## A Framework and Indicators for

 Monitoring Gender Equality and Health in the Americas
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## List of Acronyms

| ECH | An Australian not-for-profit organization that provides information <br> and support for a variety of health services in the community |
| :--- | :--- |
| ECLAC | Economic Commission for Latin America and the Caribbean |
| ISO | International Organization for Standardization |
| MDGs | Millennium Development Goals |
| MERCOSUR | Mercado Común del Sur (in Spanish): Argentina, Bolivia, Brazil, <br> Paraguay, Uruguay and Venezuela. Associate countries may <br> include Chile, Colombia, Ecuador and Peru |
| PAHO | Pan American Health Organization |
| SDGs | Sustainable Development Goals |
| UN | United Nations |
| WHO | World Health Organization |

## Executive Summary

Member States of the Region of the Americas have committed to the Strategy for Universal Access to Health and Universal Health Coverage (CD53. R14). At the same time, health experts and policymakers in many parts of the world have begun to set new targets and benchmarks in follow-up to the Sustainable Development Goals and Targets adopted by the United Nations (UN) in September 2015. As part of these processes, the Pan American Health Organization (PAHO) is working with the countries of the Americas to ensure that related resolutions, strategies, and action plans are supported with appropriate frameworks and data for monitoring and evaluating gender equality in health.

The purpose of this document is to propose an updated framework and set of core indicators for monitoring advances on gender equality in health in the Region, within the framework of renewed regional commitment to health.

PAHO has undertaken consultations on this proposed framework and list of core indicators for ensuring that gender equality in health is achieved within the context of universal coverage and access to health care and the UN Sustainable Development Goals.
This document has five sections.

Section 1, the introduction, describes the purpose and structure of the report. Section 2 establishes the foundations for this report's focus on the advancement of gender equality and the need for effective and efficient monitoring and evaluation of progress in gender equality in health. Guided by the PAHO Gender Equality Policy, concepts of equality, health equality, equity and health equity are defined, leading to a discussion of the goals of gender equity and equality in health. Whereas gender equality historically referenced women and girls almost exclusively, the concepts are now broadened to encompass processes and outcomes that disadvantage groups of boys and men as well. Stigma, racism, and other forms of oppression intersect with gender and social determinants of health to create inequities and inequalities among women and among men. Gender equality in health refers to diverse groups of women and men having equal conditions to realize their full health potential because there are no avoidable, unfair or unjust impediments based on gender norms and power relations.

Section 3 describes the key international instruments for achieving gender equality in health: the Strategy for Universal Access to Health and Universal

Health Coverage and the 2015 United Nations Sustainable Development Goals.

Section 4 provides a review of existing frameworks for the evaluation of gender equality in health. In the seven years since PAHO and WHO co-hosted a global policy dialogue on gender frameworks to improve women's health, new conceptual and applied frameworks have become available. Of the nine examples reviewed in this report, an adaptation of the World Bank's Gender Equality and Development framework is recommended. The depiction of moving cogs can be used to illustrate the interactions of individual and societal determinants of health. The model explicitly demonstrates the need for a gender-based analysis for all domains and indicators, and the model can be reconfigured to include indicators from PAHO's existing frameworks, the Gender, Health and Development Basic Indicators and the Guide for Analysis and Monitoring of Gender Equity in Health Policies.

Section 5 outlines criteria for gender and health indicators and key principles for gender-sensitive indicators to monitor gender equality in the context of the Strategy for Universal Access to Health and Universal Health Coverage and the Sustainable Development Goals. Eighteen sets of indicators were reviewed, including those selected for the Sustainable Development Goals. Based on the analysis, nine key recommendations for indicators that must be included in the Gender Equality Framework are established. The Section concludes with a proposal for a core set of indicators and the reasons they have been selected.

Section 6 includes the technical specifications for each selected key indicator, whose definitions have been agreed upon at the international level. The specifications include suggested disaggregations to provide the analysis a gender perspective within the larger framework of inequities.


Member States of the Region of the Americas have committed to the Strategy for Universal Access to Health and Universal Health Coverage (commonly referred to as Universal Health by PAHO) (CD53.R14). At the same time, health experts and policymakers have selected indicators in follow-up to the September 2015 adoption of the United Nations (UN) Sustainable Development Goals (SDGs) and targets. The Pan American Health Organization (PAHO) is working with the countries of the Americas to ensure that related resolutions, strategies, and action plans are supported with appropriate frameworks and data for monitoring and evaluation. An essential component of these processes and mechanisms is a continued commitment to gender equality and to reducing gender-based inequities. This document was developed on behalf of PAHO to help ensure that accurate, relevant data on gender and health are incorporated and that targets are met and monitored.

## $\rightarrow$ Purpose

The purpose of this document is to propose a framework and set of basic (core) indicators for gender and health for the countries of the Region of the Americas as part of the renewed regional commitments to health.

The Equity, Gender and Cultural Diversity (EGC) Office of PAHO commissioned this work to lay the groundwork for regionand country-level discussions. PAHO has received comments and responses on the proposed framework and list of basic indicators presented in this document for ensuring that gender equality in health is achieved within the context of Universal Health and the UN Sustainable Development Goals.

The general objective of this work is to establish a minimum set of agreed-upon gender and health indicators in the Region of the Americas that make it possible to identify and analyze inequalities and monitor advances toward gender equity in health as well as more broadly.

The development of this proposal reflects the need for:

## 1.

Regional harmonization and updating of the basic criteria for conceptualizing gender and health indicators;

## 2.

Guidelines for measuring and monitoring differences in health status and access associated with genderrelevant socioeconomic and cultural inequalities;

## 3.

Indicators that are consonant with the capacity of health systems to respond to disparities and inequities; and

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4 .
$$

Indicators to measure progress toward international agreements such as PAHO's Gender Equality Policy, Strategy for Universal Access to Health and Universal Health Coverage, and the Sustainable Development Goals.

section 2

## The Continued Need to Focus on Gender Equality in Health

In 1992, Margaret Whitehead defined health inequities as differences in health status that are unnecessary, avoidable, unfair and unjust, thereby positioning health equity as a social justice issue (1). A quarter century later, debate no longer focuses on terminology but rather on the origins, impact and possible remedies for health inequities. In proposing a core set of indicators for monitoring advances on gender and health for the countries of the Region of the Americas, this paper is firmly rooted in this tradition of health equity concerns.

This work was guided by the PAHO Gender Equality Policy (2) that has informed the activities of the PAHO Secretariat and the Member States of the Region of the Americas for the past decade, as well as more recent discussions of gender, equity and health (3) which consistently demonstrate the persistence of health inequalities between women, men, girls and
boys, as well as between important subpopulations, including sexual minorities, ethnic/racialized persons, and seniors (4).

## $\rightarrow$ From Disparities to Inequities in Health

Differences in health status have been the subject of epidemiological research and public policy interventions for several decades, with mixed results in terms of improvements made. In the Americas, there are differences in various health outcomes such as life expectancy, quality of life or disabilityfree life years between countries, social groups, and individuals (5). Women in Martinique, for example, have an average life expectancy of approximately 85 years while women in Haiti only live an average of 56 years. ${ }^{\text {S }}$ Similarly, in 2015, males in Canada have an average life expectancy at birth of 80 years, whereas the life

[^0]
expectancy of males in Haiti is 62 years. ${ }^{2}$ Data such as these illustrate differences in health between women and men and also between different populations of women and men, suggesting that there are meaningful disparities between countries as well as between the sexes.

When differences are described as disparities, no evaluative judgement is implied with respect to the fairness or justness of the difference. However, as already noted, some differences are understood to be avoidable, unfair and unjust, which leads to considerations of equality and equity.

Equality refers to individuals and social groups having the same opportunities to obtain and control social, economic and political resources, such as protection under the law, access to health services or education, or the right to vote. This notion refers to equality of opportunity or formal equality (6). Equality describes a state of sameness or comparability between two or more groups or individuals.

Equity, on the other hand, means fairness, and is relative, based on the different needs, preferences and interests of individuals or social groups. Equity is achieved when avoidable, systematic, and systemic differences in health are removed. This would be the case, for example, if all women and men had access to the health-sustaining
resources and services they need (7). Achieving equity may mean that different groups or individuals require different treatment. Equity is the means to achieve health equality.

Health equality refers to the rights of individuals and groups for access to, obtaining and receiving similar standards and levels of care and opportunities to maintain their physical and mental health. Health equity, in contrast, refers to ensuring that all individuals and populations have the resources and opportunities they require to overcome disadvantage that would hinder reaching their full potential for mental and physical health. The intent is to remove or mitigate social and structural challenges that prevent all persons from starting on a "level playing field" when it comes to health status, access to care, etc. Health inequalities refer to differences in health status, access to services or other healthrelated outcomes. The Centers for Disease Control and Prevention (CDC) define health disparities as "A type of difference in health that is closely linked with social or economic disadvantage. Health disparities negatively affect groups of people who have systematically experienced greater social or economic obstacles to health (8)."

Treatments, services and systems may need to be different for diverse

[^1]individuals and populations to overcome structural and societal disadvantage, such as stigma, sexism, ageism, homophobia, and ethnic and racial discrimination. The quest for equity animates the PAHO Gender Equality Policy in its pursuit of "fairness and justice by eliminating differences that are unnecessary and avoidable among different subpopulation groups" (2). In the health field, a consensus has been reached that when differences in health are observed, a central issue is to understand whether those differences are fair or unjust. Thus, differences per se are not the issue but whether a case can be made that the inequality is also an inequity (5).

## $\rightarrow$ Pursuing Gender Equality in Health through Gender Equity

The aim of PAHO/WHO gender equality initiatives is that women and men have equal conditions for realizing their health potential and benefits. The route to gender equality is the elimination of gender inequities in health, that is, inequities in health status, health care experiences, and health work participation associated with gender that are understood to be unjust, unnecessary, and avoidable.

In the past three decades, there has been a growing acknowledgment of and evidence on the significant role of sex and gender in health, for men and
women (9) and, more recently, LGBT persons (10). It is increasingly recognized "that there are systematic disparities between women and men's health that do not derive from biological sex traits but from the different positions that women and men occupy in society" (2). Whereas sex refers to the biological and physiological characteristics that define being male and female, gender refers to the socially constructed characteristics of women and men, such as norms, roles, relationships and expectations of what it means to be "feminine" or "masculine" (11).

Male and female are often understood as distinct and mutually-exclusive categories and health and other population data are typically collected and reported by the categories of "male" or "female". But "femininity" and "masculinity" are experienced and expressed along a continuum, with a diversity of chromosomal and phenotypical variations possible in the human species. Further, socially-imposed and self-assigned characteristics for masculinity or femininity vary from society to society, over time, and can be changed, depending on personal or societal desires or constraints. This means that gender identities, that is, how we see ourselves as female, male, two-spirited la term used by certain indigenous North Americans to describe individuals who identify as both genders), or a third

gender (12), have to be understood within the context of a given society and historical period (11). As with sex, the simple binary division of male and female does not reflect the range of human experience or expressions of self that gender encompasses. Most people recognize and identify with elements of both masculinity and femininity, while some individuals choose to identify as 'queer' or to avoid any gender label at all. Indeed, "[s]exual orientation and gender nonconformity are multifaceted concepts" (13) that are fluid and difficult to operationalize.

Increasingly, discussions are shifting from categorizing individuals lor groups) as female, male, neither or both to examining interpersonal interactions through the lens of gender relations. Gender relations refers to how individuals are treated by and respond to each other based on ascribed gender and the norms and roles associated with a given gender in a given society (11). Expectations about how some women or some men should behave and how they will be treated can produce disadvantage and discrimination. There may be expectations that women will not seek paid employment; lesbian women and gay men may be marginalized from families and friends or be the targets of assault (13). Gender relations become evident, for example, when
women or men or certain groups of women or men have more difficulty finding appropriate health care or if their illnesses and injuries are not treated with the same respect as in other cases. As
[g]ender relations operate through processes of having, being, knowing and doing; these processes differentiate, stratify, subordinate, [and they] place people in hierarchies, and particularly, though not only, in the case of transgender and intersex people, marginalize and exclude them (14).

Masculinities and femininities, in their various manifestations, become entrenched in policies, health care systems, religions and other key social and governance structures. In many societies, this institutionalized gender has valued masculinity more highly than femininity, leading to lengthy histories of greater power for men in politics, economics and other domains (15). However, not all men benefit from such institutionalized, gendered power, just as not all women in a society may be disadvantaged. Gendered power and relations are affected in complex ways by systems and practices of policy, social status, stigma, colonization and other oppressions, and physical and mental abilities, among other factors. As international health discussions come to grips with the health
challenges facing sexual minorities, they will also be challenged to expand the conceptualization of gender equity and equality.

## $\rightarrow$ The Continued Need to Focus on Gender Equality in Health

Issues related to gender need to be brought into the foreground of monitoring and evaluating progress toward universal health and the UN SDGs.

Equity is inherent as a goal of universal health coverage because it implies universal access of all people to needed health services, of sufficient quality across the continuum of care without the risk of financial hardship as a result of using those services (16).

Yet research continues to demonstrate that gender has a significant impact on health, both directly and through its relationship to other determinants of health.

Gender influences, among other things, opportunities to inhabit healthful living conditions, participate in employment, complete education, earn income, provide care to others, and participate in civil society. For example, women typically have fewer resources and power than men; women have less land, property, education and wealth but greater caring responsibilities (14).
"Girls in some contexts are fed less, educated less, and are more physically restricted; and women are typically employed in lower-paid, less secure, and 'informal' occupations" (14). The social roles and responsibilities associated with being male and female affect social, economic, physical, and mental health. Women's health and women's participation in civil society differ from men's experiences, including their engagement with health systems and health system workforces (17). Gender inequality increases women's exposure and vulnerability to unhealthy conditions and limits their access to health care and information, which in turn influences their health status (18).

Ethnic and cultural backgrounds, sexual orientation, and physical and mental disabilities can lead to discrimination, marginalization and exclusion and likely limit social, educational and employment opportunities in some countries (13, 19). A "comprehensive understanding of gendered health incorporates analysis of discrimination and its impact, and of the embodiment of inequities in health" (20).

Such analyses have been variously described as gender analysis or genderbased analysis, a process that examines how experiences are similar or different between women and men, as well as among women and men. This analysis identifies, assesses, and informs actions


Gender equity means fairness and justice in the distribution of benefits, power, resources, and responsibilities between women and men. The concept recognizes that women and men have different needs, access to, and control over resources, and that these differences should be addressed in a manner that rectifies the imbalance between the sexes. Gender inequity in health refers to those inequalities between women and men in health status, health care, and health work participation, which are unjust, unnecessary, and avoidable. Gender equity strategies are used to eventually attain equality. Equity is the means, equality is the result (1).
to address inequity and inequality that come from (a) different norms, roles and relations assigned to males and females; (b) unequal power relations between and among groups of men and women; and (c) the interaction of contextual factors with gender, such as sexual orientation, ethnicity, education, employment status or geography. In health, gender analysis illuminates disparities in health status, health care use, ability to obtain and pay for care, and participation in decision-making about health and health care (2).

