

IMPLEMENTING RIO: MONITORING ACTION ON THE SOCIAL DETERMINANTS OF HEALTH

|BACKGROUND PAPER|



*Technical Meeting for Measuring and Monitoring
Action on the Social Determinants of Health*

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Abbreviations

CIHR-IPPH	Canadian Institutes of Health Research - Institute of Population and Public Health
FPIC	free, prior and informed consent
ILO	International Labour Organization
LGBTI	lesbian, gay, bisexual, transgender and intersex
MDGs	Millennium Development Goals
NHRI	national human rights institutions
OECD	Organisation for Economic Co-operation and Development
OOP	out-of-pocket (payments)
PAHO	Pan American Health Organization
PHAC	Public Health Agency of Canada
SDGs	Sustainable Development Goals
SDH	social determinants of health
UNDP	United Nations Development Programme
WG	Working Group for Monitoring Action on the Social Determinants of Health
WHO	World Health Organization
WHO FCTC	Framework Convention on Tobacco Control (WHO)

Executive summary

The social determinants of health (SDH) are the conditions, in which people are born, grow, work, live and age. Their unequal distribution is the root cause of pervasive and persisting health inequalities observed around the globe, both within and across countries. Improving health equity therefore requires action on the SDH. The 194 Member States of the World Health Organization (WHO) have repeatedly pledged to take action on the SDH, prominently in the 2011 Rio Political Declaration on the Social Determinants of Health.¹ Member States and international organizations, including UN agencies, have now implemented work streams pursuing SDH-focused human rights frameworks, governance structures and mechanisms, and social or environmental policy interventions that address the SDH to improve health equity. The crucial next step is the routine monitoring of these SDH-focused interventions. This background paper for the international Technical Meeting for Monitoring Action on the Social Determinants of Health presents a proposed core basket of SDH action indicators for this purpose.

The WHO, the Public Health Agency of Canada, and the Canadian Institutes of Health Research - Institute of Population and Public Health, and the Working Group they formed, have developed a proposed core basket of SDH action indicators, reflecting the structure of the Rio Political Declaration. The monitoring system includes five domains (mirroring the declaration's five action areas), measurement concepts which reflect key pledges within and across action areas, and prioritized candidate indicators. The Working Group systematically identified and prioritized measurement concepts from pledges made in the international declaration. Then 23 sources of indicators were screened for the most suitable indicators, first by applying inclusion criteria, and then by systematically assessing the quality of potential candidate indicators. One of the crucial sources screened was the Sustainable Development Goal indicator system, and indicators from this system were prioritized, unless more suitable ones were identified from other sources – to ensure the least possible reporting burden for countries.

The central proposed core basket of indicators is presented in Table 2 (pp. 14–18). Within its five domains the basket captures 23 measurement concepts with a total of 32 prioritized candidate indicators. The indicators refer to 36 out of 56 recommendation sets provided in the WHO Commission on Social Determinants of Health final report (*Closing the gap in a generation: health equity through action on the social determinants of health*)² and endorsed by subsequent World Health Assemblies.^{3,4} This core basket aims to have sufficient scope to identify important, implementation-feasible SDH actions at national and global levels to respond to the needs of global accountability and transparency.

Next steps for advancing SDH action monitoring include:

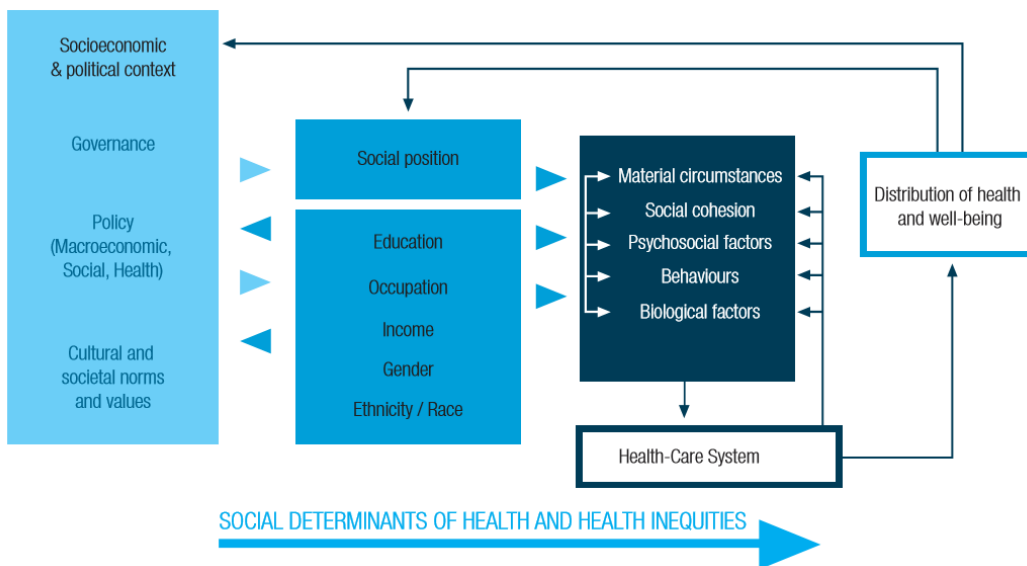
- Finalizing the core basket of SDH action indicators;
- Producing a global SDH action monitoring report and national country profile reports;
- Updating the WHO global data systems;
- Developing norms and standards for measuring SDH; and
- Facilitating and supporting networks of countries and technical experts working on SDH-focused monitoring.

1. Background

Action on the social determinants of health to improve health equity

The social determinants of health (SDH) are the conditions, in which people are born, grow, work, live and age, as well as the wider social, economic, political, environmental and cultural systems and structures that determine these conditions of daily life.² They can be differentiated into the structural SDH that stratify people socially, the intermediary SDH and the health-care system (Figure 1).² The unequal distribution of these daily living and working conditions directly causes the unequal distribution of power, money and resources, which in turn causes the inequitable distribution in health and well-being.² Since these health inequalities are socially produced, regressive and unfair, they constitute health inequities.^{2,5}

Figure 1. WHO conceptual framework for action on the social determinants of health



Source: Commission on Social Determinants of Health, 2008²

Health inequities are pervasive and rising, and this is a major problem for governments, civil society and businesses around the globe. For example, one of the most shocking public health statistics that WHO published in 2015 was that inequality in under-five mortality rates have increased over the last decade, both in many countries and globally.⁶ Member States and UN agencies are committed to reducing inequalities. The 2030 Sustainable Development Agenda – the new development framework for the period 2016–2030 – pledges to “leave no one behind”, and SDG 11 focuses on reducing inequalities. After 15 years of action to reduce inequalities in under-five mortality through the Millennium Development Goals (MDGs),⁷ much will be expected from the commitments countries made in the 2030 Sustainable Development Agenda to improve equity in under-five mortality over the 2016–2030 period,

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as part of Sustainable Development Goal (SDG) 3, “Ensure healthy lives and promote well-being for all at all ages” and the relevant targets and indicators.

As the final report of the Commission on Social Determinants of Health has already highlighted, health inequalities at their core are driven by the unequal distribution of the SDH. Improving equity consequently requires taking action on the SDH. Member States and UN agencies must systematically design, plan, implement, evaluate and rigorously monitor human rights frameworks, governance mechanisms and structures, and social and environmental policies and programmes that improve daily living conditions and health equity. Such action requires multisectoral action, using a “Health in All Policies” approach that ensures considerations of health in relevant public policies across sectors.⁸⁻¹⁰ Only by addressing the impacts of government interventions across society on health equity can the social gradient in child mortality and other health inequities be reduced.

Implementing the Rio Political Declaration on the Social Determinants of Health

Member States and UN agencies and bodies, including the World Health Assembly, have repeatedly pledged to tackle the SDH to improve health equity.^{3 4 11} At 2011 the World Conference on Social Determinants of Health in Rio de Janeiro, Brazil, 124 Member States prominently renewed their commitment to act on SDH when they adopted the 2011 Rio Political Declaration on the Social Determinants of Health (hereafter Rio Political Declaration) as their guiding policy framework for SDH action.¹ Subsequently, all 194 WHO Member States have endorsed the declaration in the 65th World Health Assembly.⁴ The Rio Political Declaration summarizes the response from countries around the world on a set of practical, politically feasible actions that governments could agree to take to implement the recommendations of the Commission on Social Determinants of Health. The declaration called for action in the five “action areas” listed in Box 1, with each action area being defined by between seven and 13 individual pledges of intended SDH-focused interventions or intervention clusters.¹ Nationally and internationally, the Rio Political Declaration is now being implemented by Member States and UN agencies by putting in place relevant human rights frameworks, governance interventions, and social and environmental policy and programmatic interventions.

