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Supplement to the Report of the World Health Organization on health statistics: Strengthening statistical systems to track health-related SDGs (E/CN.3/2020/16)

Prepared by WHO

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This document provides additional information to the above-mentioned report.

#### CLASSIFICATIONS

A suite of modern classifications and terminologies ensures standardized data recording, collection and reporting, covering the range from details for individual-level recording up to population-level reporting. WHO is updating and modernizing that suite that began with the International Statistical Classification of Diseases and Related Health Problems (ICD). This update has added detail, included scientific updates to information, has used digital technologies for embedding the classifications in modern data systems (through application programming interfaces and web services) and enabled easier use of these classifications.

WHO has released the eleventh revision of ICD (ICD-11)<sup>1</sup>. The roll-out of ICD-11 has started, with about 100 countries provided with detailed briefings. However, support is necessary for the technical work in countries for implementation. Six specific implementation projects are under way with 35 countries preparing implementation at different levels with this number expected to grow rapidly.

With its eleventh revision, ICD covers details of individual cases for research and clinical purposes, and permits aggregation of data for use at the population level. Its digital infrastructure allows linking clinical documentation systems with population data collection mechanisms. ICD-11 is multilingual: the Spanish version is already available, and versions in 14 other languages are under preparation. The revision has also served to bring convergence of other classification workstreams such that ICD-O (ICD for Oncology) (and other specialty versions that are now integrated, as are national modifications), the Anatomical Therapeutic Chemical Classification System ATC, information for use in primary care, and all elements of the International Classification of External Causes of Injury (ICECI). An optional supplementary section on traditional medicine allows recording traditional medicine diagnoses in addition to 'conventional' diagnoses to enable comparisons of impact and outcomes. A section on functioning with WHO's Disability Assessment Schedule (WHOAS 2) is included as well. Updates include also elements to record information for the Global Antimicrobial Surveillance System (GLASS) and the documentation of patient safety in line with the WHO patient safety framework. Additional work is ongoing in building links to other terminology systems to allow for semantic interoperability in the connected electronic world.

The International Classification for Functioning, Disability and Health (ICF), the International Classification of Health Interventions (ICHI), and other related members of the WHO Family of health-related classifications and terminologies cover different areas of health that are not included in ICD.

The ICF provides the framework for recording and reporting disability. It ensures that all aspects of biological (body), mental and social functioning are taken into account in recording and reporting, with

<sup>&</sup>lt;sup>1</sup><u>https://www.who.int/classifications/icd/en/</u>

http://icd.who.int

tools allowing calculation of a summary score. ICF is in the process of being modernized and moved on to the same platform as ICD-11.

Information about health interventions at individual and population levels is essential to the assessment of services provided and relevant management of resources (e.g. DRG – Diagnoses related groups), besides documentation of individual cases, or research. ICHI fills this gap. It is undergoing a final round of coverage verification and field trials with a view to finalization this year. Editing towards the final version of ICHI and moving it on to the same infrastructure as ICD-11 will precede its roll-out. Inputs on the structure of its public health interventions section are being sought.

# STRENGTHENING COUNTRY HEALTH INFORMATION SYSTEMS

This section outlines WHO work with partners in strengthening country health information systems, including by addressing various data sources.

# **SCORE Technical Package**

WHO, with support from the Health Data Collaborative (HDC) partners, has developed the SCORE technical package to assist Member States in strengthening country health data systems and capacities to respond to the monitoring requirements of the health and health-related SDGs, including universal health coverage (UHC), and other national and subnational priorities.

The assessment tool of SCORE technical package has been implemented globally, and its results will be published in 2020 in the first Global status report on health data systems and capacity. Individually, countries will receive a country profile of their results to assert their investments, to identify gaps for nationally relevant actions, and to assist monitoring performance in strengthening their health data systems overtime. To date, countries have received preliminary country assessments and a number have already used these assessments for priority setting and work planning. Regional workshops will be held throughout 2020, to review results to identify gaps and priority areas at the region and national levels and to set concrete next steps to address these.

# **Routine Health Facility Information Systems**

WHO sets standards for routine health facility data analysis and use in countries toward an integrated, standards-based approach across different health programmes to strengthening routine health information systems (e.g. Toolkit for analysis and use of routine health facility data). This toolkit is a set of resources to optimize the analysis and use of data collected through routine facility information systems. The toolkit demonstrates the collaborative efforts of multiple WHO technical programmes and partners toward an integrated, standards-based approach to strengthening routine health information systems. This approach aims to focus the analysis of routine facility data on a well-defined set of standardized core indicators, with recommended visualizations and guidance on data analysis and interpretation.

