediterranean Region, the lowest rate (19%). Availability by income group ranged from a low of 24% in the lower-middle-income group to a high of 42% of countries in the high-income group (Figure 12).

Figure 12

Percentage of countries with a policy, strategy or action plan for oral health, by WHO region and World Bank income group



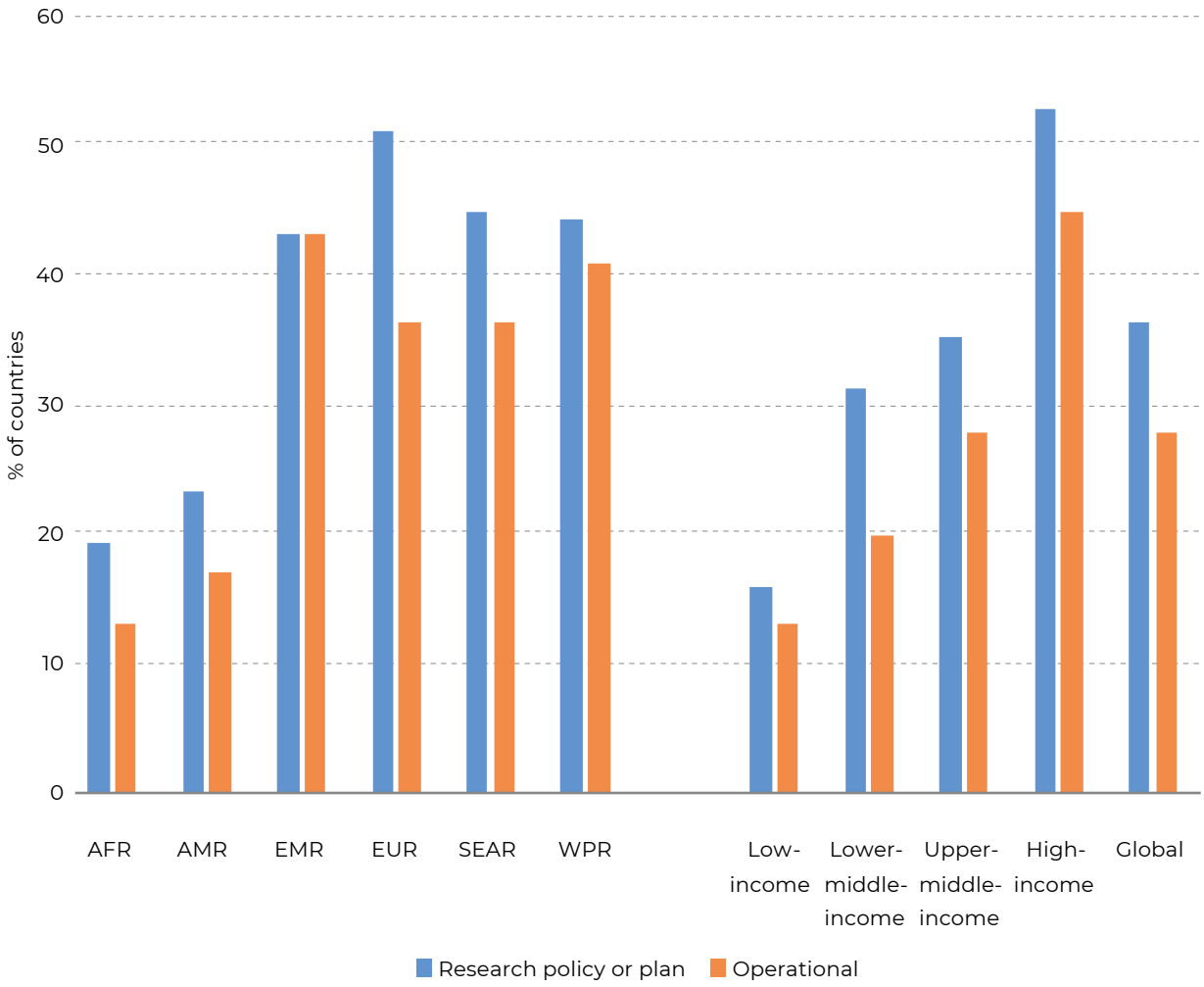
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Research policy or plan

Thirty-six per cent (36%) of countries had an NCD-related research policy or plan in place that included community-based research and an evaluation of the impact of interventions and policies. However, only 28% of countries indicated this was an operational research policy. As shown in Figure 13, operational policies were most widely available in the Eastern Mediterranean Region (43%) and the Western Pacific Region (41%), and were more than twice as likely to be available in upper-middle-income (28%) and high-income (45%) countries than in low-income (13%) and lower-middle-income (20%) countries.

Figure 13

Percentage of countries with an NCD-related research policy, by WHO region and World Bank income group



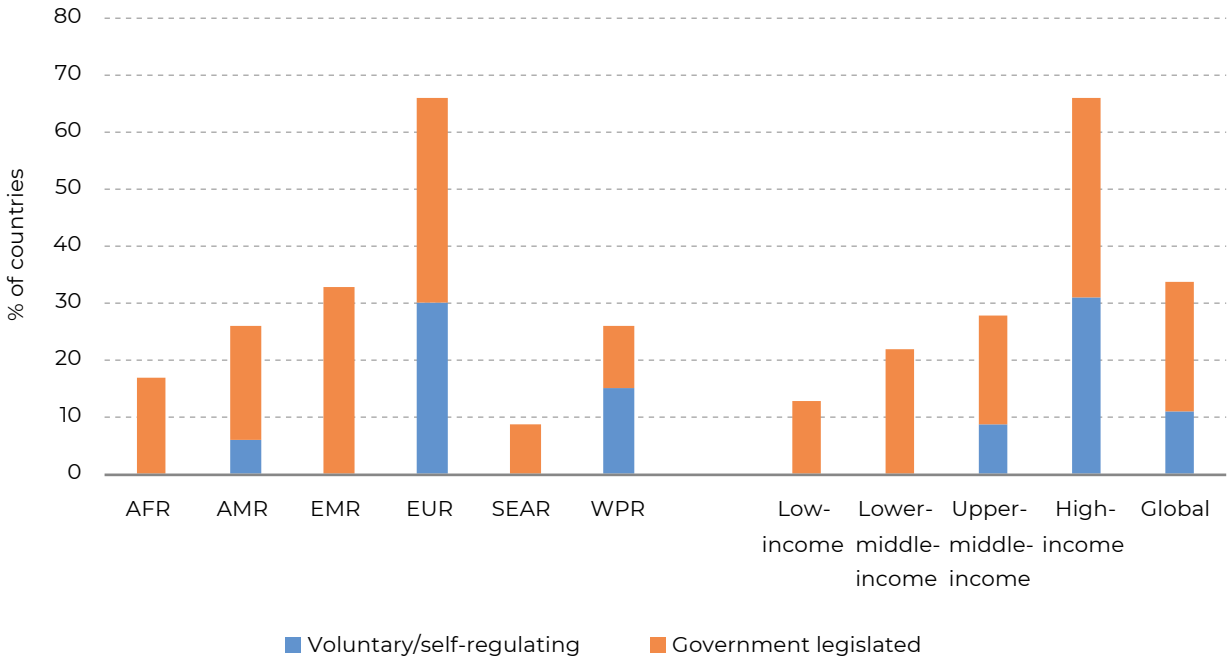
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Marketing to children

Progress monitoring indicator 7c refers to the restriction of marketing unhealthy foods to children. Thirty-five per cent (35%) of countries had achieved this indicator and had a policy to reduce the impact of marketing foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt to children. As shown in Figure 14, large discrepancies were discovered when analysing by WHO regions. In the European Region, 66% of countries confirmed they had a marketing policy in place, whereas only 9% (1 country) in the South-East Asia Region reported having such a policy. In the remaining regions, the percentage varied between 17% and 33%. When analysing the data by World Bank income groups, a clear pattern emerged: a higher prevalence of policies on the marketing of food and beverage to children was associated with countries in higher income groups. More countries reported having government-legislated policies (23%) rather than voluntary/self-regulating policies (11%). The exception to this was the Western Pacific Region where 15% of countries had voluntary/self-regulating policies and 11% government-legislated policies.

Figure 14

Percentage of countries with a policy to reduce the impact on children of the marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt, and the method of regulation, by WHO region and World Bank income group



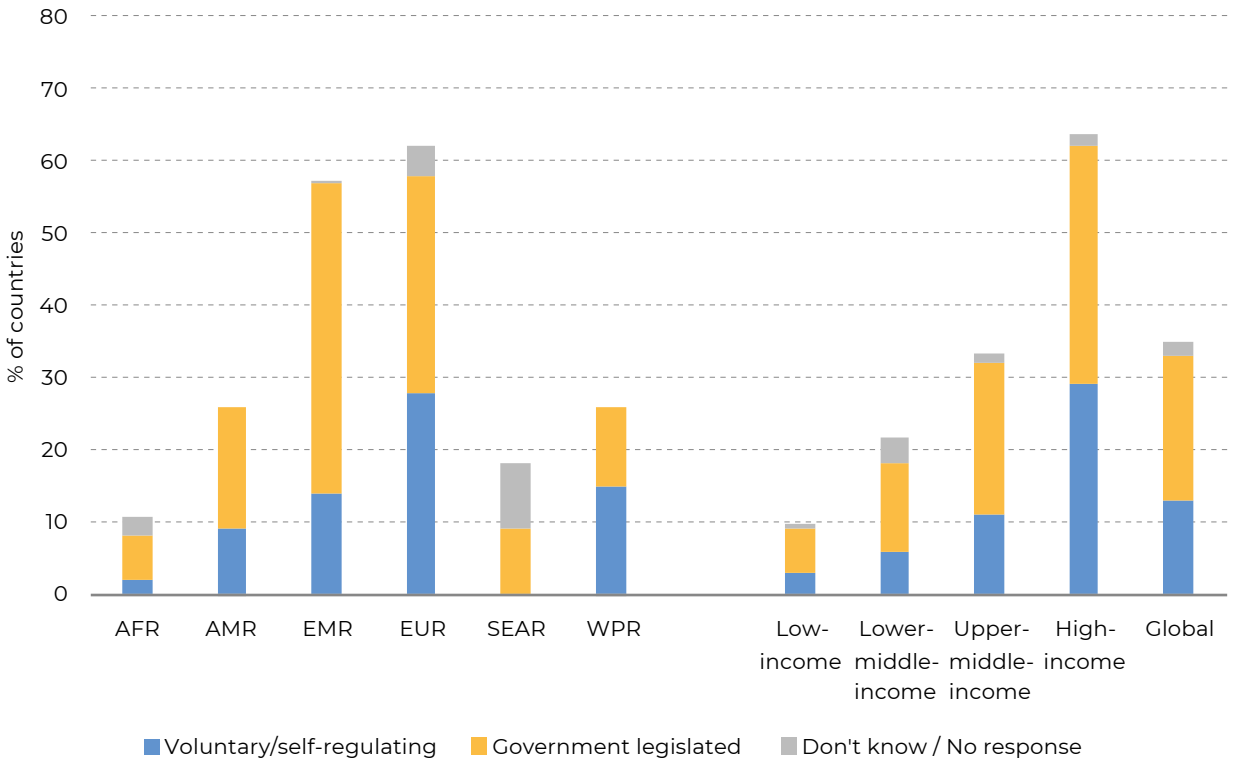
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Food regulation and policy

Progress monitoring indicator 7b states that Member State countries should adopt policies to limit saturated fatty acids and eliminate industrially-produced trans-fatty acids (i.e. partially hydrogenated vegetable oils) in the food supply. Some 35% of countries achieved this indicator. The European Region reported the highest prevalence (62% of countries), with slightly more countries having government legislated policies than voluntary/self-regulating policies. Following the European Region was the Eastern Mediterranean Region, with 57% of countries having policies addressing saturated fat, most of which were government legislated (9 of 12 countries with policies). The African Region had the lowest prevalence (11% of countries) of policies addressing saturated fats, and only 2 countries (18%) in the South-East Asia Region reported having a similar policy. About a quarter (26%) of the countries in the remaining Region of the Americas and Western Pacific Region reported having an existing policy. Government legislated policies were more prevalent in countries of all regions except for the Western Pacific Region. The highest rate of policy implementation was reported in high-income countries at 64%, with 33% having government legislated policies compared with 29% that are voluntary/self-regulated. The lowest rate of policy implementation was seen in low-income countries, of which only 10% reported implementing policies limiting saturated fatty acids (Figure 15).

Figure 15

Percentage of countries with a policy to limit saturated fatty acids and eliminate industrially produced trans fats in the food supply and the method of regulation, by WHO region and World Bank income group



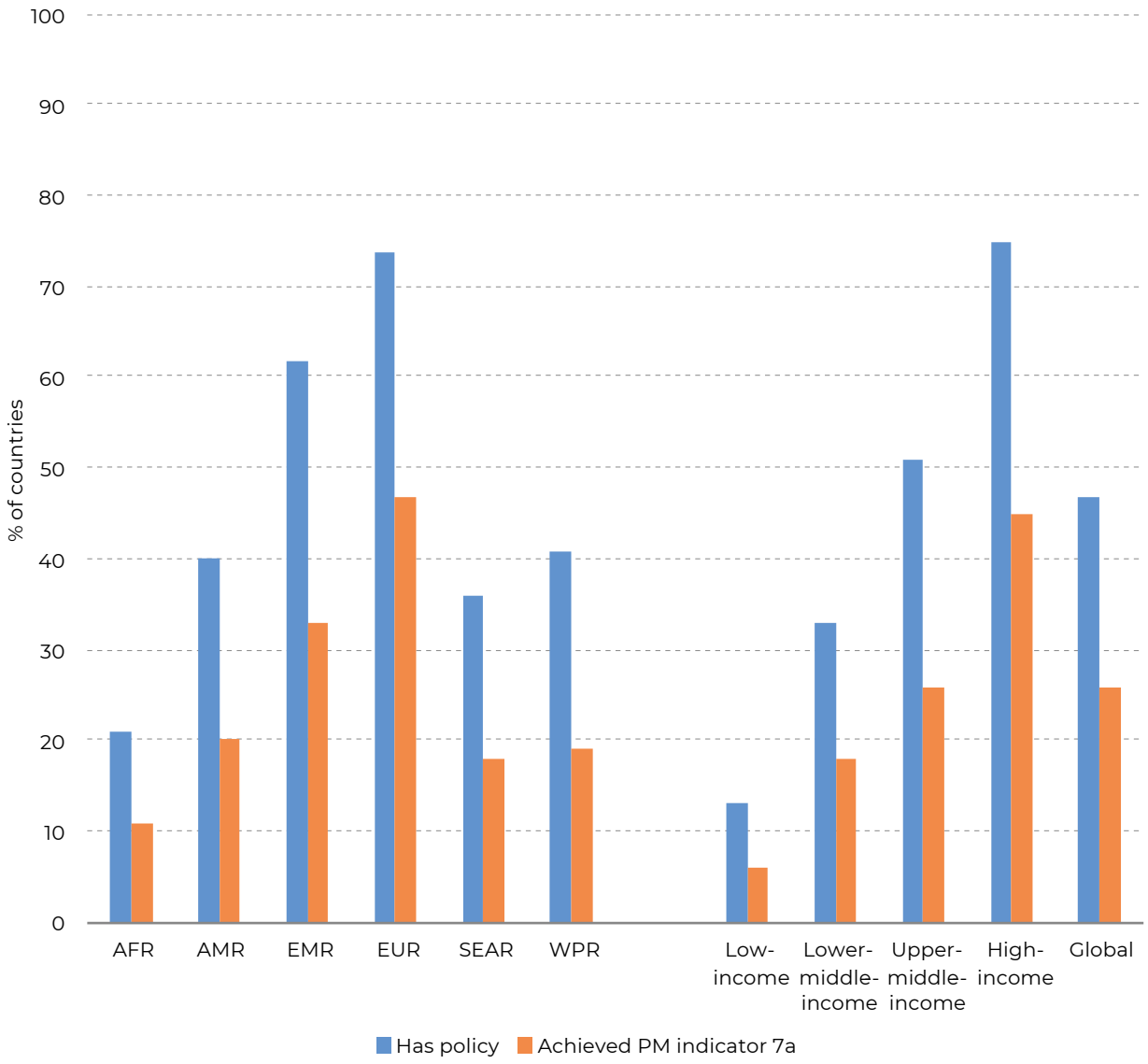
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Progress monitoring indicator 7a states that countries should implement policies to reduce population salt consumption. In order to fully achieve this indicator, the policy needs not only to be in place, but must also target either product reformulation by industry, or regulation of salt content of food, as well as include a public awareness programme and provisions for nutrition labelling. While 47% of countries reported having a policy in place to reduce population salt consumption, only 26% of countries fully achieved the indicator. The European Region led in both these measures: 74% of countries implemented salt reduction policies and 47% fully achieved progress monitoring indicator 7a. The European Region was followed by the Eastern Mediterranean Region, where 62% of countries had implemented salt reduction policies and 33% of countries fully achieved the indicator.

Conversely, the South-East Asia Region and the African Region reported the lowest number of countries with such policies (36% and 21% of countries, respectively) and similarly had the lowest rates for fully achieving the indicator (18% and 11%, respectively). Across income range, only 4 low-income countries (13%) had implemented policies to reduce population salt consumption, with only 2 countries (6%) fully achieving the indicator. Among high-income countries, three quarters (75%) had implemented such policies and 45% of high-income countries fully achieved the indicator (Figure 16). Of countries with salt reduction policies, 44% had policies that were enforced voluntarily/self-regulated, 34% were enforced through government legislation and the remainder did not know or did not answer the question.

Figure 16

Percentage of countries with any policy to reduce population salt consumption and that had achieved progress monitoring (PM) indicator 7a, by WHO region and World Bank income group



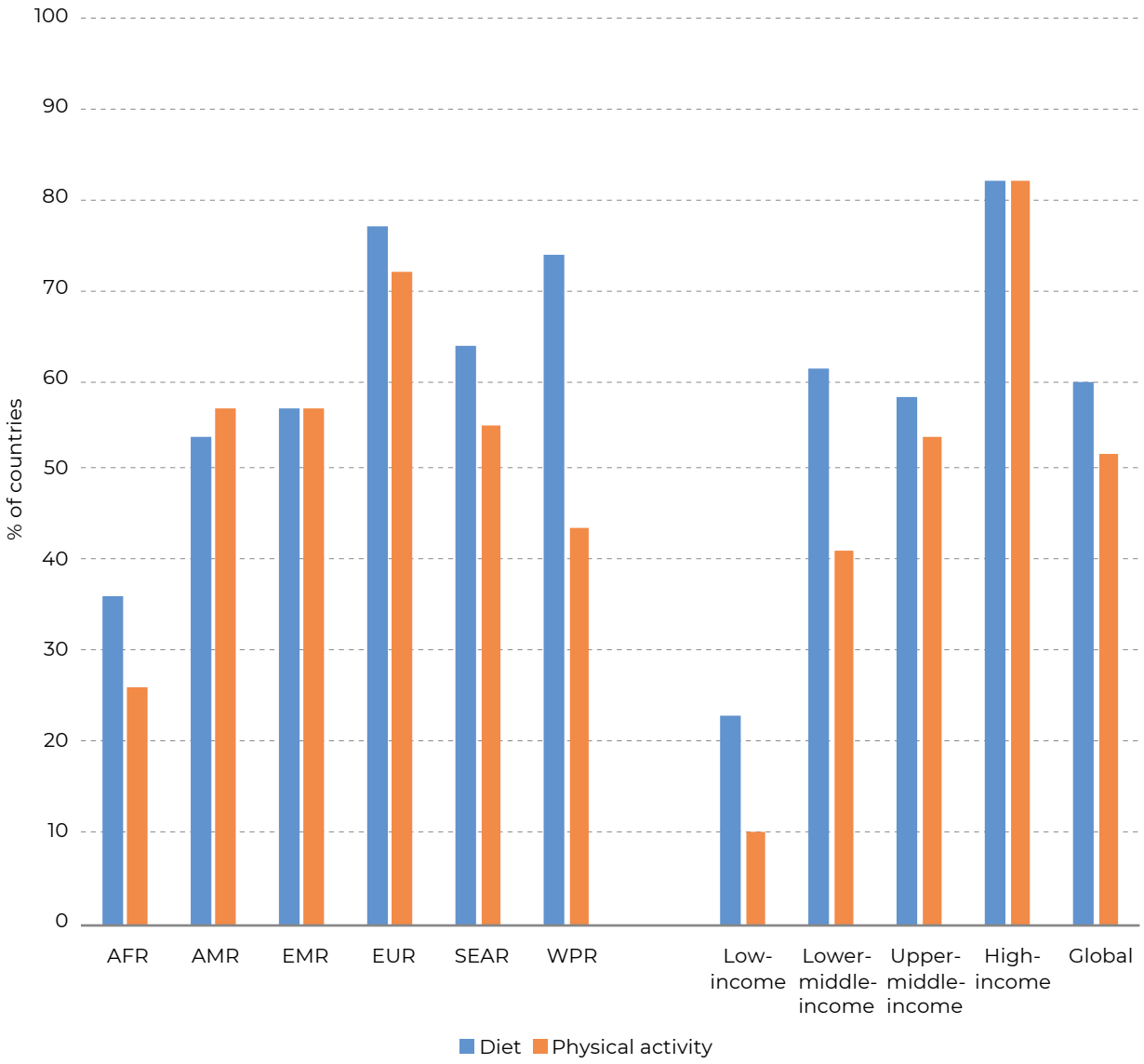
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Public awareness programmes

Progress monitoring indicator 8 examined whether countries had implemented a national public awareness programme on physical activity within the past five years. More than half of all countries (52%) achieved this indicator, yet programmes addressing physical activity were not as widespread as those addressing diet (60% of countries). Across all WHO regions, countries in the European Region reported the highest implementation rate for both programmes (77% for diet and 72% for physical activity), while those in the African Region reported the lowest (36% and 26%, respectively). The Western Pacific Region had the second highest rate of diet programme implementation (74%). Across income groups, with the exception of diet programmes among the middle-income group, implementation rates increased with income level for both types of awareness programmes (Figure 17).

Figure 17

Percentage of countries with an implemented public awareness programme that addressed diet or physical activity, by WHO region and by World Bank income group



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

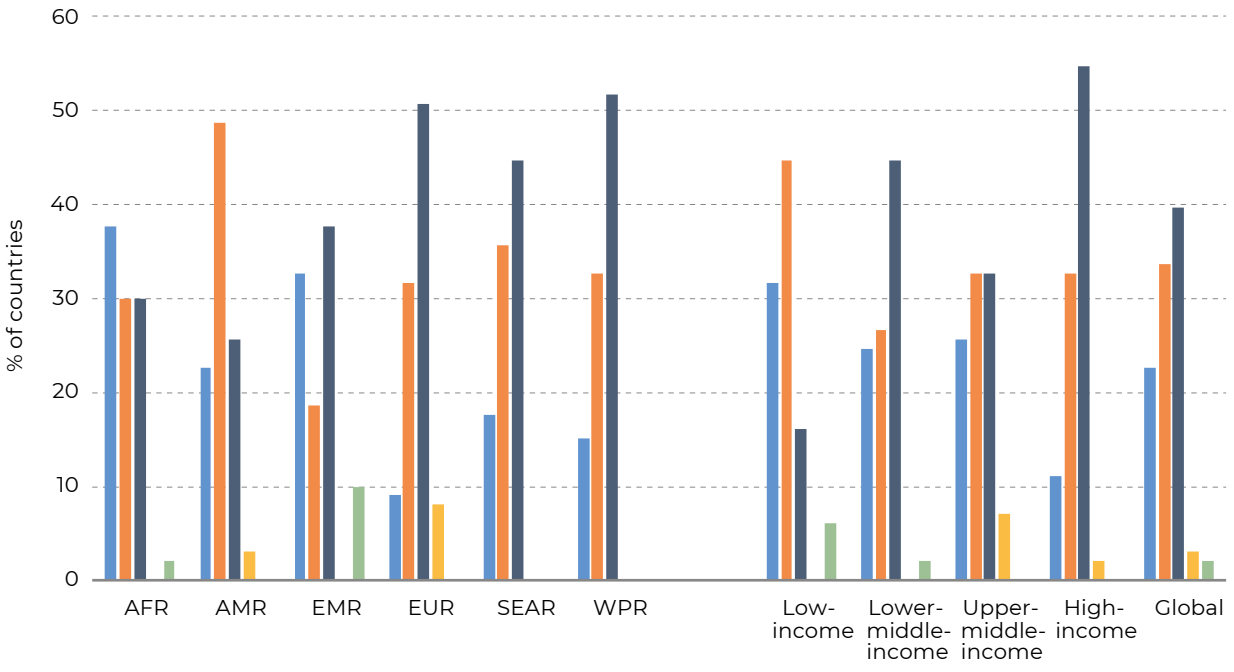
SURVEILLANCE

Surveillance responsibility

Less than a quarter of countries (23%) reported having an office, department, or administrative division within their ministry of health exclusively dedicated to NCD surveillance. Countries in the African Region were most likely to have such a department (38% of countries) while in the European Region, these were least widespread (9% of countries). Countries most frequently reported that responsibility for NCD surveillance was shared across several departments within their ministry of health (40% of countries overall), with this being the most common arrangement in all regions except for the African Region and the Region of the Americas. In this latter region, NCD surveillance was most often the responsibility of a single department within the ministry of health, but not one exclusively dedicated to NCD surveillance. Overall, high-income countries reported the highest prevalence of responsibility being shared across several divisions within the ministry of health, while low-income countries were most likely to report having an office/department/administrative division within the ministry of health responsible for NCD surveillance, but not exclusively dedicated to this. Only 3 countries – 2 in the Eastern Mediterranean Region and 1 in the African Region – reported having no one responsible for NCD surveillance; 5 countries – all but 1 in the European Region – indicated that this responsibility fell to an external agency (Figure 18).