Box 1. Action areas of the Rio Political Declaration on the Social Determinants of Health

<p>Action area 1: Adopt better governance for health and development.</p> <p>Action area 2: Promote participation in policy-making and implementation.</p> <p>Action area 3: Further reorient the health sector towards reducing health inequities.</p> <p>Action area 4: Strengthen global governance and collaboration.</p> <p>Action area 5: Monitor progress and increase accountability.</p>

SDH-focused monitoring

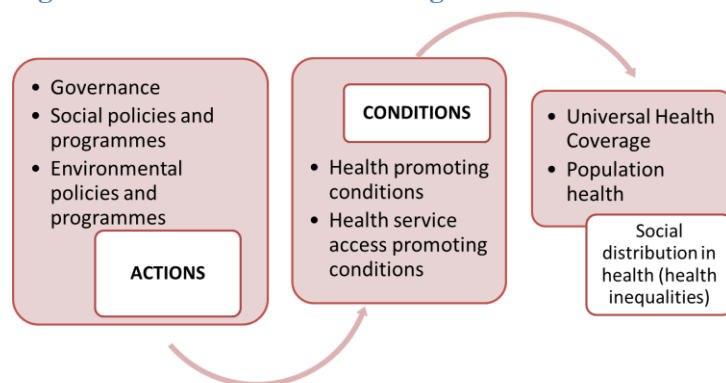
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Monitoring of well-being and inequity has been under taken at the global level for decades, including by the UN, through its MDGs, and will be continued through the monitoring of the progressive realization of the Sustainable Development Goals (SDGs). However, few efforts have been made by the health sector to strengthen monitoring of social determinants of health. A recent WHO stocktake counted 20 national systems in 15 countries that had SDH-focused monitoring (statistics on health determinants, linked to routine reports linked to health). Furthermore, efforts specifically focused on monitoring government actions to address the social gradient in health have only recently received attention.

We define SDH-focused monitoring as including the monitoring of either SDH actions or SDH conditions. SDH actions are defined in this context as a governance intervention, policy or programmatic intervention on the environment or socioeconomic sectors aimed at improving the social gradient in the conditions for health. SDH conditions are defined as the set of power, resources and money “capacities” that individuals need to produce health and that facilitate access to health services. The collection of conditions covering environment quality, accountability, inclusion, livelihoods and learning have been tagged with the acronym “EQuAL”, based on a previous expert meeting.[18] Figure 2 shows how these conditions are linked together to impact the health outcomes of key concern to the health sector: equity in population health service and programme coverage, and equity in population health itself.

Both sets of factors are important aspects of SDH-focused monitoring. Knowledge of the SDH conditions assists with designing health services and public health programmes, and provides a final check on the impact of SDH actions. SDH actions, on the other hand, are much more strongly linked to accountability mechanisms of the state, given the sectoral focus of policies and programmes and the importance of overall “governance” interventions, which are highlighted in the report of the Commission on Social Determinants of Health, and in the Rio Political Declaration on Social Determinants of Health in particular. For this reason, WHO stresses the importance of addressing the issue of SDH action monitoring with greater intensity.

Figure 2. SDH-focused monitoring



Source: adapted from Valentine et al, forthcoming.¹²

SDH action monitoring

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To improve accountability and transparency on SDH action in the measurement and monitoring domain, the crucial next step is to identify suitable indicators and build robust monitoring systems for tracking the status and trends in Member States' implementation of effective and cost-effective SDH interventions. Although tailored specifically to monitoring implementation of the Rio Political Declaration framework, these indicators and their organizing systems can at the same time also be used to monitor the progressive realization of other strategies and action plans that pledge to implement SDH-focused action, to reduce health inequities, to put "Health in All Policies", and to reorient the health sector towards health equity. Routine SDH action monitoring can also track progress made on SDH-focused goals and targets of the 2030 Sustainable Development Agenda.¹³

The need and mandate for SDH action monitoring

Monitoring of health and health inequalities (including – at time – health inequities) has been undertaken at the global level for decades, including by the UN as part of the MDGs,⁷ and will continue through monitoring the progressive realization of the SDGs.^{13 14} However, efforts specifically focused on monitoring government action on the SDH to improve equity are novel, and have only received attention recently. Over the last decade, Member States have pledged to monitor SDH action in several policy documents, including World Health Assembly resolutions (Box 2), and this provides a clear mandate for WHO to pursue SDH action monitoring.

Box 2. Timeline of recommendations of the World Health Organization and governance body policy on monitoring of action on the social determinants of health

Year	Recommendation
2008	Commission on Social Determinants of Health recommends SDH-focused monitoring in its final report, <i>Closing the gap in a generation: health equity through action on the social determinants of health</i> . ²
2009	62nd World Health Assembly (194 countries) adopts the commission's recommendation in Resolution 62.14. ³
2010	53 countries recommend monitoring of environmental interventions for reducing inequities in the Parma Declaration on Environment and Health. ¹⁵
2011	125 countries recommend strengthening of SDH-focused monitoring in the Rio Political Declaration on the Social Determinants of Health. ¹
2012	65th World Health Assembly (194 countries) adopts the recommendation of the Rio Political Declaration in Resolution 65.8. ⁴
2014	WHO European Regional Office renews its commitment to advancing SDH-focused monitoring in its European Review of Social Determinants of Health and the Health Divide. ^{16 17}
2015	68th World Health Assembly (194 countries) approves the framework for country action across sectors for health and health equity that requires establishment of mechanisms for monitoring, evaluation, and reporting in Resolution 68.17. ¹¹

Source: Pega et al, under review.¹⁸

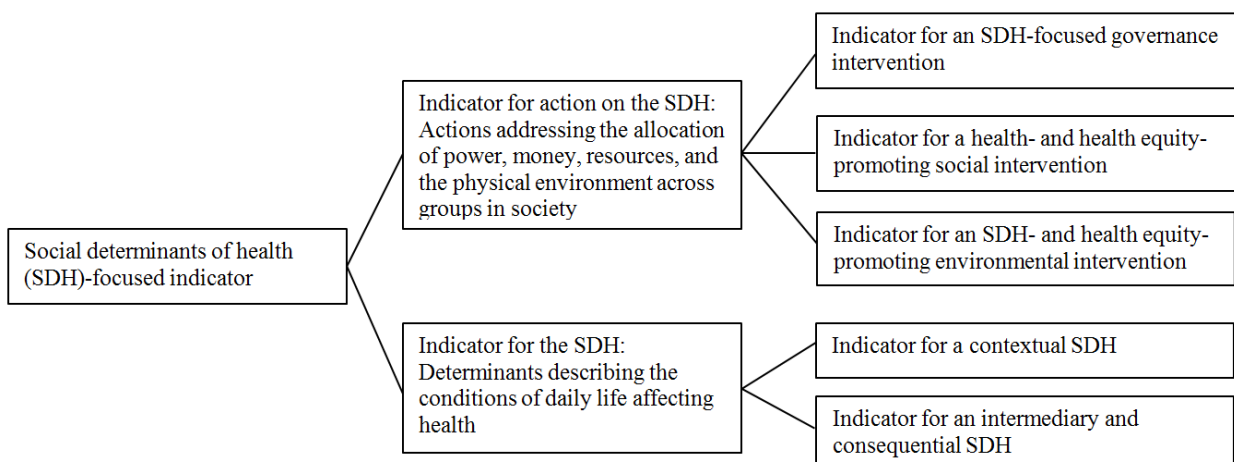
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Several streams of monitoring activities related to SDH action monitoring exist as distinct initiatives in their own right. These include the monitoring of the SDH themselves,^{19 20} the environmental determinants of health, health inequalities,²¹ universal health coverage, and – more recently and still being established – the performance monitoring of the goals and targets of the 2030 Sustainable Development Agenda.¹⁴ Importantly, and closely related to WHO’s stream of work on monitoring action on the SDH, the organization is – in parallel – currently also identifying standard indicators for the SDH themselves,^{19 20} and these two complementary work streams are envisaged to converge into an integrated SDH-focused monitoring approach.