A focus on gender highlights issues and variations in life circumstances and life chances between women and men but also among women and men, by uncovering inequalities and inequities by race, geography, income, education, employment and other determinants (11, 21). Acknowledging variations in
the experiences of groups of women and men avoids generalizations and "crude universalism" (22) and requires us to attend to the relationship between gender and other determinants of health, including socioeconomic status, violence, employment and work, ethnic/ racial origin, and age.

Discriminatory values, norms, practices, and behaviours throughout society influence both health and social outcomes. Accordingly, as a social institution, the health system, including research, policy and formal and unpaid health care services, reflects and perpetuates the values, norms and practices of society as a whole. As such, the health system is a setting for producing, maintaining, or transforming health inequities (14). Efforts to ensure universal access to health care need to be monitored to
ensure they do not perpetuate social inequities but rather, give priority to those who are most marginalized in terms of health care access.

Despite advances in the past 20 years, women's positions in societies and their resultant health status lag behind those of men in many parts of the world. For example, there has been progress on Goal 3 of the Millennium Development Goals, "Promote Gender Equality and Empower Women" (23), but the targets for girls' education, women's equal wages and women's participation in national governance have not been met (24). In an online report on the MDGs, UN Women states that

> While the three indicators under Goal 3 reflect important dimensions of gender inequality, the narrow focus of Goal 3 fails to address such critical issues as violence against women, inequalities in the division of unpaid care work, women's limited access to assets, violations of women's and girls' sexual and reproductive health and rights, and their unequal participation in private and public decision-making beyond national parliaments. For countries where data are available, women spend on average roughly twice as much or more time than men on unpaid domestic and care work (24).

The fact that these issues persist despite the progress made toward the

MDGs is reflected in the UN SDGs, where Goal 5 restates the commitments of states to continue to work toward gender equality.

Furthermore, there is evidence that women and men have unequal access to health care despite initiatives to promote universal access, with women at greater risk of having to pay out-ofpocket or forego health care because of the primary and ancillary costs (25). A recent review of four cases in Latin America related to implementing universal health coverage reported limited improvements using the gender inequality index between 2000 and 2010, particularly in comparison to the Nordic countries (16), suggesting that further improvement is necessary in access to health services through reducing gender inequity.

A focus on gender and women's health also remains critical in light of current UN dialogue on health systems. As Langer et al. (3) noted in their report from the 2014 Commission on Women and Health, health systems "heavily rely on the many contributions of women to care as members of the health workforce, in which their numbers are rapidly increasing, and in their traditional roles as primary caregivers at home and communities." Addressing health system development and reform must consequently acknowledge and include attention to women's contributions. That is, the examination


Gender equality. . . refers to a state of affairs in which women and men enjoy the same opportunities in all walks of life. It also entails the presence of a gender perspective in decision-making of all kinds and that women's interests are given the same consideration as men's in terms of rights and the allocations of resources (26).
of women's contributions should not be limited to formal discussion of gender and health, but rather to any discussion of health, health care, and health systems.

Just as in any other aspect of global progress, monitoring international goals for sustainable development must also include a focus on gender equality. Economic and environmental changes, such as climate change, "affect women's health, their rights and roles in society" (3). The UN SDGs include a continued emphasis on gender equality, eradication of poverty, strengthened and integrated health and economic systems, as well as managing natural resources. As Langer
et al. (3) note, healthy, valued, enabled and empowered women are needed to achieve sustainable development.

This means that there must be full engagement of women in decisionmaking at all levels from the state, to the economy and within a household. Even in countries without extreme gender inequality, women often have less political power and less participation in political institutions at various levels than men (14). This difference has led to international targets for women's participation in parliaments, as well as in other positions of decision-making in social, political and economic sectors. In the same way, opportunities for men

Gender equality in health refers to diverse groups of women and men having equal conditions to realize their full health potential
because there are no avoidable, unfair or unjust impediments based on gender norms or power relations (1).
in vulnerable situations to participate in civil structures must also be ensured.

Returning to the core challenge of gender equality, Johnsson-Latham (26) argues that "gender equality is an outcome that relies on the equitable distribution of social, economic, and practical resources between women and men. As such, gender equality relies upon processes and is never fully achieved but rather must be re-enacted time and time again..." Gender equality in health refers to diverse groups of women and men having equal conditions to realize their full health potential because there are no avoidable, unfair or unjust impediments based on gender norms and power relations (2).

Measuring progress to achieve the goals for universal health and for sustainable development requires an evidence base of gender-sensitive indicators.

## $\rightarrow$ Commitments to Gender Equality in Health in the Americas

The Member States of the United Nations and the Inter-American System are signatories to numerous instruments that commit them to (a) develop or strengthen processes that will improve their health information systems lincluding by disaggregating data by sex, age, ethnicity, and other relevant variables); (b) conduct gender analysis to inform, advocate for and
develop policies and programs; and (c) monitor progress toward gender equality in health.

The need to propel these processes is stated by the 2030 Agenda for Sustainable Development (A/69/L.85), which includes the 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change by 2030 , and was adopted by the United Nations General Assembly on September 25, 2015. Goal 17, "Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development" speaks directly to the imperative to, "...increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender [meaning by sex], age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts" (Target 17.18).

Similarly, the PAHO Gender Equality Policy (Resolution CD46.R16), which applies both to the Secretariat and to Member States in the Region of the Americas, emphasizes the importance of generating, monitoring and evaluating the information needed to accelerate advances toward gender equality in health. This commitment of the Member States is linked to the commitments at the heart of the Strategy for Universal Access to Health and Universal Health Coverage (Resolution CD53.R14). A conceptual

framework and relevant, agreed-upon gender and health indicators are required to implement these commitments and monitor them appropriately.

PAHO laid the foundations for this task by developing a model for basic gender and health indicators ${ }^{3}$ for the Region of the Americas, as well as guidelines for analyzing and monitoring gender equity in health policies (27). These documents have guided the identification of indicators for the subregions of Central America and the Dominican Republic, the Andean Community, and MERCOSUR countries. Concomitantly, the United Nations Statistics Division
(UNSD) has developed a proposal for gender indicators, including a health component; while the Gender Equality Observatory for Latin America and the Caribbean, which ECLAC coordinates, includes selected health-related indicators. However, given evidence of women's and men's differential access to universal health coverage to date, there is still a need to establish a core set of gender and health indicators to contribute to monitoring and evaluating the Strategy for Universal Access to Health and Universal Health Coverage as well as the SDGs which will explicitly maintain the focus on achieving gender equality.

[^2]

## Section

# Gender in the Frameworks of Universal Access to Health and Universal Health Coverage and the Sustainable Development Goals 

This section provides a brief overview of the key international instruments that provide context for the framework and core set of indicators for monitoring and evaluating gender equality in health. In each case the documents are described briefly followed by descriptions of the most relevant sections for establishing the framework and core indicators.

## $\rightarrow$ Universal Access to Health and Universal Health Coverage in the Americas

In October 2014 the 53rd Directing Council of the 66th Session of the Regional Committee of WHO for the Americas adopted the Strategy for Universal Access to Health and Universal Health Coverage (Strategy).

According to the Strategy, universal access is "the absence of geographical, economic, sociocultural, organizational, or gender barriers. Universal access is achieved through the progressive elimination of barriers that prevent all people from having equitable use of comprehensive health services determined at the national level" (CD53/5 Rev 2, paragraph 4). Universal health coverage "implies that the organizational mechanisms and financing are sufficient to cover the entire population" in its capacity to serve the needs of the population, "including the availability of infrastructure, human resources, health technologies (including medicines) and financing" (CD53/5 Rev 2, paragraph 5).

## 

Building on these two definitions, the Strategy goes on to say:

Universal access to health and universal health coverage imply that all people and communities have access, without any kind of discrimination, to comprehensive, appropriate and timely quality health services, determined at the national level according to needs, as well as access to safe, effective and affordable quality medicines, while ensuring that the use of such services does not expose users to financial difficulties, especially groups in conditions of vulnerability (CD53/5 Rev 2, paragraph 6).

The goal of the Strategy is to ensure that all people can obtain the health care and services they require without risk of financial hardship from unaffordable costs to them or their families (28).

The Strategy recognizes that the countries of the Region have developed different approaches to organizing their health systems (paragraph 2) but also recognizes that the Region has some of the greatest health inequalities in the world, in large part because millions of citizens cannot obtain comprehensive health services (paragraph 1). Despite the economic and social development of countries in the Region, the consolidation and strengthening of health systems, and the ability to incorporate and apply technology to improve health (paragraph
21), poverty and inequities remain (paragraph 22). Changing demographics (such as aging populations and longer life expectancies, migration and urbanization) and epidemiological patterns (communicable and noncommunicable diseases, as well as violence, including gender violence) require new responses by health systems and services (paragraph 23). Health system investments and reforms have not met these new challenges (paragraph 26) and political commitments to health equity require new and strengthened policies (paragraphs 31 and 33).

## $\rightarrow$ How This Report Relates to the Strategy for Universal Access to Health and Universal Health Coverage

The Strategy is a milestone toward greater equality in health for the populations of the Member States, as it moves forward many policies and strategic initiatives of the past decades (for example, the WHO Commission on Social Determinants of Health [29] and the Rio Political Declaration on Social Determinants of Health [30]). In particular, the Strategy propels the call for gender equality in the Region of the Americas. In keeping with the PAHO Gender Equality Policy (31), the Strategy explicitly refers to the influence of gender on women's and men's lives, including, for example, the greater vulnerability of some subpopulations such as sexual
minorities, ethnic groups, indigenous peoples, girls and boys, and others.

## The first paragraph in Strategic line 1 states:

...It is essential to identify health inequities between population groups through detailed health situation analyses, surveys, and specific studies, and to delve further into their determinants (paragraph 35).

This imperative is expanded in Strategic line 2:

Strengthen national information systems in order to conduct monitoring and evaluate progress toward universal access to health and universal health coverage, including the measurement of health outcomes, comprehensive health services and inequities and social determinants of health... Data should be disaggregated to facilitate the monitoring of progress toward equity. Data analysis should be used to develop and focus policies and plans with a view to advancing toward universal access to health and universal health coverage (paragraph 48).

Strategic line 3 aims to eliminate the financial barriers women, men and their families may face when they need to seek and obtain health care, "avoiding impoverishment and
exposure to catastrophic expenditures" (paragraph 52). Transparent and appropriate public financing of health systems, giving priority to primary care, will increase equity and efficiency in health systems. A public expenditure on health equivalent to $6 \%$ of GDP is recommended as an initial benchmark "to reduce inequities an increase financial protection" (paragraph 51).

The fourth Strategic line highlights the need for coordination among health and other sectors to achieve the goals of universal access and universal health coverage. Member States have committed to implementing national policies and programs that will support improvements in the social determinants of health (paragraph 53). This includes sharing evidence about programs that reduce poverty and inequities (paragraph 55) and ensuring that communities and individuals are empowered to contribute to policymaking (paragraph 56)

The framework and indicators proposed in this report are intended to assist PAHO and Member States in the coherent and comprehensive monitoring and evaluation of progress on the Strategy. There are indicators included which will measure health outcomes las noted in Strategic line 2), as well as elucidate whether and which men, women, girls or boys are privileged or (potentially) disadvantaged by health reforms and other policy

## 

## The four Strategic lines in the Strategy for Universal Access to Health and Universal Health Coverage are:

## 1.

Expanding equitable access to comprehensive, quality, people- and community-centered health services.

## 2.

Strengthening stewardship and governance.

## 3.

Increasing and improving financing, with equity and efficiency, and advancing toward the elimination of direct payment that constitutes a barrier to access at the point of service.

## 4.

Strengthening intersectoral coordination to address social determinants of health.
changes that should be ensuring universal access. Reports on health and others must include data disaggregated by sex, geographic location, ethnicity, income and education level, as well as qualitative information and other research evidence to understand how and why there are gendered differences (27, 32, 33). Examining the intersections of, for example, sex and ethnicity will help uncover structural and systemic inequities that women or men face based on their ancestry, which can then be rectified.

## $\rightarrow$ The 2015 Sustainable Development Goals

Since 2000, international development has been framed to a considerable extent by the Millennium Development Goals (MDGs), eight goals designed to "address extreme poverty in its many dimensions-income poverty, hunger, disease, lack of adequate shelter, and exclusion-while promoting gender equality, education, and environmental sustainability" by 2015 (23).

While the MDGs, which expired in 2015, helped to drive substantial change in developing countries, particularly in relation to poverty, child mortality, and access to clean water and sanitation, progress has been far from uniform and many targets have not been achieved (23). Furthermore, the MDGs do not reflect current thinking about

There are several definitions for sustainable development.
Most invoke the so-called "triple bottom line" approach to human well-being: a combination of economic development, environmental sustainability and social inclusion.
sustainable development, which sees economic development, social inclusion, and environmental protection as parts of a larger, interdependent ecological system (3, 34-36). Seventeen new Sustainable Development Goals (SDGs) were proposed as a result of the United Nations Conference on Sustainable Development as well as more than twenty international agreements and frameworks. The 17 SDGs were ratified by the UN General Assembly in September 2015 (37).

Sustainable development refers to economic and social development that is respectful of, and intended to prevent the depletion of the natural resources on Earth. Sustainable development also involves acting to address the needs of current and future generations. According to Rio+20, the website for the UN Conference on Sustainable Development, "Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs... Seen as the guiding principle for long-term global development, sustainable
development consists of three pillars: economic growth, social inclusion and environmental protection" (38).

The UN proposal states that the overarching objectives of the SDGs are eradicating poverty; changing unsustainable practices and promoting sustainable patterns of consumption and production; and protecting and managing natural resources as the basis of economic and social development (37).

## $\rightarrow$ How This Report Relates to the Sustainable Development Goals

Like the MDGs, the SDGs include an explicit commitment to achieving gender equality and empowering all women and girls (Goal 5). And, like the MDGs, the SDGs contain implicit commitments to advancing the status of women and girls because other goals, including ending poverty, ensuring health and promoting well-being and reducing inequality in and between countries (Goals 1, 3, and 10, respectively), address the needs of vulnerable and

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## The 17 UN Sustainable Development Goals include:

## Goal 1

End poverty in all its forms everywhere.

## Goal 3

Ensure healthy lives and promote wellbeing for all at all ages.

## Goal 5

Achieve gender equality and empower all women and girls.

Goal 10
Reduce inequality within and among countries.