Figure 18

Percentage of countries with an area of responsibility for the surveillance of NCDs and their risk factors, by WHO region and World Bank income group



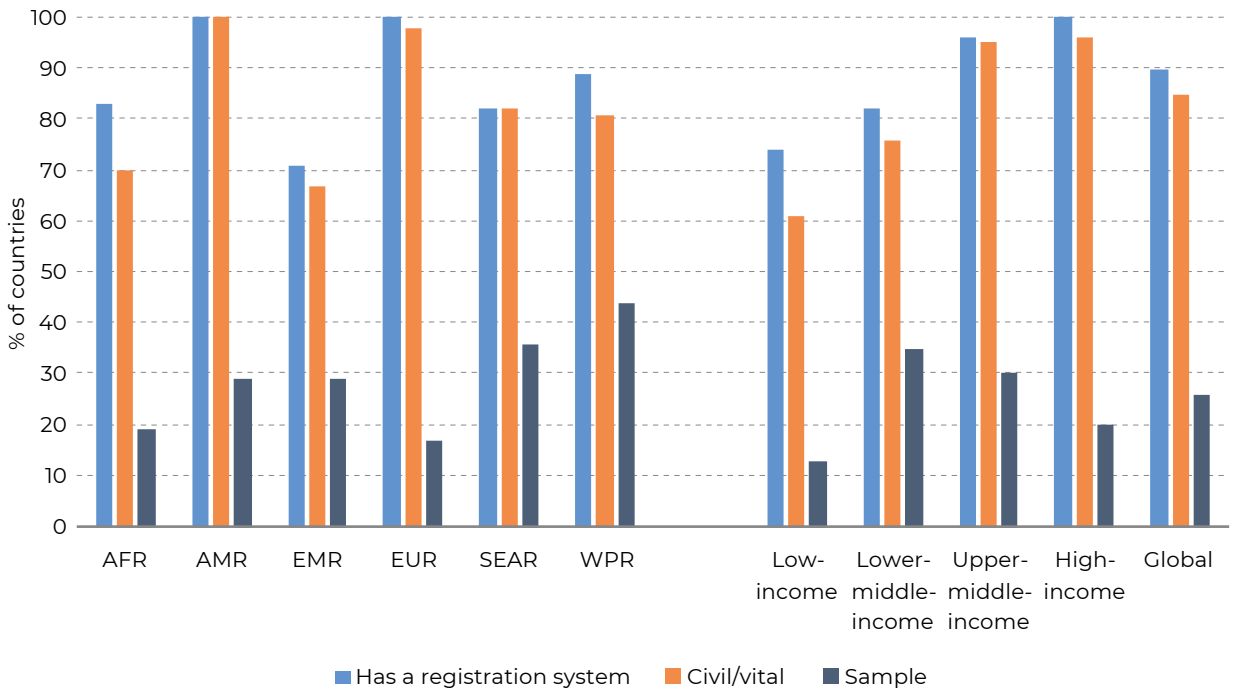
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Civil and vital registration systems reporting mortality by cause

Ninety per cent (90%) of countries reported having a system for collecting mortality data by cause of death on a routine basis, with 100% of high-income and 96% of upper-middle-income countries reporting such a registration system. Across WHO regions, the availability of such a system ranged from a low of 71% of countries in the Eastern Mediterranean Region to a high of 100% of countries in the Region of the Americas and the European Region. Countries were asked to specify whether they had a civil/vital system and/or a sample registration system; the majority (85%) reported having the former. While 50 countries (26%) indicated having a sample registration system for reporting cause of deaths, all but 3 of those countries indicated also having a civil/vital registration system (Figure 19).

Figure 19

Percentage of countries with a system for collecting mortality data by cause of death and the type of registration system, by WHO region and World Bank income group



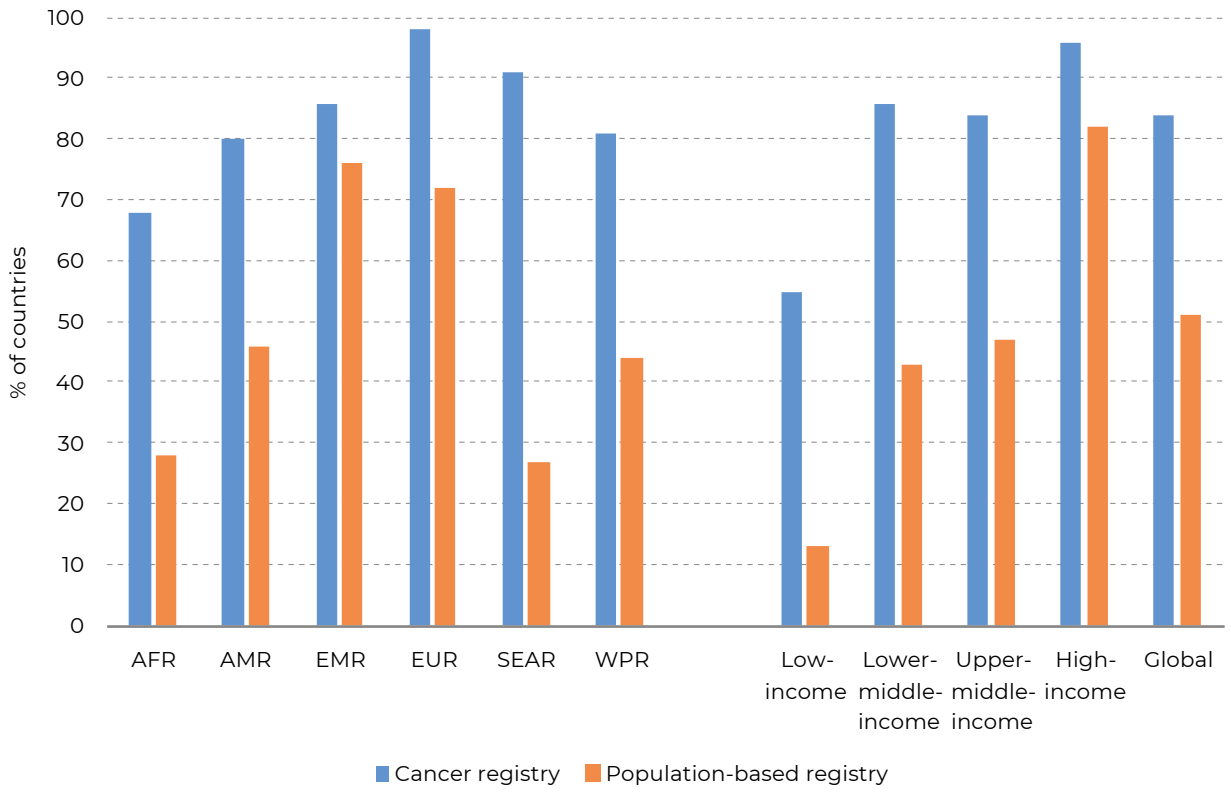
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Cancer registries

While 84% of countries reported having a cancer registry, only half (51%) had a population-based cancer registry. Population-based cancer registries were available in around three quarters of countries in the Eastern Mediterranean Region (76%) and the European Region (72%). Countries in the South-East Asia Region and the African Region reported lower availability, with just over a quarter of countries (27% and 28%, respectively) having this type of registry. While 82% of high-income countries had population-based cancer registries, availability decreased with lower income groups (Figure 20).

Figure 20

Percentage of countries with cancer registries, by WHO region and World Bank income group



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

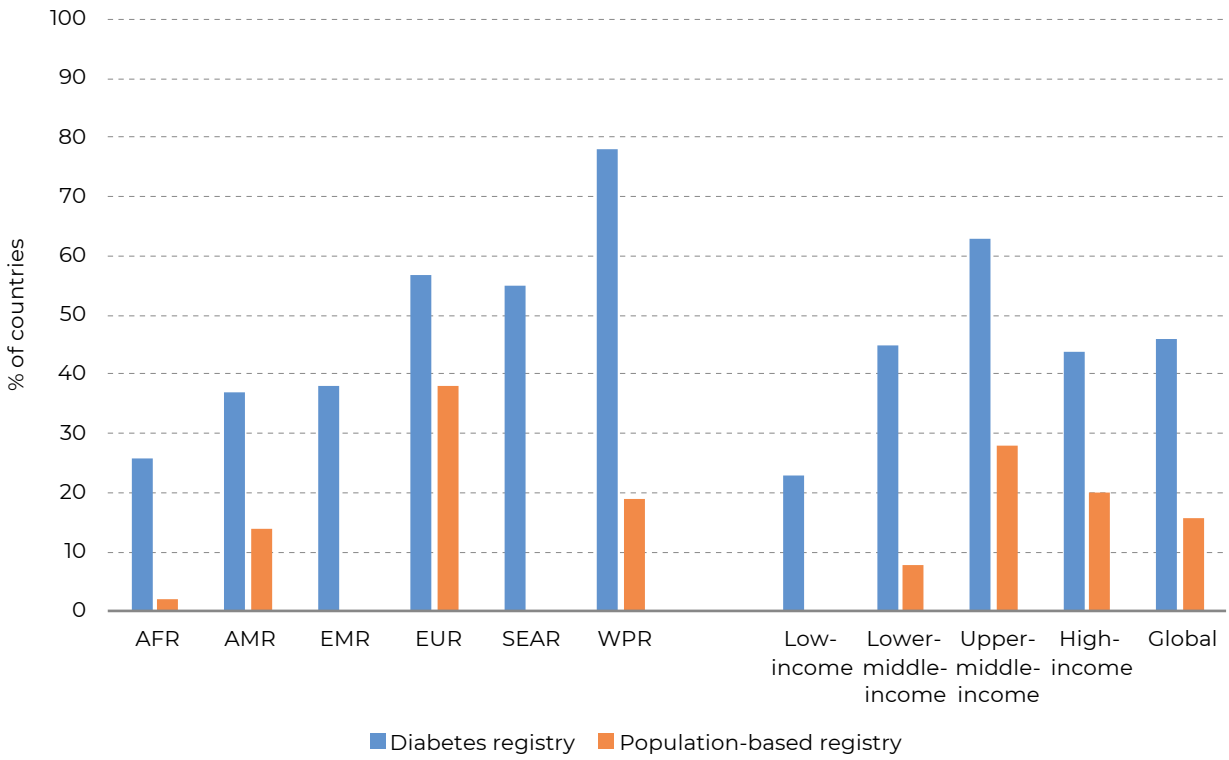
Cancer registries were already widely available in 2010, with 81% of countries reporting having one. Since then, availability has increased slightly to 88% of countries. The existence of population-based cancer registries saw a somewhat greater improvement, from 47–56%, during the seven-year period (2010–2017). All WHO regions observed a general increase in the availability of population-based cancer registries from 2010 to 2017; the exception to this was the South-East Asia Region which remained at 30% for those countries who responded to all four rounds of the survey.

Diabetes registries

Almost half of all countries (46%) reported having a diabetes registry, however only 16% had a population-based registry. The Western Pacific Region reported the highest percentage of countries with a diabetes registry (78%) followed by the European Region (57%). However, more countries in the European Region (38%) reported having population-based diabetes registries than in the Western Pacific Region (19%). The African Region had the lowest prevalence of diabetes registries (26% of countries), with only 1 country having a population-based registry. No countries in the Eastern Mediterranean Region and South-East Asia Region reported having population-based registries. Similarly, no countries in the low-income group reported having population-based diabetes registries. In comparison, at least 1 in 5 upper-middle and high-income countries had population-based diabetes registries (Figure 21).

Figure 21

Percentage of countries with a diabetes registry, by WHO region and World Bank income group



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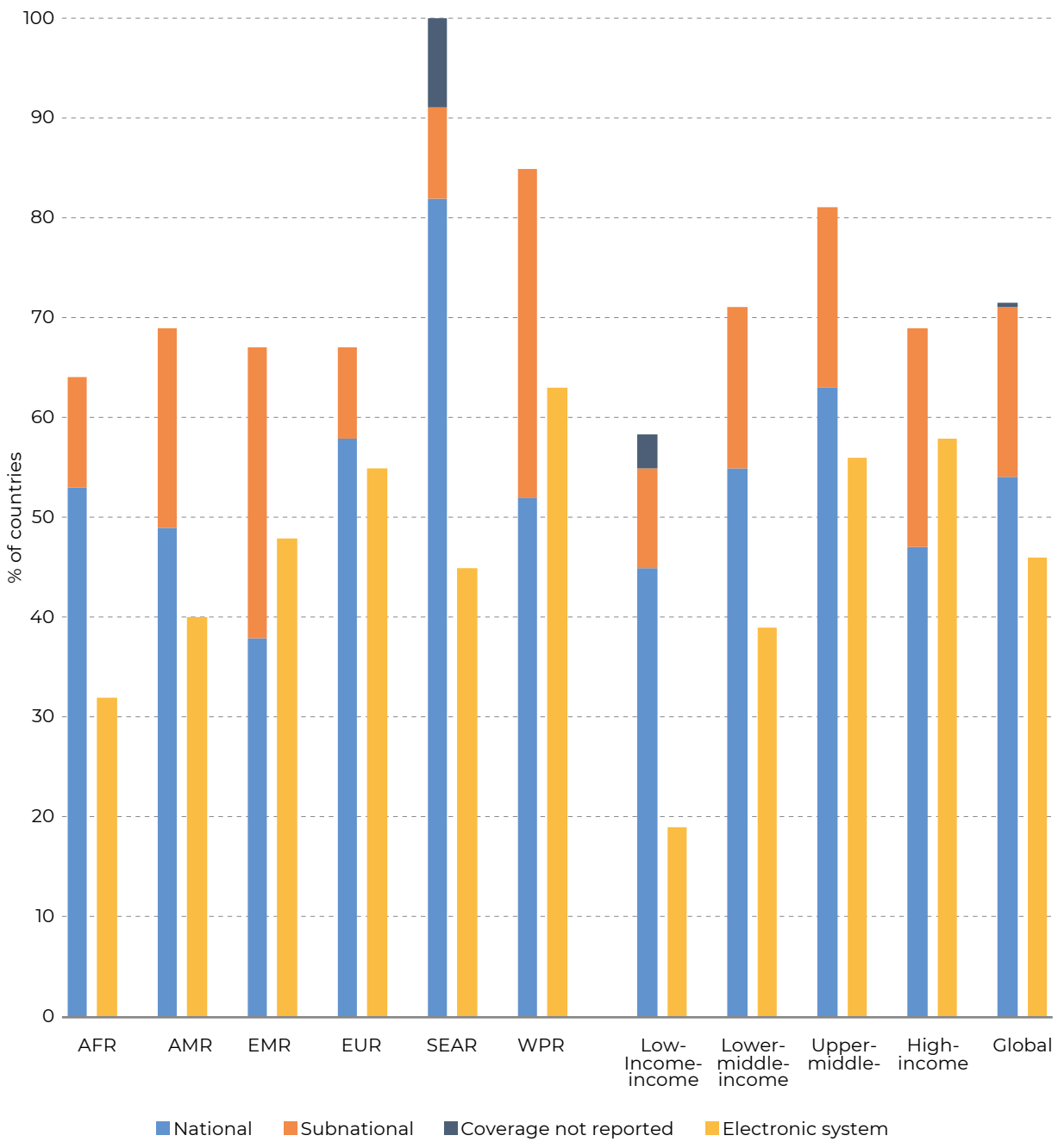
Patient information

Seventy-one per cent (71%) of countries reported having a system for recording patient information that included NCD status. While 100% of countries in the South-East Asia Region reported having such a system, only around two thirds of countries in all other regions (except for the Western Pacific Region with 85% of countries) reported having a patient information system that included NCD status. Upper-middle-income countries were most likely to have such a system (81%) followed by lower-middle-income countries (71%). Of countries with a patient information system that included NCD status, around two thirds stated that this was an electronic medical/health records system; three quarters reported the system had national coverage (Figure 22).

Figure 22

Percentage of countries with a system for recording patient information that includes NCD status, by WHO region and World Bank income group



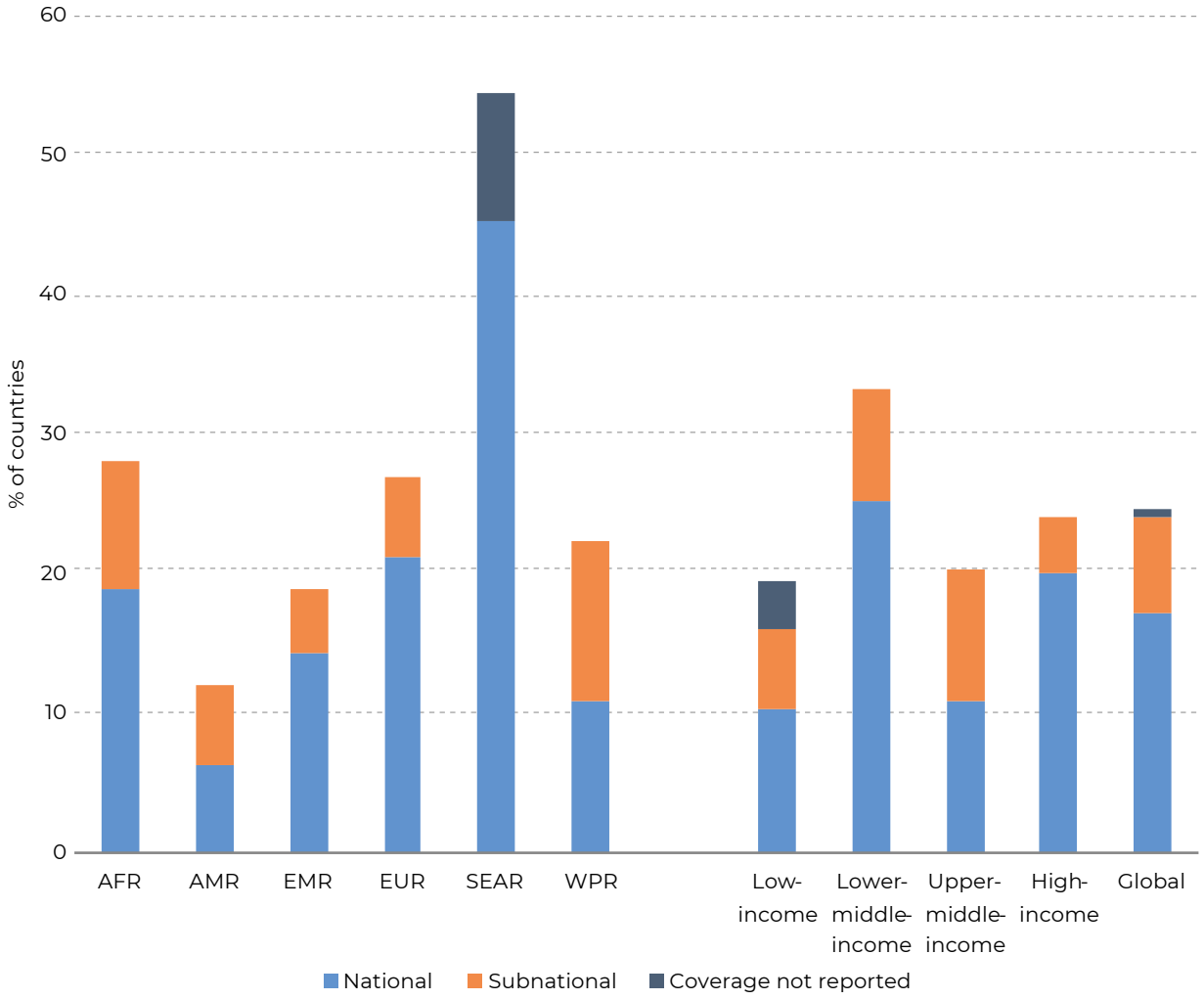
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Service availability and readiness

Approximately a quarter of countries (24%) had conducted a survey of facilities to assess service availability and readiness for NCDs, with just over two thirds of these being national assessments. More than half (55%) of countries in the South-East Asia Region had conducted an assessment, while only 11% of countries in the Region of the Americas had done so. Slightly more countries in the lower-middle-income group had conducted a survey of facilities compared with other income levels (Figure 23).

Figure 23

Percentage of countries that have conducted a survey of facilities to assess service availability and readiness for NCDs, by WHO region and World Bank income group



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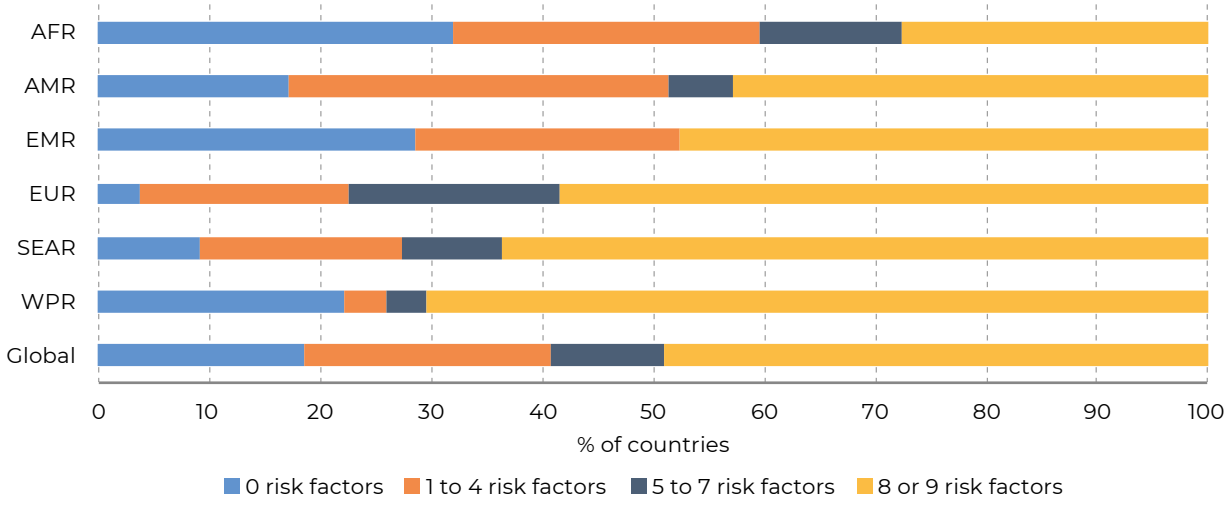
Risk factor surveys

Nineteen per cent (19%) of countries had not conducted any recent (i.e. from 2012 onwards) national adult risk factor surveys; however, nearly half (49%) of countries had conducted recent, national adult surveys for eight or nine of the nine major NCD risk factors: harmful alcohol use; low fruit and vegetable consumption; physical inactivity; tobacco use; overweight and obesity; raised blood pressure; raised blood glucose; raised cholesterol; and sodium intake). The Western Pacific Region, South-East Asia Region and European Region reported that more than half of their countries had conducted recent, national population-based adult risk factor surveys for eight or nine risk factors (Figure 24a). The Eastern Mediterranean Region had slightly fewer countries reporting covering these risk factors in recent, national surveys, however 29% of countries in this region had conducted no surveys. Nearly a third (32%) of countries in the African Region had carried out no recent surveys and only 28% had covered eight or nine risk factors. A positive trend was observed when analysing the data by country income group: an increase in the prevalence of surveys conducted covering eight or nine risk factors was associated with higher income groups. In the low-income group, 42% of countries had carried out no recent adult risk factor surveys, compared with 13–16% of middle- and high-income countries (Figure 24b).