SDH action indicators: Definitions and classifications

Definitional, conceptual and terminological clarity is required on the types of indicators that can be applied to monitor use of SDH-focused interventions in Member States.¹⁸ We categorize SDH-focused indicator into: (1) indicators for SDH action; and (2) indicators for the SDH themselves (Figure 3).¹⁸ There are three subtypes of indicators for action on the SDH. The first subtype is indicators for governance structures and mechanisms including human rights frameworks focused on the SDH. The second subtype is indicators for social policies and programmes that promote health and health equity, such as social protection and early childhood education interventions. And the third subtype are indicators for environmental policies and programmes that improve health and health equity, such a policies preventing the dumping of toxic waste in slums, which should improve the slum residents’ health, and therefore improve health equity in the population. SDH action indicators thus are performance indicators for inputs, outputs and outcomes (i.e. coverage) of relevant government interventions.

Figure 3. Typology of SDH-focused indicators



Source: Pega et al, under review¹⁸

Indicators for the SDH themselves (SDH “conditions”) comprise indicators for social norms and values, and for intermediary and consequential SDH. Rather than measuring an SDH-focused intervention,

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indicators for the SDH themselves therefore measure the impact of an SDH intervention on final outcomes (i.e. the addressed SDH). Consequently, in the identification of a core basket of SDH action indicators, we are not interested in including indicators for the SDH per se. However, for the wider SDH action monitoring systems, we are likely to want to include indicators for the SDH themselves as important contextual information for understanding the impacts of the to-be-monitored SDH action interventions.

For monitoring of action on the SDH through the implementation of the Rio Political Declaration, we are primarily interested in the specific SDH action indicators that measure those interventions that were pledged in the Rio Political Declaration. To ensure international accountability, we are particularly interested in indicators that are harmonized across countries. We can think of these actions as a set of concrete human rights framework, governance, policy and programmatic interventions defined by the Rio Political Declaration.

To be convincing an SDH action indicator must measure an intervention that effectively tackles the SDH and improves health equity. A solid evidence base supports several interventions pledged in a number of the action areas of the Rio Political Declaration for improving health equity. First, the Commission on Social Determinants of Health put forward recommendations in its final report based on the evidence reviews of effective policies and actions (Online Appendix 1).² The Cochrane Public Health Group, for example, has been at the forefront of global efforts to advance systematic review evidence on the effects of governance, social and environmental interventions on the SDH.²² For example, the evidence base demonstrating the effectiveness of social protection interventions for improving health and health equity is particularly advanced.²³⁻²⁵ Sound evidence regarding the importance of strong and generous social protection policies for a wide range of social determinants has been put forward, including but not limited to, the areas of gender equity in political leadership, unemployment coverage, universal access to health and social services, as well as social inclusion, engagement with community, cultural continuity and support for self-determination among indigenous communities.²⁶⁻²⁹ However, governance interventions in particular, require a strengthening of the evidence base. This requires additional evidence from individual studies and systematic reviews and also investment in research on SDH and interventions that address their effects on social and environmental determinants of health, health service use, population health and health equity.

Towards a WHO SDH action monitoring system

In the WHO 2016–2017 programme budget, the Department of Public Health, Environmental and Social Determinants of Health has committed to the development, launching and operation of a routine monitoring and reporting system for action on the SDH. In the 2016–2017 period, WHO will develop a global monitoring report. As is becoming the norm and a gold standard with most UN monitoring initiatives, the envisaged monitoring system is expected to be linked explicitly with the 2030 SDG Agenda,¹³ ideally through the use of relevant SDG indicators, both to ensure global policy and monitoring alignment and – importantly – also to avoid burdening Member States with additional reporting requirements.

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The four aims of the proposed WHO monitoring system are to:

- Monitor national and international action on the SDH in response to the Rio Political Declaration;
- Monitor SDH actions by the health sector and by other sectors;
- Inform Member States' and the UN system's continuous improvement in action on the SDH by providing regular reports on the status of and trends in such action; and
- Further interlink accountability systems for the implementation of the Rio Political Declaration and the SDG Agenda.

WHO, the Public Health Agency of Canada (PHAC) and the Canadian Institutes of Health Research - Institute of Population and Public Health (CIHR-IPPH) have partnered to develop an initial approach for a WHO social determinants of health action monitoring system. The three organizations gathered and convened the WG for Monitoring Action on the Social Determinants of Health (WG), a group of international experts on SDH-focused monitoring, ensuring representation and participation from all six WHO regions and from low-, middle- and high-income countries, and including active participation of the WHO, PHAC and CIHR-IPPH secretariats. The key responsibility of the WG was to develop a technical proposal for the core basket of SDH action indicators that would comprehensively monitor the implementation of the Rio Political Declaration.

The WHO SDH action monitoring system is part of the broader WHO initiative to improve SDH-focused monitoring and associated institutional public health capacities. This background paper presents information on the background, development, content (including the crucial basket of core SDH action indicators), measurement and data issues, and the next steps. This information forms the basis for technical refinement of the proposed novel monitoring system, and the initial consultation of Member States and additional technical experts on the system, at the global Technical Meeting on Monitoring Action on the Social Determinants of Health on 20–22 June in Ottawa, Canada.

2. Developing the proposed core basket of SDH action indicators

The initial focus of the WHO work stream on monitoring SDH action was to develop a conceptually robust basket of 15–25 core indicators that would enable benchmarking and tracking over time of each Member State's implementation of the actions they pledged in the Rio Political Declaration. To develop this basket of core indicators, we followed a standard process of systematic identification, assessment, and prioritization of measurement concepts and, in turn, most appropriate indicator or indicators. In brief, we first identified from the pledges for each action area of the Rio Political Declaration, the key measurement themes, which are broader themes related to SDH action, such as “social protection”. Second, for each identified measurement theme, we identified, assessed and prioritized the key measurement concept or concepts, these being concrete, measurable concepts, such as “level of public provision of social protection floors”. Third, we systematically researched potentially relevant indicators, a large number of relevant indicator databases and global monitoring systems (including the preliminary SDG monitoring system) and global monitoring reports, and we compiled these potential candidate

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indicators into a long indicator list. Fourth, we systematically assessed each potential candidate indicator and on the basis of this assessment compiled the prioritized indicators in the key end product: the proposed basket of core indicators presented in this background paper. A detailed description of the methods is provided in Online Appendix 2.

The wider WHO repository that will be created for SDH indicators in the Global Health Observatory will supplement the crucial basket of core SDH action indicators that is the focus of this background paper with detailed information on the policy context within which national SDH interventions are placed, as well as information on the country context of the to-be-monitored interventions, including the outcomes impacted by SDH interventions: the SDH themselves, environmental determinants of health, health service use (including universal health coverage), health outcomes and – importantly – health inequities.

Conceptually, the monitoring system was designed to reflect and mirror as closely as possible the structure of the declaration whose implementation it aims to monitor, to ensure the highest possible degree of alignment and transparency (Table 1). The Rio Political Declaration is made up of concrete actions on the SDH, which are organized within pledges bundled into the five broad action areas. Correspondingly, the proposed WHO SDH action monitoring system consists of indicators for action on the SDH, which are embedded within broader measurement concepts (and the broader measurement themes) and these measurement themes are organized within five domains.

Table 1. Components of the Rio Political Declaration (from narrow to broad) and corresponding components of the SDH action monitoring system

Component: SDH action monitoring system		Corresponding component: Rio Political Declaration	
Term	Definition	Term	Definition
SDH action indicator	A valid, reliable measure of the measurement concept	SDH action	A governance, policy, or programmatic intervention that improves the SDH
Measurement concept	A defined, measureable concept that captures an SDH action	Pledge	An intended action or set of actions pledged by Member States
Domain	Set of indicators that capture a single action area	Action area	A set of pledges

Defining domains and measurement concepts

Borrowing directly from the action areas of the Rio Political Declaration, the WG named the five domains of the monitoring system as domains 1: National governance; 2: Participation; 3: Health sector reorientation; 4: Global governance; and 5: Monitoring and accountability.

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In identifying, assessing and prioritizing measurement concepts, the WG followed a two-step process. The group first reviewed each pledge of the Rio Political Declaration to identify the key measurement themes communicated (see Online Appendix 3 for list and definition of measurement themes). The frequency of appearance of each theme across the pledges in all action areas was first assessed to guide identification of salient measurement themes. Themes covered broader sets of actions on the SDH as policy sectoral entry points, such as broad human rights frameworks, and sets of governance, social and environmental interventions. For pledges that also referred directly or indirectly to disadvantaged populations, such as indigenous people, children, women, transgender people and informal workers, these important populations were also included within measurement themes. Over several WG meetings, WG members highlighted pledges and further prioritized the themes that best reflected the action areas. Measurement themes were neither unique to individual action areas, nor specific to pledges. External experts were consulted on the prioritization of the measurement themes. This included feedback from experts from each of the six WHO regional offices, as well as from key external technical experts.