Goal 17
Strengthen the means of implementation and revitalize the global partnership for sustainable development.
disadvantaged populations, which are disproportionately female. The adoption of the SDGs-and the development of gender-sensitive indicators to monitor them-provides new opportunities to raise awareness about gender and other forms of inequality experienced by men and boys as well as women and girls in the Americas.

The SDGs are different from the MDGs in that they aim to address gender and other forms of inequality within countries in the context of sustainable development (39). In other words, actions to achieve equality for women and men must also ensure that the Earth's resources are preserved and conserved for current and future generations. Some researchers have suggested that women's perspectives -their attitudes toward the environment, their consumption and production patterns, and their roles in reproduction-better position them to advance sustainable development (40). According to Klugman,
...evidence suggests that if all women could exercise reproductive choice, population growth would slow enough to bring greenhouse gas emissions below current levels... And because women often show more concern for the environment, support proenvironmental policies and vote for pro-environmental leaders, their greater involvement in politics and in nongovernmental organizations could
result in environmental gains, with multiplier effects (40).

However, it is important to avoid gender stereotypes that suggest all women think alike and will make the same choices about family planning, economic development and environmental leadership, as well as other gender stereotypes that only point to men as the cause of unsustainable development (41, 42). There arealsovulnerable populations of women and of men who are less likely to benefit from globalization and are most likely to be harmed by economic shifts and environmental deterioration $(3,40,41,43)$.

As described in the Introduction, the purpose of this report is to propose a framework and a core set of gender and health indicators for monitoring and evaluating progress toward the SDGs and the Strategy for Universal Access to Health and Universal Health Coverage in the Region of the Americas. SDG 17 mandates the collection, analysis and monitoring of data to assess progress toward sustainable development and sets interim targets. Target 18 is "to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender [sex], age, race, ethnicity, migratory
status, disability, geographic location and other characteristics relevant in national contexts" by 2020. The following sections of this report provide a review of existing frameworks and indicators and propose a Core Set of Indicators in a framework which, following validation by countries in the Americas, can be used to help meet this target. Much of the data for the indicators is already being collected, and Member States can add to this foundation to develop highquality, timely reports, disaggregated and analyzed in keeping with PAHO's Guide for analysis and monitoring of gender equity in health policies (27) so that evidence of inequity and inequality can be carefully monitored and actions be taken to improve gender equality.

Target 19 of Goal 17 is to "build on existing initiatives to develop measurements of progress on sustainable development . . ." To help meet this target, this report identifies technically feasible indicators that will hold Member States accountable to the SDGs and that are meaningful and relevant to monitoring progress toward gender equality that promotes wellbeing and healthy lives for women, girls, men and boys. These include measures of the health of the physical and natural environment in which women and men reside and conduct their lives.


## $\operatorname{sen} 4$

## Gender and Health Indicator Frameworks

Health indicators are characteristics that can be measured to describe one or more aspects of individual or population health le.g., number of cases of malaria), or to describe living conditions and other determinants that influence health (e.g., number of households with running water).

Indicators are often organized according to a framework, whether explicit or implicit, which is an illustration or table for conceptualizing and organizing the measurements of interest. A framework depicts how the indicators should be understood, especially in relation to each other. As Kryzanowski and McIntyre (44) note, selecting indicators without first having a conceptual framework risks "overlooking existing or desirable indicators," particularly those that represent "key determinants of health."

In a report undertaken for the WHO and PAHO in 2010 (6), six health
indicator frameworks were assessed for their ability to incorporate gender statistics and encourage gender analysis. The authors concluded that any framework can be made gendersensitive by presenting and analyzing indicators disaggregated by sex and by explicitly reinforcing the need to develop indicators that measure the impact of social, economic, and political contexts on women's and men's health (e.g., by including unpaid work). Of the six frameworks evaluated, the authors recommended a version of the ISO health indicator framework, modified to include explicit reminders about sex, gender, and gender analysis (Figure 1) (21). In this version, gender is emphasized along the continuum of the four domains of indicators. Additionally, within each domain there is a box to remind data producers and users to consider Key Gender Equality and Equity Issues in the analysis that provide context. The issues and the context are found in other evidence and information, not just from quantitative health-related data (45).

The authors did not presume that the framework recommended in 2010 would still be appropriate or adequate. The starting point for this project was determining how the use of gendersensitive health indicators has changed in research and policy. Specifically,
recent examples of frameworks and indicators that can contribute to monitoring and evaluating gender equality in universal health access and health coverage and sustainable development were searched and reviewed.

Figure 1 | Gender and Health Information Framework
Used with permission.

| 1. Health Status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Well-being | Illness, Injury and Healthrelated States |  | Human Functions | Sexual and Reproductive Health |  |  | Expectancy and Death |
| Key Gender Equality and Equity Issues |  |  |  |  |  |  |  |
| 2. Determinants of Health |  |  |  |  |  |  |  |
| Environmental Factors | SocioEconomic Factors | GenderBased Violence | Social and <br> Community <br> Factors | Household Factors | Health-rel <br> Mediators: <br> Health <br> Behaviors <br> Psychosoc <br> Factors |  | Biomedical Factors |
| Key Gender Equality and Equity Issues |  |  |  |  |  |  |  |
| 3. Health System Performance |  |  |  |  |  |  |  |
| - Accessibility <br> - Availability <br> - Affordability <br> - Service Access <br> - Acceptability / Responsiveness |  | - Effectiveness <br> - Service / Program Effectiveness <br> - Safety <br> - Appropriateness <br> - Continuity / Continuous <br> - Competence / Capability |  |  | - Cost <br> - Technical Efficiency <br> - Allocative Efficiency <br> - Sustainability |  |  |
| Key Gender Equality and Equity Issues |  |  |  |  |  |  |  |
| 4. Community and Structural Factors |  |  |  |  |  |  |  |
| Economic Resources |  | Human Settlement |  | Governance |  | Health and Welfare Systems |  |
| Key Gender Equality and Equity Issues |  |  |  |  |  |  |  |



Two kinds of online searches were conducted for this portion of the work. ${ }^{4}$ First, a MEDLINE search was conducted for peer-reviewed literature from the past 10 years (2005-2015) that addressed how frameworks have been conceived and for what purposes. Search terms were specific to frameworks for gender, health-including health systems-and/or environment and sustainable development. Second, a Google search for health and gender indicator frameworks was performed. The search produced nearly a dozen frameworks available in English that were not already reviewed in the 2010 report and that are relevant to at least some elements of health, gender, health systems or sustainable development. ${ }^{5}$

Retrieved documents and websites were assessed to consider if they could be adapted for the purposes of this project. Every framework retrieved was analyzed according to these criteria:
a) Domains or levels: Does the framework have indicator sections for population aggregates of individual-level data (i.e., incidence, counts or rates), as well sections for other indicators that influence individual or population conditions li.e., social policies or health services)? Are there domains that go beyond women's and men's health conditions and allow for analysis of the intersections of gender with other inequities?
b) Relevance to the purpose of this project: Can the framework accommodate gender and health indicators related to universal access to health and health coverage as well as some measures of sustainable development?
c) Encouraging gender analysis: Does the framework facilitate and encourage gender analysis?
d) Ease of understanding: is the framework clear, and does the organization seem logical for monitoring gender equality?

[^3]
## $\rightarrow$ Examples of Conceptual Frameworks

Health indicators, as stated in Section 2, are health-related characteristics that can be measured.

Several of the frameworks ${ }^{6}$ retrieved aim to depict the interrelatedness of individual determinants (so-called "proximal" or "downstream") and structural or societal determinants (so-called "distal" or "upstream"7 )
with health status or outcomes. A few examples that incorporate gender in some way and an assessment of their utility for monitoring gender equality, universal health, and sustainable development are presented here.

The first example was presented by Etches et al. (46) in a 2006 review of the development of population health indicators (Figure 2). In considering the history of population health concepts as well as improved methods for statistical

Figure 2 | Model of proximal and distal causes of population health (46) Used with permission.


[^4]
analysis and data linkages, ${ }^{8}$ the authors developed a conceptual model to depict how this evolution of methods and data can be used to understand the influences of upstream political, cultural and structural factors; social constructs such as race (ethnicity) and gender; individual genetics; and immediate physical and social environments as well as health services.

This model depicts the complexity of the interactions and relationships among and between influences on health. It also identifies ecological, social, political and environmental factors affecting health as well as the role of individual characteristics and health services and systems. An additional merit of the framework is that it explicitly identifies gender disparities as a determinant of health. However, there is no clear rationale or representation of how various factors interact with one another or the numbering scheme used, and the arrows included do not explicitly depict a gender-based (or any other) analysis. Furthermore, it is difficult to imagine that populating the model with indicators would be practical, feasible or easily understandable.

A second example comes from Kryzanowski and McIntyre (44), who
proposed a model for incorporating culturally-relevant indigenous health within an environmental assessment of industrialization in Canada (Figure 3). This aim is consistent with the goal of monitoring and evaluating health in relation to sustainable development (47). The authors note that the monitoring of health determinants has not been performed with the same rigor as the monitoring of environmental impacts. The model the authors propose is based on indigenous scholarship and encompasses existing holistic models of physical, emotional, mental and spiritual health. According to the authors

The Holistic model visually depicts the relationships between industrialization and contextual, community and individual determinants of health. Thus, indigenous communities can use the model to articulate the multiple pathways by which industrialization directly and indirectly affects health and select representative indicators (48).

This model is a good illustration of the interrelatedness and layers of influence of many determinants of health. Although the model does not include mention of health systems per

[^5]se, it is reasonable to consider a place for those indicators within the same area as educational systems and social resources. However, there are no areas in this model for personal income or racial segregation and oppression. Furthermore, it does not include any
mention of the role of gender, which may be an artefact of the authors' methods, drawing upon other studies that also did not include indicators or analysis for gender considerations, or simply that the indigenous cultures described have different constructs of gender (48).

Figure 3 Holistic model to assess the effects of industrialization on indigenous health (44)
Reproduced with permission of the Canadian Public Health Association.



The third example is the model developed by Kim and Saada (49) in 2013 to illustrate the relationships between infant mortality (IM) and birth outcomes, and societal and individual determinants in the United States and Western Europe, based on priorities identified in the WHO Commission on Social Determinants of Health. As Figure 4 illustrates, the authors describe the influences
of social determinants at the level of social, economic and political contextsincluding racial segregation and genderand the conditions under which women and men live and work. Indicators related to living and working conditions, which they term "material environment" are also included in this portion of the model. Proximal factors are called "intermediary determinants," which reflect the influence

Figure 4 | Social determinants of infant mortality and birth outcomes (49) Used with permission.

of personal behaviors, biology, and stress and psychosocial factors. Kim and Saada also include access to health care and quality of prenatal care among the proximal factors. Connecting arrows illustrate the influence of different domains, ultimately affecting the outcomes for mothers and babies. Note, however, that the arrows in the model convey a mostly one-way pathway from the social to the intermediary determinants and that "gender" is not connected by arrows to any other determinant (49).

In this model, the authors conceive individual characteristics such as socioeconomic status (SES) and ethnicity as influencing where one resides, both in terms of income (area SES) and in terms of community culture (residential segregation). These living conditions are in turn influenced by governance and social policies. It is not clear, however, why health care would not also be among the social determinants, since the location of services and also the ability to afford those services are not within the immediate control of individual women. Again, gender is not shown to be related to any of the determinants.

This model is interesting as it could be adapted to include measures of sustainable development. The need to consider the two-way influences of some factors, such as social capital, is also valuable. Certainly, gender would
have to be shown to be in relation to many of the social and intermediary determinants. The figure is complicated, however, and may be unworkable once it is populated with indicators for more than one outcome.

The final example comes from the World Bank 2012 World Development Report on Gender Equality and Development (50). The model was developed to illustrate economic influences on gender and development (Figure 5). The cogs in the World Bank model depict the ways in which formal institutional structures, such as governance and social and economic policies, interact with informal institutional structures such as cultural norms and household factors to advance or hinder gender equality in terms of economic opportunity, personal agency and individual endowments. This basic model is used throughout the report to illustrate the societal, political and economic influences on women's participation in the workforce as well as women's health, education, and agency. The model is also used to describe the effects of globalization, political reforms, market forces and advocacy. It is not surprising that the World Bank, with its focus on economic development, emphasizes the role of markets and economics in this model.

The World Bank model conveys movement and action, as a change in any single $\operatorname{cog}$ can be understood to

influence change in other cogs. The arrows demonstrate the direction of that movement, illustrating that changes (growth) can take place within the smaller sphere of individuals' experiences (on the right side of the model), as well as at the levels of culture, governance and other aspects of society lon the left-hand side of the model). To complete the mechanical metaphor, the cogs can be "oiled" by policies to ensure that progress and growth advance gender equality. Throughout the report, the model is repeated, with indicators added as they are relevant to the topic at hand.

This model explicitly emphasizes the goal of gender equality and factors that contribute to advancing it in economic development. Moreover, the model includes spaces for political participation, state policies such as health services and health care administration, as well as communities and households. Women's unpaid caregiving and men's and women's out-of-pocket health care expenses could be incorporated under informal institutions, as they are often invisible, unregulated contributions to households and communities. It is reasonable to consider, also, that

Figure 5 | World Bank model for Gender Equality and Development (50) Used with permission.

ethnicity, sex, language and other identifiers could be placed within the cog called "endowments, and that the model could be adapted to include indicators of sustainable development. In fact, the World Bank Gender Data Portal includes indicators related to sustainable development as well as other areas of interest (see below).

## $\rightarrow$ Examples of Indicator Frameworks

The literature search retrieved examples of existing frameworks already populated with indicators. ${ }^{10}$ In most cases there are obvious policy drivers that determine which indicators are selected. For example, the U.S. Government's Healthy People 2020 indicator list is modified every year to reflect policy priorities (51). The 2015 list of indicators for this project includes access to health systems 12 indicators), environmental quality 12 indicators) and also social determinants (2 indicators), as well as a few physical and mental health outcomes, including injury and violence. According to the federal website, Healthy People 2020 indicators are organized as they relate to determinants of health and health disparities along the life course. The framework and the indicators convey a purpose of monitoring one or two key areas of interest related to healthy
living (such as overweight and obesity). However, the list does not depict any sense of coherence or relationship between and among the indicators. Although the data can be searched by sex, age and other disaggregates, there is no reference to gender or other equity issues either implicitly or explicitly. Lastly, there is no illustration of the influence of social structures, governance or public policy on the indicators to be measured.

Harbers et al. (52) present the European Community Health Indicator shortlist in a 2015 paper. As the authors describe, the shortlist ( 92 indicators) as a whole "covers the public health field in a comprehensive way, i.e., the shortlist contains indicators on health status, health determinants, health systems/ health services and demographic and background variables." The authors note that the list is drawn from existing data and indicator sets, but that the shortlist was nevertheless not driven by the data available and can be accommodated for changes in policy or new scientific lor presumably other) insights. The indicators for health systems and services include insurance coverage, expenditures on health, equity of access to health care services, integrated service in settings including workplace, schools and hospitals. These indicators are valuable for monitoring universal access to

[^6]
health care and health care coverage, but the framework has not yet been adapted to accommodate sustainable development or make explicit gender equality indicators and processes to monitor the advancement of gender equality.