Figure 24

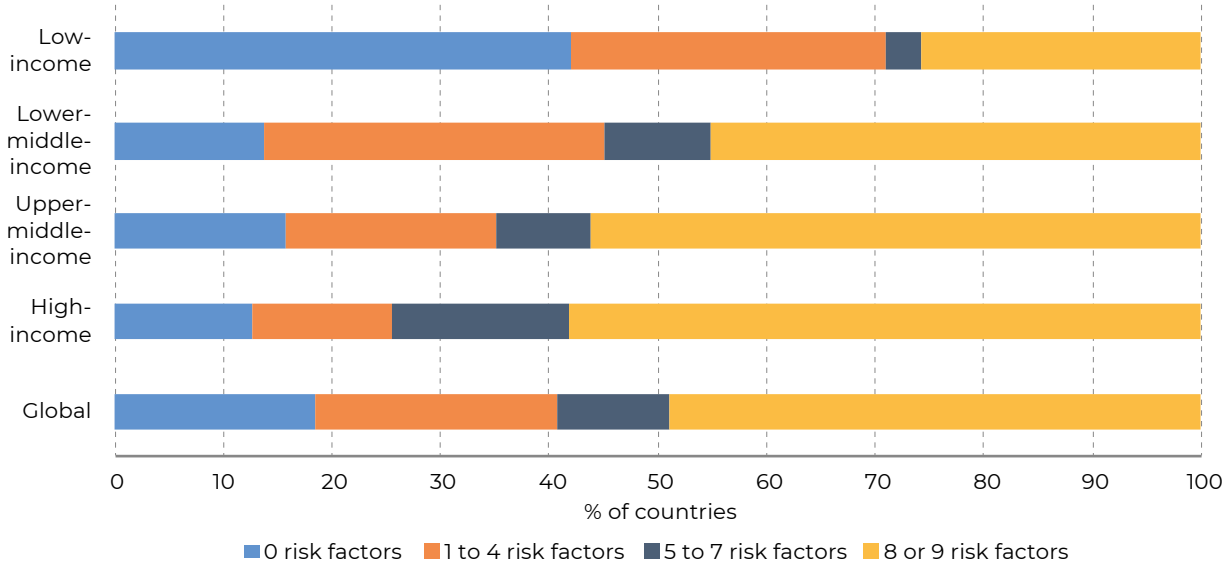
Percentage of countries covering 0–9 risk factors in recent, national adult NCD risk factor surveys

a) By WHO region



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

b) By World Bank income group



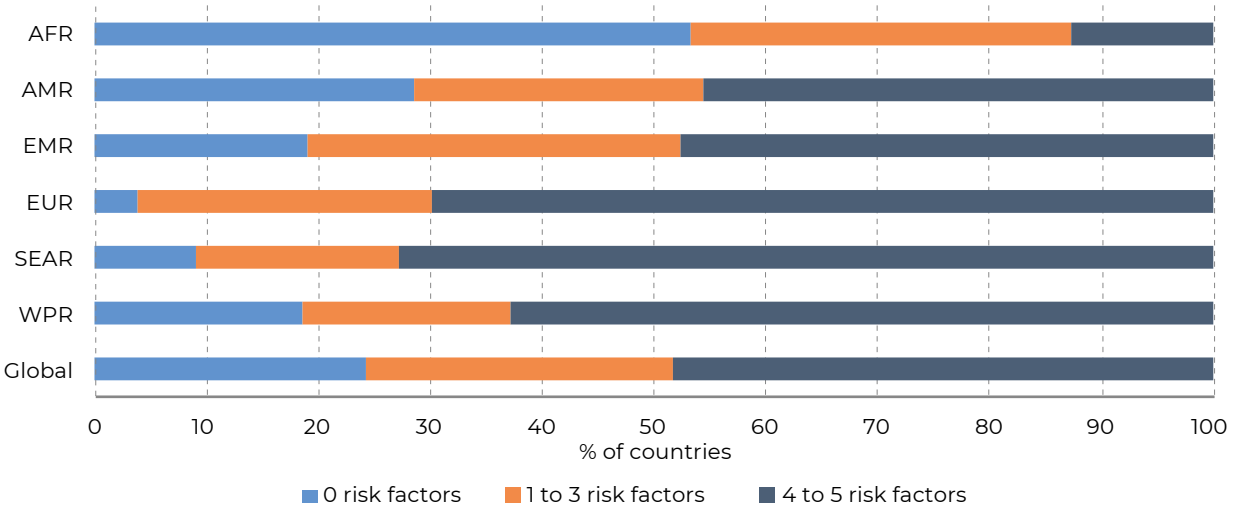
The situation was similar for adolescent risk factor surveillance activities, for which five risk factors were considered (harmful alcohol use, low fruit and vegetable consumption, physical inactivity, tobacco use, and overweight and obesity). Some 24% of countries reported having conducted no recent, national adolescent risk factor surveys, and almost half of countries (48%) had covered four or five risk factors in recent, national surveys. Most countries in the South-East Asia Region (73% of countries) and European Region (70% of countries) had covered four or five of the main risk factors in recent national surveys; likewise, 63% of countries in the Western Pacific Region. Adolescent risk factor surveillance was weakest in the African Region, with just over half of countries reporting no recent surveillance activity among adolescents, and only 13% of countries covering four or five risk factors in recent, national surveys. Progress remains to be made in the Eastern Mediterranean Region and Region of the Americas where two thirds or more of countries had conducted recent surveys, but fewer than half had covered four or five risk factors (Figure 25a). As observed in

adult risk factor surveillance, there was a clear positive trend in increasing adolescent risk factor surveillance activity that corresponded to increased country income group: 16% of low-income countries had covered four or five risk factors in recent, national surveys compared with 73% of high-income countries (Figure 25b).

Figure 25

Percentage of countries covering 0–5 risk factors in recent, national adolescent NCD risk factor surveys

a) By WHO region



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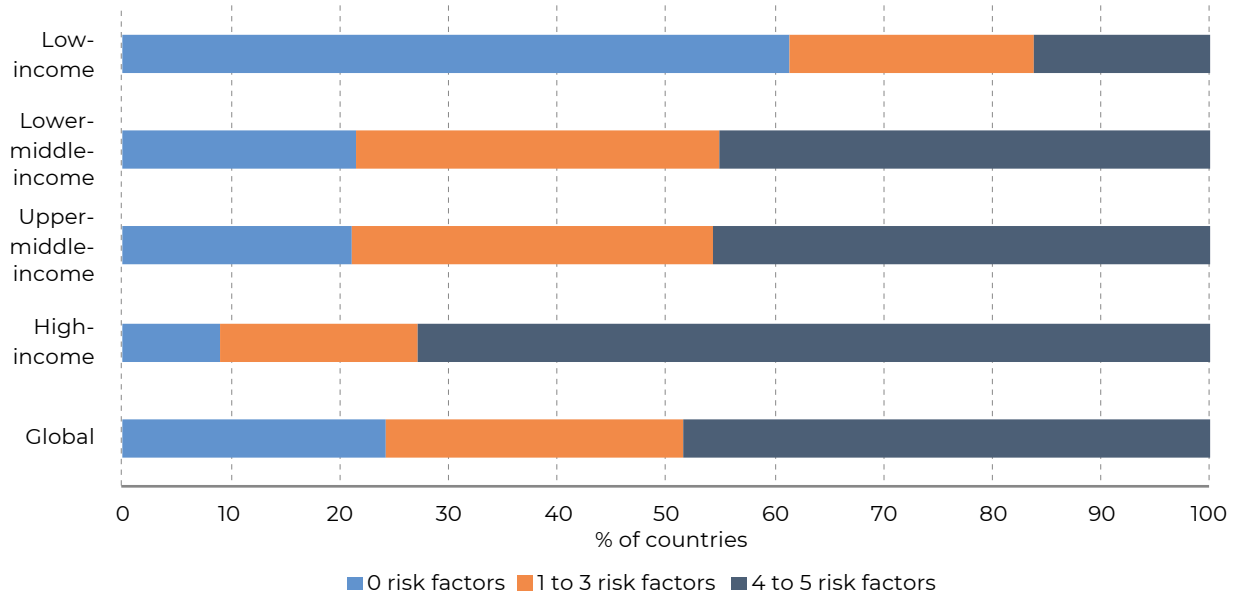
b) By World Bank income group

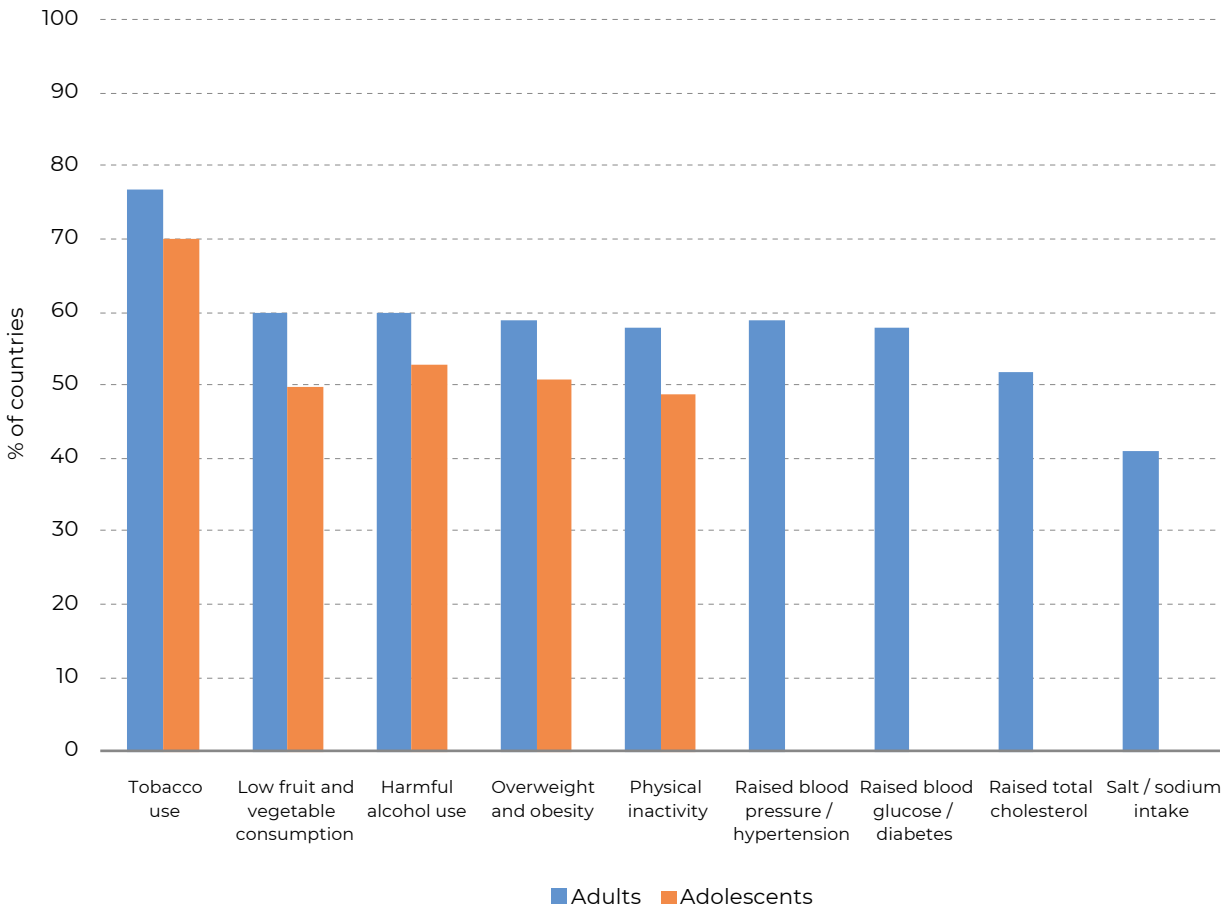


When comparing the results of surveillance activity among adults and adolescents, tobacco use was the most addressed NCD risk factor: 77% of countries reported having collected recent, national data among adults, and 70% among adolescents. Surveillance of salt/sodium

intake was the least addressed among adults, with only 41% of countries reporting recent, national surveillance of this risk factor. Among adolescents, physical inactivity was the least addressed risk factor, with only 49% of countries reporting recent, national surveillance, although this was only slightly less than for all the other risk factors, except for tobacco use. Recent, national data on the remaining risk factors among adults were collected in 52–60% of countries (Figure 26).

Figure 26

Percentage of countries that have conducted recent, national adult or adolescent risk factor surveys, by risk factor

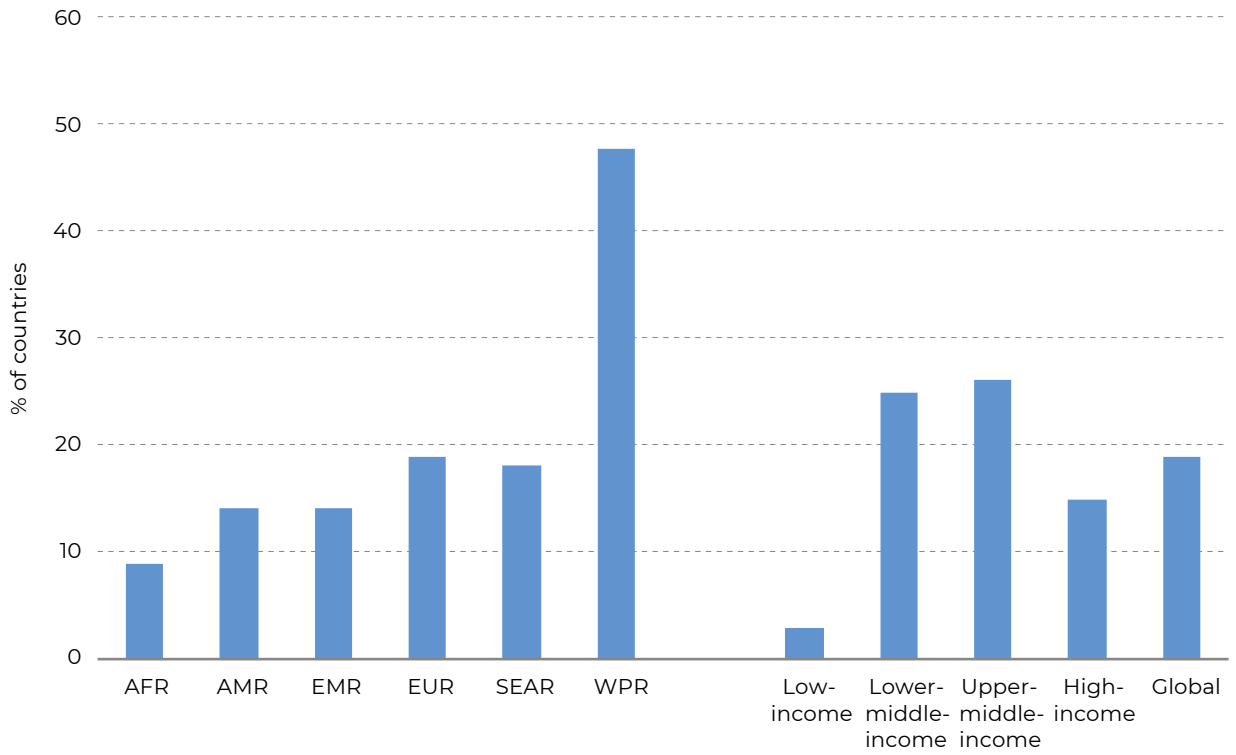


The set of 10 NCD progress monitoring indicators (see Box 2) includes indicator 3, which stipulates that each Member State conduct a STEPS survey[8] or a comprehensive health examination survey every five years. To fully achieve this indicator, a country had to indicate that they had conducted a recent survey (i.e. within the past five years) on adults for all NCD risk factors (with the exception of raised total cholesterol and low fruit and vegetable consumption), and that the survey was conducted regularly (i.e. "every 1 to 2 years" or "every 3 to 5 years"). Only 19% of countries fully achieved this indicator, a third of which were in the Western Pacific Region. Five, or fewer, countries in all regions, except for the European Region and Western Pacific Region, fully achieved this indicator and only a single low-income country. Middle-income countries had the highest rate, with approximately a quarter of countries fully achieving the indicator (Figure 27).

8 See: http://www.who.int/ncds/surveillance/steps/en/

Figure 27

Percentage of countries that have fully attained progress monitoring indicator 3, on regular health examination surveys, by WHO region and World Bank income group



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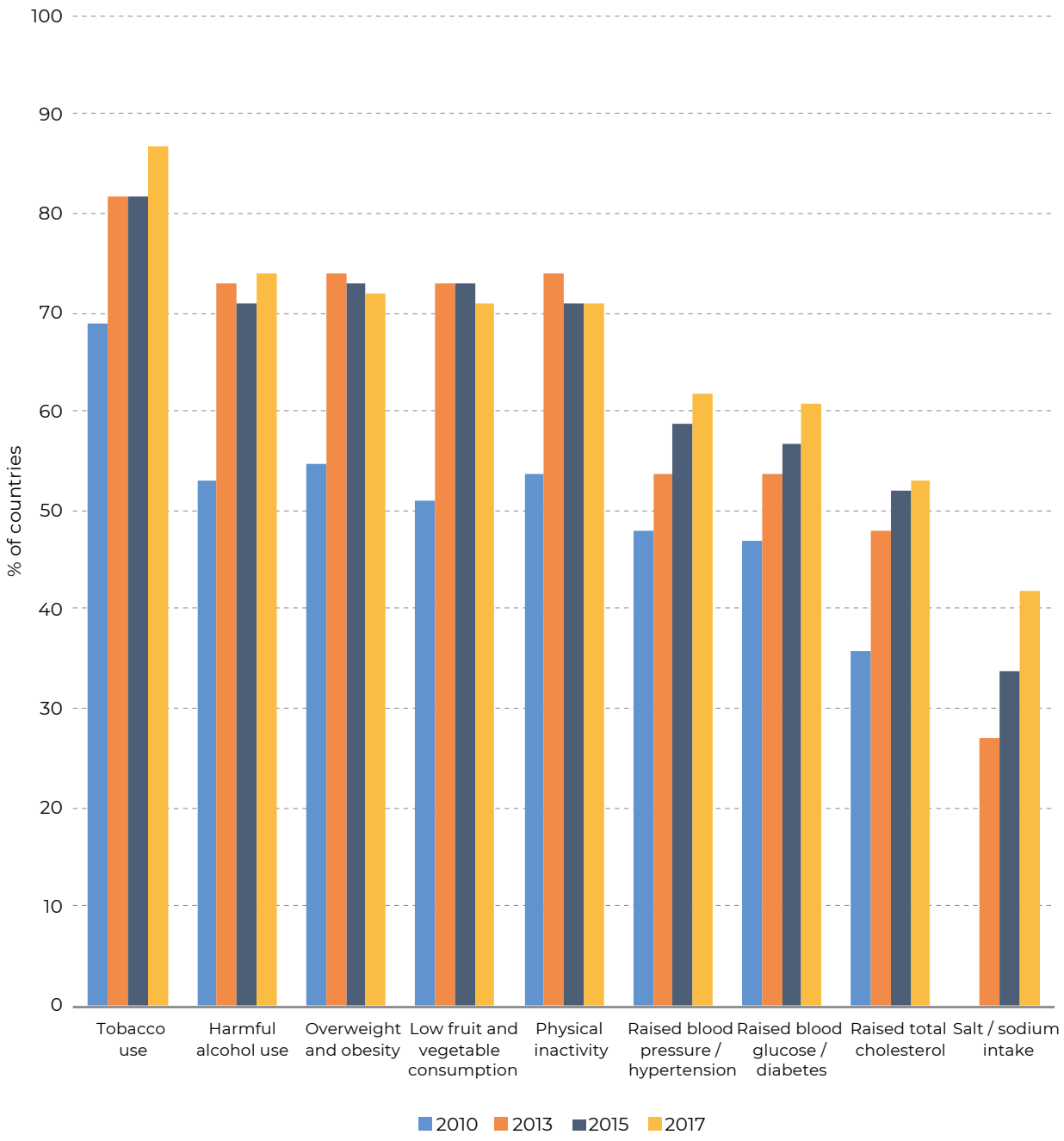
Since 2010, an increasing trend is evident in the number of countries implementing recent (i.e. in the five years leading up to each survey round) national surveys for each of the nine major NCD risk factors in the general population. Overall, the greatest progress was seen in surveys covering harmful alcohol use (53% of countries in 2010 compared with 74% in 2017), followed by surveys addressing low fruit and vegetable consumption, tobacco use, overweight and obesity, physical inactivity and raised total cholesterol. Progress in the surveillance of salt and sodium intake can only be compared since 2013, since this risk factor was not included in the 2010 survey. However, since 2013, surveillance of this risk factor has increased considerably (27% of countries in 2013 compared with 42% in 2017) (Figure 28).

Figure 28

Percentage of countries* that have conducted recent, national risk factor surveys in the general population, 2010, 2013, 2015 and 2017

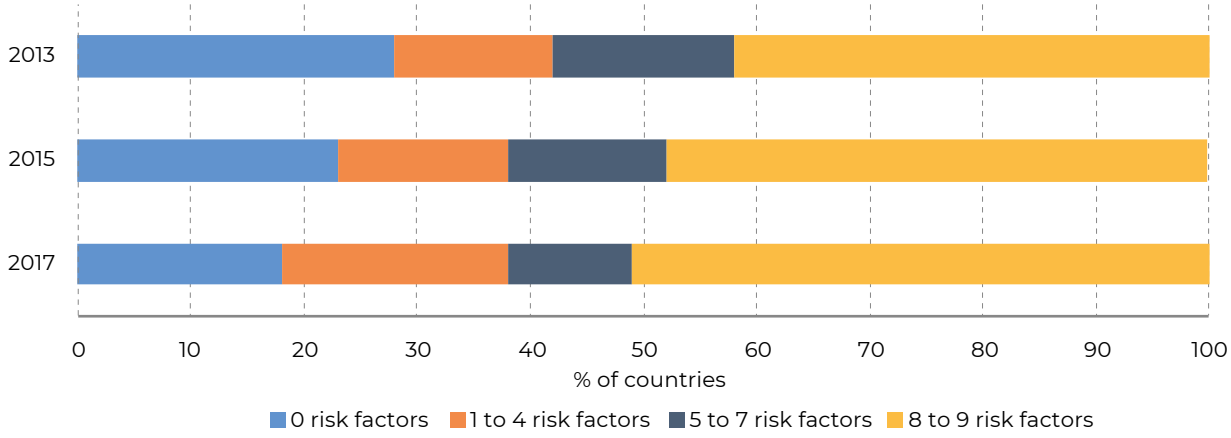


** of 160 countries that responded to all 4 surveys*

The NCD CCS questionnaire has captured details on adult versus adolescent risk factor surveillance since 2013 only. A positive trend in the breadth of adult risk factor surveys has been apparent since 2013 (Figure 29), with more countries covering greater numbers of risk factors. The pattern for adolescent risk factor surveillance, however, is not as marked (Figure 30). The percentage of countries covering all, or nearly all, nine risk factors has remained stable, but there has been a slight decrease in the percentage of countries that have not collected data on any risk factors, and a corresponding increase in the percentage that have covered one to three risk factors in recent, national surveys.