Measurement themes were too broad to represent specific action areas for monitoring, and they were therefore coupled with ideas contained in pledges to generate measurement concepts. In WG meetings and in one-on-one interviews with WG members, the broader measurement themes (acting as a foundation for framework development) were therefore linked with prioritized pledges to generate and refine measurement concepts (see Online Appendix 4 for a list of measurement concepts and their alignment with pledges). The WG then developed five criteria for systematically identifying and prioritizing measurement concepts (see Appendix 1, Table A1.1). Subsequently the WG systematically applied these criteria and jointly selected the core measurement concepts.

Identifying, prioritizing and developing indicators

First, the WG developed criteria for systematic selection and assessment of SDH action indicators. To determine a reasonable set of these criteria, the WG reviewed the indicator development literature and reports of relevant international monitoring efforts to ensure consistency with best practice in indicator selection. Based on this literature review, the WG developed a tailored list of inclusion criteria for screening indicators (see Appendix 2, Table A2.1) and quality assessment criteria for selecting the most suited SDH action indicators (see Appendix 2, Table A2.2).

Second, the WG members and external experts consulted proposed 21 sources for candidate indicators, including databases, reports and other indicator sets (e.g. the 230 preliminary SDG indicators)¹⁴ (see Online Appendix 5). The WG secretariat screened these sources for relevant SDH action indicators, applying the inclusion criteria (see Appendix 2, Table A2.1) and compiled eligible, potentially suitable candidate indicators in the long indicator list (available from authors).

Third, to identify the most suitable candidate indicator or indicators for each measurement concept, several WG members numerically rated candidate indicators according to the quality assessment criteria (see Appendix 2, Table A2.2). WG members also scanned indicators on the long indicator list, including the foundational SDG indicators, to match with the measurement concept, and then applied the quality

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assessment criteria to the indicators considered most suitable (see Online Appendix 6 for quality assessment of prioritized indicators).

Finally, the most suitable indicators were compiled into the core basket of indicators, and some indicators were minimally refined to optimally suit the monitoring system. Such minimal refinements included combining several binary indicators into one ordinal indicator, and creating parity indices (ratio of disadvantaged to advantaged group in intervention coverage).³⁰

3. Proposed core basket of SDH action indicators

Overarching properties

The SDH action monitoring system measures the implementation of Rio Political Declaration across five action areas. The Rio Political Declaration built directly on and aligned with the recommendations of the Commission on Social Determinants of Health, and therefore monitoring the implementation of actions taken in response to the organizing policy framework of the declaration is in harmony with the long-term efforts on SDH that Member States have pursued.

The monitoring system is SDH-action oriented in that it puts SDH action indicators, which are input, output and outcome indicators, at its centre. Therefore, the monitoring system tracks progress on key SDH-focused actions of governments: the use of human rights frameworks, governance structures and mechanisms (in the past often referred to as “processes”), and social and environmental policies and programmes.

WHO seeks strong alignment and interlinkages between its monitoring systems and the SDG Agenda, to ensure cost-effectiveness of monitoring efforts and placing the smallest possible burden on national and international data and reporting systems, in accordance with fundamental principles of official statistics. For the most part, SDG indicators with readily available data from many countries therefore form the foundation of the SDH action monitoring system. However, if more suitable indicators were identified from other sources, then those were prioritized over SDG indicators. The same approach has also been pursued in other major global health monitoring initiatives, such as the indicator set for the Global Strategy for Women’s, Children’s and Adolescents’ Health.³¹ However, we acknowledge that this approach may have resulted in some gaps in the indicator system, both in terms of population groups and interventions covered.

A balance is sought between input and output indicators that measure governance interventions (or “processes”) and outcome indicators measuring population coverage with crucial interventions, such as social protection for people living below the national poverty line. Finally, an equity focus is ensured by capturing both indicators measuring level of intervention provision (“coverage”) and inequality in level of intervention provision (“equity in coverage”). Equity in level of intervention coverage is measured using parity indices (ratio of disadvantaged to advantaged group in intervention coverage).³⁰ For Member

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State's provision of early childhood education for example, the monitoring system includes *Indicator 1.2.1: Proportion of children participating in early childhood education*, together with *Indicator 1.2I.1: Parity index (by gender) in the proportion of children participating in early childhood education*.

Guiding structure

From narrow to broad, the structure of the SDH action monitoring system comprises 15–25 indicators, nested within 23 measurement concepts, housed within five domains.

Domains

Domains correspond to the five Rio Political Declaration action areas. Domain 1: National governance captures “Action area 1: Adopt better governance for health and development”. Pledges within this action area pertain to government structures and mechanisms, including the development of social and environmental policies and programmes that improve health equity. Domain 2: Participation captures “Action area 2: Promote participation in policy-making and implementation”. Pledges within this action area relate to participation of communities, and especially the most disadvantaged communities, in policy-making. Pledges in Domain 3: Health sector reorientation, which captures “Action area 3: Further reorient the health sector towards reducing health inequities” pertain to consideration of mainstreaming action on the SDH to reduce health inequities specifically within the health sector. Domain 4: Global governance relates to “Action area 4: Strengthen global governance and collaboration” which pledges international action and collaboration on the SDH. Domain 5: Monitoring and accountability captures pledges in “Action area 4: Monitor progress and increase accountability” to monitor and improve transparency and accountability, including by providing access to data disaggregated by key SDH.

Measurement concepts

The basket of core indicators captures a total of 23 measurement concepts that are prioritized because they are central to one or more pledges made by Member States in the Rio Political Declaration and associated World Health Assembly Resolution. To demonstrate alignment of the policy framework (Rio Political Declaration) with the monitoring system (WHO SDH action monitoring system), Online Appendix 4 tabulates, for each domain, all pledges of the declaration, alongside the measurement concepts that cover the pledges. Online Appendix 6 provides the detailed rationale for why each measurement concept was prioritized. Finally, Online Appendix 7 shows alignment of the core basket of SDH action indicators drawn from the SDG indicator system with the relevant SDGs and targets.

List of indicators

We now present the core of the SDH action monitoring system, the central basket of prioritized SDH action indicators – the key product developed by the WG (Table 2). This core indicator set is the central part of the proposed SDH action monitoring system, and the central aspect of this background paper. This core basket of prioritized SDH action indicators will be refined over time, including from feedback and

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recommendations collected at the global Technical Meeting on Monitoring of Action on the Social Determinants of Health.

Each indicator was uniquely named, with the nomenclature reflecting the indicator's domain, measurement concept, and the individual indicator, amongst other information (Figure 4). For example, Indicator *3.II.1 Parity index (by wealth quintile) in coverage with safely managed drinking-water* is an indicator from domain 3 (i.e. **3**.II.1), measurement concept II (i.e. 3.**II**.1) where the "I" indicates that inequality in an intervention is measured), and that this is the first indicator for this measurement concept (i.e. 3.II.**1**). Measurement concepts that are governance interventions (or "processes") are indicated with a non-capitalized letter appearing in the measurement concept, such as 3.**a**.1. And measurement concepts that contain a capital I or II measure inequities in the population coverage with an intervention (e.g. 3.1**I**.1), these generally being parity indices (ratio of disadvantaged to advantaged population in intervention coverage). An asterisk (*) is added behind indicators without immediate data availability across many countries.