The comprehensive toolkit includes a series of integrated modules that can be used individually or together. A set of overarching modules addresses key concepts common to all programme-specific modules, including data quality review and integrated health services analysis; programme-specific modules are curated according to their operational and monitoring needs. Each module consists of a guidance document, training materials and an electronic configuration package for automated dashboard production, that can be adapted for use with various digital solutions, for example, the District Health Information Software 2 (DHIS2). Modules for reproductive, maternal, newborn, child and adolescent health; immunization; HIV; tuberculosis; malaria; and hepatitis have been made available.<sup>2</sup> Additional modules are in development.

# **Civil Registration and Vital Statistics**

From a health perspective, the production of a continuous flow of mortality data for a given population enables epidemiological research to support public health measures. Yet globally, few low- and middleincome countries have civil registration and vital statistics (CRVS) systems that produce cause-of-death statistics of sufficient quality to guide public health decision-making.

WHO has supported initiatives and partner organizations at the regional and country levels towards CRVS strengthening through the following mechanisms: collaborations with UNECA and UNESCAP and other development partners in CRVS system strengthening activities in countries and implementing the WHO regional strategy and work plan. There have been increasing efforts to support the health sector in Member States to strengthen birth and death notification in recent years.

WHO co-sponsored the organization of the Fifth Ministerial Conference for ministers responsible for CRVS in Africa in Lusaka, October 2019. WHO will co-sponsor the organization of the UNESCAP Second CRVS Ministerial Conference in October 2020. WHO is coordinating with UNICEF and Vital Strategies to lead a session on CRVS at the forthcoming World Data Forum 2020 in Bern, Switzerland.

WHO and UNICEF have developed a guidance on the "Health sector contributions towards improving the civil registration of births and deaths in low-income countries" to be launched in 2020. The WHO CRVS Global Strategy 2020-2024 is being prepared for release in 2020. It will provide guidance to Member States according to the maturity level of their CRVS systems. As part of the strategy for regional support, CRVS capacity-building workshops will be conducted to strengthen regional and country expertise. It is envisaged that direct support will be offered to priority or 'first phase' countries during 2020-2024.

# Verbal autopsy

WHO continues to develop and maintain verbal autopsy (VA) standards. The WHO VA working group was re-constituted as a WHO VA Reference Group (VARG), which convened for the first time in Seoul, South Korea at the annual meeting of the WHO Family of International Classifications (WHO-FIC) Network in October 2018. The VARG supports and advices WHO regarding development and maintenance of WHO VA standards and respective VA instrument, standards for VA training and

<sup>&</sup>lt;sup>2</sup> https://www.who.int/healthinfo/tools\_data\_analysis\_routine\_facility/en/.

implementation as well as advancement of methods and tools for assigning causes of death from VA interviews.

# World Health Survey+

Building on WHO's experience in household health surveys, the WHS+ is a data collection platform that can be implemented as a standalone survey or integrated with other multi-country survey platforms where feasible, national surveys or within topic-specific surveys, deployed based on the context and work across different modes of data collection (e.g. in person, mobile phones, web-based, multi-modal). To realize the full potential of WHS+, collaboration is critical, especially between Ministries of Health and the National Statistics Organizations.

While the WHS+ platform is being designed to fill critical data gaps to track progress towards Universal Health Coverage and health-related SDGs, it can be tailored to country-specific needs. Country-specific plans will be developed for health surveys that are nationally owned.

Several countries have begun testing the WHS+ and a larger roll out is planned in 2020-2021 following expert consultations. This work will be coordinated with the InterSecretariat Working Group on Household Surveys and the International Household Survey Network.

#### MONITORING HEALTH INEQUALITIES

The concept of leaving no one behind is foundational to achieving the SDGs. Recognizing the importance of data disaggregation to inform equity-oriented health policies, programs, and practices, WHO has developed a package of resources and tools<sup>3</sup> to build capacity for collecting, analyzing and reporting on health inequality data for both global<sup>4,5</sup> and national monitoring. This includes a handbook<sup>6</sup>, a manual<sup>7</sup> and statistical codes<sup>8</sup> on data disaggregation. WHO also launched the Health Equity Monitor database<sup>9</sup> in 2013, one of the largest global databases with disaggregated health data, which has been updated annually since then.