The World Bank collects and reports on numerous indicators related to gender equality, health and sustainable development, and other domains on the Gender Data Portal." Many indicators are found in more than one category to illustrate their importance in monitoring the progress of gender equality. As with the Gender Equality and Development model described above, the focus of the portal is on economic development; however, there is a recognition that gender equality is required for true advancement in sustainable and economic development.

PAHO's Guide for Analysis and Monitoring of Gender Equity in Health Policies aims to "elucidate the implications of health system reform policies for gender equity" (27). It provides theoretical and analytical bases for identifying problems, forming policies and setting priorities for action. The guide also suggests indicators for monitoring gender equality in the four observation fields (or domains):

- Demographics, including access to drinking water and basic sanitation.
- Governmental institutions that promote women's advancement, including income distribution, employment, political participation and legal frameworks.
- Health situation, including sexual and reproductive health as well as human resources for health.
- Geopolitical context.

This framework differs from the one recommended in 2010 (see page 19) in that measures of structural conditions are embedded in the same domains as population-level indicators of health and social status. The availability of health programs, for example, occupies the same domain as population-level rates of mortality or substance use. In this way, so-called "lifestyle choices" or individual preferences may be understood to be linked to systemic or even structural (i.e., legal frameworks) conditions.

Note that this framework builds upon PAHO's Basic Indicators for Gender Equity in Health, developed in 2005 and reviewed in the 2010 report (6) (Table 1). As the authors noted in 2010,
the goal of gender [equality] is sought in health status, access to health care services, health care cost coverage, and health care management. Notably, the tiers

[^7]of socioeconomic determinants and health management provide opportunities to monitor and take action upon women's inclusion in policy decisions, how well women's rights are upheld, and the opportunities they have to direct health care for other women and the community.

These goals and the tiers can be applied now to monitoring gender equality for boys and men as well as for girls and women in vulnerable situations.

The 2010 review of frameworks goes on to comment on the value of explicitly including gender-based violence and sexual and reproductive health, as well as indicators of health financing and coverage.

The 2005 list of indicators proposed by PAHO and the indicators proposed in the Guide cover many of the areas of interest for the Strategy. These include state health expenditures and financing as well as women's and men's personal out-of-pocket expenditure for health

Table 1 | Basic Indicators for Gender Equity in Health, Pan American Health Organization

| Socioeconomic <br> Determinants of Health <br> Health Situation | Demographic profiles <br> Socioeconomic factors (income, employment, <br> education, environment, laws and regulations) |
| :--- | :--- |
|  | Mortality <br> Morbidity <br> Risk factors <br> Sexual and reproductive health <br> Gender-based violence |
| Access and Utilization of <br> Health Services | Coverage <br> Utilization of health promotion and prevention <br> Health expenditures |
| Health Management | Formal and informal health care <br> Decision-making |


care. The indicators are also clearly selected to monitor progress in gender equality and determine where action and policy change are required, as many indicators explicitly describe the gender-sensitivity suggested. The two frameworks can be adapted to measure health-related Sustainable Development Goals. The frameworks would benefit, however, from an illustration to depict the ways in which systemic and personal factors intersect and to emphasize the focus on improving gender equality. ${ }^{12}$

## $\rightarrow$ Summary and <br> Recommendations: A Model and a Framework

The review of existing frameworks in this section demonstrates that policy priorities in population and public health shape indicator frameworks and at the same time can explain how the indicators relate to each other. As noted, some frameworks are based solely on available data while others are more conceptual or aspirational. Where there is no conceptual framework articulated, the relationship between the indicators may not be clear. PAHO's Gender Equality framework is an exception as it includes structural, community and
individual indicators within each of its four domains.

As a result, a two-pronged approach is recommended: one that will provide a framework for organizing indicator domains as well as an illustration of the relationships among these indicators and domains.

A model based on the World Bank gender equality and development framework (50), will reinforce the focus on monitoring gender equality in universal access to health care, universal health coverage, and sustainable development.

This model (Figure 6) explicitly emphasizes the overarching goal of gender equality and factors that contribute to advancingit. The modelwas developed with an economic focus, and would have to be adapted to incorporate the domains of governmental structures, health system economics, political participation, health services and health care administration, unpaid caregiving and out-of-pocket health care expenses. Moreover, this model can be adapted to illustrate the need to monitor equity and equality for

[^8]Figure 6 | Proposed Model for Gender Equality Framework and Indicators in the Context of Universal Health and the Sustainable Development Goals
Adapted with permission.

diverse populations of women and men, including disaggregation by rural or urban residence, ethnicity, and other identifiers.

Finally, it is recommended that a framework be used to organize
indicators in familiar domains. The ISOinspired framework, similar to the one proposed in 2010, provides a workable, familiar template for reporting. In the following section, the domains and indicators to be included in the model and the framework are discussed.


## Section

## Criteria and Recommendations for a Core Set of Indicators to Monitor Gender Equality in Health

## Basic Criteria for Indicators

Health indicators were conceived to be meaningful and relevant (46) because they can show changes over time, particularly with regard to the results of specific interventions or natural phenomena. According to Etches et al. (46),
health indicators should contribute to overall population health goals, namely improving the health of populations and reducing health inequalities. Health indicators can be used to support this goal when applied for advocacy, accountability, system management, quality improvement, and research.

Health-related indicators are selected to convey a particular narrative or to inform priority policy change. It is also
critical to select indicators that can describe the situation or experiences of women, men and gender minorities as well as the influence of other variables, such as place of residence, age, sexual orientation, ethnicity, personal or household income, and so on. At the very least, indicator data must be collected and reported by sex, so that comparisons can be made between the needs and experiences of women and men (21,32, 45). This is only a first step, however, since gender analysis of indicators is also needed to interpret the information and identify key inequalities and the inequities that contribute to those inequalities. That is, indicators must be gender-sensitive.

Gender-sensitive indicators highlight changes in the status and roles of women and men, serving to track
gender-related changes in society over time. Besides being essential to identify differences in women's and men's experiences, access to resources and control over their own lives, they can also be used to assess the effects of policies and programs. They provide information about whether observed sex differences in health indicators result from gendered norms and expectations in households, communities or social and political structures that unfairly prevent some females or some males from participating fully in society or achieving their full health potential (58). Historically, gender-sensitive indicators have been used to provide evidence of women's status in society, but just as concepts of gender have evolved, gender-sensitive indicators are becoming more valuable for monitoring which populations of men and boys are vulnerable as well. In this way, gender-based analysis can be broadened and mainstreamed to improve equity and efficiency in health and related systems.

Indicators that advance gender equality are not only related to individual behaviors and endowments, but also reflect physical, economic, political and social environments at the household, community and national authority levels lincluding subnationall, including measures of access to high quality and affordable care and sustainable development.

## $\rightarrow$ Criteria for Selecting Indicators for the Gender Equality and Health Framework

The gender and health indicators used to monitor and evaluate Universal Health Access and Universal Health Coverage in the Region of the Americas should meet the criteria described above. That is, all indicators should be:

Relevant, meaningful and familiar to the producers and the users. Ideally, Member States will seek the information from this Core Set of gender equality and health indicators just as they do for the current PAHO Health Situation Basic Indicators.

Well-defined, clear and understandable to those gathering and using the data. In other words, the target of an indicator and the reasons for measuring it should be evident.

Valid and reliable, providing accurate and consistent measures regardless of location.

Technically feasible, so that it is possible to gather data for the indicator from existing survey or administrative data, or through some new instrument. As Lin and others have pointed out (53), there should be little additional cost to gathering indicator data if there are already good data systems in place. Where

data are already being gathered, the inclusion of a new indicator should not be onerous or costly, or else can be planned to be included in the near future.

Usable, in that they can lead to policy change where needed and be acted upon.

Additionally, there should not be too many indicators, so that collecting, reporting and presenting the indicators is manageable. This will ensure that the data are readily and easily presented in a timely fashion and that interventions and targets can be quickly identified and implemented.

Forty indicator frameworks from the UN, the World Bank, PAHO and health authorities of other countries were reviewed. Fourteen were reviewed in depth because of their relevance to monitoring gender equality in health, access to health care and financing and Sustainable Development Goals 3, 7, 12 and 17 (see Annex A). The lists were then compared according to the intent of what is measured, focusing on what is being measured rather than how it is being measured (i.e., rates, proportions). Many of the indicators evaluated were recommended, although they may vary somewhat in exactly how they were to be measured.

## $\rightarrow$ Recommended Core Indicators

As a result of the review of frameworks and indicators that were already in development for monitoring progress on the SDGs, nine key areas were established for the core set of indicators of gender equality in health. Additional key issues have been included to ensure that there is gender equality both in processes and in outcomes, particularly in the context of universal health. These key areas are:

1) Gender-sensitive indicators of mortality and morbidity from major causes, including noncommunicable diseases and external causes of death.
2) Indicators of sex-specific needs such as reproductive health and care for women and men, as appropriate by age. Maternal mortality rates, for example, remain a fundamental indicator of women's health, of the availability of appropriate health care services, and of women's position in society (54). Maternal and child health is frequently used as a proxy indicator, but there is a risk that women's
health becomes subsumed under children's health and infant mortality (which is also critical) and women's health will be dismissed or neglected if not explicitly included. Genderbased analysis of sexual health is necessary to reduce inequities for men who have sex with men and transgender people who, along with women, bear the consequences of unsafe sex (55).
3) Indicators of women's and men's experience of assault and violence, as well as of the existence of state structures to protect against gender-based violence. Violence against women is most often perpetrated by intimate partners or other family members, and causes physical injuries, mental strain and death. Laws that protect women and systems that prosecute their assailants provide security and allow women greater equality. Men also experience genderbased violence, which may be related to gangs or other expressions of masculinity. It may also be experienced by men who identify with non-dominant expressions of gender or sexual orientation (which is also the case for women). Violence against men is a leading cause of injury and death, and while
typically more episodic in terms of the relationship between the attacker and the victim, violence and intentional injuries are often driven by racism or other forms of oppression and power differences.
4) Indicators of unpaid work. Universal health coverage can create greater equality by removing unfair or unaffordable costs so that all may seek and obtain care. However, health reforms to cut costs on physician and hospital services that have been underway for over two decades have essentially increased the hours of unpaid health care in homes, disproportionately affecting women.
5) Indicators of public financing of the health system, including efforts to increase the health care workforce (56). Out-ofpocket health care expenses for individuals must also be monitored. Women and men who do not have additional benefits through their employment or some other form of insurance may have to delay or forego care or treatments, depending on what services are publicly funded.

6) Indicators of environmental degradation as well as hazards in the physical environment and any differential impact on women and men, girls and boys. These will be defined at the household or community level and relate to potable water, sanitation, as well as industrial hazards, and changes in the landscape, such as depletion of forests, loss of arable land for crops or water pollution.
7) Indicators of events and trends related to changing climate conditions, such as drought, flooding or extreme temperatures, with a focus on how such changes may contribute to risk or vulnerability for women or men, including in their occupations.
8) Indicators of women's and men's equal involvement in the work force as well as fair compensation for their employment.
9) Indicators of gender equality in diverse arenas of policy-making and governance.

The proposed core indicators for monitoring and evaluating gender equality and universal health in the Americas in the context of the SDGs are presented in Annex C. The indicators are arranged within the domains of the Gender and Health Information Framework (Figure 1), with some changes noted.

Beyond this proposed core set of indicators, consideration should be given to the inclusion of a composite index for Wellness or Well-being, ${ }^{13}$ Happiness ${ }^{14}$ or one of the international gender (in)equality indexes. ${ }^{15}$

Regarding the 2010 proposal, the domain "Social Determinants of Health" replaces the more generic "determinants." The domain of policies and governance has various names in other frameworks, but here it will be named "Governance and Sustainable Development."

[^9]
## The following framework domains help to organize the indicators, so they can be reported and analyzed meaningfully:

Health Status: monitoring the progress of health status indicators can facilitate the reduction of disparities. Indicators should look at avoidable causes of mortality and morbidity, and link masculinity and femininity to behaviors and to health outcomes.

Social Determinants of Health: using the guidance of the Commission on Social Determinants of Health (CSDH). Include the burden women have as care providers.

Health Systems Performance: focusing on the right to timely, acceptable, affordable and appropriate health services of high quality, and the diverse barriers to health, including to safe abortion services. Health care providers' gender biases should be examined as part of the analysis of access and quality of services.

Governance and Sustainable
Development: ${ }^{16}$ the legal and structural contexts within Member States, including at subnational levels. Include indicators of alignment with international gender equality agreements.

Furthermore, special care has been taken to situate the framework and the model within the context of human rights, as well as Member States' implementation of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), the Convention of Belém do Pará and other international agreements for reducing gender inequalities.

## $\rightarrow$ Gender-Based Analysis for Monitoring Gender Equality

Regardless of which indicators are adopted for monitoring gender equality, it is essential to continue with genderbased analyses of the data collected and reported (2). The list of proposed indicators includes cross-tabulations that will provide important information on health differences and inequities between and among males and females. Primary among these is the need for cross-tabulations by income, given that it is a strong predictor of inequality. Decisions will also have to be made about how the data are presented le.g., as rate ratios or rate differences) which are not value-neutral (59).

[^10]

Gender-based analysis also requires research and community information from other sources. Additional quantitative and qualitative evidence should be used to understand the drivers and the implications of sex and other differences observed in the data. Information from small-scale or localized studies may be the only way to understand subregional differences or health inequalities in minority populations.

Gender-based analysis is strengthened by situating indicator data in the context of women's and men's lives, including the links between gender identities, gender relations and gender power, and health status outcomes, social determinants of health and access to appropriate services. By asking what is causing the differences in health and how they are differently experienced, it is possible to make policy decisions for improvements that can reduce health inequities and lead to improved gender equality (1, 33, 45).

## $\rightarrow$ Consultation Process

The proposed model and framework for indicators were presented to an international meeting of experts, hosted
by PAHO's Office for Equity, Gender and Cultural Diversity (EGC) in April 2016. The international experts came from different countries and sectors, including civil society, academia, government agencies (ministries of health, national statistical offices, Centers for Disease Control and Prevention) and other international organizations, such as the World Bank. Over the two-day meeting, participants reviewed and commented on this conceptual framework and the proposed gender and health indicators. The results of the discussions have been incorporated in this document. In addition, the experts group committed to advocating for the development and use of selected gender and health indicators. In September 2016, EGC issued a survey to request respondents to select a core set of indicators from the ones proposed, and to select a limited set of key indicators. The document and the selected basic and key indicators have been presented at various events, such as the meeting of the Technical Commission on Gender and Health (CTGS, by its acronym in Spanish) of the Council of Ministers of Health of Central America (COMISCA) held in 2017. EGC also intends to elaborate and disseminate a plan of action to promote development and reporting on indicators of gender and health.