Figure 4. Nomenclature of indicators

Domain/Measurement concept	Indicator
Domain 1: National governance	
1.1 Level of public social protection	1.1.1 Percentage of the population covered by social protection floors/systems below the poverty line [SDG Indicator 1.3.1]

Domain 1

Source of indicator
(e.g. SDG indicator)

Measurement concept 1.1
(governance interventions indicated by letters (e.g. 1.a) and inequities indicated by addition of an I (e.g. 1.1I))

First indicator for measurement concept 1.1

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Table 2. Core basket of SDH action indicators by domain and measurement concept

Domain/Measurement concept	Indicator
Domain 1: National governance	
1.1 Level of public social protection	<i>1.1.1 Percentage of the population covered by social protection floors/systems below the poverty line</i> [SDG Indicator 1.3.1]
1.1I Gender inequities in the level of public social protection	<i>1.1I.1 Parity index (female/male) for the percentage of the population covered by social protection floors/systems below the poverty line</i> [SDG Indicator 1.3.1, disaggregated data]
1.2 Level of public provision of early childhood education	<i>1.2.1 Participation rate in organized learning (one year before the official primary entry age)</i> [SDG Indicator 4.2.2]
1.2I Gender inequities in the level of public social protection	<i>1.2I.1 Parity index (female/male) for participation rate in organized learning (one year before the official primary entry age)</i> [SDG Indicator 4.2.2, disaggregated data]
1.2II Income inequities in the level of public social protection	<i>1.2II.1 Parity index (bottom/top wealth quintile) for participation rate in organized learning (one year before the official primary entry age)</i> [SDG Indicator 4.2.2, disaggregated data]
1.a Provision of the rights and public laws guaranteeing self-determination of Indigenous Peoples	<i>1.a.1</i> [no indicator yet identified]
1.b Provision of public laws guaranteeing human rights for transgender populations	<i>1.b.1 Presence/lack of laws that criminalize trans identity and expression, protect against discrimination on the basis of gender identity/gender expression as a category, and determine the legal right for individuals to determine their legal gender and name¹*</i> [UNDP]
1.c Provision of public laws guaranteeing human rights for sex workers	<i>1.c.1 Presence/lack of laws that criminalize sex work and protect the public health of sex workers*</i> [Review of national legislation]
1.d Provision of public laws guaranteeing workers	<i>1.d.1 Increase in national compliance of labour rights (freedom of association and</i>

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human rights for informal	<i>collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation</i> [SDG Indicator 8.8.2]
1.e Level of intersectoral action for health and health equity	<i>1.e.1 Whether a national policy exists that addresses at least two priority determinants of health in target populations^{2*}</i> [PAHO]
Domain 2: Participation	
2.a Mechanisms for guaranteeing transparency in policy-making	<i>2.a.1 Whether country has adopted and implemented constitutional, statutory and/or policy guarantees for public access to information</i> [SDG Indicator 16.10.2]
2.b Level of implementation of mechanisms for participation of civil society	<i>2.b.1 Whether the country has accountability mechanisms that support civil society engagement in health impact decisions*</i> [PAHO]
	<i>2.b.2 Whether mechanisms exist to engage communities and civil society in the policy development process across all sectors*</i> [PAHO]
2.c Level of implementation of mechanisms for participation of civil society in policy-making for indigenous peoples	<i>2.c.1 Number of policies that recognize the duty to consult and cooperate in good faith with indigenous peoples in order to obtain their free, prior and informed consent (FPIC) before adopting and implementing legislative or administrative measures that may affect them. World Conference on Indigenous Peoples commitment, paragraph 3*</i> [source]
	<i>2.c.2 1) Existence of special measures to strengthen capacity of indigenous peoples' representative institutions; 2) Existence and capacity of national human rights institutions (NHRI) to reach out to vulnerable groups such as indigenous peoples; 3) Institutional mechanisms and procedures for consultation with indigenous peoples, in accordance with international standards*</i> [source]
	<i>2.c.3 1) Provisions for direct participation of indigenous peoples' elected representatives in legislative and elected bodies; 2) Recognition in the national legal framework of the</i>

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	<i>duty to consult with indigenous peoples before adopting or implementing legislative or administrative measures that may affect them*</i> [source]
2.d Level of implementation of mechanisms for participation of civil society in policy-making for transgender populations	<i>2.d.1 Presence/lack of laws that prohibit LGBTI people from forming organizations and participate in political parties and social movements*</i> [UNDP]
Domain 3: Health sector reorientation	
3.1 The level of comprehensive, equitable basic service coverage by health systems (including primary health care and the right to health)	<i>3.1.1 Percentage of population using safely managed drinking-water services</i> [SDG Indicator 6.1.1]
	<i>3.1.2 General government expenditure on primary health care and health promotion as a proportion of general government expenditure</i> (if data unavailable proxy: <i>3.1.2 General government expenditure on health as a proportion of general government expenditure</i>) [WHO]
3.1I Inequities in the level of comprehensive, equitable basic service coverage by health systems (including primary health care and the right to health)	<i>3.1I.1 Parity index (by wealth quintile) in coverage with safely managed drinking-water</i> [SDG Indicator 6.1.1, disaggregated data]
3.2 Level of financial health protection	<i>3.2.1 Percentage of population with catastrophic health expenditure (universal health coverage)</i> [WHO]
3.2I Inequities in level of financial health protection	<i>3.2I.1 Out-of-pocket (OOP) payments as % of income among lowest wealth quintile/OOP as % of income amongst highest wealth quintile</i> [WHO]
3.3 Level of integration of equity into health systems, policies and programmes	<i>3.3.1 Percentage of total government health expenditure on prevention and public health services</i> [OECD health accounts; WHO national health accounts]
	<i>3.3.2. Equity-adjusted universal health service coverage index*</i> [WHO]

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3.a Mechanisms for ensuring integration of equity into health systems, policies and programmes	3.a.1 <i>National and/or subnational policy addressing the reduction of health inequities established and documented</i> [WHO EURO]
	3.a.2 <i>Existence of a national policy which supports routine consideration of health equity in health promotion and disease prevention programs</i> [source unclear]
Domain 4: Global governance	
4.1 Level of international funding for comprehensive, equitable basic service coverage by health systems (including primary health care and the right to health)	4.1.1 <i>Amount of water and sanitation related official development assistance that is part of a government coordinated spending plan</i> [SDG Indicator 6.a.1]
4.a Level of implementation of international agreements that improve the SDH	4.a.1 <i>The country's performance on the International Health Regulations (IHR) capacity and health emergency preparedness index</i> [SDG Indicator 3.d.1]
	4.a.2 <i>Number of countries with tax policies have been implemented to reduce tobacco demand</i> [WHO FCTC]
4.b Participation of developing countries in international policy-making	4.b.1 <i>Percentage of members or voting rights of developing countries in international organizations</i> [SDG Indicator 10.6.1/16.8.1]
4.c North-South, South-South sharing to develop holistic policies addressing inequities and sustainable development	4.c.1 <i>US dollar value of financial and technical assistance (including through North-South, South-South and triangular cooperation) committed to developing countries</i> [SDG 17.9.1]
Domain 5: Monitoring and accountability	
5.1 Disaggregation of health data according to social determinants of health	5.1.1 <i>Percentage of indicators in the Global Health Observatory that are provided disaggregated by a social characteristic</i> [WHO]
5.a. Level of implementation of SDH-focused monitoring systems	5.a.1 <i>Country has dedicated SDH action monitoring system (as per WHO definition to be developed)*</i> [WHO/PAHO]
	5.a.2 <i>Country has dedicated monitoring system for health inequalities</i>

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	[WHO]
5.b. Financial investment in research and evaluations of SDH interventions to promote equity	<i>5.b.1 Proportion of national health research spending related to actions on SDH*</i> [source unclear]
5.c. Mechanisms for guaranteeing access to information as a key component of research, monitoring and evaluations to ensure accountability and justice	<i>5.c.1 Whether country has adopted and implemented constitutional, statutory and/or policy guarantees for public access to information</i> [SDG Indicator 16.10.2]

Notes: * Indicator does not have full data availability (i.e., does not have all of: established methods, international standards, and data available across countries). ¹ Composite index composed from three individual binary indicators. ² A composite index could be composed of this indicator and additional binary indicators from the PAHO Health in All Policies regional monitoring system.