WHO has also been building capacity for inequality monitoring among its Member States through running regular regional and country training workshops<sup>10</sup>. For instance, the in-depth capacity building in Indonesia led to the development of the first-ever comprehensive joint-report of WHO and a Member State on "State of health inequality: Indonesia" <sup>11</sup>. Moreover, a new manual on inequality monitoring in

<sup>&</sup>lt;sup>3</sup> https://www.tandfonline.com/doi/full/10.3402/gha.v8.29034

<sup>&</sup>lt;sup>4</sup> <u>https://www.who.int/gho/health\_equity/report\_2015/en/</u>

<sup>&</sup>lt;sup>5</sup> <u>https://www.who.int/gho/health\_equity/report\_2018\_immunization/en/</u>

<sup>&</sup>lt;sup>6</sup> https://www.who.int/gho/health\_equity/handbook/en/

<sup>&</sup>lt;sup>7</sup> <u>https://www.who.int/gho/health\_equity/manual/en/</u>

<sup>&</sup>lt;sup>8</sup> <u>https://www.who.int/gho/health\_equity/statistical\_codes/en/</u>

<sup>&</sup>lt;sup>9</sup> <u>http://apps.who.int/gho/data/node.main.nHE-1540?lang=en</u>

<sup>&</sup>lt;sup>10</sup> <u>https://www.tandfonline.com/doi/full/10.1080/16549716.2017.1419739</u>

<sup>&</sup>lt;sup>11</sup> <u>https://www.who.int/gho/health\_equity/report\_2017\_indonesia/en/</u>

immunization has been published in 2019<sup>12</sup>. In addition, we have developed the Health Equity Assessment Toolkit (HEAT and HEAT Plus), a software application that enables countries to assess inequalities at national or subnational levels<sup>13</sup>.

WHO is also represented in the IAEG-SDG working group on data disaggregation and has been collaborating with UN Statistical Division to build capacities for countries through training workshops on data disaggregation. The WHO Health Equity Assessment Toolkit (HEAT and HEAT Plus) is used to assess within-country inequalities in health, and also can be used for assessing inequalities in all other SDG indicators using their relevant inequality dimensions.

# **REFERENCE GROUP ON HEALTH STATISTICS**

The WHO Reference Group on Health Statistics (RGHS) provides advice on population-health related statistics of relevance to WHO. The primary role of the RGHS is to advise and support WHO's efforts to assist Member States to ensure maximal gains in population health through policies correctly informed by data, analytics, and evidence. The RGHS serves as a broad scientific and strategic platform to facilitate the exchange of knowledge and application of health statistics, beyond mortality and cause of death, and to accelerate efforts to improve data collection practices and analytical capacity in countries. The membership profile of the RGHS accordingly covers a wide range of expertise and skills.

The aim is for WHO and its Member States to continue to benefit from the best possible scientific and strategic advice in the generation, use, interpretation, and dissemination of health statistics. WHO is looking to accelerate efforts among global partners, including academic and research groups, to improve analytical capacity and data collection systems in countries.

The most recent RGHS meeting took place in Geneva in December 2019 and was attended by global experts in health statistics, including experts from national statistical offices and ministries of health, observers, and the WHO Secretariat.

# THEMATIC AREAS

The section below outlines recent and planned health statistical work on selected thematic areas.

# Antimicrobial resistance

Antimicrobial resistance (AMR) renders medicines ineffective and causes infections to persist, increasing the risk of spread to others. New resistance mechanisms are emerging and spreading globally, threatening our ability to treat common infectious diseases, resulting in prolonged illness, disability, and death. Given the increasing importance to address AMR globally, a related indicator is being proposed to

<sup>&</sup>lt;sup>12</sup> <u>https://www.who.int/gho/health\_equity/manual\_immunization/en/</u>

<sup>&</sup>lt;sup>13</sup> <u>https://www.who.int/gho/health\_equity/assessment\_toolkit/en/</u>

be added to the SDG monitoring framework, i.e. indicator 3.d.2, Reduce the percentage of bloodstream infections due to selected antimicrobial resistant organisms.<sup>14</sup>

Since the adoption of the Global Action Plan on Antimicrobial Resistance<sup>15</sup> in May 2015, WHO has been working with its Member States to build their technical capacity to address key strategic objectives of the plan including surveillance, infection prevention and control, antimicrobial stewardship, and implementation of the antimicrobial resistance national action plans.