#  section 6 <br> <br> Technical Specifications for Key <br> <br> Technical Specifications for Key Indicators 

 Indicators}

## Domain 1. Health Status

$\rightarrow$ ADOLESCENT FERTILITY RATE (15-
19 YEARS OF AGE)

## Definition:

Quotient obtained by dividing the annual number of live births to women aged 1519 years by the population of women in that age group during the same year, for a given geographical area, expressed per 1,000 live births.

## Adolescent fertility rate

Annual number of live births to women
$=\frac{\text { aged } 15-19 \text { years } \times 1,000}{\text { Total number of women aged } 15-19 \text { years }}$
Population data are mid-year estimates obtained by linear interpolation of the corresponding United Nations 5-year population projections, which are based on the medium fertility variant.

## Relevance:

Adolescent reproductive health is a critically important issue, particularly owing to the social, economic, and health consequences of an unplanned
pregnancy or an abortion. Despite a decrease in adolescent fertility rates in recent decades, the issue continues to be of major concern.

Pregnancy at a very young age is one of the main risk factors for maternal and infant death. Adolescent pregnancies are frequently unwanted pregnancies that occur in unestablished couples and that lead to physical, emotional, and social complications. Teenage mothers are confronted with obstacles that keep them from continuing their studies and achieving social integration, factors that are vital to their healthy development. If they opt for an abortion, in most cases it is practiced in unsafe conditions that put women's health or lives at risk.

Adolescent fertility rates in the Americas for 2017 range from 86.9 in Nicaragua to 8.2 in Montserrat (PAHO. Health Situation in the Americas: Core Indicators 2017).

Among the factors associated with the decrease in fertility is the use of contraceptives. However, according to the Demographic and Health Surveys

(DHS) carried out in various countries of the region of Latin America and the Caribbean, young people between the ages of 15 and 19 are precisely the group with the greatest unmet need for family planning. In five countries with available data since 2010, the percentage of adolescent women in a union who did not want to have children or who wanted to space births but were not using any contraceptive method ranged from $57 \%$ in Haiti (2012) to 19\% in Honduras (20112012) (DHS. STATcompiler. Accessed March 27, 2018).

## Required data:

- Number of live births and mothers' ages
- Female population aged 15-19 years


## Data sources:

- Vital statistics


## Suggested disaggregation:

- Place of residence: urban and rural
- Indigenous peoples, people of African descent, other ethnic or racial groups
- Level of education: none and primary school, secondary school or higher
- Socioeconomic status


## $\rightarrow$ MORTALITY FROM DIABETES MELLITUS

## Definition:

Quotient obtained by dividing the number of deaths from cerebrovascular diseases in women by the total number of women in the population, by age group, for a given year and geographical
area, expressed per 100,000 women. This definition applies to men as well.

> - Reported age-specific rate of death from diabetes mellitus in women
> Number of deaths from diabetes mellitus among women in a specific $=\frac{\text { age group } \times 100,000}{} \frac{\text { Total number of women in that age group }}{}$
> - Reported age-specific rate of death from diabetes mellitus in men

Number of deaths from diabetes
mellitus among men in a specific
$=\frac{\text { age group } \times 100,000}{\text { Total number of men in that age group }}$
Causes of death attributable to diabetes mellitus correspond to codes E10-E14 of the ICD-10.

## Relevance:

Diabetes mellitus is one of the most alarming public health problems in the Region. The increase in overweight, in tandem with sedentary lifestyles and population aging, contributes to the risk of developing diabetes mellitus. Furthermore, diabetes is a risk factor for cardiovascular diseases, blindness, kidney damage, and loss of lower limbs. Many cases of diabetes can be prevented by a healthy diet and physical exercise, and complications can be reduced by maintaining a healthy weight, eating a low-fat, fiber-rich diet, quitting smoking, exercising regularly, and keeping high blood pressure under control.

Of the 40 countries with available data (most recent year available: 2012-2014), 17 show higher estimated rates of death from diabetes among women than among men, and 14 show similar rates in both sexes (PAHO. Gender, Health, and Development in the Americas: Core Indicators 2016).

The health sector should focus particularly on preventing diabetes and improving the effectiveness of care provided to affected individuals, especially in light of the expected overall increase in the number of cases of diabetes by the year 2025 in the Region of the Americas (NCD-RisC [website]. Diabetes. http://ncdrisc.org/ data-visualisations-diabetes.html)

## Required data:

- Number of deaths from diabetes mellitus, by sex and age group
- Population, by sex and age group


## Data source:

- Vital registration systems and population estimates
- Age-adjusted rates of death from diabetes mellitus, by sex, for the countries of the Region are available at http://www.paho.org/data/index. php/en/
- Projected rates of diabetes prevalence in 2025, available from the NCD Risk Factor Collaboration (NCDRisC) at http://ncdrisc.org/data-visualisations-diabetes.html


## Suggested disaggregation:

- Place of residence: urban and rural
- Age groups: 25-49, 50-64, 65 years and over
- Level of education: none or primary school, secondary school or higher
- Socioeconomic status
- Ethnic/racial group
- Activity status


## $\rightarrow$ MORTALITY FROM CEREBROVASCULAR DISEASES

## Definition:

Quotient obtained by dividing the number of deaths from cerebrovascular diseases in women by the total number of women in the population, by age group, for a given year and geographical area, expressed per 100,000 women. This definition applies to men as well.
> - Reported age-specific rate of death from cerebrovascular diseases in women

> Number of deaths from cerebrovascular diseases among women in a specific age group x 100,000
> Total number of women in that age group

> - Reported age-specific rate of death from cerebrovascular diseases in men

Number of deaths from cerebrovascular diseases among men in a specific age group $=\frac{x 100,000}{\text { Total number of men in that age group }}$


Causes of death attributable to cerebrovascular diseases correspond to codes I60-I69 of the ICD-10.

## Relevance:

Hypertension and obesity are among the risk factors for cerebrovascular disease that are more strongly linked to the female sex insofar as they are aggravated by post-menopausal hormonal changes and by the use of oral contraceptives during childbearing years.

Although the incidence of cerebrovascular diseases rises considerably after the age of 45 years, in women such diseases begin to appear among the five leading causes of death as early as 25 years of age. This trend in higher mortality from cerebrovascular diseases among women has been changing, and in most countries, mortality rates among men are currently as high as they are among women or even higher.

## Required data:

- Number of deaths from cerebrovascular diseases, by sex and age group
- Population, by sex and age group


## Data source:

- Vital registration systems and population estimates

Age-adjusted rates of death from cerebrovascular diseases, by sex, for the countries of the Region are available at http://www.paho.org/data/index.php/en/

## Suggested disaggregation:

- Place of residence: urban and rural
- Age groups: 35-49, 50-64, 65 years and over
- Level of education: none or primary school; secondary school or higher
- Specific population groups: ethnic groups, migrants, displaced persons, refugees
- Activity status


## $\rightarrow$ MORTALITY FROM ISCHEMIC HEART DISEASE

## Definition:

Quotient obtained by dividing the number of deaths from ischemic heart disease in women by the total number of women in the population, by age group, for a given year and geographical area, expressed per 100,000 women. This definition applies to men as well.

- Reported age-specific rate of death from ischemic heart disease in women

Number of deaths from ischemic heart disease among women in a specific age
$=\frac{\text { group } \times 100,000}{\text { Total number of women in that age group }}$

- Reported age-specific rate of death from ischemic heart disease in men
$=\frac{\begin{array}{c}\text { Number of deaths from ischemic heart } \\ \text { disease among men in a specific age } \\ \text { group } \times 100,000\end{array}}{\text { Total number of men in that age group }}$

Causes of death attributable to ischemic heart disease correspond to codes I20-I25 of the ICD-10.

## Relevance:

At younger ages, heart disease is more common among men, but after the reproductive years the gaps between men and women grow smaller and heart disease becomes a more frequent cause of death among women - and women need to be aware of this.

In the Americas, ischemic heart disease is the leading cause of death among men aged 45 years or older and among women aged 50 to 79 years.

## Data required:

- Number of deaths from ischemic heart disease, by sex and age group
- Population, by sex and age group


## Data sources:

- Vital registration systems and population estimates

Age-adjusted rates of death from ischemic heart disease, by sex, for the countries of the Region are available at http://www.paho.org/data/index.php/en/

## Suggested disaggregation:

- Place of residence: urban and rural
- Age groups: 35-49, 50-64, 65 years and over
- Level of education: none or primary school; secondary school or higher
- Socioeconomic status
- Ethnic/racial group
- Activity status


## $\rightarrow$ RATE OF DIAGNOSIS OF HUMAN IMMUNODEFICIENCY VIRUS INFECTION

## Definition:

Quotient obtained by dividing the reported number of newly diagnosed cases of HIV infection in women, for a specific year and geographical area, by the total number of women in the same population, expressed per 100,000 women. This definition applies to men as well.

- Rate of diagnosis of HIV infection in women

Reported number of newly diagnosed cases
$=\frac{\text { of HIV infection in women } \times 100,000}{\text { Total number of women }}$

- Rate of diagnosis of HIV infection in men

Reported number of newly diagnosed cases
$=\frac{\text { of HIV infection in men } \times 100,000}{\text { Total number of men }}$

## Relevance:

Knowing what population groups present a higher rate of diagnosis of HIV infection is important. From a social standpoint, the unequal distribution of power as determined by gender relations and mediated by race, social class, age, and certain cultural practices keeps many women and men from being able to protect themselves and puts them in a position of greater vulnerability with respect to the sexual transmission of HIV.


Women are often highly vulnerable to HIV transmission owing to biological characteristics having to do with greater exposure of the vaginal mucous membrane during heterosexual intercourse, especially at younger ages; to their limited access to information on sexual and reproductive health; to their inability to negotiate less risky sexual relations; and to the likelihood of experiencing discrimination and gender-based and family violence.

## Required data:

- Number of newly diagnosed cases of HIV infection, by sex
- Population, by sex


## Data sources:

- Epidemiological surveillance systems that report cases of HIV infection

The annual number of newly diagnosed cases of HIV infection for the countries of the Region, by sex, is available at http:// www.paho.org/data/index.php/en/

## Suggested disaggregation:

- Place of residence: urban and rural
- Age groups: under 15, 15-24, 25-49, 50 years and over
- Level of education: none or primary school; secondary school or higher
- Socioeconomic status
- Specific population groups: ethnic/racial group, migrants, displaced persons, refugees, gender identity (man, woman, transgender), people who engage in
higher risk behavior (men who have sex with men, sex workers of either sex, injecting drug users)
- Modes of transmission


## Observation:

An indicator could be added for the prevalence of HIV infection.

## $\rightarrow$ PERCENTAGE OF WOMEN WHO REPORT EXPERIENCING PHYSICAL AND/OR SEXUAL VIOLENCE BY AN INTIMATE PARTNER IN THE PAST 12 MONTHS, AMONG EVER-PARTNERED WOMEN

## Operational definition of the indicator:

Number of ever-partnered women aged 15 years or older who report having suffered physical or sexual violence at the hands of their current or previous intimate partner over the 12-month period preceding the survey, expressed as a percentage of all women aged 15 years or older in a given country or other geographical area.

## Violence against women:

The United Nations has defined violence against women as
any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life. ${ }^{17}$

[^11]
## Other term definitions: ${ }^{18}$

International surveys use different operational definitions to measure intimate partner violence. However, the following definitions are the ones most commonly used in the Demographic and Health Surveys and the WHO Multi-country Survey on Women's Health and Domestic Violence against Women:

Physical violence: Any of the following acts: slapping or shaking a woman, throwing objects at her, pushing her, twisting her arm or pulling her hair, striking her with a fist or with an object that could cause her injury, kicking, dragging, or hitting her, the threat or actual attempt of strangling her, burning her or wounding her with a knife, a firearm, or another type of weapon.

Sexual violence: Any of the following acts: forcing a woman to have unwanted sexual intercourse, forcing her to engage in other unwanted "sexual acts" or to have unwanted sex for fear of what her partner might do if she refuses.

Intimate partner: Husband or cohabiting partner, except in settings where "stable," long-term sexual partners who do not live together are common and culturally relevant.

## Relevance:

Physical and sexual violence constitute a violation of human rights. The recognition that violence against women is a public health problem has resulted from a growing awareness of the harmful effects of intimate partner and non-partner sexual violence on women's health. Physical or sexual violence has multiple effects on health, ranging from the loss of life to injuries and disabilities that leave physical and psychological wounds, sometimes permanently.

According to an analysis of data from 12 countries of Latin America and the Caribbean with available national prevalence estimates, between 7.7\% and $25.5 \%$ of women aged $15-49$ years reported having experienced physical or sexual violence at the hands of their husbands or intimate partners over the 12 -month period preceding the survey. Among adolescent women aged 15-19 years, these percentages range from 9.3\% to 30.2\% (Bott et al., 2012).

## Required data:

- Number of ever-partnered women who reported having suffered physical and/ or sexual intimate partner violence at the hands of a current or previous intimate partner within the last 12 months, as determined by a survey of a population-based sample of women

[^12]

## Data sources:

- Population-based household surveys of violence against women
- Population-based household surveys with a module that includes intimate partner violence


## Suggested disaggregation:

- Type of violence: physical, sexual, both
- Marital status: In a union at present (married, living with someone); previously in a union (divorced/ separated/widowed); single woman who has never lived with an intimate partner. Note: Women who have never married but who have lived with an intimate partner in the past should be classified as separated, although this is not a legal category.
- Place of residence: urban and rural
- Age group of the women surveyed: 15-$49,15-19,20-29,30-39,40-49,50$ years or over
- Years of formal educational of the women surveyed: 0-3 years, 4-6 years, $7-11$ years, 12 years or more
- Specific population groups: ethnic/ racial group, migrants, displaced persons, refugees
- Wealth quintile
- Degree of violence (severe, non-severe)
- Work status of the interviewee (has a paid job or performs unpaid household work]


## Observation:

Since intimate partner violence primarily affects women, surveys and the violence modules included in them focus on women.

## $\rightarrow$ HEALTHY LIFE EXPECTANCY AT 60 YEARS OF AGE

## Definition: ${ }^{19}$

Healthy life expectancy at age 60 is the average number of years that an individual 60 years of age can be expected to live in a given state of health if prevailing trends in mortality and health status remain constant. Healthy life expectancy is a general term used in reference to any of an entire class of indicators. Specific healthy life expectancy is based on health status as defined by health, morbidity or disability criteria. Since this indicator is based on mathematical calculations using estimates derived from data, dependency in basic activities of daily living can be used as a proxy indicator.