Figure 29

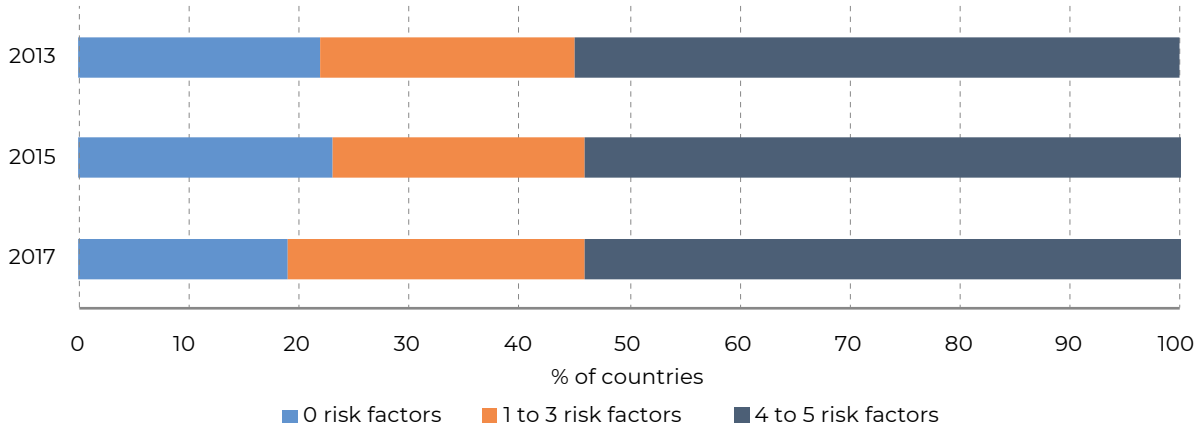
Percentage of countries* that have conducted recent, national adult risk factor surveys, 2013, 2015 and 2017



** of 160 countries that responded to all 3 surveys.*

Figure 30

Percentage of countries* that have conducted recent, national adolescent risk factor surveys, 2013, 2015 and 2017



** of 160 countries that responded to all 3 surveys.*

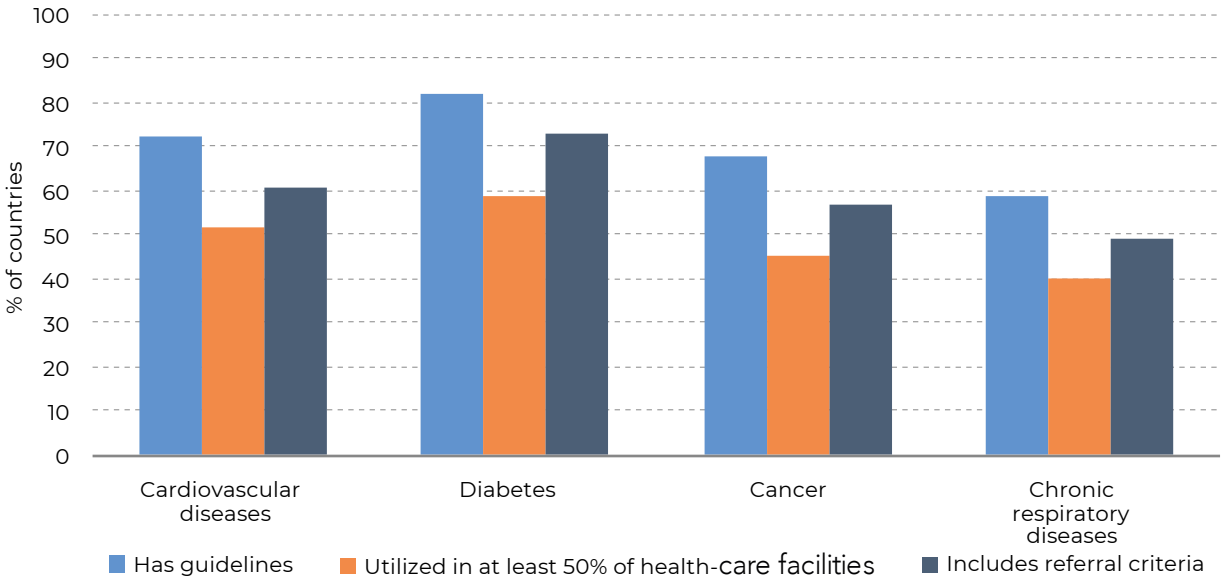
HEALTH SYSTEMS CAPACITY

NCD-related guidelines and referral criteria

Countries were asked if they had evidenced-based national guidelines/protocols/standards available for the management of each of the four main NCDs through a primary care approach recognized or approved by government or competent authorities. Where guidelines existed, countries were asked if the guideline(s) were utilized in at least 50% of health-care facilities; when the guidelines were last updated; and whether or not the guidelines include referral criteria. While the majority of countries had guidelines for each of the four main NCDs, guidelines for diabetes were the most prevalent, with 82% of countries reporting having these in place. Guidelines for cardiovascular diseases and cancer were also widely available (in 72% and 68% of countries, respectively). Only 59% of countries reported having guidelines for chronic respiratory diseases. Among those countries who reported having guidelines available for each NCD, approximately two thirds reported that the guidelines were utilized in at least 50% of health facilities, while more than 80% reported that the guidelines included referral criteria (Figure 31). Fewer countries from the low-income group had utilized guidelines for each NCD (guidelines for chronic respiratory diseases being the least widely available), compared with countries from other income groups. The upper-middle-income group reported the most utilized guidelines for each NCD, with diabetes guidelines being the most widely available (70% of countries).

Figure 31

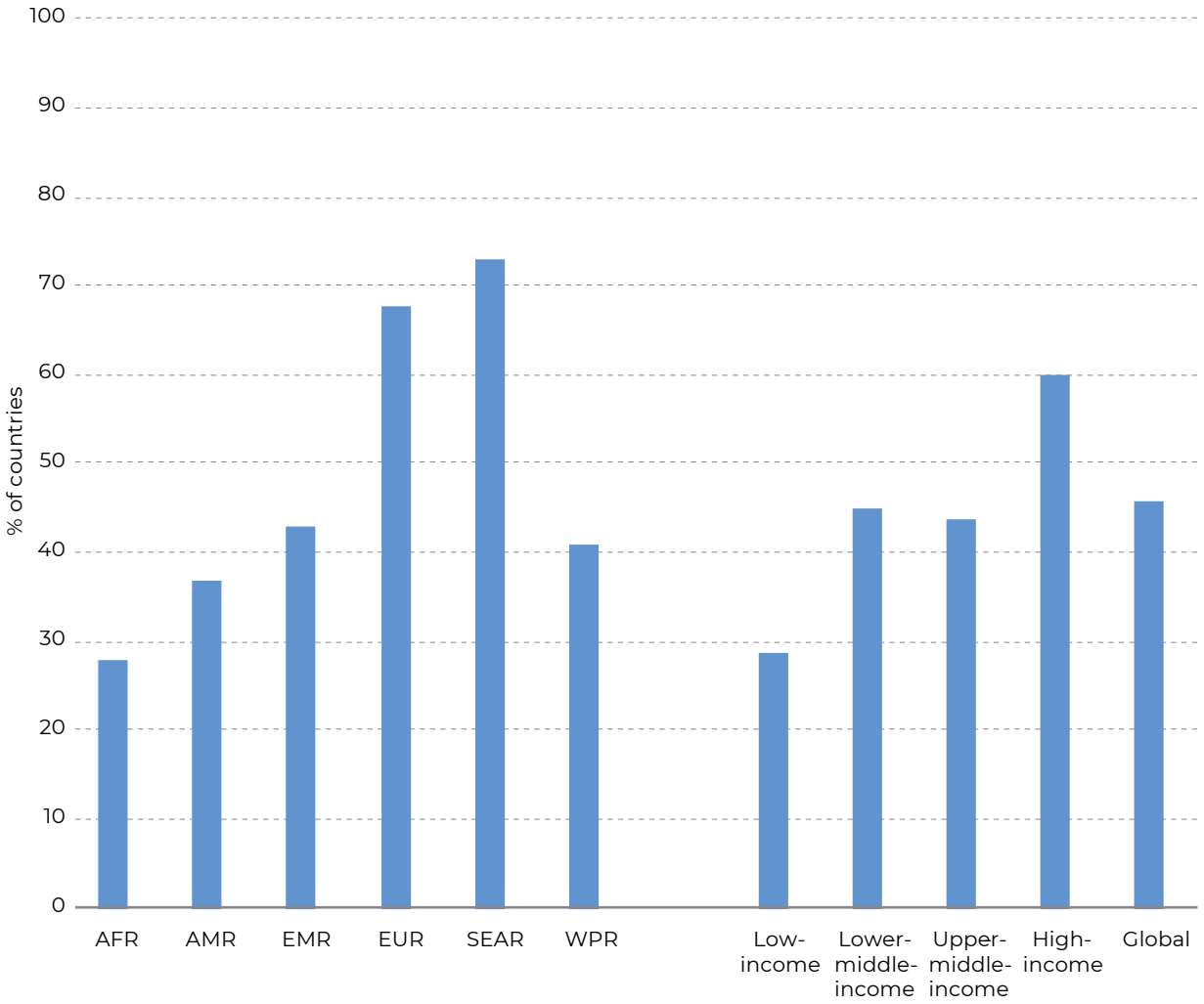
Percentage of countries that have evidenced-based national guidelines/protocols/standards for each of the four main NCDs, and whether the standard guidelines/protocols/standards are utilized in at least 50% of health-care facilities and include referral criteria



Indicator 9 of the NCD progress monitoring indicators refers to the availability of evidence-based national guidelines for the four main NCDs (see Box 2). In order to achieve this indicator, a country needed to have guidelines available for all four of these NCDs. Almost half of countries (46%) achieved this indicator, with achievement rates highest in the South-East Asia (73%) and European Regions (68%) and lowest in the African Region (28%). Across income ranges, high-income countries achieved the highest rate (60%) with less than a third of low-income countries (29%) achieving the indicator (Figure 32).

Figure 32

Percentage of countries with guidelines for all four main NCDs (progress monitoring indicator 9), by WHO region and World Bank income group



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Cancer screening programmes

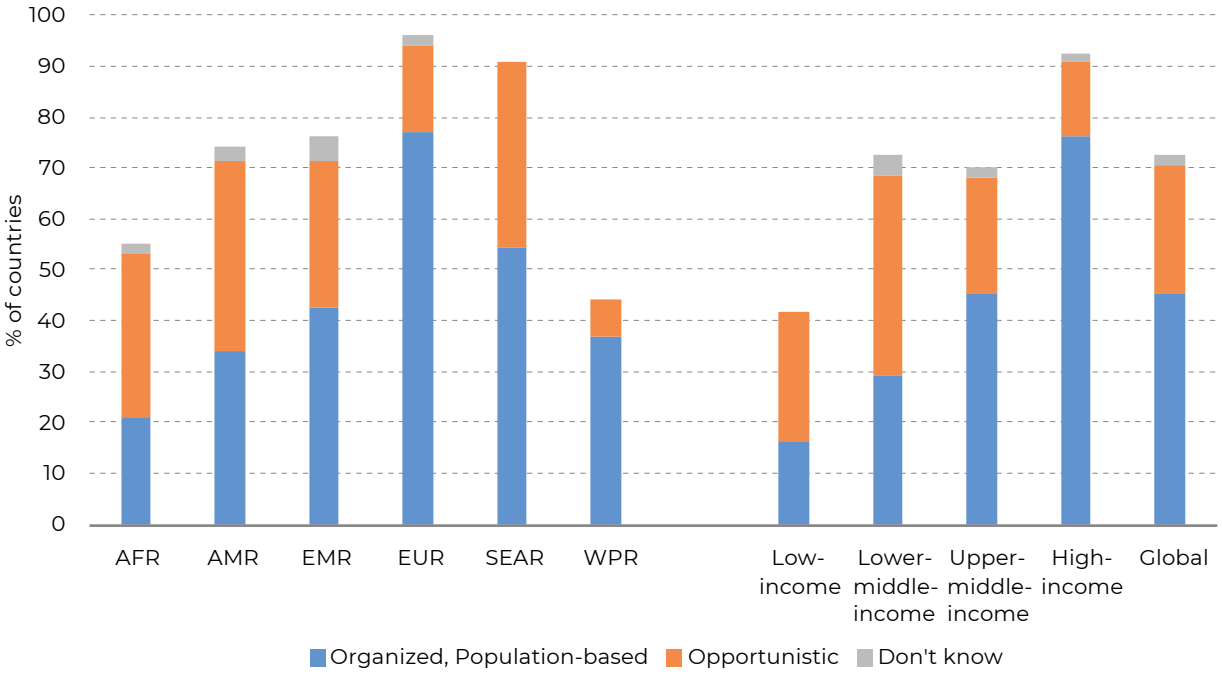
Breast cancer screening

Nearly three quarters (73%) of countries globally reported having a breast cancer screening programme, including 93% of high-income countries and 42% of low-income countries. All but 2 countries in the European Region (96% of countries), and all but 1 country in the South-East Asia Region (91% of countries) reported having a national breast cancer screening programme. However, the availability of such programmes was markedly lower in the Western Pacific Region (44%) and African Region (55%). Globally, more countries reported having programmes that were organized and population-based (45%) than opportunistic (25%). However, low- and lower-middle-income groups had more countries reporting opportunistic programmes (Figure 33a). Countries also reported the coverage of their screening programmes. Only 11% of countries responded that their breast screening programmes reached 70% or more of the target population, and 10% reached more than 50% but less than 70%; thus the majority of programmes reached 50% or less of their target population (Figure 33b).

Figure 33

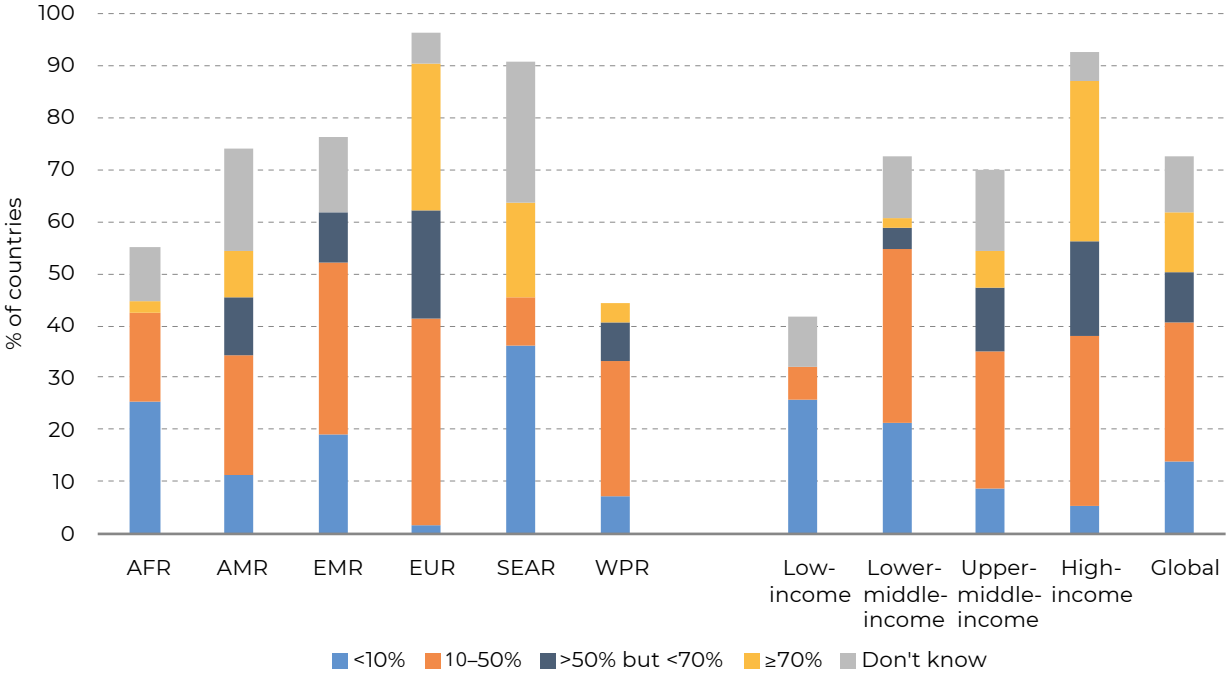
Percentage of countries with a breast cancer screening programme, the type of screening programme, and percentage of screening coverage, by WHO region and World Bank income group

a) Breast cancer screening by type of screening



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

b) Breast cancer screening by screening coverage



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

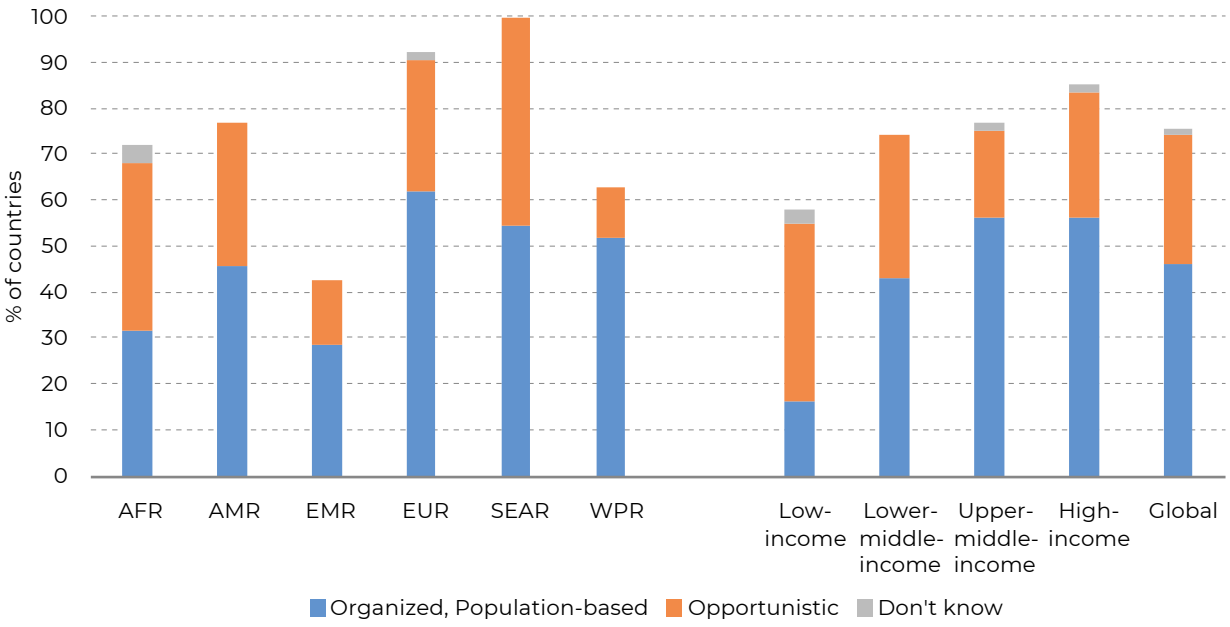
Cervical cancer screening

Just over three quarters (76%) of countries reported having cervical cancer screening programmes in place; about a third of these were opportunistic. As indicated in Figure 34a, the increasing trend of available cervical cancer screening programmes was associated with higher income groups. The same trend was observed with types of screening programmes, where population-based screening programmes were increasingly available with rising income group. Cervical cancer screening programmes – organized and opportunistic – were available in the majority of countries within all regions, except for the Eastern Mediterranean Region (43% of countries). Regarding coverage level of cervical cancer screening programmes, countries most frequently reported that their screening programme reached 10–50% of the target population (just over a third of reported programmes). Only 22 countries (11%), globally, reported cervical cancer screening programmes reaching 70% or more of the population, with most of these in the high-income group or from the European Region or Region of the Americas. Most screening programmes that covered less than 10% of the target population were reported in the African Region and among countries in the low- and lower-middle income groups (Figure 34b).

Figure 34

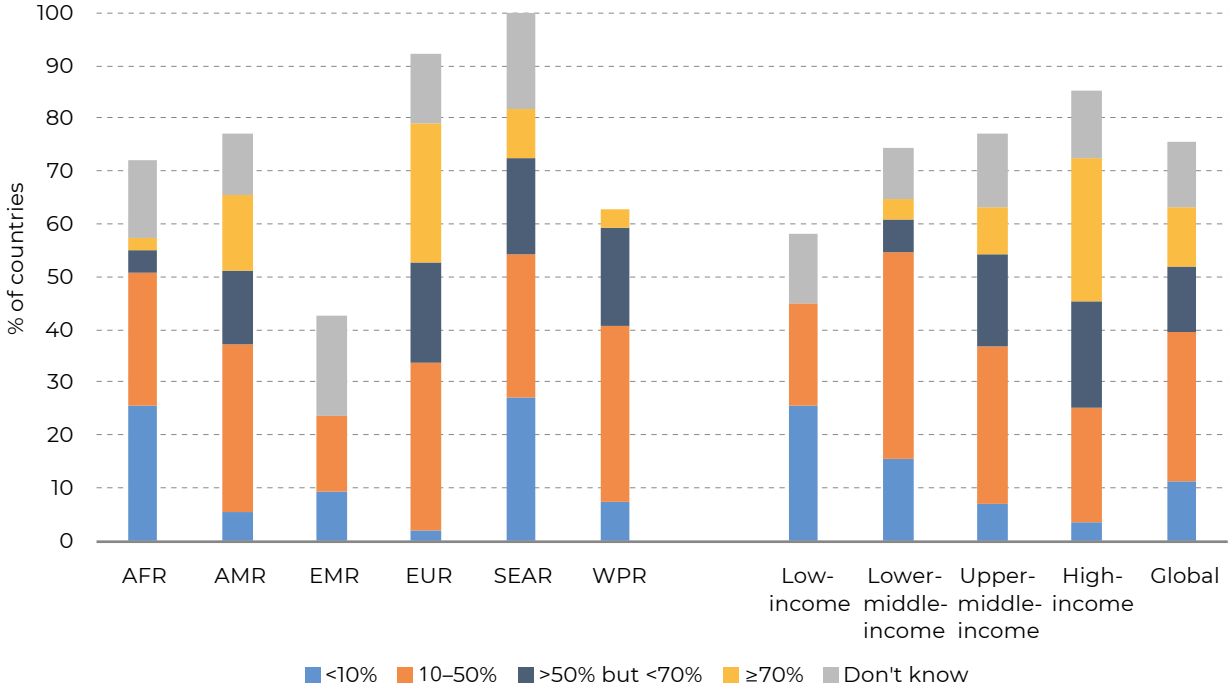
Percentage of countries with a cervical cancer screening programme, the type of screening programme, and percentage of screening coverage, by WHO region and World Bank income group

a) Cervical cancer screening by type of screening



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

b) Cervical cancer screening by screening coverage



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

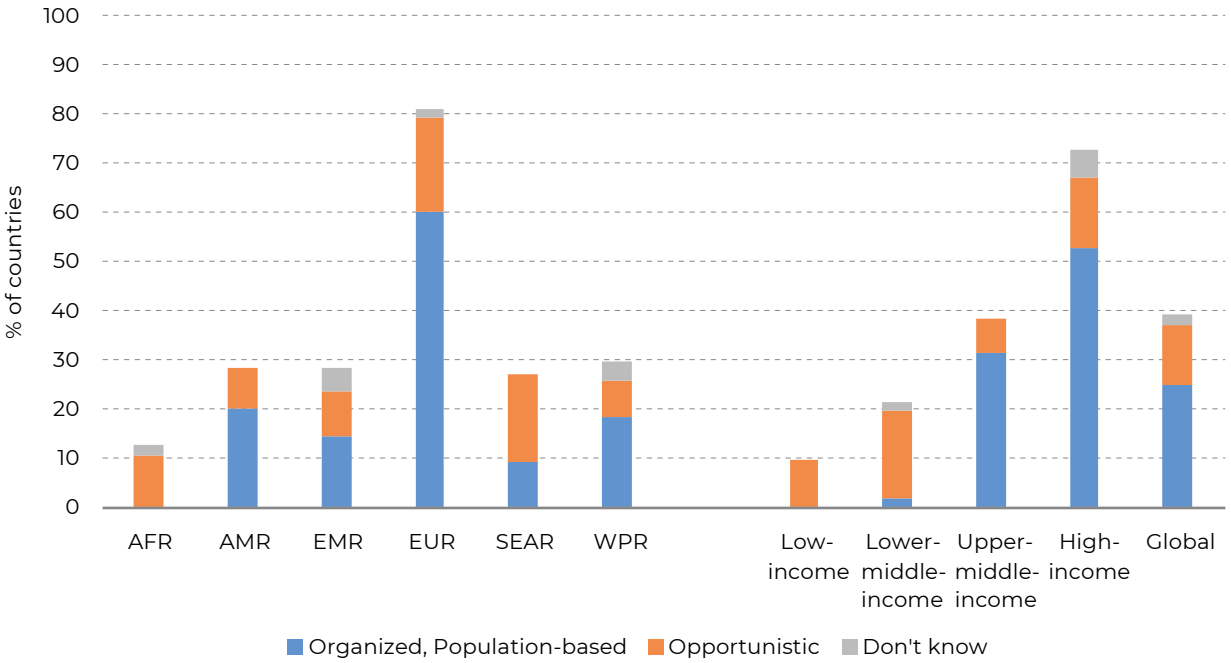
Colon cancer screening

Thirty-nine per cent (39%) of countries reported having a colon cancer screening programme in place, the majority among countries in the high-income group (40 of 76 countries with programmes) or in the European Region (43 of 76 countries with programmes), compared with only 3 low-income countries. Two thirds of countries with programmes had organized, population-based programmes, although no countries in either the African Region or in the low-income group had this type of screening programme (Figure 35a). In general, coverage of programmes was low among all regions and income groups: most countries with programmes reported a coverage of less than 10% or 10–50% and only 4 countries in total (all from the European Region) had programmes reaching more than 70% of the target population (Figure 35b).