After the launch of the Global Antimicrobial Resistance Surveillance System (GLASS)<sup>16</sup> in 2016, a total of 87 countries have been supported to enroll into the system and produce data on resistance and antibiotic consumption. 54 out of 87 countries enrolled are low- and middle-income countries (LMIC), and national surveillance systems were developed in 30 out of the 54 LMIC. Since 2017, annual global data calls were conducted on antimicrobial resistance in human infections, 2 global reports were published based on data collected by the Member States, and the 3rd GLASS report will be issued in April 2020. In 2020, the third data call on AMR and the first data call on antimicrobial consumption (AMC) will be launched. The data from GLASS will be the source of information to track SDG indicator 3.d.2.

Over 2018-2019 the following country capacity building/technical assistance activities have been conducted to support the establishment of national surveillance systems, and to help collect, analyze and report data: 25 country missions to assist with development of national AMR surveillance, 7 national workshops, 4 multi-country workshops on AMR surveillance, 18 webinars, and continuous help desk to GLASS national focal points.

Preventing and controlling infections in health-care facilities is a key objective of the global action plan. Two global surveys have been conducted by WHO on the situation of infection prevention and control (IPC) programmes: at the national and facility levels in 88 countries in 2018, and in 5925 facilities in 141 countries in 2019. Countries were enabled to collect and analyze health data from these surveys, which help guide global policies. In collaboration with academic institutions, WHO also conducted four systematic reviews estimating the global epidemiology and burden of health care-associated sepsis and in the neonatal, maternal and adult populations. WHO will launch a global report on epidemiology and burden of sepsis in May 2020. In 2018, WHO supported 48 countries in strengthening their national IPC capacity and implementation at the point of care, using a step-wise prioritization approach based upon IPC indicators' monitoring. By 2020 WHO will publish a new protocol for surveillance of health careassociated infections in settings with limited resources, after testing in 8 countries worldwide.

Antimicrobial stewardship programmes are critical to help manage the use of antibiotics and reduce the burden of antimicrobial resistance in health-care facilities. WHO is developing an assessment tool for the implementation of antimicrobial stewardship programmes based on quality measures on infection managements and antimicrobial consumption and use data. Training will be conducted for countries to use this tool and collect relevant data to guide strategic decisions and strengthen quality of care. In 2019, WHO supported 10 countries in initiating national and health-care facility antimicrobial stewardship programmes through national advocacy and planning meetings and health-care facility

<sup>&</sup>lt;sup>14</sup> <u>https://unstats.un.org/unsd/statcom/51st-session/documents/2020-2-SDG-IAEG-E.pdf</u>

<sup>&</sup>lt;sup>15</sup> https://www.who.int/antimicrobial-resistance/global-action-plan/en/

<sup>&</sup>lt;sup>16</sup> https://www.who.int/glass/en/

training workshops. In 2020, WHO will organize two regional antimicrobial stewardship capacity building workshops to facilitate the implementation of integrated antimicrobial stewardship programmes at national and health-care facility levels.

WHO also administers the annual Tripartite AMR Country Self-Assessment Survey (TrACSS) in all WHO Member States to collect data on the implementation of their antimicrobial resistance national action plans. This survey is developed in collaboration with the Food and Agriculture Organization (FAO) and the World Organisation for Animal Health (OIE). In the third round of the survey in 2019, data was collected from 159 countries on various indicators associated with human health, animal health and agriculture, and the environment. The results of the surveys are published in a public website: <a href="https://www.amrcountryprogress.org/">https://www.amrcountryprogress.org/</a> . The fourth round of the survey has been launched, and the results will be published in May 2020.

# National Health Workforce Accounts (NHWA)

The National Health Workforce Accounts (NHWA)<sup>17</sup> is a system by which countries progressively improve the availability, quality, and use of health workforce data through monitoring of a set of indicators to support achievement of Universal Health Coverage (UHC), Sustainable Development Goals (SDGs) and other health objectives.

The purpose of the NHWA is to facilitate the standardization and interoperability of health workforce information.

The NHWA defines standardized indicators to:

- generate reliable human resources for health (HRH) information and evidence;
- enable planning, implementation and monitoring of workforce policies towards UHC; and
- improve comparability of health workforce data nationally and globally

WHO and partners have developed a number of tools and guidance to support NHWA implementation at country level. The NHWA Handbook follows a modular structure aligned with the health labour market framework. It encompasses 78 health workforce indicators organized into 10 modules covering three labour market components: education, labour force and serving population health needs. These categories correspond with major types of policies required to provide safe, effective, person-centred health services. The NHWA includes both numeric and capability indicators (e.g. information on regulation or the status of the HRH monitoring and management system).