As a general rule, the individual over 60 years of age, or his or her caregiver, is asked to indicate whether he or she is able to perform various tasks independently. The Barthel index is a generic measure used to assess the

[^13]patient's level of independence with respect to certain basic activities of daily living (ADL). By means of this index, different scores and weights are assigned depending on the examinee's ability to carry out the activities in question lfeeding, transferring from chair to bed, grooming, using the toilet, bathing, moving about, going up and down the stairs, dressing and undressing, controlling bowels, controlling bladder). To see the rating scale, click here: http://www.strokecenter.org/wp-content/ uploads/2011/08/barthel.pdf
\[

$$
\begin{aligned}
& \text { - Percentage of people over } 60 \text { years of age } \\
& \text { with dependency in basic activities } \\
& \text { of daily living }
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\text { dependency in basic activities } \\
\text { of daily living }
\end{gathered}
$$
\]

## Relevance:

This healthy life expectancy indicator provides valuable information about a given population's overall health.

This is an ideal indicator capturing both mortality and the years of life lived in less than full health, such as in the presence of a disability lyears of life
lost due to disability). In the context of an aging population, ${ }^{20}$ understanding this indicator-which combines health, disability, and well-being-is a necessity.

WHO has reported on the healthy life expectancy indicator for Member States based on the analysis of the global burden of disease. In its publication World Health Statistics 2016, WHO shows that the health conditions contributing most heavily to the loss of healthy life years are musculoskeletal disorders, especially back and neck pain, mental and substance use disorders (depression and anxiety disorders), neurological disorders, loss of vision and hearing, and cardiovascular diseases and diabetes. The prevalence of most of these conditions increases with age, while life expectancy rises simultaneously. As a result, healthy life expectancy increases at a slower pace than life expectancy. ${ }^{21}$

This indicator, as determined at 60 years of age, is particularly relevant from a gender perspective because women have higher life expectancy at birth than men but do not live in as full a state of health as men.

## Required data:

- Number of people over 60 years of age who are dependent for the basic

[^14]
activities of daily living (bathing, dressing, grooming, transferring from bed to chair, controlling bowels and bladder, and getting about)

- Total population over 60 years of age


## Data sources:

- Health surveys
- Administrative records from health services and health facilities
- Social service registries


## Suggested disaggregation:

- Place of residence: urban and rural
- Ethnic/racial group
- Sex
- Socioeconomic status


## $\rightarrow$ MATERNAL MORTALITY RATIO (PER 100,000 LIVE BIRTHS)

## Definition:

Ratio obtained by dividing the number of deaths of women, in a given year and geographical area, during pregnancy or within the 42-day period following delivery, regardless of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy itself, its interruption, or its care, but not from accidental or incidental causes, by the number of live births in a given geographical area and year, expressed per 100,000 live births (14). The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD10) includes two other types of maternal death: late maternal deaths, which are
those that occur more than 42 days but less than 365 days after childbirth or abortion; and pregnancy-related deaths, which occur during pregnancy or within the 42-day period following childbirth, regardless of the cause.

- Maternal mortality ratio
$=\frac{\text { Number of maternal deaths } \times 100,000}{\text { Total number of live births }}$

The causes of death related to pregnancy, childbirth, and the puerperium correspond to codes 000-099, A34 of the ICD-10 (25).

## Relevance:

This is an important indicator of the reproductive health risks that women face. The disparity seen in this indicator among and within countries in different stages of development suggests that most of these deaths can be avoided with timely prevention and management.

Factors related to the complications of pregnancy, childbirth, and the postpartum period continue to be among the leading causes of death in women of childbearing age in the Region. This is indisputable evidence of inequity, since such deaths are essentially preventable because their leading causes and determinants are known and the scientific knowledge and simple technology required to prevent them are available. The ability to access-culturally, financially, and
geographically-quality health services for early risk detection could substantially reduce the number of maternal deaths through prenatal care, the availability of the essential elements required for obstetric care, and the appropriate provision of information to prevent unwanted pregnancies.

The difficulty in determining the actual number of women who die during pregnancy, labor, and breastfeeding reflects the low priority, relatively speaking, that continues to be accorded to this issue. In Latin America and the Caribbean, important rates of underreporting have been detected; despite such underreporting, maternal mortality continues to be a human development indicator that differs widely between developed and less developed countries, and ratios are higher among indigenous women. As a cause of death, abortion is even more underreported than other maternal causes of death because the procedure is illegal in most countries of the Americas.

## Required data:

- Number of maternal deaths, late maternal deaths, and pregnancyrelated deaths over a specific time period (usually a year)
- Number of live births in the same period


## Data source:

- Vital registries, potentially supplemented with verbal autopsies or maternal death audits

The maternal mortality ratios reported by the countries of the Region are available at http://www.paho.org/data/index.php/en/

## Suggested disaggregation:

- Place of residence: urban and rural
- Age groups: 10-14, 15-19, 20-34, 35-49 years of age
- Ethnic/racial group
- Specific causes of maternal mortality: hemorrhage, toxemia, abortion, infection, complications linked to breastfeeding and the puerperium, and indirect maternal causes


## Observations:

Given the high incidence of unsafe abortions at increasingly early ages, developing a supplementary indicator for the rate of death from unsafe abortion in women 1049 years of age is recommended.

The method used to estimate the maternal mortality ratio reported by the national health authority can vary from country to country and from period to period, which makes it unsuitable for comparisons across countries. For countries where the estimated annual number of live births is fewer than 10,000, estimating the maternal mortality ratio is not recommended.

## $\rightarrow$ SELF-PERCEIVED MENTAL HEALTH STATUS

Self-perceived health status reflects an individual's perception of his or her own health-in the case of this

particular indicator, from a mental health standpoint. This indicator, which is qualitative in nature, is a good predictor of health status and risks as well as access to health services. To identify mental health problems, the possibility of depression, anxiety, or other mental disorders must be borne in mind.

This indicator is obtained from surveys and the question asked is usually "How would you rate your mental health over the last 12 months?" with mental health defined as
> a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. ${ }^{22}$

The response is formulated on a 5 -point Likert scale: very good, good, fair, poor, or very poor. If the respondent answers "very good" or "good," he or she is considered to regard his or her own mental health as positive. This question should be adapted to different age groups-to children or adults, for example-or different cultures, whose response scales will vary depending on what is being asked. European countries have ample experience in this area.

## Domain 2. Social Determinants of Health

## $\rightarrow$ AVERAGE NUMBER OF WORKING HOURS PER WEEK - PAID AND UNPAID

## Definition:

Total work time-be it paid or unpaid work-includes all the activities performed by men and women aged 15 years and over to produce goods or provide services for consumption by third parties or for self-consumption. In other words, it is the sum of paid work time and unpaid work time, with paid work being the production of goods and delivery of services for market consumption, whereas unpaid work is work performed without pay and primarily in the private sphere. The indicator is expressed in hours per week and in tenths of an hour (Gender Equality Observatory for Latin America and the Caribbean).
• Total work time
Paid work time + unpaid work time (for men
and women)
• Paid work time

$=\frac{\text { Total number of hours spent on paid work }}{\text { Total number of people who reported }}$| having performed paid work, |
| :---: |
| unpaid work, or both |

[^15]- Unpaid work time

Total number of hours spent on unpaid work
$=\frac{\text { Total number of people who reported }}{}$ having performed paid work, unpaid work, or both

## Relevance:

In general, women spend more time working, when paid work and unpaid work are considered in combination. The empirical evidence suggests, however, that the number of working minutes dedicated to the labor market is usually lower among women; this could be a result of women bearing the burden of reproductive capacity and of the division of labor along gender lines, which tends to restrict the time they can devote to paid employment. Consequently, women face constraints that hinder their chances of generating a higher income and accessing non-cash resources and insurance and retirement plans, which are normally tied to employment in the formal sector of the economy.

Unpaid household work, which is performed mostly by women, is regarded as coming naturally to them, and the fact that such work is perceived as having no monetary value is precisely the reason it has remained invisible within the context of occupational health measures and of the development of the system of national accounts.

Shared responsibility and a more even distribution of household and caregiving
duties between men and women are explicitly included in international and national commitments geared toward achieving gender equality. Many countries are making progress in measuring women's and men's total work time information that is key to explaining why women are in an unfavorable position-by developing satellite accounts for unpaid work based on data from time-use surveys. Furthermore, several countries are developing and implementing initiatives aimed at recognizing the work involved in caregiving, which is performed primarily by women.

## Required data:

- Number of hours that men and women aged 15 years and over report having spent on paid and unpaid work


## Data sources:

- Time-use surveys; time-use modules within household surveys


## Suggested disaggregation:

- Place of residence: urban and rural
- Age groups: 15-19, 20-34, 35-49, 50 years and over
- Ethnic/racial group


## Observations:

A supplementary indicator that is valuable from a health standpoint is the time men and women spend caring for sick individuals with special or greater needs who cannot fend for themselves. This indicator is especially important

considering the higher prevalence of chronic degenerative diseases that are associated, albeit not exclusively, with an aging population.

It is vitally important, from a public health standpoint, to estimate to what extent unpaid work contributes to health care. According to Mexico's health sector satellite account for 2008, unpaid work in health care amounted to $80 \%$ of general hospital-based services produced by the health sector, and women performed 76\% of this unpaid health care work.

## $\rightarrow$ HIGHEST LEVEL OF EDUCATION ACHIEVED BY ADULTS (AGED 19 YEARS AND OVER)

## Definition:

Education is one of the social determinants of health. This indicator is reflective of the opportunities that men and women have of achieving a certain level of education, which will have an impact on their access to resources and opportunities.

The levels of education achieved by men and women aged 19 years and over can be categorized as follows: no schooling or pre-primary school; primary school; secondary school; higher education, non-university; higher education at a university, with graduate school included in this category or treated separately (INEI, Peru), in a given year.

- Percentage of women with no schooling or pre-primary schooling

Number of women aged 19 years or older - who achieved this level $\times 100$

Total number of women aged 19 years or older

The same formula applies to any other educational levels defined.

## Relevance:

There is evidence of a direct correlation between educational achievement and improved health and well-being among women and their families. Education is the driver behind women's empowerment. Nonetheless, the Region continues to face important challenges in making progress toward integral sex education and the inclusion of a gender equality and human rights perspective in the school curriculum.

Women's educational achievements do not always go hand in hand with betterpaid jobs or access to decision-making positions.

## Required data:

- Women and men aged 19 years or older and their respective levels of educational achievement
- Number of men and women aged 19 years or older in a given year


## Data sources:

- National household surveys


## Suggested disaggregation:

- Place of residence: urban and rural
- Age groups: 19-34, 35-49, 50 years or older
- Ethnic/racial group


## Observations:

Trends in this indicator show the progress made by women over time.

## $\rightarrow$ UNMET NEED FOR FAMILY PLANNING

## Definition:

Quotient obtained by dividing the number of pregnant or amenorrheic women of childbearing age who are (a) in a union and whose most recent pregnancy was unwanted or who would have liked to delay it, plus (b) the number of nonpregnant, non-amenorrheic women of childbearing age who do not want children or (c) want to delay having them and are not using any method of contraception, by the total number of women of childbearing age in a union, in a given period and geographical area, expressed as a percentage of the total number of women of childbearing age.
> - Percentage of women of childbearing age who have an unmet need for family planning

> Number of women of childbearing age in a union (a) whose most recent pregnancy was unwanted, (b) who do not want more children, or (c) who want to delay pregnancy $=\frac{\text { but are not using contraceptives } \times 100}{\text { Total number of women of childbearing }}$ age in a union

## Relevance:

This indicator provides information on the proportion of women of childbearing age with an unmet need for family planning, as indicated by their wish to limit or space future births, but who are not using any method of contraception. This information will be very useful for targeting efforts in programs for the improvement of women's access to family planning.

The availability of different family planning methods makes it possible for individuals and their intimate partners to freely determine the number and spacing of their children. Furthermore, family planning makes it possible to enjoy sexual relations without fear of an unplanned pregnancy. Hence, the use of contraception results in important health benefits for women.

In terms of policy, it is important to consider strategies aimed at improving access to family planning services so that women can be offered the choice of preventing unplanned pregnancies, which often end in unsafe abortions.

## Required data:

- Number of women of childbearing age who are in a union and are either pregnant, amenorrheic, not pregnant, or not amenorrheic and who have expressed wanting to delay pregnancy or to stop having children but who are not using contraception
- Number of women of childbearing age in a union



## Data sources:

- Demographic and Health Surveys
- Household surveys with a module for reproductive health


## Suggested disaggregation:

- Place of residence: urban and rural
- Age groups: 15-19, 20-34, 35-49 years
- Level of education: none or primary school; secondary school or higher
- Socioeconomic status
- Specific population groups: ethnic/ racial group, migrants, displaced persons, refugees


## Observation:

This indicator does not include pregnant or amenorrheic women who were using contraception because that would be reflective of a demand for more effective family planning methods.

## $\rightarrow$ GIRLS AND ADOLESCENTS UNDER 15 YEARS OF AGE WHO ARE MOTHERS, BY AGE GROUPS

## Definition:

Number of girls and adolescents under 15 years of age who have given birth in a given period and geographical area.

## Relevance:

Maternity in childhood and early adolescence is associated with a higher risk of complications during pregnancy and childbirth and therefore contributes to higher maternal mortality.
Pregnancy at these ages has an impact
on health and on personal and social development, particularly considering that a large percentage of these pregnancies result from sexual violence.

## Required data:

- Number of girls and adolescents under 15 years of age who have given birth in the period and geographical area under study


## Data sources:

- Vital registration systems


## Suggested disaggregation:

- Mothers' ages
- Place of residence: urban and rural
- Level of education: none or primary school; secondary school or higher
- Socioeconomic status
- Specific population groups: ethnic/ racial group, migrants, displaced persons, refugees

Domain 3. Health System Performance
$\rightarrow$ PERCENTAGE OF WOMEN WHO REPORTED DIFFICULTY ACCESSING HEALTH SERVICES FOR LACK OF MONEY FOR TREATMENT DURING SICKNESS

## Definition:

Percentage of women interviewed aged 15-49 years who responded affirmatively that "raising money to pay for treatment" during sickness would hinder their access to health services.

Universal access to health implies that every individual and community has access, on a non-discriminatory basis, to comprehensive, appropriate, timely, and high-quality health services, as defined at the national level and in accordance with needs, as well as to quality drugs that are safe, effective, and affordable, while ensuring that the use of these services does not expose users, particularly those in conditions of vulnerability, to financial strain.

## Relevance:

Health equity aims to ensure that every individual has an equal opportunity to fulfill his or her highest health potential and that no one is at a disadvantage in this respect. A precondition to achieving equity in health is equitable access to health care, which is attained when all people have access to health and social services commensurate with their needs, regardless of their ability to pay.