Figure 35

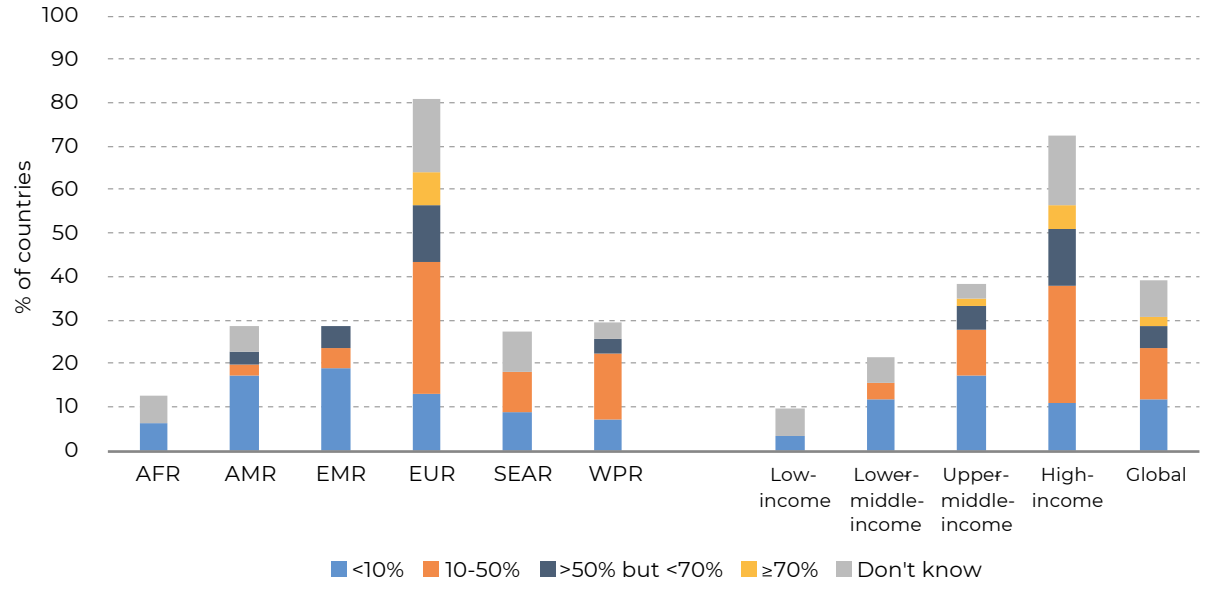
Percentage of countries with a colon cancer screening programme, the type of screening programme, and percentage of screening coverage, by WHO region and World Bank income group

a) Colon cancer screening by type of screening



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

b) Colon cancer screening by screening coverage



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

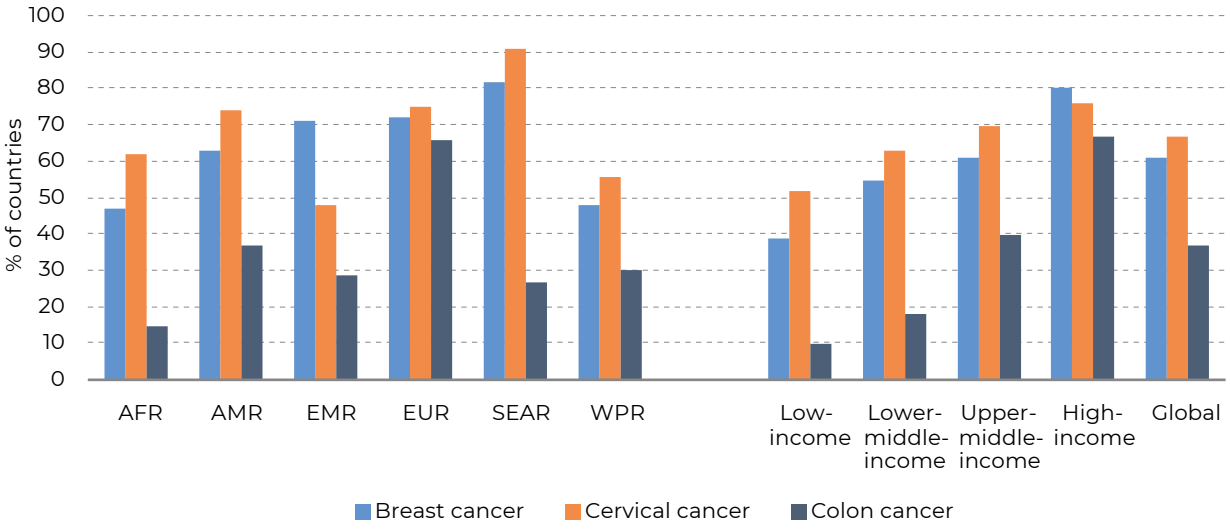
Diagnosis guidelines and referral systems for cancer

Although more than half of countries had programmes or guidelines to strengthen early diagnosis of breast and cervical cancer by means of rapid identification of the first symptoms at the primary health-care level, only 37% of countries had these for colon cancer. Early diagnosis programmes/guidelines for cervical cancer were more common among all regions and income groups, except for the Eastern Mediterranean Region and high-income countries, where breast cancer programmes/guidelines were more widespread (Figure 36). Two thirds (66%) of countries in the European Region had early detection programmes/guidelines for colon cancer, the most of all regions, compared with 15% of countries in the African Region. For all three cancer types, the prevalence of early detection programmes/guidelines increased with higher income groups.

The majority of countries had clearly defined referral systems from primary care to secondary/tertiary care for suspected breast and cervical cancer cases (60% and 65% of countries, respectively) (Figure 37). For suspected colon cancer cases, 44% of countries had such referral systems in place. Countries in the South-East Asia Region reported the highest prevalence (82% of countries) of breast cancer referral systems, while the African Region reported the lowest (38%). With the exception of the Eastern Mediterranean Region, more than half of countries in all regions had referral systems in place for cervical cancer cases. Regarding referral systems for colon cancer cases, the European Region was the only region to have had more than half of countries with clearly defined referral systems (72% of countries). Increasing prevalence of referral systems for all cancer types was found to correspond with increasing income group.

Figure 36

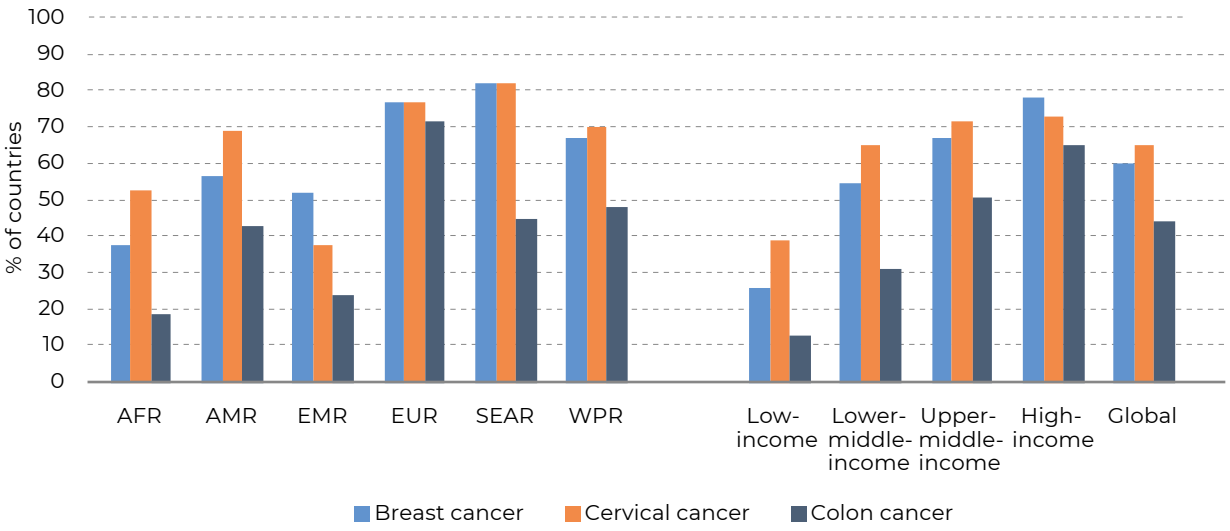
Percentage of countries with early detection programmes/guidelines to strengthen early diagnosis of cancer symptoms at the primary health-care level



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Figure 37

Percentage of countries with a clearly defined referral system from primary care to secondary and tertiary care for suspect cancer cases



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

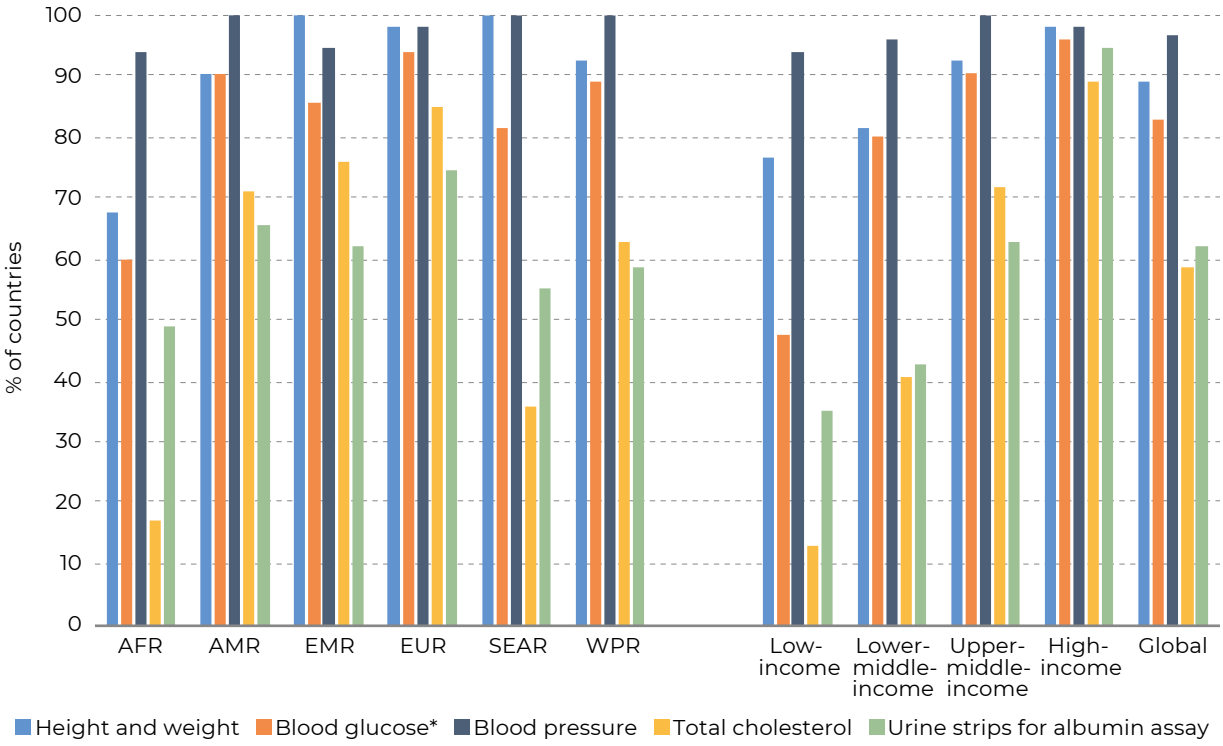
Availability of tests and procedures for early detection, diagnosis and monitoring of NCDs

Many basic technologies for the early detection, diagnosis and monitoring of NCDs were reported as being generally available in primary care facilities (i.e. available in 50% or more facilities) in the public health sector: 97% for blood pressure measurement; 89% for height and weight measurement; and 83% for blood glucose measurement. Urine strips for glucose and ketone measurement, urine strips for albumin assay, and total cholesterol measurement were also reported as being generally available (71%, 62%, and 59%, respectively) by most countries. However, for the remainder of the basic technologies, fewer than half of countries reported them as being generally available: HbA1c (45% of countries); dilated fundus examination (41%); foot vibration perception by tuning fork (41%); peak flow measurement spirometry (39%); and foot vascular status by Doppler (24%).

The six essential technologies for the early detection, diagnosis and monitoring of NCDs include height, weight, blood glucose, blood pressure, total cholesterol and urine strips for albumin assay. The general availability of the six essential basic technologies is shown in Figure 38 by WHO region and World Bank income group (height and weight are combined). Blood pressure measurement was widely available across all regions and income groups, with only 5 countries worldwide not reporting that it was generally available. Height and weight measurement, although widely reported as generally available, was markedly less available in the African Region and among low-income countries. Availability of total cholesterol measurement and urine strips for albumin assay was highly variable: these were generally available in 89% and 95%, respectively, of high-income countries, but consistently fewer countries in the middle- and low-income groups reported general availability. With the exception of blood pressure testing among countries in the high-income group, a positive trend of greater availability with increasing income group was observed. While the vast majority (85%) of high-income countries reported that all six essential technologies were generally available, only 2 low-income countries (6%) reported that all six were generally available, and a further 4 low-income countries (13% of countries in the income group) reported that five of the six were generally available.

Figure 38

Percentage of countries with availability of essential technologies for early detection, diagnosis, and monitoring of NCDs in the primary care facilities of the public and private health sector, by WHO region and World Bank income group



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

** Blood glucose measurement or oral glucose tolerance test*

Availability of medicines in the public health sector

Countries were requested to indicate the availability of basic medicines required for the treatment of NCDs in the primary care facilities of the public health sector. Medicines were described as generally available if they were available in 50% or more of pharmacies. All 10 essential medicines for the management of the leading NCDs were generally available in the majority of countries (Table 6): thiazide diuretics and aspirin (100 mg) were the most readily available medicines (available in 90% and 88% of countries, respectively), whereas statins and steroid inhalers were least likely to be reported as generally available (66% and 58% of countries, respectively). Calcium channel blockers and ACE inhibitors were shown to be readily available in high-income countries (100% of countries), while only 39% and 45%, respectively, of low-income countries had these.

Countries were also asked to report on the availability of benzathine penicillin injection and sulphonylurea (both generally available in more than 70% of countries), as well as oral morphine (32% of countries) and nicotine replacement therapy (only 29% of countries), the only two medications not generally available in the majority of countries. With a few exceptions, most of the essential NCD medicines were generally available in less than half of the low-income countries, with statins and steroid inhalers being the most rare. Steroid inhalers were generally available in 2 countries only in the South-East Asia Region and less than a quarter of countries in the African Region. All but 2 high-income countries (96% of countries in the income group) reported that all 10 essential medicines were generally available, while a single low-income country reported that all 10 were generally available. Most low-income countries (55%) had four or fewer of the 10 essential medicines generally available.

Table 6

Percentage of countries with medicines generally available in primary care facilities of the public health sector, by WHO region and World Bank income group

		Beta Blockers*	Statins*	Oral morphine	Steroid inhaler*	Broncho-dilator*	Sulphonyl-urea(s)	Benza-thine penicillin injection
WHO Region	AFR	47	34	19	23	53	43	72
	AMR	89	71	29	71	83	80	80
	EMR	76	57	0	57	71	71	76
	EUR	98	94	57	89	96	94	87
	SEAR	100	55	0	18	82	45	82
	WPR	89	70	48	59	81	81	78
World Bank income group	Low-income	39	16	6	6	39	29	71
	Lower-middle-income	75	49	8	35	73	55	76
	Upper-middle-income	89	77	33	70	86	88	81
	High-income	100	98	67	96	96	96	85
ALL		80	66	32	58	78	72	79

		Insulin*	Aspirin (100 mg)*	Met-formin*	Thiazide Diuretics*	ACE Inhibitors*	CC Blockers*	Nicotine replace-ment
WHO Region	AFR	47	72	62	81	53	47	9
	AMR	83	89	91	94	91	89	17
	EMR	71	81	86	81	76	71	24
	EUR	94	100	96	100	98	96	64
	SEAR	55	91	82	91	64	73	0
	WPR	67	93	89	89	81	81	26
World Bank income group	Low-income	39	74	58	81	45	39	6
	Lower-middle-income	51	80	73	80	65	67	12
	Upper-middle-income	84	89	95	95	91	84	18
	High-income	98	100	98	100	100	100	69
ALL		72	88	84	90	79	77	29

AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

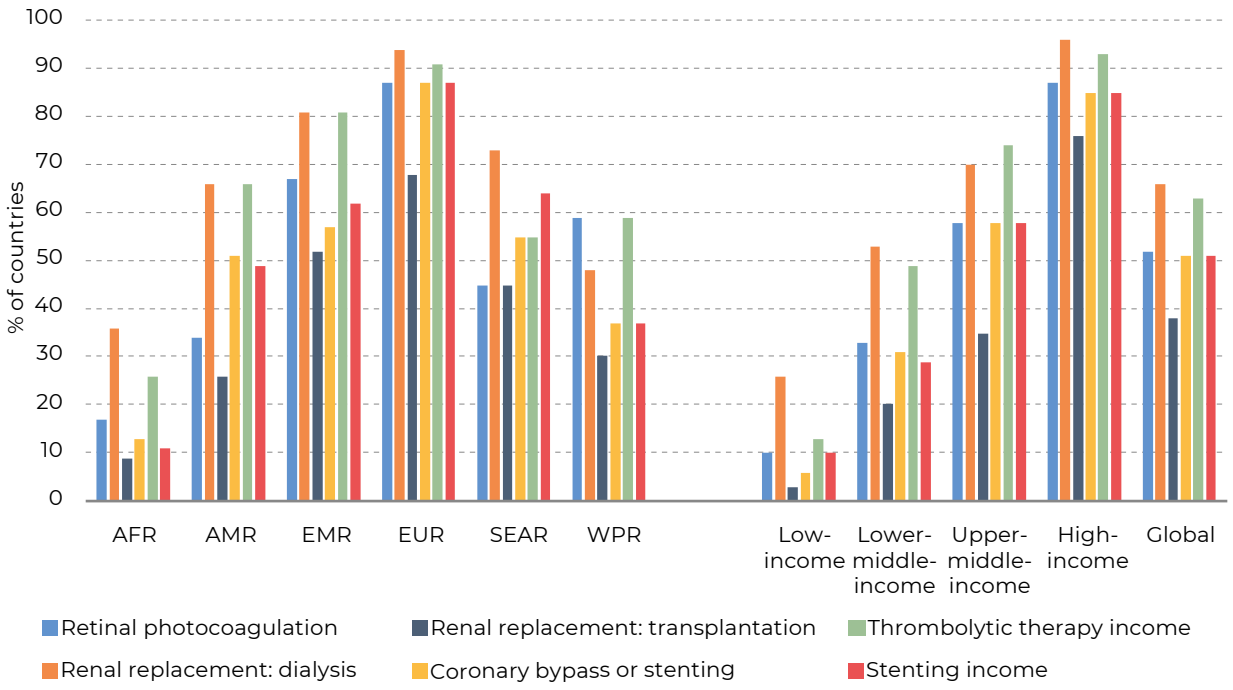
** Essential NCD medicine*

Procedures for treating NCDs

In the survey questionnaire, countries were asked whether or not a selection of procedures for treating NCDs were generally available in the publicly funded health system – "generally available" being defined as treatment procedures reaching 50% or more patients in need (Figure 39). Globally, renal replacement by dialysis (66% of countries) and thrombolytic therapy (63%) were most widely available, while renal replacement by transplantation was generally available in the fewest countries (38%). Three quarters of countries (75% or more) in the high-income group reported all six listed treatments being generally available while approximately the same percentage of low-income countries (74%) reported that none of the procedures were generally available. Across the six WHO regions, the African Region had the lowest availability of all the selected procedures, with percentages ranging from 9–36% of countries, whereas procedures were most widely available in the European Region (68–94% of countries) and Eastern Mediterranean Region (52–81% of countries).

Figure 39

Percentage of countries with procedures generally available for treating NCDs in the public health-care system, by WHO region and World Bank income group



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

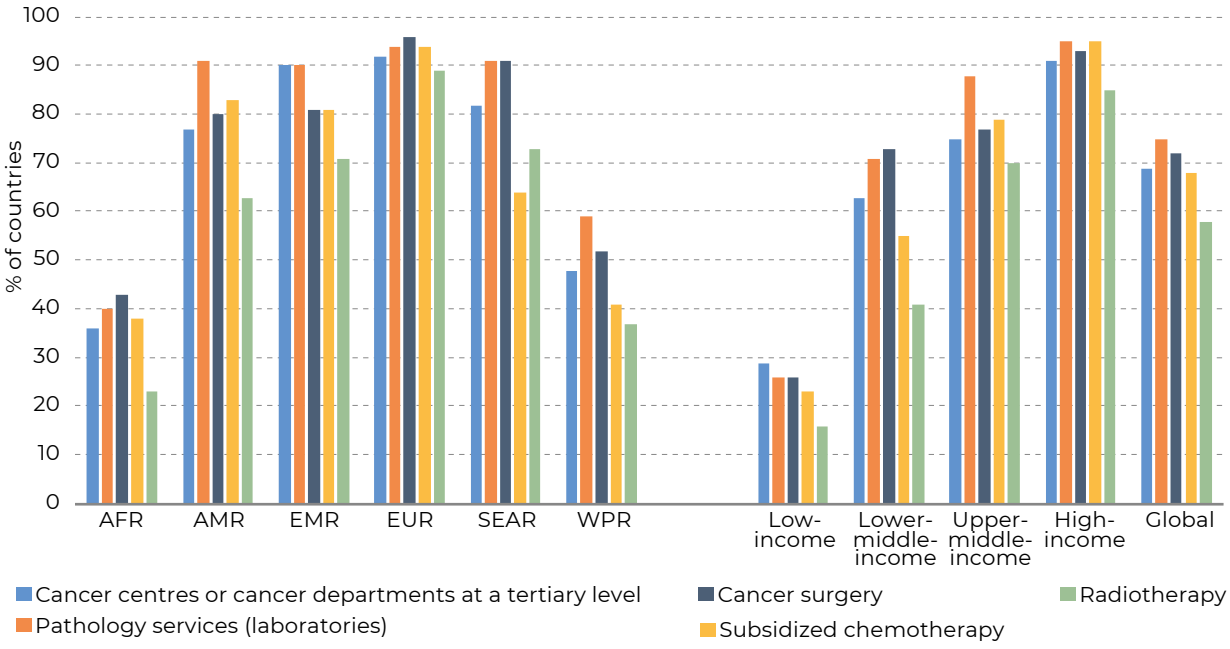
Cancer diagnosis and treatment

Countries indicated the availability of cancer diagnosis and treatment services in the public health sector; "generally available" was defined as services reaching 50% or more of the patients in need. Pathology services were widely available in the public health sector in three quarters (75%) of countries, with at least 90% reporting generally availability in all regions except the Western Pacific (59%) and African (40%) Regions. Cancer surgery was also commonly available (72% of countries) followed by cancer centres or cancer departments at the tertiary level (69% of countries) and subsidized chemotherapy (68%). Radiotherapy services were less commonly available with 58% of countries reporting general availability. A distinct positive trend in income group was observed for all five cancer diagnosis and treatment services: greater availability of

services being associated with higher income groups (Figure 40). While at least 60% of countries in the Region of the Americas, Eastern Mediterranean Region, European Region and South-East Asia Region reported that each of the five services was generally available, fewer than 60% of countries in the remaining two regions reported that each of the services was generally available.

Figure 40

Percentage of countries with generally available cancer diagnosis and treatment services in the public sector, by WHO region and World Bank income group



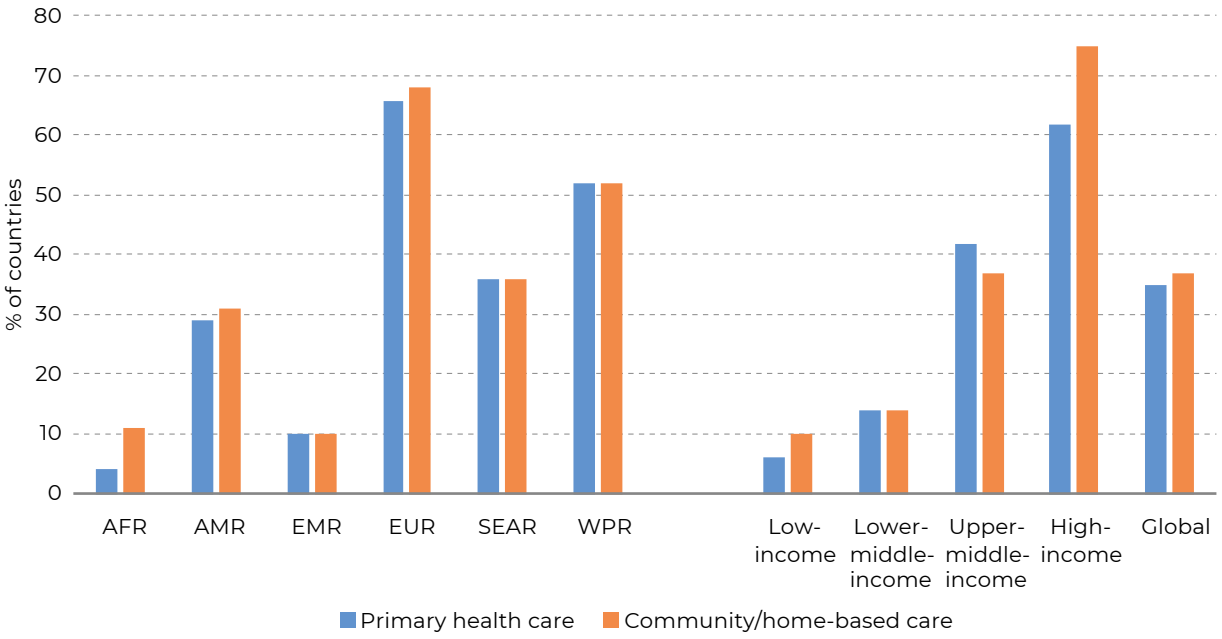
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Palliative care

Countries were also asked to indicate if palliative care (both in primary health care and in community- or home-based care) for patients with NCDs in the public health system reached at least 50% of patients in need (i.e. was "generally available"). Approximately one third of countries responded that palliative care was generally available in both primary health-care facilities (35%) and community- or home-based care (37%). Palliative care was most widely available in the European Region, where two thirds of countries reported that it was generally available in each setting. Just over half the countries in the Western Pacific Region reported that palliative care was generally available in each setting. Among the remaining four regions, palliative care in a primary health-care setting was generally available in just over a third of countries in the South-East Asia Region, just under a third of countries in the Region of the Americas and in only 2 countries in each of the African and Eastern Mediterranean Regions. In the African Region and Region of the Americas palliative care was slightly more available in a community- or home-based care setting. The availability of palliative care increased markedly with income group: only 2 or 3 low-income countries offered palliative care in primary health-care or community-/home-based care settings, while nearly two thirds to three quarters of high-income countries offered palliative care in these settings (Figure 41).