4. Social determinants of health action reporting systems

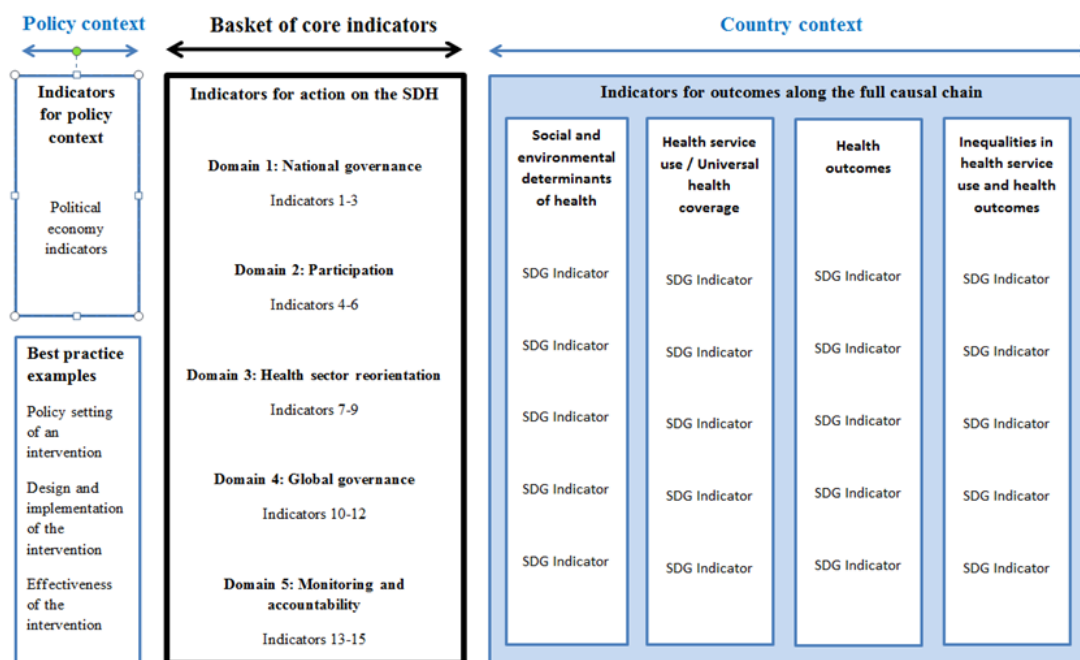
Standardized national SDH action monitoring reports

It is envisaged that national-level country reports will be developed based on an agreed common structure, some of the elements of which are described in the next section. A shortened version of these reports would be housed as country profiles in the WHO global and regional health observatories. Both the country profiles and the in-depth national-level reports would be useful in the context of promoting action in countries, in particular for working across sectors using a Health in All Policies approach and for reorienting health systems.

Describing the national policy context

The core basket of SDH action indicators proposed in the previous section will form the core of the global, regional and national monitoring and reporting systems for action on the SDH. However, different regions and countries require different actions on the SDH, because of different policy and country contexts. Consequently, the report user requires indicators, descriptions of the policy and country context, and summaries of the evidence to meaningfully interpret individual actions on the SDH. Therefore, several further information elements are required for making sense of national SDH action indicators within their specific policy and country context (Figure 5).

Figure 5. National reports with the core basket of SDH action indicators embedded in contextual indicators and information



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An example will illustrate this point. To fully understand the use of social protection floors as a key action on the SDH in a country, a user of a global monitoring report requires information on the country's political economy (i.e. one aspect of policy context), as well as its level of poverty and health equity by income (i.e. two aspects of country context). Such contextualizing information will enable the report user to compare an increase of 5% in coverage with social protection floors in a classical social welfare state with very low proportions of the population residing in poverty with the same change achieved in a country without a strong welfare system and with very high proportions of the population below the poverty line. A concrete best practice example of a specific social protection floor intervention, such as a cash transfer intervention, in a country that has been particularly effective can further improve understanding of policy context.

Important policy contexts include macro-level and micro-level factors. Macro-level factors could be captured by indicators for a country's political economy for example. Micro-level factors could be captured by best practice examples describing the context for a specific intervention (Box 3). Such text boxes of standardized best practice examples could include a description of the intervention setting (e.g. national strategies or plans for the action), the intervention itself (e.g. design and implementation) and evidence of the intervention's effectiveness in improving outcomes of interest (e.g. evidence from governmental and independent impact research and evaluations).

Box 3. Standardized best practice example

Unconditional cash transfer programme – country X

Policy setting: Country X is a low-income country with 50% of the population below the poverty line. Traditionally, the country did not have a comprehensive welfare state. The country started establishing a comprehensive social protection floor in 2011.

Intervention: The unconditional cash transfer programme was established in 2011 and it is the country's main anti-poverty intervention. The intervention aims to reduce poverty and improve health and well-being, especially among children in families below the poverty line. By design, it is universal and generous, providing up to 40% of average family income. The programme was implemented through community-based local government agencies, and this implementation achieved 95% take up among eligible families.

Evidence for effectiveness: Government and independent evaluations have shown the unconditional cash transfer programme has reduced poverty, improved the use of health check-ups among children, and reduced neonatal and under-five mortality. Moreover, the programme has reduced the gaps in income, health service use, and health outcomes between children in families in the lowest wealth quintile and those in the highest wealth quintile.

Indicators and evidence on impacts along the causal chain to communicate health implications

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Examples of important country contexts include outcomes among the causal chain of the interventions from the SDH: social or environmental determinants of health, use of health services (including universal health coverage) and health outcomes, as well as inequities in all these types of outcomes. While it will not in the first instance be possible to track the timing of action and outcomes along the causal chain, it is still important to show these “outcome” factors in the SDH (and equity in SDH), health coverage (and equity in coverage) and health outcomes (and health equity), by way of context.

National-level reports will need to draw in local and regional scientific evidence on links along the causal chain as described in Figure 5. Different ways of presenting messages on equity-oriented trends in determinants are explored as part of the WHO sponsored journal series: “Monitoring Health Determinants with an Equity Focus” in *Global Health Action* (see in particular: “Assessing the relevance of indicators in tracking social determinants and progress toward equitable population health in Brazil”).²⁸

The key elements we look for in the action are an increase in the average level of coverage and health in the population *and* reduced health inequities. For example, a social protection policy increases income among the population living in poverty, and by graduating from poverty the low-income population is able to improve the environmental quality of their housing. These gains in income and housing lift the life expectancy of the recipients of the social protection interventions closer to the life expectancy of those with a medium level of income, and this leads to an improvement in health equity by income.

Another causal pathway through which actions on the SDH impact health and health equity is by improving use of health services. The WHO composite index for universal health coverage (including an equity-adjusted index) provides a potential indicator source for measuring health service use. This will also ensure linkages between SDH and the wider universal health coverage agenda to the extent possible. As highlighted in previous WHO work,¹⁹ it is important to select SDH action indicators that also relate to enhancing universal health services coverage.

Standardized global reports

A first global report on action on the SDH is planned for 2017. Thereafter the report will be produced every two years. It will focus on presenting an overview of global progress towards progressive realization of the Rio Political Declaration through the use of core and contextual national indicators described in this report. The statistical annex to the report will list particular country profiles and the core basket of indicators for SDH action, as well as the policy and country context.

Integrating SDH action indicators in SDH-focused monitoring systems

We have sketched WHO’s approach for comprehensive SDH-focused monitoring in section 1. SDH action indicators are central to this wider monitoring approach, and they can be paired with indicators for the specific SDH addressed by the action to describe the progress being made on addressing SDH. The WG process did not review indicators for SDH conditions, as its focus was on SDH action (intervention) indicators. Further work will be done to present candidate SDH condition indicators. The SDGs include

information on SDH conditions,¹⁸ and WHO has also compiled a list of additional indicators and indicators sources that will be made available in future publications, including in the *Global Health Action Series* that will be launched later in 2016.^{19 20}

5. Measurement and data challenges

In the review, selection and prioritization of indicators, several gaps in both how action on the SDH would be measured, and the state of available high-quality data were uncovered. This section will provide a brief overview of the challenges that arose during this process and highlight potential solutions for overcoming these issues.

Measurement challenges

Input, output and outcome indicators for monitoring SDH-focused interventions are still not routinely collected in many intervention areas. Most indicators uncovered in the environmental scan of existing SDH-focused databases and reports as sources for SDH action indicators were impact indicators, including indicators for the SDH themselves. However, the SDG indicator system is a game changer in that it presents a large number of novel SDH action indicators, and the core basket of SDH action indicators presented in this background paper draws on these indicators as its foundation.

Capturing context and implementation of interventions was another challenge. While several SDH action indicators measure actions taken to improve the SDH, they do not capture whether the action was successful or not (i.e. do not measure level of implementation). Similarly, many SDH action indicators do not capture issues of intervention design, such as whether a policy or programme was designed specifically to reduce health inequities.

The evidence base for the effectiveness and cost-effectiveness of several of the SDH-focused interventions captured by some SDH action indicators was not always conclusive. Systematic review evidence is centrally required to further support the use of these indicators, and this will require further investments in research and evaluation of the health and health equity effects of governance, policy and programmatic interventions that improve health equity.