Steps to eliminate out-of-pocket payments (the costs borne by individuals in the form of health service fees), should be planned and implemented gradually. Such payments should be replaced by pooled solidarity-based mechanisms that allow for different funding sources depending on the national context, such as social security contributions, taxes, and fiscal revenues, in order to increase financial protection and the equity and efficiency of the health system.

## Required data:

- Number of women aged 15-49 years who feel that "raising money to pay
for treatment," should they fall sick, would be a limiting factor in terms of access to health services


## Data sources:

- Demographic and Health Surveys


## Suggested disaggregation:

- Place of residence: urban and rural
- Age groups: 15-19, 20-34, 35-49 years
- Level of education: none or primary school; secondary school or higher
- Wealth quintile
- Marital status: Never married or cohabited; married or cohabiting; divorced, separated, or widowed


## Reference:

Strategy for Universal Access to Health and Universal Health Coverage (Resolution CD53.R14)

## $\rightarrow$ OUT-OF-POCKET EXPENDITURE ON HEALTH

## Definition:

Average household expenditure on women's health, in current United States dollars (US\$), in a given period and geographical area; average household expenditure on men's health, in current US\$, in a given period and geographical area.

## Relevance:

Funding for health care comes from public sector funds and a large percentage comes from out-of-pocket expenditure. The latter affects women

primarily, and is therefore regarded as a barrier to access to health services and a regressive measure standing in the way of achieving equity in health. From a health equity standpoint in particular, the goal is for no payment to be required at the point of entry to health services.

From a gender equity perspective, contributions for health system funding should be commensurate with people's ability to pay rather than with their differential needs or risk as determined by their gender. This principle of equity in health is not being fulfilled for women, since there is evidence that women pay a larger share in non-solidarity-based systems despite their ability to pay being lower than men's.

On the one hand, lower ability to pay among women, who, in the vast majority of cases, hold jobs with less recognition, lower productivity and lower pay in the labor market, is not in consonance with their out-of-pocket expenditure, which is usually higher. On the other hand, women bear the brunt of higher health care costs generated by their reproductive role, a situation that runs contrary to the equity principle calling for socialization of these workforce reproduction costs.

## Required data:

- Household expenditure on men's and women's health


## Data sources:

- Income and expenditure surveys
- Household surveys with health modules that include expenditure


## Suggested disaggregation:

- Place of residence: urban and rural
- Participation in the formal and informal sectors of the labor market
- Access to insurance and retirement plans
- Age groups: under 15, 15-49, 50-64, 65 years and over
- Socioeconomic status
- Specific population groups: ethnic/ racial group, migrants, displaced persons, refugees
- Types of expenditure: health service visits, tests, drugs, others
$\rightarrow$ HUMAN RESOURCES FOR
HEALTH (PHYSICIANS, NURSES, MIDWIVES, DENTAL PRACTITIONERS, PHARMACISTS) AND STAFF IN DECISION-MAKING POSTS


## Definition:

Quotient obtained by dividing the number of women holding paid employment as physicians, dentists, pharmacists, nurses, and ancillary nurses (nursing assistants and technicians) by the total number of people employed in each of these professions, expressed as a percentage.

- Percentage of people employed as physicians who are women

Number of women employed as physicians $=\frac{\mathrm{x} 100}{\text { Total number of women and men }}$ employed as physicians
(The same definition applies to women dentists, pharmacists, nurses and ancillary nurses)

- Percentage of high-level decision-making posts held by women

Number of women in high-level decision-
$=\frac{\text { making posts } \times 100}{\text { Total number of people in these posts }}$

## Relevance:

The process of socialization, which conditions men and women to have different motivations when choosing activities, occupations, and roles regarded as consistent with culturally defined gender stereotypes, accounts for women being more likely to choose service-oriented occupations. This explains why such a high proportion of the female workforce is employed in the health professions, especially as health care staff.

Gender-based inequalities are responsible for the differences between men and women in the health sector in terms of professions and specialtyareas, as well as levels of autonomy, decisionmaking capacity and remuneration. In this sector, women have historically been underrepresented in occupations involving greater authority and decision-making capacity, which puts them at a disadvantage when it comes to priority-setting and resource allocation as well as decisions concerning staff reductions.

In the Region, women constitute approximately $80 \%$ of all health workers but are concentrated in job categories marked by lower pay, decision-making capacity and prestige.

## Required data:

- Number of women and men who work in the health sector as physicians, dentists, pharmacists, nurses, and ancillary nurses
- Number of women and men holding decision-making posts at the highest levels in the health sector


## Data sources:

- Employment surveys that record an individual's profession and sex
- Administrative records from health services and health facilities
- National professional registries


## $\rightarrow$ PERCENTAGE OF PREGNANT WOMEN RECEIVING APPROPRIATE PRENATAL CARE (AT LEAST FOUR PRENATAL VISITS IN THE FIRST TRIMESTER OF PREGNANCY)

## Definition:

Quotient obtained by dividing the number of women who, during their most recent pregnancy, were checked by trained health workers at least four times during the first trimester, by the total number of pregnant women, in a given period and geographical area, expressed as a percentage.


- Percentage of women who received at least four controls during the first trimester of their most recent pregnancy

Number of women who had at least four check-ups by trained health workers during
$=\frac{\text { the first trimester } \times 100}{\text { Total number of pregnant women }}$

## Relevance:

Based on the results of studies conducted by WHO, at least four prenatal check-ups by trained health workers are recommended during the first trimester of pregnancy. These checkups significantly improve the chances of identifying complications, making it possible to prevent many maternal deaths.

Care during pregnancy based on regular prenatal visits is one of the determinants of healthy outcomes for mother and child. Regular check-ups during pregnancy, especially in the first months, make it possible to detect signs of potential complications during pregnancy that require special care, as well as to get vaccinated against tetanus and treated for malaria and anemia. It also makes it possible to identify and treat high-risk cases that can appear during pregnancy and labor.

This indicator shows the use of health services for a healthy motherhood that benefits mothers and children and results in the prevention of unjust deaths.

## Required data:

- Number of women that were checked at least four times by trained health workers during the first trimester of their most recent pregnancy
- Total number of pregnant women


## Data sources:

- Household surveys with a module for reproductive health
- Demographic and Health Surveys


## Suggested disaggregation:

- Place of residence: urban and rural
- Mother's age: under 20, 20-34, 35-49 years
- Mother's level of education: none or primary school; secondary school or higher
- Socioeconomic status
- Specific population groups: ethnic/ racial group, migrants, displaced persons, refugees


## Domain 4. Governance and Sustainable Development

## $\rightarrow$ CRUDE RATE OF GRADUATION FROM PRIMARY, SECONDARY, AND TERTIARY SCHOOL

## Definition:

Total number of women and men who graduated from (or completed) the last grade of school, regardless of age, by educational level, expressed as a percentage of the population at the theoretical age of entry into the respective programs.

- Crude rate of graduation from primary school in a given school year

Number of women who graduated from $\xlongequal{\text { primary school in a given school year } \times 100} \frac{\text { Total number of women at the theoretical }}{\text { Nom }}$ (official) age of graduation from the last grade of primary school, in the same school year

This definition also applies to men and to secondary and tertiary levels of education.

## Relevance:

This indicator shows the percentage of men and women who manage to complete a primary, secondary, and tertiary education. It provides information on how current levels of primary, secondary, and tertiary education are determined by school enrollment in previous years and past policies governing entry into these educational levels. Furthermore, it is an indicator of the system's ability to provide the population at the theoretical age of graduation with the opportunity to complete a certain level of education.

This indicator can be analyzed in tandem with an indicator of the rates at which men and women enter the labor market, as well as with indicators capturing the reasons men and women drop out of school.

## Required data:

- Number of women and men who graduated from the last grade of primary, secondary, and tertiary school
- Population at the theoretical (official) age of graduation from the last grade at those levels


## Data sources:

- Registries, surveys, and school censuses capturing graduation rates
- Censuses or estimates of the population at the theoretical (official) age of graduation from the last grade at those levels


## Suggested disaggregation:

- Place of residence: urban and rural
- Socioeconomic status
- Specific population groups: ethnic/ racial group, migrants, displaced persons, refugees


## Observation:

Since this estimate includes all graduates (regardless of age), the rate can exceed $100 \%$ owing to the presence of children who are older or younger than the official age of graduation and who enter primary school early or late and/or repeat grades. Caution is advised when drawing comparisons across countries as, in some countries, the number of graduates may be influenced by the availability of seats in secondary schools. ${ }^{23}$

## $\rightarrow$ POPULATION WITH ACCESS TO IMPROVED DRINKING WATER SOURCES

## Definition:

Quotient obtained by dividing the population with access to improved drinking

[^16]
water sources (see observation) by the total population, in a given period and geographical area, expressed as a percentage.

- Percentage of the population with access to improved drinking water sources

Number of people with access to improved
$=\frac{\text { drinking water sources } \times 100}{\text { Total population }}$

## Relevance:

In places where water for human consumption is located far from households, women are primarily responsible for collecting the amount needed for daily household consumption.

For women, who bear the primary responsibility for the health of household members and for household chores, access to improved drinking water sources is one of the essential elements for the improvement of health and the control of certain diseases related to water quality. If water that is safe for human consumption is available in households, women spend less time collecting water, potentially reducing their domestic workload.

In 2015, in the Region of the Americas, the percentage of urban and rural populations with access to improved drinking water sources reached $92 \%$ and $89 \%$ respectively. Nonetheless, there are pronounced differences among countries. For urban areas, figures
range from $65 \%$ in Haiti and $85 \%$ in the Dominican Republic to more than $98 \%$ in almost 30 countries and territories; for rural areas, the countries with the lowest access are Haiti ( $48 \%$ ) and Peru ( $69 \%$ ) (PAHO. Health Situation in the Americas: Core Indicators 2017).

## Data required:

- Number of people with access to improved drinking water sources
- Total population


## Data sources:

- Household censuses
- Household surveys with a module for household characteristics


## Suggested disaggregation:

- Place of residence: urban and rural (in consonance with national definitions for urban and rural areas)


## Observation:

With regard to environmental conditions, this indicator could be supplemented with an indicator for the percentage of households with access to basic sanitation and with an additional indicator for the different types of cooking fuels, since certain fuels negatively affect the health of women, who are primarily responsible for household chores.

An improved drinking water source is defined in terms of the availability of 20 liters of water per person per day at a distance of no more than 1 kilometer. Improved drinking water sources
include a residential connection, public water source, well, hand dug covered well, protected source, or collected rainwater; unimproved sources include an uncovered well, uncovered source, rivers or reservoirs, water provided by sellers, bottled water and water from road tankers. Bottled water is not considered an improved source due to limitations in supply, not because of its quality.

## $\rightarrow$ NUMBER OF COUNTRIES WITH A LEGAL FRAMEWORK FOR ABORTION CARE AND THAT APPLY THE WORLD HEALTH ORGANIZATION'S ABORTION MANAGEMENT PROTOCOL

In Latin America and the Caribbean, the percentage of pregnancies that end in abortion increased from 23\% to 32\% between 1990-1994 and 2010-2014. Over this period, nearly one in every four abortions in Latin America and the Caribbean was performed under safe conditions. Most ( $60 \%$ ) procedures fall under the "unsafe" category. In 2014, at least $10 \%$ of all maternal deaths (900 deaths) in Latin America and the Caribbean resulted from unsafe
abortions. ${ }^{24}$ Annually, nearly 760,000 women in the region receive treatment for complications deriving from unsafe abortions. ${ }^{25}$

In terms of legal regulation, abortion is banned altogether, without exception, in six countries of the region. ${ }^{26}$ Nine other countries allow it almost exclusively to save the mother's life, and only a few allow limited exceptions to be made in cases of rape (Brazil, Chile, Mexico and Panama) and severe fetal abnormalities (Chile, Panama, and almost half of the states of Mexico). ${ }^{27}$ Less than 3\% of women in the region live in countries where abortion is legal in broad terms; that is, where it is allowed without restriction in terms of reasons nor socioeconomic restriction. ${ }^{28}$

The WHO established a standard of care, based on evidence, in the Clinical Practice Handbook for Safe Abortion, ${ }^{29}$ which seeks to facilitate the application of clinical recommendations and to provide a guide for public policymakers and directors of programs ${ }^{30}$ to offer care for a safe abortion and protect the health of women.

[^17]These manuals include information on how to establish and strengthen services from a human rights approach, based on national laws and policies on the care of women who have a safe and fully evaluated abortion. The use of clinical recommendations should be adapted to each woman, emphasizing her clinical condition and the specific abortion method that will be used, while considering the preferences of each patient regarding care. ${ }^{31}$

## $\rightarrow$ PROPORTION OF WOMEN IN NATIONAL LEGISLATURES AND LOCAL POWER

## Definition:

Quotient obtained by dividing the total number of women legislators in the lower or single house of the legislative body, by the total number of men and women legislators in the same house, in a given period, expressed as a percentage.

- Percentage of legislators who are women

Total number of women legislators (lower or single house of the
$=\frac{\text { legislative body) } \times 100}{\text { Total number of men and women }}$ legislators in the same house

## Relevance:

Legislative bodies vary considerably in their degree of independence and authority. Generally speaking, they
perform a triple role: designing laws controlling government management, and representing the electorate.

## Required data:

- Number of men and women legislators llower or single house of the legislative body)


## Data sources:

- Economic Commission for Latin America and the Caribbean (ECLAC), Gender Equality Observatory for Latin America and the Caribbean


## Observation:

The data are generally available in national legislatures and are updated after elections. National legislatures send their data, at least once a year, to the Inter-Parliamentary Union (IPU), particularly when the number of members has changed substantially. The IPU regularly compiles international series and regional and global aggregates and releases information monthly, whereas the United Nations Statistics Division releases information annually, which explains why the figures can differ Itaken from ECLAC's Gender Equality Observatory for Latin America and the Caribbean).
$\rightarrow$ LOCAL POWER
For local positions of power, the information required is the number

[^18]of women and men who have been elected as mayors or as local or municipal government officials, which is determined in every election at the level of local or municipal government. The titles of these officials differ from country to country.

The data for this indicator are validated by the machineries for the advancement of women in countries of the Americas using the official figures released by electoral agencies and are available in ECLAC's Gender Equality Observatory for Latin America and the Caribbean.