The implementation of the NHWA is a country-led activity. It builds on existing national systems and mechanisms to progressively improve country capacity to collect, analyse, use and report HWF indicators to inform policy making according to the country needs. It is a collaborative activity bringing

<sup>&</sup>lt;sup>17</sup> <u>https://apps.who.int/iris/bitstream/handle/10665/311853/WHO-HIS-HWF-NHWA-2019.1-eng.pdf?ua=1</u>

together multiple stakeholders. WHO has developed an Implementation Guide to help countries implement the NHWA in a sustainable manner.

# Nutrition

The WHO nutrition surveillance team supported more than 30 countries in the last 4 years (2016-2019) in the following activities:

1) Worked with countries to align national nutrition framework with the Global Nutrition Monitoring Framework,<sup>18</sup> to assure harmonized indicators are used for monitoring the global nutrition targets;

2) Together with key partners, developed guidelines on anthropometric data collection, analyses and reporting to enhance data quality;

3) Developed tools to help countries assess quality and analyze child anthropometric data and derive child malnutrition estimates following harmonized reporting adhering to GATHER guidelines;

4) Transfer knowledge to countries on the use of the Global Nutrition Targets Tracking Tool<sup>19</sup> for countries to assess their current status and explore different scenarios for moving towards their national nutrition targets;

WHO also work with key partners for deriving the UNICEF-WHO-WB Joint Child Malnutrition Estimates (JME) annually to feed into global reports including SDG monitoring; this work is being enhanced by new partnerships such as IHME to improve and harmonize data and methods as much as possible. WHO is moving towards an integrated nutrition platform to house all the databases on nutrition for which WHO holds the custody and to link to process and policy data related to the achievement of the global nutrition targets and SDG goals.

# Health and Migration

Building on the long-standing work to promote health of refugees and migrants, as part of the transformation WHO started a dedicated programme on Health and Migration set it up in the Office of the Deputy Director General.

At the World Health Assembly in 2019 Members States agreed a five-year global action plan to promote the health of refugees and migrants, that underpins the Global Compact for Safe, Orderly and Regular Migration (GCM), <sup>20</sup> as well as New York Declaration on Refugees and Migrants.<sup>21</sup> The plan focuses on achieving universal health coverage - and the highest attainable standard of health - for refugees and migrants and for host populations. The plan includes short and long-term steps to mainstream refugee

<sup>&</sup>lt;sup>18</sup> <u>https://www.who.int/nutrition/publications/operational-guidance-GNMF-indicators/en/</u>

<sup>&</sup>lt;sup>19</sup> <u>https://www.who.int/nutrition/trackingtool/en/</u>

<sup>&</sup>lt;sup>20</sup> <u>https://www.un.org/en/ga/search/view\_doc.asp?symbol=A/RES/73/195</u> 21

https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A\_RES\_7 <u>1 1.pdf</u>

and migrant health care; enhance partnerships; strengthen health monitoring and information systems and counter misperceptions about migrant and refugee health. The Assembly requests the Director-General to report back, in collaboration and consultation with Member States and partners, on progress in the implementation of the WHO global action plan on promoting the health of refugees and migrants, 2019–2023 to the World Health Assembly in 2021 and 2023 and urged the Member States to report on a voluntary basis the actions they have taken relating to WHO global action plan on promoting the health of refugees and migrants.

These reports are part of the organization's impact framework where WHO is committed to have countries enabled to strengthen data, analytics and health information systems to inform policy and deliver impacts, to achieve the "triple billion" targets that are at the heart of WHO's strategic plan for the period 2019-2023 – one billion more people benefitting from universal health coverage (UHC); one billion more people better protected from health emergencies; and one billion more people enjoying better health and well-being. This is integral to WHO's commitment to help its Member States achieve the health and health related SDGs. Being cross-cutting, multisectoral and multi-dimensional, this will require unprecedented coordination and concerted efforts by all relevant parties at the country level, where national statistical office can play a key role on all aspects of data and statistics for evidencebased policy development and formulation. Such efforts can also exemplify the role of national statistical offices on complex issues of refugee and migrant health, help enrich the data disaggregation discussions in the IAEG-SDGs as well as to achieve all migration related SDGs including the SDG target 17.18 that calls to 'enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of highquality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts'. This will also play a significant role in building the monitoring framework for the Global Compact for Safe, Orderly and Regular Migration – UN General Assembly Resolution 73/195, which is built on the SDGs, and founded on various Human Rights Declarations, Covenants and Conventions.