While continuous indicators that could be precisely measured and be sensitive to change over time were preferred for the monitoring system, the environmental scan of the existing indicators revealed that a large proportion of indicators developed for monitoring SDH-focused interventions were categorical or binary indicators. This is particularly true for governance interventions, which often measure whether a certain policy exists or not. To address this challenge, some indicators were modified from a binary form to a categorical or continuous form. For instance, the Plan of Action on Health in all Policies: Validation of Implementation Indicators report³² contained a number of regional indicators that measured the proportion of countries within the region that routinely completed an action. One indicator was: *Number of countries and territories with a specific mechanism, such as intersectoral committees or impact*

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assessment on health, by which the health sector can act within the public sector and beyond it. This indicator was revised to a categorical format: *Proportion of intersectoral mechanisms through which the health sector can act within the public sector that have strong sectoral reach.* Additionally, indicators could be transformed into continuous formats. For example, the denominator would be the number of mechanisms evaluated in a country and the numerator would be the number of mechanisms meeting the “strong reach” criterion. The “strong reach” criterion would then need an explicit statement, such as mechanisms within the policy cycle jurisdiction that include at minimum the policy development process.

Data challenges

The environmental scan of existing sources for candidate SDH action indicators revealed that there were numerous existing indicators that measure action on the SDH. However, the reporting by countries of these indicators was variable. Whereas most indicators came from global databases or reports with data for all countries, several others did not. SDG indicators were prioritized in many cases, also because they ensure global data availability across countries and regions, if not immediately then at least over the medium or long term.

There was a recurrent theme in the discussions with the WG to place emphasis on existing indicators such as the SDG indicators that have existing political commitment. By selecting some SDG indicators, the monitoring system would reduce the burden in gathering and reporting data as well as increase buy-in from countries where resources for monitoring may be limited. An inclusion criterion was added to give preference to measurement concepts and indicators that align with the SDG indicator system (i.e. ideal are SDG indicators themselves).

While all action areas of the Rio Political Declaration were to be captured in the monitoring system, the scan of the global reports and databases revealed disproportionate numbers of existing indicators for each action area, as candidate indicators in the original long indicator list. In particular, Action area 4 and Action area 5 had only six and five candidate indicators, respectively. When contrasting this with the 63 candidate indicators for Action area 1, this highlights a measurement gap in the existing indicators. There are currently few existing indicators that measure very specific SDH action to strengthen global governance and collaboration or action to monitor progress and increase accountability. In future, additional work will be needed to develop suitable indicators that can capture these action areas.

Finally, in reviewing available databases for indicators, it was often difficult to judge precisely the quality of data available for indicators. More work is needed to better understand the available global databases and to refine the quality assessment of the available indicators. Two publications (WHO, 2014 – a working paper for WHO EQuAL project on *Measuring and monitoring intersectoral factors influencing equity in universal health coverage (UHC) and health*,¹⁹ and Pega et al¹⁸), shared with the WG, had done some of this work in developing indicators and reviewing the quality of data sources. These publications were used extensively by the WG as a starting point for this work but more research is needed to better understand the quality of existing data sources.

6. Next steps

The Technical Meeting on Measuring and Monitoring Action on the Social Determinants of Health is an important step for WHO in strengthening national, regional and global SDH-focused monitoring capacities. We now describe anticipated key next steps over the 2016–2017 period.

Finalize core basket of SDH action indicators for global reporting on progress

Following discussion of the SDH action monitoring approach presented in this background paper at the meeting in Ottawa in June 2016, recommended amendments to the proposed monitoring and reporting system, including the core basket of SDH action indicators, will be documented. This may include the addition of new measurement concepts and indicators, if this is recommended by participants of the Technical Meeting or the open global consultation on the core basket of indicators. At the meeting WHO will actively seek countries interested in piloting SDH action monitoring and reporting nationally. After the meeting, WHO will convene an open web-based consultation. Feedback collected during the meeting, from the open consultation and from the national trials will be used to develop a final set of core indicators, which will be presented later in 2016. Using the final set of core SDH action indicators and building on the experiences of countries in national trials of this indicator set, WHO will develop and publish at least one global SDH action monitoring report in 2017.

Grow evidence base for SDH action monitoring

The Commission on Social Determinants of Health and others, have highlighted the need for additional, rigorous evaluations of the effect of intersectoral actions on the SDH on determinants of health, health service use, health outcomes and – importantly – health equity. WHO aims to support research that further strengthens the evidence base for SDH action indicators, which may include the need for additional development of methods. Additional evidence is urgently required on governance interventions and environmental interventions in particular.

Update global data systems

WHO's global databases will be enhanced through gathering and making available statistical data sets covering the core indicators for multiple years. WHO will work towards inclusion of the initial core SDH action indicators in the Global Health Observatory and WHO Health Equity Monitor to ensure open access to these indicators for Member States international organizations, and technical experts.

Develop norms and standards

WHO will develop definitional standards and monitor the national use of SDH-focused monitoring and SDH action monitoring systems. To do this, WHO will establish a database on monitoring systems, describing the definitional criteria they fulfil with respect to an SDH-focused monitoring system, and an SDH action monitoring system, respectively. Moreover, Health in All Policies training and guidance will

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be enhanced through having a solid set of core action indicators, in particular those creating linkages with the SDGs.

Facilitate and support networks of countries and technical experts

The vision of SDH-focused monitoring is to support sharing of countries experience and strengthening of national monitoring capacities. This will involve developing useful information resources on current monitoring systems and international norms and standards related to SDH-focused monitoring systems. WHO will also facilitate networks of Member States and technical experts who are operating or establishing SDH action and broader SDH-focused monitoring systems.

References

1. World Health Organization. Rio Political Declaration on Social Determinants of Health. Rio de Janeiro, Brazil: World Health Organization, 2011.
2. Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. Geneva: World Health Organization, 2008.
3. 62nd World Health Assembly. Resolution WHA62.14: reducing health inequities through action on the social determinants of health. Geneva, Switzerland: World Health Organization, 2009.
4. 65th World Health Assembly. Resolution WHA65.8: outcome of the World Conference on Social Determinants of Health. Geneva: World Health Organization, 2012.
5. Braveman P. Health disparities and health equity: concepts and measurement. *Annu Rev Public Health* 2006;27:167-94.
6. World Health Organization. State of inequality: reproductive, maternal, newborn and child health. Geneva, Switzerland: World Health Organization, 2015.
7. United Nations General Assembly. United Nations Millennium Declaration (Resolution 55/2). New York, NY: United Nations, 2000.
8. Becerra-Posada F. Taking health into account in all policies--Author's reply. *Lancet Glob Health* 2015;3(10):e595.
9. World Health Organization, Finnish Ministry of Social Affairs and Health. The Helsinki Statement on Health in All Policies. Helsinki, Finland: World Health Organization, 2013.
10. World Health Organization, Government of South Australia. Adelaide Statement on Health in All Policies: moving towards a shared governance for health and well-being. Adelaide, Australia: World Health Organization, Government of South Australia, 2010.
11. 68th World Health Assembly. Resolution WHA68.17: contributing to social and economic development: sustainable action across sectors to improve health and health equity (follow-up of the 8th Global Conference on Health Promotion). Geneva, Switzerland: World Health Organization, 2015.
12. Valentine N, Koller T, Hosseinpoor A, Gerecke M, Blas E, Goldblatt P, et al. Developing the EQUAL monitoring framework: equity-oriented analysis of linkages between health and other sectors. *G. Global Health Action* forthcoming;Special Issue: Monitoring Health Determinants with an Equity Focus: 2015; 2016.
13. United Nations General Assembly. Transforming our world: the 2030 Agenda for Sustainable Development (Resolution 70/1). New York, NY: United Nations, 2015.
14. United Nations Economic and Social Council. Report of the Inter-agency and Expert Group on Sustainable Development Goal Indicators New York: United Nations Economic and Social Council, 2015.
15. World Health Organization Regional Office for Europe. Parma Declaration on Environment and Health. Parma, Italy: World Health Organization Regional Office for Europe, 2010.
16. Marmot M, Allen J, Bell R, Bloomer E, Goldblatt P, Consortium for the European Review of Social Determinants of H, et al. WHO European review of social determinants of health and the health divide. *Lancet* 2012;380(9846):1011-29.