Figure 41

Percentage of countries with palliative care generally available in a primary health-care setting or community- or home-based care, by WHO region and World Bank income group



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Cardiovascular risk stratification

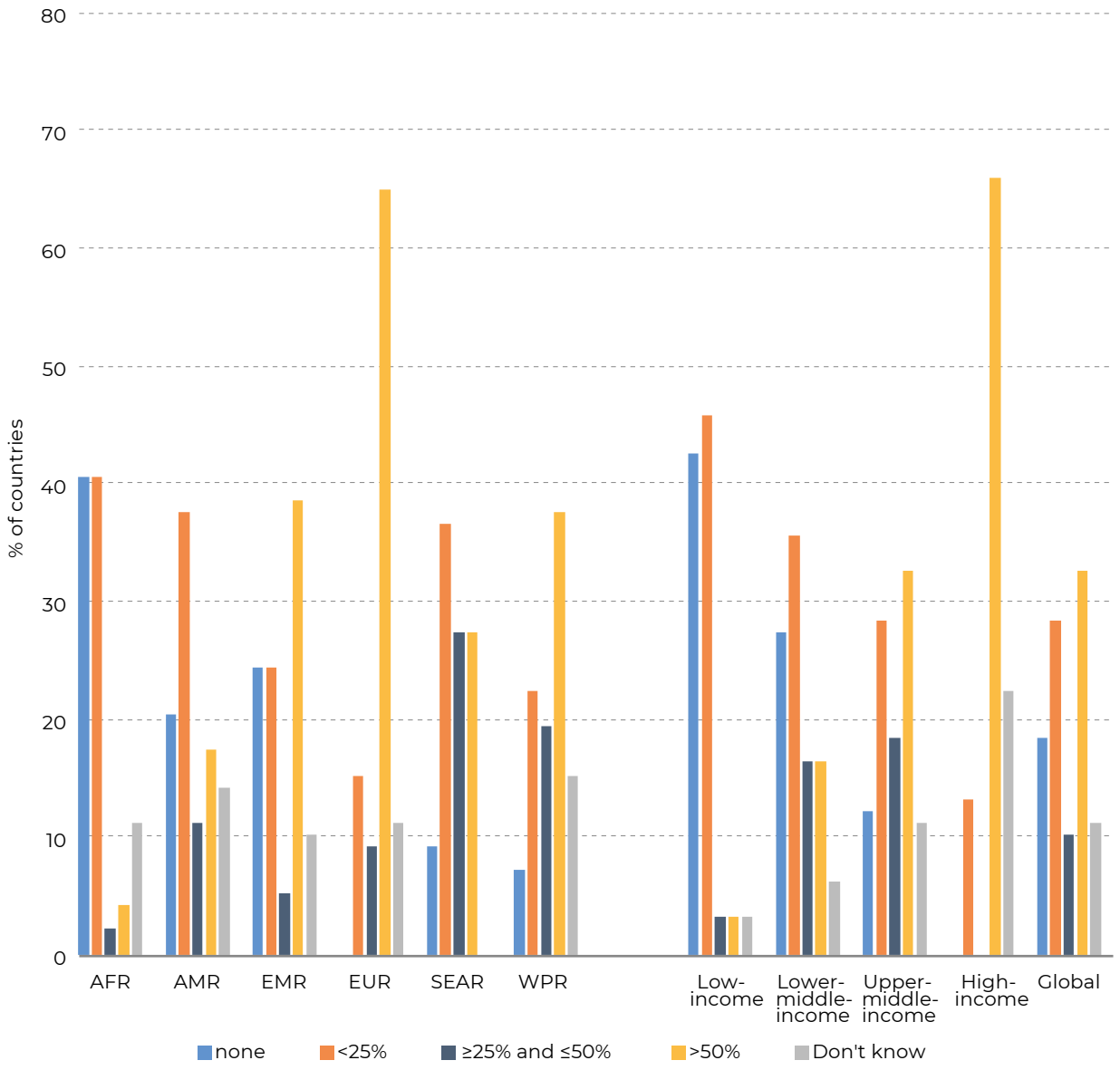
While 11% of countries were unable to report the availability of cardiovascular risk stratification in primary health-care facilities, approximately a third (32%) reported that more than 50% of primary health-care facilities were offering this service for the management of patients at high risk of heart attack and stroke. Most of these were countries in the high-income or upper-middle-income group. Low-income countries, however, widely reported that either no risk stratification was offered (42%) or that the risk stratification was available in less than 25% of primary health-care facilities (45%). With the exception of the European Region, which had a clear majority of countries reporting that risk stratification was available in more than 50% of health-care facilities, and the African Region, which had a clear majority of countries reporting that risk stratification is either not available at all, or only in less than 25% of health-care facilities, the availability of risk stratification varied considerably within each region (Figure 42).

Of the 137 countries that indicated they conduct cardiovascular risk stratification, just over half (55%) used the WHO/ISH prediction charts[9]; 31% used a different type of cardiovascular disease risk stratification and 13% did not know what specific type they used.

9 See: http://www.who.int/cardiovascular_diseases/guidelines/Chart_predictions/en/

Figure 42

Percentage of primary health-care facilities offering cardiovascular risk stratification for the management of patients at high risk for heart attack and stroke, by WHO region and World Bank income group



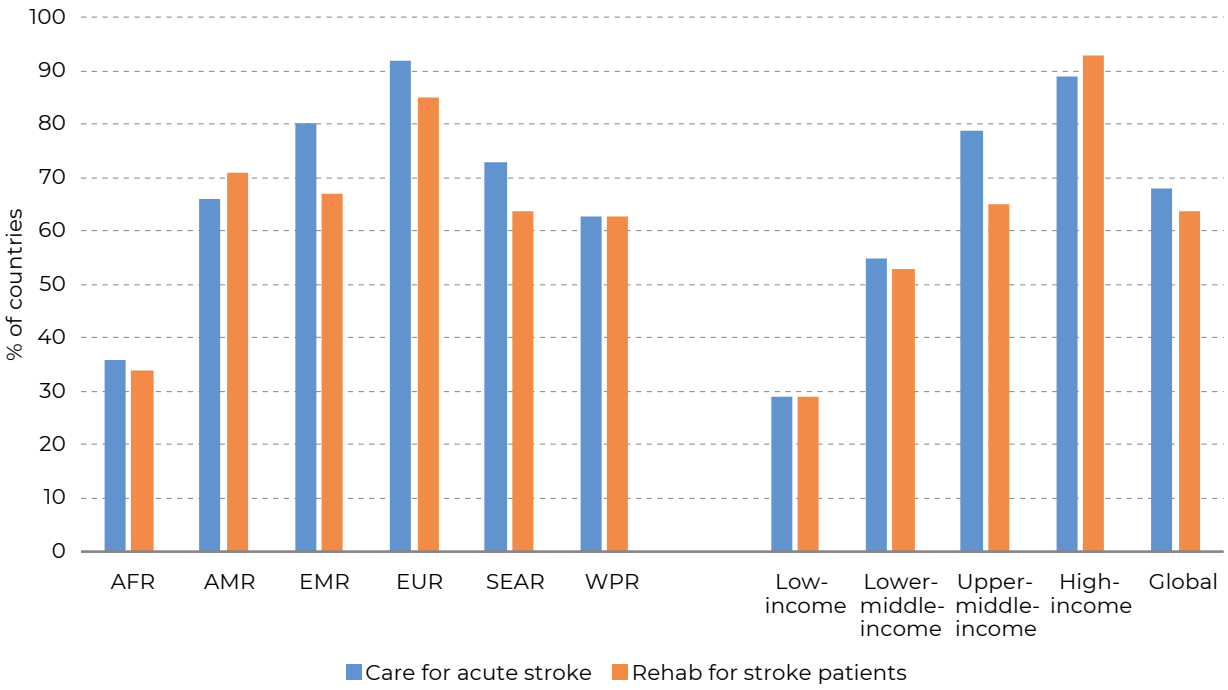
AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Care of acute stroke and rehabilitation

When asked about the availability of services for stroke patients in the public health system, provision of care for acute stroke patients was slightly more available than rehabilitation services. Just over two thirds (68%) of countries reported that provisions of care for acute stroke patients were generally available, meaning that they reached 50% or more of the patients in need; 64% of countries indicated general availability of rehabilitation services for stroke patients. Countries in the European Region and the high-income group reported the highest rates of availability of acute stroke care and rehabilitation services. Countries from the low-income group and the African Region were far less likely to report that either of the services for stroke was generally available. The availability of stroke care services was found to have a positive association with increasing income level groups (Figure 43).

Figure 43

Percentage of countries with available services for provision of care for acute stroke and rehabilitation, by WHO region and World Bank income group



AFR: WHO African Region; AMR: WHO Region of the Americas; EMR: WHO Eastern Mediterranean Region; EUR: WHO European Region; SEAR: WHO South-East Asia Region; WPR: WHO Western Pacific Region.

Registers and follow up systems for rheumatic fever and rheumatic heart disease

The final question of the survey asked countries to report on the existence of a register of patients who have had rheumatic fever and rheumatic heart disease. Globally, almost a quarter (23%) of countries reported having a register, and nearly two thirds of these reported having systems for follow-up or recall to deliver long-term penicillin prophylaxis. Among countries where rheumatic heart disease was endemic,[10] only 27% reported having registers, the vast majority of which (80% of those with registers) included systems for follow-up or recall. No endemic countries in the Eastern Mediterranean Region had registers, and just over 10% of endemic countries in the African Region had them. However, in the Western Pacific Region, nearly two thirds of countries where rheumatic heart disease is endemic had registers.

10 Defined as in Watkins, D. A. et al. Global, regional, and national burden of rheumatic heart disease, 1990–2015. N. Eng. J. Med. 377, 713–722 (2017) using mortality data from Global Health Data Exchange: http://ghdx.healthdata.org/ (accessed 31 May 2018).

DISCUSSION

Key findings

Infrastructure, governance and financing

Countries widely reported having NCD units contained within their ministry of health (86% of countries); all but 4 of these countries indicated that their NCD units had at least one full-time staff member. The change since 2010 has been mixed: slightly fewer countries reported the existence of NCD units in 2017, yet unstaffed units are becoming more rare. Globally, more than half of countries reported availability of funding for all eight NCD activities,[11] although funding for palliative care and research lagged considerably in nearly all regions. For funding areas where trend data was available, a fairly uniform improvement was seen globally. While funding for primary prevention and health promotion was already high in 2010 (82% of countries), this increased to nearly 90% of countries in 2017. Improvement in the availability of funding for surveillance, monitoring and evaluation was even more marked during the seven-year period, increasing from just over 70% in 2010 to nearly 90% in 2017. Government revenues were the most common source of funding for NCDs globally, with 95% of countries reporting these as one of the top three funding sources for NCDs, yet barely two thirds of low-income countries stating the same, indicating a lack of government investment in NCDs in a significant proportion of low-income countries. Since 2010, there has been a marked increase in funding available for NCDs from health insurance and earmarked taxes (from tobacco, alcohol, or other products), although both are still far less commonly reported as primary funding sources for NCD activities compared with general government revenues. While taxation on tobacco and alcohol products was widespread (94% and 79% of countries, respectively), other possible fiscal interventions, such as price subsidies for healthy foods, incentives to promote physical activity, or the taxation of sugar-sweetened beverages and foods high fat, sugar or salt, were far more rare. Just over a third of countries had operational multisectoral NCD commissions to oversee NCD engagement, policy coherence and accountability of sectors beyond health. While operational commissions were reported from countries in all regions and income groups, the proportion of countries in the African Region with operational commissions was markedly lower than in the other regions.

Plans, policies and strategies

Although one of the time-bound commitments to which Member States have adhered was to set national NCD targets by 2015, less than two thirds reported having done so in 2017, with middle-income countries having the highest rates of target setting. However, NCDs have been included in the outcomes or outputs of the national health plans of 90% of Member States worldwide, a rate that remains high across all regions and income groups. Member States have also committed to adopting national multisectoral policies and plans by 2015, yet fulfilment of this commitment by many countries is not complete. While 88% of countries reported having a national policy, strategy or action plan that integrated several NCDs and their risk factors, only 71% of countries indicated that their plan was operational. Fewer (65%) had operational policies that were multisectoral, and fewer still (only 51%) had operational multisectoral policies that addressed the four main risk factors and four main NCDs. Nevertheless, among the 160 countries reporting for all survey rounds during the past seven years, improvement in this area has been remarkable: whereas only 52 countries reported having operational plans in 2010, this escalated to 120 countries in 2017, with significant progress being made across

11 Primary prevention; health promotion; early detection/screening; health care and treatment; surveillance; monitoring and evaluation; capacity building; palliative care; and research

all regions. As regards whether each of the four main NCDs and four main risk factors had been addressed by operational policies, strategies or action plans, chronic respiratory diseases stood out as the issue least commonly addressed: only 62% of countries reported having an operational policy to address these. Yet policies relating to chronic respiratory diseases were far more available than they had been only seven years earlier, with more than three times as many countries reporting having operational policies for these diseases in 2017 than in 2010. Although improvements were seen in policy availability for each of the four main NCDs and their four main risk factors, the expansion of policies for chronic respiratory diseases was the most striking. Implementation of cost-effective policies for NCDs related to diet, such as policies to reduce the impact of marketing unhealthy foods to children and to limit saturated fat and salt in the food supply, was very uneven across regions and income groups, with greater policy availability in the European and Eastern Mediterranean Region and high-income countries. Although salt policies were the most commonly implemented among the cost-effective diet policies, only 47% countries reported having such policies, and nearly half of these policies did not meet the requirements to fully achieve the related progress monitoring indicator.

Surveillance

NCD surveillance was overseen either within or across departments in the ministry of health of the vast majority of countries. Only 5 countries relied on an external agency and 3 reported that no one in the country oversaw this work. Some 84% of countries had cancer registries, yet only two thirds of these were population-based. Diabetes registries were less prevalent (46% of countries) and only a third of these were population-based. There is thus considerable progress to be made in this area, either in the foundation of new registries or through the expansion of existing registries. Service availability and readiness assessments are an important means for Member States to monitor and evaluate their health systems. Despite their inherent value, only 24% of Member States had conducted such assessments. With the exception of the South-East Asian Region, where just over half of Member States had implemented such a survey, the implementation rate of these surveys was uniformly low across all regions and income groups. As part of the time-bound commitment to set national NCD targets for 2025, Member States are expected to implement a STEPS survey or a comprehensive health examination survey every five years, the regular collection of data being necessary to not only set targets, but track a country's progress towards those targets. While there has been considerable overall progress in NCD surveillance since 2010, only 19% of Member States had fully achieved this indicator on risk factor surveillance. Notable, however, is that the majority of Member States (70%) partially achieved this indicator, thus signifying that although NCD risk factor surveillance activity is occurring, it is not sufficiently broad (i.e. particular risk factors are not being covered), or frequent, or both. While there has been a steady decline in the number of countries conducting no surveillance activities, the improvement is far more modest for adolescent risk factor surveillance. Among those countries who had responded to all three rounds of the survey since 2013, the number of countries conducting no surveys among adolescents has remained more or less stable at around 1 in 5.

Health systems capacity

One of the indicators for the time-bound commitment to strengthen health systems to address NCDs addresses whether Member States have evidence-based national guidelines/protocols/standards for the management of the four major NCDs (cardiovascular disease, diabetes, cancer, chronic respiratory diseases). While the majority of Member States reported having guidelines in place for each of the four major NCDs, less than half had fully achieved the progress monitor indicator and had all four guidelines in place. Guidelines for chronic disease were most lacking, particularly in low-income countries. Additionally, among those Member States who had guidelines available, only about two thirds reported that they were utilized in at least 50% of health-care facilities.

Breast and cervical cancer screening programmes were widely available in approximately three quarters of countries; however colon cancer screening programmes were far less widely available (39% of countries). More programmes were organized and population-based, rather than opportunistic,

for all three types of cancers, although programmes in low-income countries were predominantly opportunistic. Most screening programmes were not reaching a substantial proportion of the population they were trying to reach, the majority reaching 50% or less of the target population. More than half (61–67%) of countries reported integrating early detection programmes or guidelines for breast and cervical cancer into primary health-care services, but just over a third (37%) had done so for colon cancer. Similarly, 60–65% of countries had a clearly defined referral system for breast and cervical cancer, but only 44% had such a system for colon cancer.

Although four of the six essential technologies for early detection, diagnosis and monitoring of NCDs –height, weight, blood glucose and blood pressure measurement – were widely available (83–97% of countries), the remaining two technologies – cholesterol measurement and urine strips for albumin assay – were less widely available (59% and 62% of countries, respectively), particularly in low- and lower-middle-income countries. Regarding the 10 essential NCD medicines, each was available in the majority of countries, but only half (49%) reported all 10 as being generally available, with marked disparities across income groups: while all but 2 high-income countries reported all 10 as generally available, only 1 low-income country reported the same. Statins and steroid inhalers were particularly lacking among low-income countries, with only a small number of countries in this income group reporting these essential medicines as being generally available (5 countries for statins and 2 countries for steroid inhalers). No low-income country and only 5 lower-middle-income countries reported all essential medicines and technologies being generally available; in contrast, 82% of high-income countries reported that all were generally available.

A similar situation was seen in the availability of selected procedures for treating NCDs, such as dialysis, coronary bypass or stenting, as well as for cancer diagnosis and treatment services. While all but renal replacement by transplantation were available in a majority of countries, disparities between low- and high-income countries were stark. Palliative care was less available globally, with barely a third of countries reporting this form of care reaching most of the population in need in either the primary health-care facilities or in community- or home-based care. While high-income countries were far more likely to indicate palliative care being generally available in either setting, there is still considerable progress to be made, even in this income group. Likewise, cardiovascular risk stratification is widely available (in more than 50% of health-care facilities) in only a third of countries overall, with a further third reporting some availability of risk stratification (available in 50% or fewer health facilities). There is thus progress to be made in this area across all income groups and regions.

Strengths and limitations of the survey

The Noncommunicable Diseases Country Capacity Survey (NCD CCS) is a unique tool that offers a broad view of the global response to the rising public health issue of NCDs. The 2017 questionnaire was based on the 2015 survey, and every effort was made during the revision process for the 2017 survey to ensure consistency over time to allow for comparisons to be made. Furthermore, the 2017 survey saw an expansion of the validation process: a greater number of documents were requested from countries than in 2015 which strengthened the quality of the 2017 data. The validation work was decentralized, thus each Regional Office oversaw the validation work for their respective Member States, allowing for closer follow-up with each country. The 100% response rate in this survey round was remarkable among global surveys of Member State focal points and certainly reflects, in part, the greater attention NCDs have received recently at the highest levels. The breadth of the questionnaire, the high response rate, and the more than 11 000 supporting documents submitted were major strengths of the survey.

The survey was not without its weaknesses, however. It was not feasible to request documentation from countries for every single question since no uniform document would have been readily available from all or most countries to support their responses. Moreover, there was a limit to the amount of detail that could be requested from countries on particular topics, as this would have presented an unreasonable burden and risked

negatively impacting their overall response rate. While instructions for validation were shared and reviewed with counterparts in all WHO regional offices – with WHO headquarters overseeing the validation process and holding a meeting specifically to review it in detail – once the majority of results were received, there remained the possibility of inconsistency in the process despite every best effort to standardize this work. To minimize the possibility of misinterpretation of questions, a glossary of terms was provided in the five languages in which the survey was administered. Nevertheless, it remained possible for respondents to misinterpret the questions and specific terms used. Finally, while countries were encouraged to collaborate with colleagues in order to complete the questionnaire, countries with large, decentralized health systems were at a marked disadvantage, as the questionnaire sought to obtain national-level information.

CONCLUSION

Priorities for further action

The results of the 2017 NCD CCS demonstrate that, while substantial progress has been made in national responses to prevent and address NCDs, there remains a wide range of opportunities for improvement. Highlighted below are several key areas where action needs to be prioritized:

I. *NCD funding*
While the global picture of funding availability for many key NCD activities, such as health care and treatment, health promotion activities and early detection/ screening, is very promising, low-income countries still lag far behind the other income groups. Additionally, the areas of palliative care and research remain underfunded in over a third of countries.

II. *Fiscal interventions*
Certain fiscal policies, such as taxation on sugar-sweetened beverages (SSB) and unhealthy foods, and subsidies for healthy foods, are recommended interventions that can aid in lowering the prevalence of NCDs and their risk factors. While nearly a quarter of countries now report having implemented an SSB tax (by far the most widely reported of the dietary fiscal interventions), these tools remain greatly underutilized.

III. *Multisectoral coordination*
Although modest progress has been made in the two years since the 2015 round of the survey, nearly two thirds of countries still do not have an operational multisectoral commission, agency or mechanism to oversee NCD engagement, policy coherence and accountability of sectors beyond health.

IV. *Policy implementation*
Only half of countries have met the time-bound commitment for 2015 to set national, multisectoral policies to aid in achieving the national targets by 2025. Countries who have failed to meet this commitment are encouraged to develop and operationalize integrated NCD plans that are multisectoral and that address all the main NCDs and their main risk factors.

V. *NCD Best Buys and other recommended interventions*
WHO has recently published a set of "Best Buys and recommended interventions" which have proven effective in preventing and controlling NCDs (7). The 2017 survey captured the extent to which these are currently being implemented, particularly in the areas of reducing unhealthy diet and physical inactivity as well as cervical cancer prevention. The results showed that these "Best Buys" have been implemented either partially, or fully, by a narrow majority of countries at most, thus suggesting more work is needed to promote these interventions and assist countries in their implementation.

VI. *Sustained surveillance*
While increasingly few countries are completely inactive in the area of NCD risk factor surveillance, many struggle to maintain a robust system, with sufficient resources to regularly collect data at least every five years.

VII. *NCD screening, diagnosis and treatment*
Just over half of countries do not have clinical guidelines for the management of at least one of the four main NCDs. Cancer screening programmes are still falling far short of reaching the majority of their target populations and many remain opportunistic. Considerable work is needed to improve the availability of essential NCD medicines and technologies in low-income countries.

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ANNEX 1
WHO MEMBER STATES AND SURVEY RESPONDENTS

† signifies that the country responded to the 2017 survey but not to one or more of the 2010, 2013 or 2015 surveys. These countries were thus excluded from the multi-year comparisons.