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## Annex C Selected Basic Indicators

## Technical notes for the selected key indicators can be found in Section 6.

## Domain 1: Health Status

|  | Basic indicators | Key indicator (Y/N) | International conventions and conferences |
| :---: | :---: | :---: | :---: |
| 1 | Adolescent fertility rate (15-19 years of age) | $\checkmark$ | - Report on the International Conference on Population and Development Programme of Action lobjective 7.44[b]) <br> - Global Strategy for Women's, Children's and Adolescents' Health (2016-2030) <br> - Gender Equality Observatory for Latin America and the Caribbean ECLAC (Physical Autonomy) <br> - United Nations Department of Economic and Social Affairs |
| 2 | Mortality rate for selected noncommunicable diseases (diabetes mellitus, cerebrovascular disease, ischemic heart disease) | $\checkmark$ | - Political Declaration of the High-Level Meeting of the General Assembly on the Prevention and Control of Noncommunicable Diseases (A/66/L.1) <br> - Global Strategy for Women's, Children's and Adolescents' Health (2016-2030) <br> - Sustainable Development Goal 3 |
| 3 | Rate of diagnosis of HIV infection | $\checkmark$ | - Report on the International Conference on Population and Development Programme of Action (objective 8.29[a]) <br> - Global Strategy for Women's, Children's and Adolescents' Health (2016-2030) <br> - Sustainable Development Goal 3 |
| 4 | Percentage of women who report experiencing physical and/or sexual violence by an intimate partner in the past 12 months, among everpartnered women | $\checkmark$ | - Inter-American Convention on the Prevention, Punishment and Eradication of Violence against Women (Convention of Belém do Parál <br> - Gender Equality Observatory for Latin America and the Caribbean ECLAC (Physical Autonomy) <br> - Report of the Fourth World Conference on Women lobjective D.1, D.2) <br> - Global Strategy for Women's, Children's and Adolescents' Health (2016-2030) <br> - Sustainable Development Goal 5 <br> - United Nations Department of Economic and Social Affairs |
| 5 | Healthy life expectancy at 60 years of age | $\checkmark$ | - Report on the International Conference on Population and Development Programme of Action (objective 8.3[b]) <br> - United Nations Department of Economic and Social Affairs |

Domain 1: Health Status

|  | Basic indicators | Key indicator (Y/N) | International conventions and conferences |
| :---: | :---: | :---: | :---: |
| 6 | Maternal mortality ratio (per 100,000 live births) | $\checkmark$ | - Report on the International Conference on Population and Development Programme of Action (objective 8.20[a] and 7.14[b]) <br> - Report of the Fourth World Conference on Women (objective C.1) <br> - Sustainable Development Goal 3 <br> - Global Strategy for Women's, Children's and Adolescents' Health (2016-2030) <br> - Gender Equality Observatory for Latin America and the Caribbean ECLAC (Physical Autonomy) <br> - United Nations Department of Economic and Social Affairs |
| 7 | Refugee or migrant population (if relevant) by country or territory of origin |  |  |
| 8 | Self-perceived health status |  |  |
| 9 | Self-perceived mental health status | $\checkmark$ | - Report of the Fourth World Conference on Women (objective C.1) <br> - Global Strategy for Women's, Children's and Adolescents' Health (2016-2030) |
| 10 | Prevalence of obesity and overweight |  |  |
| 11 | Suicide mortality rate |  |  |

## Domain 2: Social Determinants of Health

|  | Basic indicators | Key indicator (Y/N) | International conventions and conferences |
| :---: | :---: | :---: | :---: |
| 1 | Population aged 15 and over with own income |  |  |
| 2 | Average number of working hours per week - paid and unpaid | $\checkmark$ | - Report of the Fourth World Conference on Women lobjectives F.1, H.3) <br> - Sustainable Development Goal 5 <br> - Gender Equality Observatory for Latin America and the Caribbean ECLAC (Economic Autonomy) <br> - United Nations Department of Economic and Social Affairs |
| 3 | Highest level of education achieved by adults laged 19 years and over) | $\checkmark$ |  |
| 4 | Unmet need for family planning | $\checkmark$ | - Gender Equality Observatory for Latin America and the Caribbean ECLAC (Physical Autonomy) |
| 5 | Girls and adolescents under 15 years of age who are mothers, by age groups | $\checkmark$ | - Report on the International Conference on Population and Development Programme of Action (objective 7.44) |

## Domain 2: Social Determinants of Health

|  | Basic indicators | Key <br> indicator <br> $(\mathbf{Y} / \mathbf{N})$ |  |
| :--- | :--- | :--- | :--- |
| 7 | Wage income of women as <br> a percentage of men's |  | International conventions and conferences |
| 7 | Number of average hours <br> of unpaid health care work, <br> by sex and type of activities |  |  |
| 8 | Decent employment (i.e., <br> non-precarious, seasonal <br> or informal) compared to <br> total employment |  |  |

Domain 3: Health System Performance

|  | Basic indicators | Key indicator (Y/N) | International conventions and conferences |
| :---: | :---: | :---: | :---: |
| 1 | Women and men without access to sexual and reproductive health services |  | - CEDAW (art.12) <br> - Report on the International Conference on Population and Development Programme of Action (objective 7.5[a]) <br> - Report of the Fourth World Conference on Women (objective C.1) <br> - Global Strategy for Women's, Children's and Adolescents' Health (2016-2030) <br> - Sustainable Development Goal 3 |
| 2 | Percentage of women who reported difficulty accessing health services for lack of money for treatment during sickness | $\checkmark$ | - Global Strategy for Women's, Children's and Adolescents' Health (2016-2030) |
| 3 | Out-of-pocket expenditure on health | $\checkmark$ | - Report of the Fourth World Conference on Women lobjective C.5) |
| 4 | Human resources for health (physicians, nurses, midwives, dental practitioners, pharmacists) and staff in decision-making posts | $\checkmark$ | - Report of the Fourth World Conference on Women lobjectives C.2, C.4) |
| 5 | Percentage of pregnant women receiving appropriate prenatal care lat least four prenatal visits in the first trimester of pregnancy) | $\checkmark$ | - United Nations Department of Economic and Social Affairs |
| 6 | Mental health services in the community per 1,000 people (or treatment for severe illness) |  |  |
| 7 | Obstetric violence: <br> Inappropriate interventions, including verbal and psychological or emotional abuse of women during perinatal care |  |  |
| 8 | Public spending on health as a percentage of the total health expenditure |  |  |

## Domain 4: Governance and Sustainable Development

|  | Basic indicators | Key indicator (Y/N) | International conventions and conferences |
| :---: | :---: | :---: | :---: |
| 1 | Curriculum for comprehensive sexual education in school system |  |  |
| 2 | Crude rate of graduation from primary, secondary and tertiary school | $\checkmark$ |  |
| 3 | Population with access to improved drinking water sources | $\checkmark$ | - Report of the Fourth World Conference on Women (objective C.1) |
| 4 | Number of countries with a legal framework for abortion care and that apply the World Health Organization's abortion management protocol | $\checkmark$ | - Report on the International Conference on Population and Development Programme of Action (objective 7.44) <br> - Report of the Fourth World Conference on Women lobjective C.1) |
| 5 | Proportion of women in national legislatures and local power | $\checkmark$ | - CEDAW (art.8) <br> - Report of the Fourth World Conference on Women (objective G1) <br> - Sustainable Development Goal 5 <br> - Gender Equality Observatory for Latin America and the Caribbean ECLAC (Autonomy in decision-making) <br> - United Nations Department of Economic and Social Affairs |
| 6 | Full-time and part-time children care for children $0-5$ years of age and percentage of children of that age who have a quota on a regular basis |  |  |
| 7 | Proportion of households with poor air quality luse fuels for cooking or heating) |  |  |
| 8 | Rights to land, measured by (1) the right to documented land; and (2) the feeling of security against the arbitrary dispossession of land |  |  |

In order to monitor and assess progress toward gender equality in health, strategies, programs, and action plans need to be supported by defined and appropriate indicators. To fulfill this objective, the Pan American Health Organization (PAHO), in its continuing commitment to foster gender equality and the reduction of related inequities, presents this conceptual framework and indicators to monitor gender equality in health in the Region of the Americas.

The indicators, which have been agreed with experts from the Region and beyond, are organized in four dimensions and are fully consistent with PAHO's Gender Equality Policy; the Strategy for Universal Access to Health and Universal Health Coverage; the United Nations Sustainable Development Goals; and the Global Strategy for Women's, Children's and Adolescents' Health; among others. It is essential to know how the conceptual framework is grounded in practical approaches, facilitating countries' progress toward the development and monitoring gender inequalities and inequities in health, and fostering knowledge and evidence for action.

The document stresses that "a distinction must be made between the biological and physiological nature of sex, and the roles and responsibilities in society imposed and adopted according to gender beliefs." It is aimed at staff of ministries of health, national mechanisms for the advancement of women/gender equality, planning offices, academia, PAHO/WHO staff, and other stakeholders.


[^0]:    1http://www.paho.org/data/index.php/es/

[^1]:    2http://www.paho.org/data/index.php/es/

[^2]:    ${ }^{3}$ PAHO. Gender, Health and Development in the Americas: Basic Indicators. 2009. http://www.paho.org/hq/index. php?option=com_content\&view=article\&id=2596\%3A2010-gender-health-development-americas-basic-indicators-2009\&catid=2503\%3Astatistical-information-country-profiles\&ltemid=2101\&lang=en

[^3]:    ${ }^{4}$ A full description of search methods employed is available from the authors.
    ${ }^{5}$ A complete list of frameworks reviewed can be found in Annex B.

[^4]:    ${ }^{6}$ Note that some frameworks described here predate the 2010 report, which was conducted with a different set of objectives than the present review.
    ${ }^{7}$ The authors note that Krieger (57) critiques the perpetuation of the terms proximal and distal as, she argues, they create a false dichotomy while at the same time may seem interchangeable, as some of these examples demonstrate. Instead, Krieger recommends referring to pathways and processes that contribute to or impinge on health equality and desired health outcomes.

[^5]:    ${ }^{8}$ Data linkage refers to connecting different data sources to each other through matching records. Postal addresses, for example, can be used to link health records of individuals with census or survey data from the same address or neighborhood.
    ${ }^{9}$ Etches et al. (46) used the term "race" in this paper, rather than "ethnicity".

[^6]:    ${ }^{10} \mathrm{~A}$ complete list of frameworks reviewed can be found in Annex B.

[^7]:    "http://data.worldbank.org/topic/gender

[^8]:    ${ }^{12}$ PAHO also regularly issues summary brochures, the Health Situation: Basic Indicators and Gender and Health Situation, which reinforce the need to present and use data disaggregated by sex, and encourages gender-based analysis by presenting sex ratios (male:female) to monitor trends and evaluate progress toward gender equality. The frameworks include some measures of health services (e.g., health personnel and immunization coverage), which can serve as proxy measures for comprehensive health coverage, i.e., universal health coverage. Sustainable development indicators, such as employment and labor market involvement have not yet been incorporated.

[^9]:    ${ }^{13}$ For example, https://uwaterloo.ca/canadian-index-wellbeing/ ${ }^{14}$ For example, http://worldhappiness.report/ or http://www.happyplanetindex.org/ ${ }^{15}$ For example, the UNDP Gender Inequality Index http://hdr.undp.org/en/content/gender-inequality-index-gii, the World Economic Forum Global Gender Gap Index http://reports.weforum.org/global-gender-gap-report-2014/ part- 1 /, the Gender Equity Index http://www.socialwatch.org/taxonomy/term/527

[^10]:    ${ }^{16}$ Note that the name of this domain is a change in acknowledgment of the need to include international rights frameworks, gender equality legislation and indicators related to Universal Health and Sustainable Development

[^11]:    ${ }^{17}$ Declaration on the Elimination of Violence against Women (A/RES/48/104), United Nations General Assembly.

[^12]:    ${ }^{18}$ Bott S, Guedes A, Goodwin M, Mendoza JA. Violence against women in Latin America and the Caribbean: A comparative analysis of population-based data from 12 countries. Washington, D.C.: Pan American Health Organization; 2012. Available from: https://www.paho.org/hq/dmdocuments/2014/Violence1.24-WEB-25-febrero-2014.pdf

[^13]:    ${ }^{19}$ World Health Organization. World Report on Ageing and Health. Geneva: WHO; 2015. Available at:
    http://www.who.int/ageing/events/world-report-2015-launch/en/ and Lara Jaque, Roxana, Pinto Santuber, Cecilia, Espinoza Lavoz, Elena. Actividades básicas de la vida diaria en personas mayores y factores asociados. Rev Chil Salud Publica 2010;14(2-3):291-310. Available at: https://core.ac.uk/download/pdf/46548370.pdf

[^14]:    ${ }^{20}$ WHO defines healthy aging as the process of developing and maintaining the functional ability that enables wellbeing in older age. Available at: https://www.who.int/ageing/healthy-ageing/en/
    ${ }^{21}$ World Health Organization. Chapter 3: Monitoring the Health Goal - Indicators of Overall Progress.
    In: World Health Statistics: Monitoring Health for the SDGs. Geneva: WHO; 2016. Available at:
    http://www.who.int/gho/publications/world_health_statistics/2016/EN_WHS2016_Chapter3.pdf?ua=1

[^15]:    ${ }^{22}$ Definition of the World Health Organization.

[^16]:    ${ }^{23}$ Definition available at http://uis.unesco.org/sites/default/files/documents/education-indicators-technical-guidelines-en_0.pdf

[^17]:    ${ }^{24}$ Abortion in Latin America and the Caribbean https://www.guttmacher.org/sites/default/files/factsheet/fs-aww-lac-es.pdf
    ${ }^{25}$ Singh S and Maddow-Zimet I, Facility-based treatment for medical complications resulting from unsafe pregnancy termination in the developing world, 2012: a review of evidence from 26 countries, BJOG: An International Journal of Obstetric and Gynaecology, 2015
    ${ }^{26}$ Leyes Sobre Aborto en el Mundo - 2007.
    https://www.reproductiverights.org/es/document/leyes-sobre-aborto-en-el-mundo-2007
    ${ }^{27}$ Guttmacher Institute. Abortion in Latin America and the Caribbean. Fact Sheet. March 2018. https://www.guttmacher.org/sites/defautt/files/factsheet/ib_aww-latin-america.pdf
    ${ }^{28}$ United Nations Department of Economic and Social Affairs, Population Division; World population prospects: the 2015 revision, 2015; and Center for Reproductive Rights, The world's abortion laws 2017, http://www.worldabortionlaws.com/.
    ${ }^{29}$ WHO. Clinical Practice Handbook for Safe Abortion, 2014.
    https://www.who.int/reproductivehealth/publications/unsafe_abortion/clinical-practice-safe-abortion/en/
    ${ }^{30}$ WHO. Safe Abortion: technical and policy guidance for health systems; Second Edition, 2012
    https://apps.who.int/iris/bitstream/handle/10665/70914/9789241548434_eng.pdf?sequence=1

[^18]:    ${ }^{31}$ WHO. Clinical Practice Handbook for Safe Abortion, 2014.
    https://www.who.int/reproductivehealth/publications/unsafe_abortion/clinical-practice-safe-abortion/en/

[^19]:    ${ }^{32}$ The frameworks were retrieved through online searches for indicators for the assessment of issues pertaining to "gender" and "health," as well as searched for indicators relevant to sustainable development.