Social Determinants of Health Action Monitoring System

17. World Health Organization. Review of social determinants and the health divide in the WHO European Region: final report. Copenhagen, Denmark: Regional Office for Europe, World Health Organization, 2013.
18. Pega F, Valentine N, Rasanathan K, Hosseinpoor AR, Torgersen T, Ramanathan V, et al. Sustainable Development Goal indicators for action on the social determinants of health: fostering multisectoral partnerships using a "Health in All Goals" lens. Under review.
19. World Health Organization. Measuring and monitoring intersectoral factors influencing equity in universal health coverage (UHC) and health: Summary report of a meeting in Bellagio, 6-8 May 2014. Geneva, Switzerland: World Health Organization, 2014.
20. Pedrana L, Pamponet M, Walker R, Costa F, Rasella D. Scoping review: national monitoring frameworks for social determinants of health and health equity. *Glob Health Action* 2016;9:28831.
21. Hosseinpoor AR, Bergen N, Koller T, Prasad A, Schlotheuber A, Valentine N, et al. Equity-oriented monitoring in the context of universal health coverage. *PLoS Med* 2014;11(9):e1001727.
22. The Cochrane Collaboration. Cochrane Public Health. Melbourne, Australia: The Cochrane Collaboration, 2016.
23. Lagarde M, Haines A, Palmer N. The impact of conditional cash transfers on health outcomes and use of health services in low and middle income countries. *Cochrane Database Syst Rev* 2009(4):CD008137.
24. Pega F, Carter K, Blakely T, Lucas PJ. In-work tax credits for families and their impact on health status in adults. *Cochrane Database Syst Rev* 2013;8:CD009963.
25. Pega F, Liu SY, Walter S, Lhachimi SK. Unconditional cash transfers for assistance in humanitarian disasters: effect on use of health services and health outcomes in low- and middle-income countries. *Cochrane Database Syst Rev* 2015;9:CD011247.
26. Australian Indigenous HealthInfoNet. Summary of developments in Indigenous health promotion. Retrieved May 2016 from <http://www.healthinfonet.ecu.edu.au/health-systems/health-promotion/reviews/our-review>. 2005.
27. Lundberg O, Yngwe MA, Stjerne MK, Elstad JJ, Ferrarini T, Kangas O, et al. The role of welfare state principles and generosity in social policy programmes for public health: an international comparative study. *Lancet* 2008;372(9650):1633-40.
28. Kirmayer L, Valaskakis G, editors. *Healing traditions: the mental health of Aboriginal Peoples in Canada* Toronto, Ontario: University of British Columbia Press, 2009.
29. Osborne K, Baum F, Brown L. What works? A review of actions addressing the social and economic determinants of Indigenous health . Issues paper no 7 . Produced for the Closing the Gap Clearinghouse. . Canberra, Australia: Australian Institute of Health and Welfare & Melbourne: Australian Institute of Family Studies, 2013.
30. Shannon GD, Im DD, Katzelnick L, Franco OH. Gender equity and health: evaluating the impact of Millennium Development Goal Three on women's health in South Asia. *Women Health* 2013;53(3):217-43.
31. Every Woman Every Child. Global strategy for women's, children's and adolescents' health (2016–2030). New York, NY: Every Woman Every Child, 2015.

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32. Pan American Health Organization. Validation of the indicators of implementation of the Action Plan on Health in All Policies: proposal for implementation in countries [Validación de los indicadores de implementación del Plan de Acción sobre la Salud en Todas las Políticas: Propuesta para su aplicación en los países]. Washington, DC: Pan American Health Organization, 2016.
33. Leadership Council of the Sustainable Development Solutions Network. Indicators and a Monitoring Framework for the Sustainable Development Goals. Available from: <http://unsdsn.org/resources/publications/indicators/>. 2015.
34. Public Health Agency of Canada. Rio Political Declaration on Social Determinants of Health: a snapshot of Canadian actions 2015. Ottawa, ON: Public Health Agency of Canada, 2015.
35. Church C, Rogers MM. Designing for results: integrating monitoring and evaluation in conflict transformation programs (Washington, DC: Search for Common Ground), available at <https://www.sfcg.org/Documents/manualpart1.pdf> (Accessed 26 March 2016). 2006.

Appendix 1. Criteria for systematic selection of measurement concepts and indicators

Table A1.1 Criteria for systematically identifying and prioritizing measurement concepts

Criterion	Criterion specification and / or preference
Measurement concept is unique to the SDH	Preference will be given to measurement concepts unique to action on the SDH over concepts already measured and reported on by member states to WHO or other UN agencies
Balance between measurement concepts for governance and policy or programme interventions	The final set of prioritized measurement concepts will reflect a balance of human rights interventions, SDH-focused governance structures or mechanisms and social or environmental policies or programs on specific determinants of health
Measurement concept has available indicators	Measurement concepts with high-quality indicators will be prioritized over those with indicators of less high quality
Measurement concepts features frequently in the Rio Political Declaration pledges	Measurement concepts mentioned more frequently within or across action areas will be prioritized over those mentioned less frequently
Measurement concept has face validity	Measurement concepts should have face validity of relevance/applicability across different country contexts

Appendix 2. Criteria for systematic selection and quality assessment of indicators

Table A2.1 Criteria for including indicators in the long list of indicators

Criterion	Inclusion Criterion	Exclusion Criterion
Indicator measures an SDH action	Measures an action (or <i>intervention</i>) on the SDH, defined as (1) a governance intervention focused on SDH or health equity, including human rights interventions; (2) a social intervention that improves health or health equity; or (3) an environmental intervention that improves the SDH or health equity	Does not measure an action on the SDH (i.e., measures an intention as opposed to an action)
Indicator measures a modifiable SDH action	Measures a <i>modifiable</i> action	Measures an action taken at the local level
Indicator is national- or global-level	Measures a <i>national-level</i> action from the country's <i>government</i> (Rio Political Declaration action areas 1, 2, 3 and 5) or a <i>global-level</i> action from the <i>countries' governments</i> or <i>international governmental organizations</i> (Rio Political Declaration action area 4)	Measures an action that cannot be modified (e.g., historical action)
Indicator is quantitative, preferably continuous	Is a <i>quantitative</i> indicator	Is a qualitative indicator (e.g., is a box with text only)
Indicator is available	Has <i>data available</i> or <i>becoming available</i> (within 3 years) for at least some low, middle, and high income countries	Has no data available, or has data becoming available only over the long term (i.e., available in over three years only)
Indicator is aligned with the <i>Rio Political Declaration</i>	Captures a <i>key measurement concept</i> of the <i>Rio Political Declaration</i>	

Table A2.2 Criteria for assessing the quality of shortlisted indicators

Criterion	Criterion specification and / or preference
Indicator fulfills SMART criteria	Indicator is specific (i.e., targets a specific area for improvement)
	Indicator is measurable (i.e., is easy to measure, interpret and communicate with straightforward policy implications) (avoid composite indices, if possible)
	Indicator is assignable (i.e., clearly specifies who will take the action)
	Indicator is realistic (i.e., measures an action that can realistically be taken, given available resources)
	Indicator is time-related (i.e., measures an action that can be changed over time, with annual changes being feasible)
Indicator is alignment with the SDG (i.e., is an SDG indicator)	Preference was given to indicators from the SDG indicator system over indicators capturing concepts covered in SDG targets over indicators not measuring concepts covered in the SDGs.
Indicator is feasible and cost-effective	Indicator is easy to obtain without additional burden for the producer or guardian of the data. Preference is given to official data over data from other sources.
Indicator is reported annually. ³³	Indicator has easily attainable data for each year
Indicator can measure progressive change	Preference is given to continuous indicators (e.g., the proportion of population covered by a social protection floor) over categorical indicators (e.g., provision of social protection floors was complete vs. medium vs. low) over binary indicators (e.g., social protection floor was provided versus not provided).
Indicator measures an evidence-based intervention on the SDH	Preference is given to indicators measuring actions with a stronger evidence base over those with a weaker evidence base. ³⁴
Indicator is globally applicable and harmonized. ³⁵	Preference is given for indicators with applicability across diverse country contexts and that are globally harmonized in their measurement
Indicator is acceptable to stakeholders. ³⁵	Indicator is user-inspired, responds to data needs, and is acceptable to key stakeholders

List of online appendices

(see www.who.int/social_determinants/ottawa-meeting/en/)

Online Appendix 1. List of action areas and recommendations by the Commission on Social Determinants of Health

Online Appendix 2. Detailed description of methods for developing the core basket of SDH action indicators

Online Appendix 3. List and definition of measurement themes

Online Appendix 4. List of measurement concepts and alignment with Rio Political Declaration

Online Appendix 5. Sources screened for SDH action indicators

Online Appendix 6. Quality assessment of prioritized SDH action indicators

Online Appendix 7. List of SDG goals, targets and full text indicators covered in the proposed core basket of SDH action indicators