WHO African Region

Algeria
Angola†
Benin
Botswana†
Burkina Faso
Burundi
Cabo Verde†
Cameroon
Central African Republic
Chad†
Comoros
Congo
Côte d'Ivoire†
Democratic Republic of the Congo†
Equatorial Guinea†
Eritrea
Eswatini
Ethiopia†
Gabon†
Gambia
Ghana
Guinea
Guinea-Bissau†
Kenya
Lesotho
Liberia†
Madagascar
Malawi
Mali
Mauritania
Mauritius†
Mozambique
Namibia†
Niger
Nigeria
Rwanda
Sao Tome and Principe
Senegal
Seychelles
Sierra Leone†
South Africa†
South Sudan†
Togo
Uganda
United Republic of Tanzania†
Zambia
Zimbabwe

WHO Region of the Americas

Antigua and Barbuda†
Argentina
Bahamas†
Barbados
Belize
Bolivia (Plurinational State of)
Brazil
Canada
Chile
Colombia†
Costa Rica
Cuba
Dominica
Dominican Republic
Ecuador
El Salvador

Grenada†
Guatemala
Guyana†
Haiti†
Honduras
Jamaica
Mexico
Nicaragua
Panama
Paraguay
Peru
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines†
Suriname
Trinidad and Tobago
United States of America
Uruguay
Venezuela (Bolivarian Republic of)†

WHO Eastern Mediterranean Region

Afghanistan
Bahrain
Djibouti†
Egypt
Iran (Islamic Republic of)
Iraq
Jordan
Kuwait
Lebanon
Libya
Morocco
Oman
Pakistan
Qatar
Saudi Arabia
Somalia
Sudan
Syrian Arab Republic
Tunisia
United Arab Emirates
Yemen

WHO European Region

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus†
Belgium
Bosnia and Herzegovina†
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan†

Latvia
Lithuania
Luxembourg†
Malta
Monaco
Montenegro
Netherlands
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
The former Yugoslav Republic of Macedonia
Turkey
Turkmenistan†
Ukraine
United Kingdom
Uzbekistan

WHO South-East Asia Region

Bangladesh
Bhutan
Democratic People's Republic of Korea
India
Indonesia
Maldives
Myanmar
Nepal
Sri Lanka
Thailand
Timor-Leste†

WHO Western Pacific Region

Australia
Brunei Darussalam
Cambodia
China
Cook Islands†
Fiji
Japan
Kiribati
Lao People's Democratic Republic
Malaysia
Marshall Islands
Micronesia (Federated States of)
Mongolia
Nauru
New Zealand
Niue
Palau
Papua New Guinea
Philippines
Republic of Korea
Samoa†
Singapore
Solomon Islands
Tonga
Tuvalu
Vanuatu
Viet Nam

ANNEX 2

LIST OF COUNTRIES BY WORLD BANK INCOME GROUPS

Categories for this report were based on the income categories for 2017

HIGH-INCOME

Andorra
Antigua and Barbuda
Australia
Austria
Bahamas
Bahrain
Barbados
Belgium
Brunei Darussalam
Canada
Chile
Cyprus
Czechia
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Japan
Kuwait
Latvia
Lithuania
Luxembourg
Malta
Monaco
Netherlands
New Zealand
Norway
Oman
Palau
Poland
Portugal
Qatar
Republic of Korea
Saint Kitts and Nevis
San Marino
Saudi Arabia
Seychelles
Singapore
Slovakia
Slovenia
Spain
Sweden
Switzerland
Trinidad and Tobago
United Arab Emirates
United Kingdom
United States of America
Uruguay

UPPER-MIDDLE-INCOME

Albania
Algeria
Argentina
Azerbaijan
Belarus
Belize
Bosnia and Herzegovina
Botswana
Brazil
Bulgaria

China
Colombia
Cook Islands
Costa Rica
Croatia
Cuba
Dominica
Dominican Republic
Ecuador
Equatorial Guinea
Fiji
Gabon
Grenada
Guyana
Iran (Islamic Republic of)
Iraq
Jamaica
Kazakhstan
Lebanon
Libya
Malaysia
Maldives
Marshall Islands
Mauritius
Mexico
Montenegro
Namibia
Nauru
Niue
Panama
Paraguay
Peru
Romania
Russian Federation
Saint Lucia
Saint Vincent and the Grenadines
Samoa
Serbia
South Africa
Suriname
Thailand
The former Yugoslav Republic of Macedonia
Tonga
Turkey
Turkmenistan
Tuvalu
Venezuela (Bolivarian Republic of)

LOWER-MIDDLE-INCOME

Angola
Armenia
Bangladesh
Bhutan
Bolivia (Plurinational State of)
Cabo Verde
Cambodia
Cameroon
Congo
Côte d'Ivoire
Djibouti
Egypt
El Salvador
Eswatini
Georgia
Ghana
Guatemala
Honduras
India
Indonesia
Jordan
Kenya
Kiribati
Kyrgyzstan

Lao People's Democratic Republic
Lesotho
Mauritania
Micronesia (Federated States of)
Mongolia
Morocco
Myanmar
Nicaragua
Nigeria
Pakistan
Papua New Guinea
Philippines
Republic of Moldova
Sao Tome and Principe
Solomon Islands
Sri Lanka
Sudan
Syrian Arab Republic
Tajikistan
Timor-Leste
Tunisia
Ukraine
Uzbekistan
Vanuatu
Viet Nam
Yemen
Zambia

LOW-INCOME

Afghanistan
Benin
Burkina Faso
Burundi
Central African Republic
Chad
Comoros
Democratic People's Republic of Korea
Democratic Republic of the Congo
Eritrea
Ethiopia
Gambia
Guinea
Guinea-Bissau
Haiti
Liberia
Madagascar
Malawi
Mali
Mozambique
Nepal
Niger
Rwanda
Senegal
Sierra Leone
Somalia
South Sudan
Togo
Uganda
United Republic of Tanzania
Zimbabwe

ANNEX 3
QUESTIONNAIRE

COUNTRY PROFILE OF CAPACITY AND RESPONSE TO NONCOMMUNICABLE DISEASES (NCDS)

Modules

I PUBLIC HEALTH INFRASTRUCTURE, PARTNERSHIPS AND MULTISECTORAL COLLABORATION FOR NCDs AND THEIR RISK FACTORS

II STATUS OF NCD-RELEVANT POLICIES, STRATEGIES AND ACTION PLANS

III HEALTH INFORMATION SYSTEMS, MONITORING, SURVEILLANCE AND SURVEYS FOR NCDs AND THEIR RISK FACTORS

IV CAPACITY FOR NCD EARLY DETECTION, TREATMENT AND CARE WITHIN THE HEALTH SYSTEM

Purpose

- The purpose of this survey is to gauge your country's capacity for responding to noncommunicable diseases. It will guide Member States, WHO Regional Offices and WHO HQ in planning future actions and technical assistance required to address NCDs and their risk factors. This is also the basis for ongoing assessment of changes in country capacity and response.
- The information collected through this survey will also be used to produce some of the indicators that Member States have agreed to monitor and will be held accountable to the United Nations General Assembly (UNGA) and World Health Assembly (WHA);
- Use of standardized questions allows comparisons of country capacities and responses. We have divided this survey into four modules, assessing four key aspects of NCD prevention and control.
- The four main types of noncommunicable diseases are cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes.
- The main risk factors for NCDs are harmful use of alcohol, tobacco use, unhealthy diet, and physical inactivity. Capacity assessment related to some specific risk factors is also captured in other topic-specific assessments – e.g. for tobacco through the WHO Report on the Global Tobacco Epidemic.

Process

- The survey is intended to assess national level capacity and response to NCDs. If responsibility for health is decentralized to sub-national levels, it can also be applied at subnational levels.
- A focal point or survey coordinator will need to be identified to coordinate and ensure survey completion. However, in order to provide a complete response, a group of respondents with expertise in the topics covered in the modules will be needed. Please use the table provided to indicate the names and titles of all of those who have completed the survey and which sections they have completed. Please also add any additional information on other sources you may have consulted in developing your response.
- Please note that while there is space to indicate "Don't Know" for most questions, there should be very few of these. If someone is filling in numerous "Don't Knows", another person who is more aware of this information should be found to complete this section.
- In order to validate responses, documentation will be requested for affirmative responses throughout the questionnaire. Please make every effort to provide electronic copies of the requested documentation. If documentation has been provided previously and is available in the NCD Document Repository (https://extranet.who.int/ncdccs/documents), please indicate this. If you are unable to provide electronic copies through the provided links, please ask your regional focal point for an alternative means to submit documentation.

INFORMATION ON THOSE WHO COMPLETED THE SURVEY

Who is the focal point for completion of this survey?

Name: .....

Position: .....

Contact Information: .....

Sections completed: .....

Name and contact information of others completing survey	Sections completed

I PUBLIC HEALTH INFRASTRUCTURE, PARTNERSHIPS AND MULTISECTORAL COLLABORATION FOR NCDS AND THEIR RISK FACTORS

This module includes questions related to the presence of a unit or division in the ministry of health dedicated to NCDs and risk factors, staff and funding. It also includes an assessment of the existence of fiscal interventions as incentives to influence health behaviour and/or to raise funds for health-related activities. Finally, it assesses the existence of a formal multisectoral mechanism to coordinate NCD-related activities in sectors outside of health. Responses to these questions enable reporting against NCD Global Action Plan process indicators and UN High-Level Meeting national commitment progress indicators.

1) Is there a unit/branch/department in the ministry of health or equivalent with responsibility for NCDs and their risk factors?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 2

1a) Please indicate the number of full-time-equivalent technical/professional staff in the unit/branch/department.

☐ 0 ☐ 1 ☐ 2–5 ☐ 6–10 ☐ 11 or more ☐ Don't know

2) Is there funding allocated in the government budget for the following NCD and risk factor activities/functions?

i) Primary prevention	☐ Yes ☐ No ☐ Don't Know
ii) Health promotion	☐ Yes ☐ No ☐ Don't Know
iii) Early detection/screening	☐ Yes ☐ No ☐ Don't Know
iv) Health care and treatment	☐ Yes ☐ No ☐ Don't Know
v) Surveillance, monitoring and evaluation	☐ Yes ☐ No ☐ Don't Know
vi) Capacity-building	☐ Yes ☐ No ☐ Don't Know

vii) Palliative care ☐ Yes ☐ No ☐ Don't Know

viii) Research ☐ Yes ☐ No ☐ Don't Know

If at least one Yes to above questions:
2a) What are the major sources of regular funding for NCDs and their risk factors?

More than one can apply, rank order them where: 1 = Largest source; 2 = Next largest; 3 = Others

☐ General government revenues

☐ Health insurance

☐ International Donors

☐ National Donors

☐ Earmarked taxes on alcohol, tobacco, etc.

☐ Other (specify) .....

☐ Don't Know

3) Is your country implementing any of the following fiscal interventions? (for taxes, please respond "Yes" only if excise taxes and/or special VAT/sales tax rates are applied)

Taxation on alcoholic beverages ☐ Yes ☐ No ☐ Don't Know

Taxation on tobacco (excise and non-excise taxes) ☐ Yes ☐ No ☐ Don't Know

Taxation on sugar sweetened beverages ☐ Yes ☐ No ☐ Don't Know

Taxation on foods high in fat, sugar or salt ☐ Yes ☐ No ☐ Don't Know

Price subsidies for healthy foods ☐ Yes ☐ No ☐ Don't Know

Taxation incentives to promote physical activity ☐ Yes ☐ No ☐ Don't Know

Others (specify) ☐ Yes ☐ No ☐ Don't Know

If Yes to at least one of the above, other than price subsidies:
3a) Are any of these funds earmarked for health promotion or health service provision?

☐ Yes ☐ No ☐ Don't Know

4) Is there a national multisectoral commission, agency or mechanism to oversee NCD engagement, policy coherence and accountability of sectors beyond health?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to MODULE II

4a) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational or under development:

4b) Please provide name: .....

4c) Which of the following are members? (Check all that apply)

☐ Other Government Ministries (non-health, e.g. ministry of sport, ministry of education)

☐ United Nations Agencies

☐ Other international institutions

☐ Academia (including research centres)

☐ Nongovernmental organizations/community-based organizations/civil society

☐ Private Sector

☐ Other (specify) .....

☐ Don't know

IF "Private Sector" is one of the members:

4d) Is the tobacco industry's participation to the consultations and decision making process excluded from the national multisectoral commission?

☐ Yes ☐ No ☐ Don't Know

II STATUS OF NCD-RELEVANT POLICIES, STRATEGIES, AND ACTION PLANS

This module includes questions relating to the presence of policies, strategies, or action plans - the questions differentiate between integrated policies/strategies/action plans that address several risk factors or diseases, and policies/strategies/action plans that address a specific disease or risk factor. Additional questions address the existence of specific policies related to the cost-effective interventions for NCDs. Responses to these questions enable reporting against NCD Global Action Plan process indicators and UN High-Level Meeting national commitment progress indicators.

1a) Are NCDs included in the outcomes or outputs of your current national health plan?

☐ Yes ☐ No ☐ Don't Know

1b) Are NCDs included in the outcomes or outputs of your current national development agenda?

☐ Yes ☐ No ☐ Don't Know

2) Are there a set of time-bound national targets for NCDs based on the 9 voluntary global targets from the WHO Global Monitoring Framework for NCDs?

☐ Yes ☐ No ☐ Don't Know

If Yes:

2a) Are there a set of national indicators for these targets based on the indicators from the WHO Global Monitoring Framework for NCDs?

☐ Yes ☐ No ☐ Don't Know

II A INTEGRATED POLICIES, STRATEGIES, AND ACTION PLANS

3) Does your country have a national NCD policy, strategy or action plan which integrates several NCDs and their risk factors? Please note that disease- and risk factor-specific policies, strategies, and action plans will be reported in other questions later in this module.

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 4

If yes:

Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

Is it multisectoral? ☐ Yes ☐ No ☐ Don't Know

Is it multistakeholder? ☐ Yes ☐ No ☐ Don't Know

Please provide the following information about the policy, strategy or action plan:

3a) Title: .....

3b) Does it address one or more of the following major risk factors?

Harmful use of alcohol ☐ Yes ☐ No ☐ Don't Know

Unhealthy diet ☐ Yes ☐ No ☐ Don't Know

Physical inactivity ☐ Yes ☐ No ☐ Don't Know

Tobacco ☐ Yes ☐ No ☐ Don't Know

3c) Does it include early detection, treatment and care for:

Cancer ☐ Yes ☐ No ☐ Don't Know

Cardiovascular diseases ☐ Yes ☐ No ☐ Don't Know

Chronic respiratory diseases ☐ Yes ☐ No ☐ Don't Know

Diabetes ☐ Yes ☐ No ☐ Don't Know

3d) Does it include palliative care for patients with NCDs?

☐ Yes ☐ No ☐ Don't Know

3e) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:

3e-i) What was the first year of implementation? .....

3e-ii) What year will it expire? .....

II B POLICIES, STRATEGIES, ACTION PLANS FOR SPECIFIC KEY NONCOMMUNICABLE DISEASES

The questions in this sub-section only refer to policies, strategies and action plans that are specific to key NCDs If your integrated policy, strategy or action plan addresses the NCD, you do not need to re-enter that information.

4) Is there a policy, strategy, or action plan for cardiovascular diseases in your country?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 5

If yes:

Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

4a) Write the title .....

4b) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:

4b-i) What was the first year of implementation? .....

4b-ii) What year will it expire? .....

5) Is there a policy, strategy, or action plan for cancer or some particular cancer types in your country?

☐ Yes for all cancers or cancer in general

☐ Yes but only for specific cancers (specify: .....)

☐ No

☐ Don't Know

IF NO: Go to Question 6

If yes, provide the following for the general cancer policy/strategy/action plan or, if there isn't one, for the most important specific cancer policy/strategy/action plan:

Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

5a) Write the title .....

5b) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:

5b-i) What was the first year of implementation? .....

5b-ii) What year will it expire? .....

6) Is there a policy, strategy, or action plan for diabetes in your country?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 7

If yes:

Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

6a) Write the title .....

6b) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:

6b-i) What was the first year of implementation? .....

6b-ii) What year will it expire? .....

7) Is there a policy, strategy, or action plan for chronic respiratory diseases in your country?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 8

If yes:

Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

7a) Write the title .....

7b) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:

7b-i) What was the first year of implementation? .....

7b-ii) What year will it expire? .....

8) Is there a policy, strategy, or action plan for oral health in your country?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 9

If yes:

Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

8a) Write the title .....

8b) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:

8b-i) What was the first year of implementation? .....

8b-ii) What year will it expire? .....

9) Is there a policy, strategy, or action plan for another noncommunicable disease of importance in your country?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 10

If yes:

Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

Please provide the following information about the policy/strategy/action plan. If there is more than one, please provide the information for the most recent one.

Please specify which NCD: .....

9a) Write the title .....

9b) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:

9b-i) What was the first year of implementation? .....

9b-ii) What year will it expire? .....

II C POLICIES, ACTION PLANS, STRATEGIES FOR NCD RISK FACTORS

The questions in this sub-section only refer to policies, strategies and action plans that are specific to an NCD risk factor. If your integrated policy, strategy or action plan addresses the risk factor, you do not need to re-enter that information.

10) Is there a policy, strategy, or action plan for reducing the harmful use of alcohol in your country?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 11

If yes:

Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

10a) Write the title .....

10b) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:

10b-i) What was the first year of implementation? .....

10b-ii) What year will it expire? .....

11) Is there a policy, strategy, or action plan for reducing overweight/obesity in your country?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 12

If yes:

Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

11a) Write the title .....

11b) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:

11b-i) What was the first year of implementation? .....

11b-ii) What year will it expire? .....

12) Is there a policy, strategy, or action plan for reducing physical inactivity and/or promoting physical activity in your country?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 13

If yes:
Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

12a) Write the title .....

12b) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:
12b-i) What was the first year of implementation? .....

12b-ii) What year will it expire? .....

13) Is there a policy, strategy, or action plan to decrease tobacco use in your country?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 14

If yes:
Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

13a) Write the title .....

13b) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:
13b-i) What was the first year of implementation? .....

13b-ii) What year will it expire? .....

14) Is there a policy, strategy, or action plan for reducing unhealthy diet related to NCD and/ or promoting a healthy diet in your country?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 15

If yes:
Is it a policy/strategy? ☐ Yes ☐ No ☐ Don't Know

Is it an action plan? ☐ Yes ☐ No ☐ Don't Know

14a) Write the title .....

14b) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

If Operational:

14b-i) What was the first year of implementation? .....

14b-ii) What year will it expire? .....

II D SELECTED COST-EFFECTIVE POLICIES FOR NCDS AND RELATED RISK FACTORS

NB: Only selected policies are captured here as information on some policy measures, e.g. for tobacco and alcohol, are included in other assessment tools.

15) Is there a policy and/or plan on NCD-related research including community-based research and evaluation of the impact of interventions and policies?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 16

If Yes:
15a) Indicate its stage:

☐ Operational ☐ Under development ☐ Not in effect ☐ Don't know

16) Is your country implementing any policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 17

If yes:
16a) Are the policies:

☐ Voluntary/self-regulating ☐ Government legislation ☐ Don't know

16b) Who is responsible for overseeing enforcement and complaints?

☐ Government ☐ Food Industry ☐ Independent regulator

☐ Other, please specify: .....

16c) Do they include steps taken to address the effects of cross-border marketing of food and non-alcoholic beverages on children?

☐ Yes ☐ No ☐ Don't Know

16c-i) If yes, please provide details: .....

17) Is your country implementing any national policies that limit saturated fatty acids and virtually eliminate industrially produced trans fats (i.e. partially hydrogenated vegetable oils) in the food supply?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 18

17a) If yes, are the policies:

☐ Voluntary/self-regulating ☐ Government legislation ☐ Don't know

18) Is your country implementing any policies to reduce population salt consumption?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 19

18a) Are these targeted at:

Product reformulation by industry across the food supply	☐ Yes	☐ No	☐ Don't Know
Regulation of salt content of food	☐ Yes	☐ No	☐ Don't Know
Public awareness programme	☐ Yes	☐ No	☐ Don't Know
Nutrition labelling	☐ Yes	☐ No	☐ Don't Know

18b) If yes to product reformulation or regulation of salt content, is the policy:

☐ Voluntary/self-regulating ☐ Government legislation ☐ Don't know

19) Has your country implemented any national public awareness programme on diet within the past 5 years?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 20

19a) If yes, please provide details of the public awareness programme(s): .....

20) Has your country implemented any national public awareness programme on physical activity within the past 5 years?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to MODULE III

20a) If yes, please provide details of the public awareness programme(s): .....

III HEALTH INFORMATION SYSTEMS, MONITORING, SURVEILLANCE AND SURVEYS FOR NCDS AND THEIR RISK FACTORS

The questions in this module assess surveillance relating to the mortality, morbidity and risk factor reporting systems of each country and whether NCD mortality, morbidity and risk factor data were included in their national health reporting systems. Responses to these questions enable reporting against NCD Global Action Plan process indicators and UN High-Level Meeting national commitment progress indicators.

1) In your country, who has responsibility for surveillance of NCDs and their risk factors?

☐ An office/department/administrative division within the MOH exclusively dedicated to NCD surveillance

☐ An office/department/ administrative division within the MOH not exclusively dedicated to NCD surveillance

☐ Responsibility is shared across several offices/departments/administrative divisions within the MOH

☐ Coordination is by an external agency, such as an NGO or statistical organization

☐ No one has this responsibility

☐ Don't know

III A DATA INCLUDED IN THE NATIONAL HEALTH INFORMATION SYSTEM

(National health information system refers to the annual or regular reporting system of the National Statistical Office or Ministry of Health)

2) Does your country have a system for collecting mortality data by cause of death on a routine basis?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 3

IF YES:

2a) Is there a civil/vital registration system? ☐ Yes ☐ No ☐ Don't Know

2b) Is there a sample registration system? ☐ Yes ☐ No ☐ Don't Know

2c) What is the latest year for which data are available? .....

2d) Can the data collected be disaggregated by:

Age ☐ Yes ☐ No ☐ Don't Know

Gender ☐ Yes ☐ No ☐ Don't Know

Other sociodemographic factor ☐ Yes ☐ No ☐ Don't Know

3) Does your country have a cancer registry?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 4

IF YES:

3a) Are the data collected population-based, hospital-based, or other?

☐ Population-based

☐ Hospital-based

☐ Other (specify: .....)

☐ Don't know

3b) Is the coverage of the registry national or subnational?

☐ National (covers the whole population of the country)

☐ Subnational (covers only the population of a defined region, not the whole country)

☐ Don't know

3c) What is the latest year for which data are available? .....

4) Does your country have a diabetes registry?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 5

IF YES:

4a) Are the data collected population-based, hospital-based, or other?

☐ population-based

☐ hospital-based

☐ Other (specify: .....)

☐ Don't know

4b) Is the coverage of the registry national or subnational?

☐ National (covers the whole population of the country)

☐ Subnational (covers only the population of a defined region, not the whole country)

☐ Don't know

4c) Does the registry include data on any chronic complications which are updated as the patient's complications status changes?

☐ Yes ☐ No ☐ Don't Know

4d) What is the latest year for which data are available? .....

5) Does your country have a system for recording patient information that includes NCD status?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 6

IF YES:

5a) Is it an electronic medical records/health records system?

☐ Yes ☐ No ☐ Don't Know

5b) What is the coverage of the system?

☐ National (covers the whole population of the country)

☐ Subnational (covers only the population of a defined region or regions or only certain segments of the population)

☐ Don't know

6) Has your country conducted a survey of facilities to assess service availability and readiness for NCDs?

☐ Yes ☐ No ☐ Don't Know

IF NO: Go to Question 7

6a) Year of last survey .....

6b) Coverage of last survey:

☐ National ☐ Subnational ☐ Don't know

III B RISK FACTOR SURVEILLANCE

	7a) Harmful alcohol use	7b) Low fruit and vegetable consumption	7c) Physical inactivity	7d) Tobacco use
7) Have population-based surveys of risk factors (may be a single RF or multiple) been conducted in your country for any of the following: (Please fill in all columns, start in the first row, going left to right, and then continue left to right across the second row.) For the questions on surveys on adolescents, please include here only surveys specifically targeting adolescents (i.e. do not repeat adult surveys that may have covered part of the adolescent age range).	☐ Yes ☐ No ☐ Don't know **IF NO: Go to next column.** **IF YES:** i) Was there a survey on adolescents? ☐ Yes ☐ No ☐ Don't know **IF YES:** i-1) Was it: ☐ National ☐ Subnational ☐ Don't know	☐ Yes ☐ No ☐ Don't know **IF NO: Go to next column.** **IF YES:** i) Was there a survey on adolescents? ☐ Yes ☐ No ☐ Don't know **IF YES:** i-1) Was it: ☐ National ☐ Subnational ☐ Don't know	☐ Yes ☐ No ☐ Don't know **IF NO: Go to next column.** **IF YES:** i) Was there a survey on adolescents? ☐ Yes ☐ No ☐ Don't know **IF YES:** i-1) Was it: ☐ Measured ☐ Self-reported ☐ Don't know i-2) Was it: ☐ National ☐ Subnational ☐ Don't know	☐ Yes ☐ No ☐ Don't know **IF NO: Go to next column.** **IF YES:** i) Was there a survey on adolescents? ☐ Yes ☐ No ☐ Don't know **IF YES:** i-1) Was it: ☐ National ☐ Subnational ☐ Don't know

	7a) Harmful alcohol use	7b) Low fruit and vegetable consumption	7c) Physical inactivity	7d) Tobacco use
7) Have population-based surveys of risk factors (may be a single RF or multiple) been conducted in your country for any of the following: (Please fill in all columns, start in the first row, going left to right, and then continue left to right across the second row.) For the questions on surveys on adolescents, please include here only surveys specifically targeting adolescents (i.e. do not repeat adult surveys that may have covered part of the adolescent age range).	i-2) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know i-3) When was the last survey conducted? (give year) ..... ii) Was there a survey on adults? ☐ Yes ☐ No ☐ Don't know **IF YES:** ii-1) Was it: ☐ National ☐ Subnational ☐ Don't know	i-2) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know i-3) When was the last survey conducted? (give year) ..... ii) Was there a survey on adults? ☐ Yes ☐ No ☐ Don't know **IF YES:** ii-1) Was it: ☐ National ☐ Subnational ☐ Don't know	i-3) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know i-4) When was the last survey conducted? (give year) ..... ii) Was there a survey on adults? ☐ Yes ☐ No ☐ Don't know **IF YES:** ii-1) Was it: ☐ Measured ☐ Self-reported ☐ Don't know	i-2) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know i-3) When was the last survey conducted? (give year) ..... ii) Was there a survey on adults? ☐ Yes ☐ No ☐ Don't know **IF YES:** ii-1) Was it: ☐ National ☐ Subnational ☐ Don't know

	7a) Harmful alcohol use	7b) Low fruit and vegetable consumption	7c) Physical inactivity	7d) Tobacco use
7) Have population-based surveys of risk factors (may be a single RF or multiple) been conducted in your country for any of the following: (Please fill in all columns, start in the first row, going left to right, and then continue left to right across the second row.) For the questions on surveys on adolescents, please include here only surveys specifically targeting adolescents (i.e. do not repeat adult surveys that may have covered part of the adolescent age range).	iii-2) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know ii-3) When was the last survey conducted? (give year)	iii-2) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know ii-3) When was the last survey conducted? (give year)	ii-2) Did it assess physical activity for work/in the household, for transport and during leisure time? ☐ Yes ☐ No ☐ Don't know ii-3) Was it: ☐ National ☐ Subnational ☐ Don't know ii-4) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know ii-5) When was the last survey conducted? (give year)	ii-2) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know ii-3) When was the last survey conducted? (give year) .....

	7e) Raised blood glucose/ diabetes	7f) Raised total cholesterol	7g) Raised blood pres-sure/Hy-pertension	7h) Overweight and obesity	7i) Salt / Sodium intake
7) cont.	☐ Yes ☐ No ☐ Don't know **IF NO: Go to next column.** **IF YES:** i) Was it: ☐ Measured ☐ Self-reported ☐ Don't know ii) Was it: ☐ National ☐ Subnational ☐ Don't know	☐ Yes ☐ No ☐ Don't know **IF NO: Go to next column.** **IF YES:** i) Was it: ☐ Measured ☐ Self-reported ☐ Don't know ii) Was it: ☐ National ☐ Subnational ☐ Don't know	☐ Yes ☐ No ☐ Don't know **IF NO: Go to next column.** **IF YES:** i) Was it: ☐ Measured ☐ Self-reported ☐ Don't know ii) Was it: ☐ National ☐ Subnational ☐ Don't know	☐ Yes ☐ No ☐ Don't know **IF NO: Go to next column.** **IF YES:** i) Was there a survey on adolescents? ☐ Yes ☐ No ☐ Don't know **IF YES:** i-1) Was it: ☐ Measured ☐ Self-reported ☐ Don't know i-2) Was it: ☐ National ☐ Subnational ☐ Don't know	☐ Yes ☐ No ☐ Don't know **IF NO: Go to MODULE IV.** **IF YES:** i) Was it: ☐ Measured by 24-hr urine collec-tion ☐ Measured by 12-hr urine collec-tion ☐ Measured by spot urine collec-tion ☐ Measured by combina-tion of me-thods ☐ Self-re-ported ☐ Don't know

7) cont.	7e) Raised blood glucose/ diabetes	7f) Raised total cholesterol	7g) Raised blood pressure/ Hypertension	7h) Overweight and obesity	7i) Salt / Sodium intake
	iii) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know iv) When was the last survey conducted? (give year)	iii) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know iv) When was the last survey conducted? (give year)	iii) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know iv) When was the last survey conducted? (give year)	i-3) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know i-4) When was the last survey conducted? (give year) .... ii) Was there a survey on adults? ☐ Yes ☐ No ☐ Don't know	ii) Was it: ☐ National ☐ Subnational ☐ Don't know iii) How often is the survey conducted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know iv) When was the last survey conducted? (give year) ....

	7e) Raised blood glucose/ diabetes	7f) Raised total cholesterol	7g) Raised blood pressure/ Hyperten-sion	7h) Overweight and obesity	7i) Salt / Sodium intake
7) cont.				**IF YES:** ii-1) Was it: ☐ Measured ☐ Self-reported ☐ Don't know ii-2) Was it: ☐ National ☐ Subnatio-nal ☐ Don't know ii-3) How often is the sur-vey conduc-ted? ☐ Ad hoc ☐ Every 1 to 2 years ☐ Every 3 to 5 years ☐ Other ☐ Don't know ii-4) When was the last survey conducted? (give year)	

IV CAPACITY FOR NCD EARLY DETECTION, TREATMENT AND CARE WITHIN THE HEALTH SYSTEM

The questions in this module assess the health-care systems capacity related to NCD early detection, treatment and care within the health-care sector. Specific questions focus on availability of guidelines or protocols to treat major NCDs, and the tests, procedures and equipment related to NCDs within the health-care system. It also assesses the availability of palliative care services for NCDs. Responses to these questions enable reporting against NCD Global Action Plan process indicators and UN High-Level Meeting national commitment progress indicators.

1) Please indicate whether evidence-based national guidelines/protocols/standards are available for the management (diagnosis and treatment) of each of the major NCDs through a primary care approach recognized/approved by government or competent authorities. Where guidelines/protocols/standards are available, please indicate their implementation status, when they were last updated and whether they contain standard criteria for the referral of patients from primary care to a higher level of care (secondary/tertiary).

	Cardiovascular Disease	Diabetes	Cancer	Chronic Respiratory Disease
1a) Are they available?	☐ Yes ☐ No ☐ Don't Know	☐ Yes ☐ No ☐ Don't Know	☐ Yes (specify cancer types) ☐ No ☐ Don't Know	☐ Yes ☐ No ☐ Don't Know
1b) Are they being utilized in at least 50% of health-care facilities	☐ Yes ☐ No ☐ Don't Know	☐ Yes, ☐ No ☐ Don't Know	☐ Yes, ☐ No ☐ Don't Know	☐ Yes ☐ No ☐ Don't Know
1c) When were they last updated?				
1d) Do they include referral criteria?	☐ Yes ☐ No ☐ Don't Know	☐ Yes ☐ No ☐ Don't Know	☐ Yes ☐ No ☐ Don't Know	☐ Yes ☐ No ☐ Don't Know

2) Indicate the availability of the following basic technologies for early detection, diagnosis / monitoring of NCDs in the primary care facilities of the public and private health sector where: Generally available = 1; Generally not available = 2, Don't know = 3.

** Generally available: in 50% or more health-care facilities* *Generally not available: in less than 50% health-care facilities*	Availability in the primary care facilities of the public health sector (1, 2, or 3)	Availability in the primary care facilities of the private health sector (1, 2, or 3)
Overweight and obesity		
2a) Measuring of weight	.....	.....
2b) Measuring of height	.....	.....
Diabetes mellitus		
2c) Blood glucose measurement	.....	.....
2d) Oral glucose tolerance test	.....	.....
2e) HbA1c test	.....	.....
2f) Dilated fundus examination	.....	.....
2g) Foot vibration perception by tuning fork	.....	.....
2h) Foot vascular status by Doppler	.....	.....
2i) Urine strips for glucose and ketone measurement	.....	.....
Cardiovascular disease		
2j) Blood pressure measurement	.....	.....
2k) Total cholesterol measurement	.....	.....
2l) Urine strips for albumin assay	.....	.....
Asthma and chronic obstructive pulmonary disease		
2m) Peak flow measurement spirometry	.....	.....

3) Please indicate if there is a national screening programme targeting the general population for the following cancers and, if yes, provide details.

Cancers	Initial screening method (indicate only one, the most widely used)	Population targeted by the programme	Type of programme	Screening coverage
Breast ☐ Yes ☐ No ☐ Don't know **If NO: Go to next row**	☐ Clinical breast exam ☐ Mammography screening ☐ Don't know	Women aged ..... to ..... Other, specify: ☐ Don't know	☐ Organized population-based screening ☐ Opportunistic screening ☐ Don't know	☐ Less than 10% ☐ 10% to 50% ☐ more than 50% but less than 70% ☐ 70% or more ☐ Don't know
Cervix ☐ Yes ☐ No ☐ Don't know **If NO: Go to next row**	☐ Visual inspection ☐ PAP smear ☐ HPV test ☐ Don't know	Women aged ..... to ..... Other, specify: ☐ Don't know	☐ Organized population-based screening ☐ Opportunistic screening ☐ Don't Know	☐ Less than 10% ☐ 10% to 50% ☐ more than 50% but less than 70% ☐ 70% or more ☐ Don't know
Colon ☐ Yes ☐ No ☐ Don't know **If NO: Go to next row**	☐ Faecal test ☐ Colonoscopy/ sigmoidoscopy ☐ Don't know	People aged ..... to ..... Other, specify: ☐ Don't know	☐ Organized population-based screening ☐ Opportunistic screening ☐ Don't know	☐ Less than 10% ☐ 10% to 50% ☐ more than 50% but less than 70% ☐ 70% or more ☐ Don't know
Other cancer type(s) Specify: ..... ☐ Yes ☐ No ☐ Don't know				

4) Please indicate if early detection of the following cancers by means of rapid identification of the first symptoms is integrated into primary health care services and if there is a clearly defined referral system from primary care to secondary / tertiary care for suspect cases (in low- and middle-income countries this set of measures may be designated as an "early diagnosis" programme):

	Breast	Cervix	Colon	Other cancer types (specify: .....)
Programme/ guidelines to strengthen early diagnosis of first symptoms at primary health-care level	☐ Yes ☐ No ☐ Don't know	☐ Yes ☐ No ☐ Don't know	☐ Yes ☐ No ☐ Don't know	☐ Yes ☐ No ☐ Don't know
Clearly defined referral system from primary care to secondary and tertiary care	☐ Yes ☐ No ☐ Don't know	☐ Yes ☐ No ☐ Don't know	☐ Yes ☐ No ☐ Don't know	☐ Yes ☐ No ☐ Don't know

5) Is there a national HPV vaccination programme under implementation?

☐ Yes

☐ No

☐ Don't Know

If NO: Go to Question 6.

If yes, please provide the following details of the programme:

5a) Who is targeted by the programme?

☐ Girls aged ..... to .....

☐ Other (specify: .....)

☐ Don't know

5b) What year did the programme begin? .....

5c) What is the immunization coverage of the programme?

☐ Less than 10%

☐ 10% to 50%

☐ more than 50% but less than 70%

☐ 70% or more

☐ Don't know

6) Describe the availability of the medicines below in the primary care facilities of the public health sector, where: 1 = Generally available; 2 = Generally not available; 3 = Don't know.

** Generally available: in 50% or more pharmacies*

Generally not available: in less than 50% of pharmacies

Generic drug name	Availability*
6a) Insulin	
6b) Aspirin (100 mg)	
6c) Metformin	
6d) Thiazide Diuretics	
6e) ACE Inhibitors	
6f) Calcium channel Blockers	
6g) Beta Blockers	
6h) Statins	
6i) Oral morphine	
6j) Steroid inhaler	
6k) Bronchodilator	
6l) Sulphonylurea(s)	
6m) Benzathine penicillin injection	
6n) Nicotine Replacement Therapy	

7) Indicate the availability* of the following procedures for treating NCDs in the publicly funded health system, where: 1 = Generally available; 2 = Generally not available; 3 = Don't know.

** Generally available: reaches 50% or more patients in need*

Generally not available: reaches less than 50% of patients in need

Procedure name	Availability
7a) Retinal photocoagulation	
7b) Renal replacement therapy by dialysis	
7c) Renal replacement by transplantation	
7d) Coronary bypass	
7e) Stenting	
7f) Thrombolytic therapy (streptokinase) for acute myocardial infarction	

8) Detail the availability of cancer diagnosis and treatment services in the public sector:

** Generally available: reaches 50% or more patients in need*

Generally not available: reaches less than 50% of patients in need

Service	Availability*
Cancer centres or cancer departments at tertiary level	☐ Generally available ☐ Generally not available ☐ Don't know
Pathology services (laboratories)	☐ Generally available ☐ Generally not available ☐ Don't know
Cancer surgery	☐ Generally available ☐ Generally not available ☐ Don't know
Subsidized chemotherapy	☐ Generally available ☐ Generally not available ☐ Don't know
Radiotherapy	☐ Generally available ☐ Generally not available ☐ Don't know

9) How many pathology laboratories for cancer diagnosis are there in the country? (If you don't know the exact number, just give an interval, for example "between 2 and 5".)

Number of public laboratories: ..... ☐ Don't know

Number of private laboratories: ..... ☐ Don't know

Palliative care for patients with NCDs:

10) Indicate the availability* of palliative care for patients with NCD in the public health system:

** Generally available: reaches 50% or more patients in need*

Generally not available: reaches less than 50% of patients in need

10a) In primary health-care facilities:

☐ Generally available ☐ Generally not available ☐ Don't know

10b) In community- or home-based care:

☐ Generally available ☐ Generally not available ☐ Don't know

Cardiovascular disease:

11) What proportion of primary health-care facilities are offering cardiovascular risk stratification for the management of patients at high risk for heart attack and stroke?

☐ none ☐ less than 25% ☐ 25% to 50% ☐ more than 50% ☐ Don't know

If more than none:

11a) Which CVD risk scoring chart is used?

☐ WHO/ISH risk prediction charts

☐ Others (specify .....)

☐ Don't know

12) Indicate the availability* of services for stroke in the public health system:

** Generally available: reaches 50% or more patients in need*

Generally not available: reaches less than 50% of patients in need

12a) Provision of care for acute stroke:

☐ Generally available ☐ Generally not available ☐ Don't know

12b) Rehabilitation for stroke patients:

☐ Generally available ☐ Generally not available ☐ Don't know

13) Is there a register of patients who have had rheumatic fever and rheumatic heart disease?

☐ Yes ☐ No ☐ Don't Know

IF YES:

13a) Are there systems for follow-up/recall to deliver long-term penicillin prophylaxis?

☐ Yes ☐ No ☐ Don't Know

ANNEX 4
GLOSSARY OF TERMS USED IN THE SURVEY

Academia: Refers to educational institutions, especially those for higher education.

Broadcast media: Media which is broadcast to the public through radio and television.

Cancer: A generic term for a large group of diseases that can affect any part of the body. Other terms used are malignant tumours and neoplasms. One defining feature of cancer is the rapid creation of abnormal cells that grow beyond their usual boundaries, and which can then invade adjoining parts of the body and spread to other organs.

Cancer registry: A systematic collection of data about cancer cases in a certain region or a certain hospital. The first aim is to count cancer cases to get an idea of the magnitude of the problem. WHO advises national coverage by population-based registry in small countries only.

Capacity building: The development of knowledge, skills, commitment, structures, systems and leadership to enable effective action.

Cardiovascular diseases: A group of disorders of the heart and blood vessels that includes coronary heart disease, cerebrovascular disease, peripheral arterial disease, rheumatic heart disease, congenital heart disease, deep vein thrombosis and pulmonary embolism.

Cardiovascular risk assessment: Use of risk prediction charts to indicate the risk of a fatal or non-fatal major cardiovascular event in the next 5 to 10 years. Based on the assessment people can be stratified into different levels of risk, which will help in management and follow up.

Chronic respiratory diseases: Diseases of the airways and other structures of the lung. Some of the most common are: asthma, chronic obstructive pulmonary disease, occupational lung diseases and pulmonary hypertension.

Civil registration: The system by which a government records the vital events of its citizens and residents, such as births, deaths and marital status, and cause of death.

Collaboration: A recognized relationship between different groups with a defined purpose.

Community: A specific group of people, often living in a defined geographical area, who share a common culture, values and norms, and are arranged in a social structure according to relationships which the community has developed over a period of time. Members of a community exhibit some awareness of their identity as a group, and share common needs and a commitment to meeting them.

Cross-border marketing: Marketing originating in one country that crosses national borders through broadcast media and internet, print media, sponsorship of events and programmes or any other media or communication channel. It includes both in-flowing and out-flowing cross-border marketing.

Diabetes: A disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces.

Early detection/screening: Measures performed in order to identify individuals who have early stages of a disease (with apparent symptoms in the case of early detection and without in the case of screening).

Earmarked taxes: Taxes which are collected and used for a specific purpose.

Fiscal interventions: Measures taken by the government such as taxes and subsidies.

Free sugars: Monosaccharides and disaccharides added to foods by the manufacturer, cook or consumer, plus sugars naturally present in honey, syrups and fruit juices.

Full immunization coverage: The proportion of people in the population targeted by the programme who actually received the full dose(s) of vaccine.

General government revenue: The money received from taxation, and other sources, such as privatization of government assets, to help finance expenditures.

Health: A state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity. A resource for everyday life which permits people to lead an individually, socially and economically productive life. A positive concept emphasizing social and personal resources as well as physical capabilities.

Health behaviour: Any activity undertaken by an individual, regardless of actual or perceived health status, for the purpose of promoting, protecting or maintaining health, whether or not such behaviour is objectively effective towards that end.

Health care and treatment: The diagnosis and treatment of diseases.

Health-care facility: Facilities which provide health services. They may include mobile clinics, pharmacies, laboratories, primary health care clinics, specialty clinics, and private and faith-based establishments.

Health promotion: The process of enabling people to increase control over, and to improve their health.

Healthy diet: A healthy diet throughout the life-course helps prevent malnutrition in all its forms as well as a range of noncommunicable diseases (NCDs) and conditions. The exact make-up of a healthy, balanced diet will vary depending on the individual needs (e.g. age, gender, lifestyle, degree of physical activity). For adults, a healthy diet contains fruits, vegetables, legumes, nuts and whole grains and should be limited in free sugars, salt, total fat, saturated fats and free of industrial trans-fats.

International donors: Organizations which extend across national boundaries and which give funds for projects of a development nature.

Intervention: Any measure whose purpose is to improve health or alter the course of disease.

Legislation: A law or laws which have been enacted by the governing bodies in a country.

Marketing: Any form of commercial communication or message that is designed to, or has the effect of, increasing the recognition, appeal and/or consumption of particular products and services. It comprises anything that acts to advertise or otherwise promote a product or service.

Multisectoral: Involving different sectors, such as health, agriculture, education, finance, infrastructure, transport, trade, etc.

Multisectoral collaboration: A recognized relationship between part or parts of different sectors of society (such as ministries (e.g. health, education), agencies, nongovernmental agencies, private for-profit sector and community representation) which has been formed to take action to achieve

health outcomes in a way that is more effective, efficient or sustainable than might be achieved by the health sector acting alone.

Multi-stakeholder: Involving stakeholders from across the public sector, civil society, NGOs and the private sector.

National Cancer Screening Programme: A government-endorsed programme where screening is offered. NGO-led programmes or national recommendations to go for screening at one's own cost, do not qualify as national screening programmes.

National focal point, unit or department:

i) **National focal point:** the person responsible for the prevention and control of chronic diseases in a ministry of health or national institute.

ii) **Unit or department:** a unit or department with responsibility for NCD disease prevention and control in a ministry of health or national institute.

National health reporting system, survey and surveillance:

i) **National health reporting system:** The process by which a ministry of health produces annual health reports that summarize data on, for example, national health human resources, population demographics, health expenditures, and health indicators such as mortality and morbidity. Includes the process of collecting data from various health information sources, e.g. disease registries, hospital admission or discharge data.

ii) **National survey:** A fixed or unfixed time interval survey on the main chronic diseases, or major risk factors common to chronic diseases.

iii) **Surveillance:** The systematic collection of data (through survey or registration) on risk factors, chronic diseases and their determinants for continuous analysis, interpretation and feed-back.

National integrated action plan: A concerted approach to addressing a multiplicity of issues within a chronic disease prevention and health promotion framework, targeting the major risk factors common to the main chronic diseases, including the integration of primary, secondary and tertiary prevention, health promotion and diseases prevention programmes across sectors and disciplines.

National policy, strategy, action plan:

i) **Policy:** A specific official decision or set of decisions designed to carry out a course of action endorsed by a political body, including a set of goals, priorities and main directions for attaining these goals. The policy document may include a strategy to give effect to the policy.

ii) **Strategy:** a long-term plan designed to achieve a particular goal.

iii) **Action plan:** A scheme of course of action, which may correspond to a policy or strategy, with defined activities indicating who does what (type of activities and people responsible for implementation), when (time frame), how and with what resources to accomplish an objective.

National protocols/guidelines/standards for chronic diseases and conditions:
A recommended evidence-based course of action to prevent a chronic disease or condition or to treat or manage a chronic disease or condition aiming to prevent complications, improve outcomes and quality of life of patients.

NGO: Nongovernmental organization.

Noncommunicable diseases (NCDs): The four main types of noncommunicable diseases are cardiovascular diseases (such as heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes.

Noncommunicable diseases prevention and control: All activities related to surveillance, prevention and management of the chronic noncommunicable diseases.

Not in effect: Any policy, strategy or plan of action which has been previously developed and is no longer under development, but for various reasons is not being implemented.

Nutrition labelling: A description intended to inform consumers of the nutritional properties of food. Nutrition labelling consists of two components: (a) nutrient declaration; (b) supplementary nutrition information.

Operational: A policy, strategy or plan of action which is being used and implemented in the country, and has resources and funding available to implement it. Also applies to a multisectoral commission/mechanism which is functional and meets on a regular basis.

Palliative care: Palliative care is an approach that improves the quality of life of patients (adults and children) and their families who are facing problems associated with life-threatening illness. It prevents and relieves suffering through the early identification, correct assessment and treatment of pain and other problems, whether physical, psychosocial or spiritual.

Partnership for health: An agreement between two or more partners to work cooperatively towards a set of shared health outcomes.

Price subsidies: Economic benefit provided by the government (such as a tax allowance or duty rebate) to keep the price of healthy foods low.

Primary health care: Refers to core functions of a nation's health system. Encompassing front-line health service delivery (primary care) as well as health system structure; governance and financing; the intersectoral policy environment; and social determinants of health, primary health care provides essential health interventions according to a community's needs and expectations.

Primary prevention: Measures directed towards preventing the initial occurrence of a disease or disorder.

Print media: Communicating with the public through printed materials such as magazines, newspapers and billboards.

Product reformulation by industry: Refers to the process of changing the composition of processed foods to be healthier and reduce the salt content.

Public awareness programme: A comprehensive effort that includes multiple components (messaging, grassroots outreach, media relations, government affairs, budget, etc.) to help increase public understanding about the importance of an issue.

Public health sector: Publicly funded health-care sector.

Rehabilitation: A set of measures that assist individuals who experience, or are likely to experience, disability to achieve and maintain optimal functioning in interaction with their environments.

Risk factors associated with noncommunicable diseases

The four main risk factors for NCDs are tobacco use, harmful use of alcohol, unhealthy diet and low levels of physical activity.

Sample registration system: A method and procedure for estimating vital statistics in national and regional populations by intensively registering and verifying vital events in population samples. For instance, in India more than 4,000 rural and 2,000 urban sample units, with a total of more than 6 million persons, i.e., less than 1% of the total national population, are included in a sample registration system that provides a reasonably reliable picture of the national pattern of vital events at a cost that is feasible and reasonable.

Saturated fats: Fats found in animal products, including meat and whole milk dairy products, as well as certain plant oils like palm, palm kernel and coconut oils.

Screening: Measures preformed across an apparently healthy population in order to identify individuals who are at high risk or in the early stages of disease, but do not yet have symptoms.

Screening coverage: The proportion of people in the population targeted by the programme who actually received screening in the time frame defined by the programme. (For example, if a country recommend mammography screening every 2 years for women aged 50 to 60. The screening coverage is the number of women aged 50 to 60 who benefitted from mammography thanks to the programme in the past 2 years, divided by the total number of women aged 50 to 60 in the country.)

Self-regulation: In this context refers to when a group or private sector entity governs or polices itself without outside assistance or influence.

Target: A specific aim to be achieved, should be time bound, and define a 'desired', 'promised', 'minimum' or 'aspirational' level of achievement.

Taxation incentives to promote physical activity: Involve removing the tax (or a portion of the tax) in order to promote increased use of goods or services to encourage physical activity.

Trans-fatty acids (trans fats): A form of fatty acids. While trans fats do occur in tiny amounts in some foods, almost all the trans fats come from an industrial process that partially hydrogenates (adds hydrogen to) unsaturated fatty acids. Trans fats, then, are a form of processed vegetable oils.

Under development: Something which is still being developed or finalized and is not yet being implemented in the country.

VAT/Sales Tax: "Value-added tax" (VAT) is a "multi-stage" tax on all consumer goods and services applied proportionally to the price the consumer pays for a product. Although manufacturers and wholesalers also participate in the administration and payment of the tax all along the manufacturing/distribution chain, they are all reimbursed through a tax credit system, so that the only entity who pays in the end is the final consumer. Most countries that impose a VAT do so on a base that includes any excise tax and customs duty. Example: VAT representing 10% of the retail price. Some countries, however, impose sales taxes instead. Unlike VAT, sales taxes are levied at the point of retail on the total value of goods and services purchased.

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