

# Primary Health Care Vital Signs Profiles

## Detailed Methodology Note

October 22, 2018

### **The Primary Health Care Performance Initiative**

The Primary Health Care Performance Initiative (PHCPI) was founded by the Bill and Melinda Gates Foundation, the World Bank, and the World Health Organization, in cooperation with Results for Development and Ariadne Labs, to promote quality primary health care (PHC) for all, with a focus on low- and middle-income countries.

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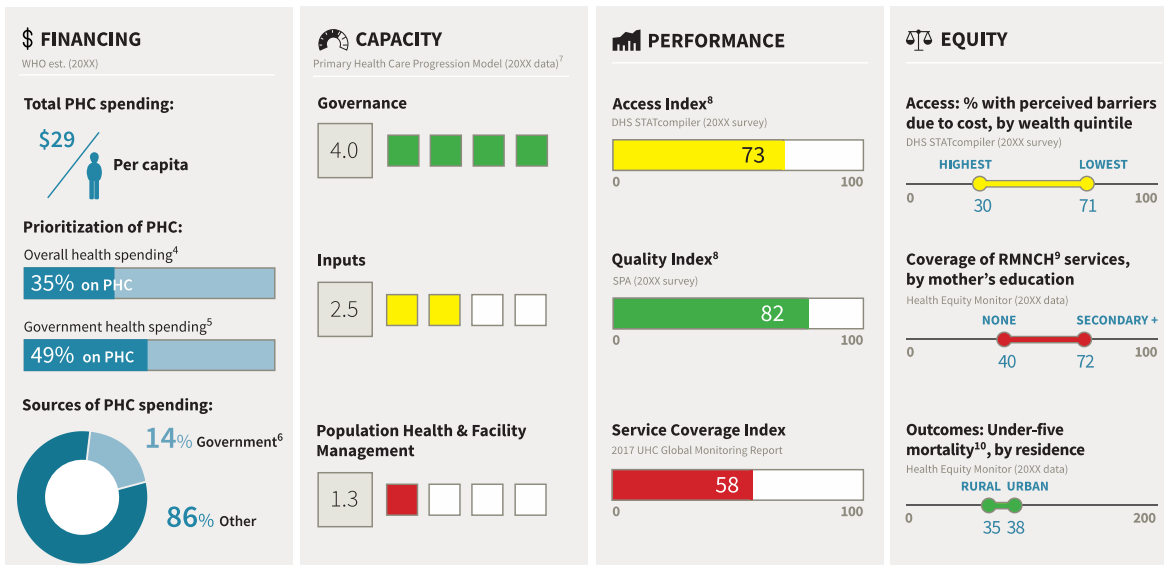
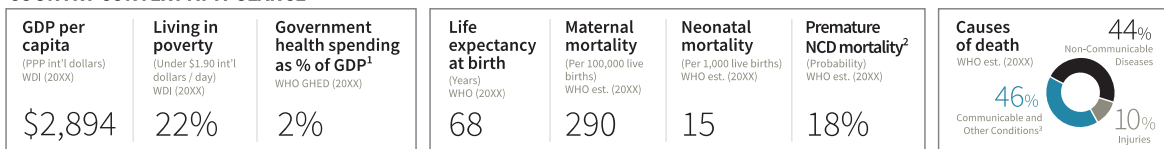
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# Country

## Draft Primary Health Care Vital Signs Profile

### COUNTRY CONTEXT AT-A-GLANCE



Note: Indicator values presented here may differ from country data sources due to the use of standardized categories and methods to enhance international comparability. See Indicator Description Sheet for details.

1. Domestic general government health expenditure as % of gross domestic product (GDP)  
 2. Probability of dying between ages 30 and 70 from cardiovascular disease, cancer, diabetes, or chronic respiratory disease  
 3. Communicable, maternal, perinatal, and nutritional conditions  
 4. Current PHC expenditure as % of Current Health Expenditure (CHE)  
 5. Domestic general government PHC expenditure as % of domestic general government health expenditure  
 6. Domestic general government PHC expenditure as % of current PHC expenditure  
 7. The PHC Progression Model uses mixed methods to assess foundational capacities of PHC on a scale from 1 (low) to 4 (high)  
 8. Because different data indicators are used in each country, composite index values may not be comparable across countries. See page 2 for the specific indicators used in this VSP.  
 9. The composite coverage index is a weighted score reflecting coverage of eight RMNCH interventions along the continuum of care ([http://www.who.int/gho/health\\_equity/report\\_2015/en/](http://www.who.int/gho/health_equity/report_2015/en/))  
 10. Deaths of children before age 5, per 1,000 live births

The Primary Health Care (PHC) Vital Signs Profile (VSP) provides a snapshot of primary health care systems in individual countries, shining a light on where systems are strong and where they have challenges. It is designed to help countries and development partners identify priority areas for improvement, and to track and trend improvements over time.

## INFORMATION SOURCES

The VSP contains data from a number of national surveys<sup>1</sup> and global databases coupled with additional data collected and reported by countries. Sources were chosen after several rounds of review with global experts on the monitoring and evaluation of PHC.<sup>2</sup> Globally comparable data sources were preferred, when available, in order to promote international comparability as a potential mechanism for enhancing accountability and cross-country learning.

While globally comparable indicators and data sources were preferred to populate areas of the VSP, in many cases such data does not exist. In these cases, PHCPI has worked with countries to find alternative data sources for the profile that are consistent with the PHCPI framework, even when such sources are not globally comparable.

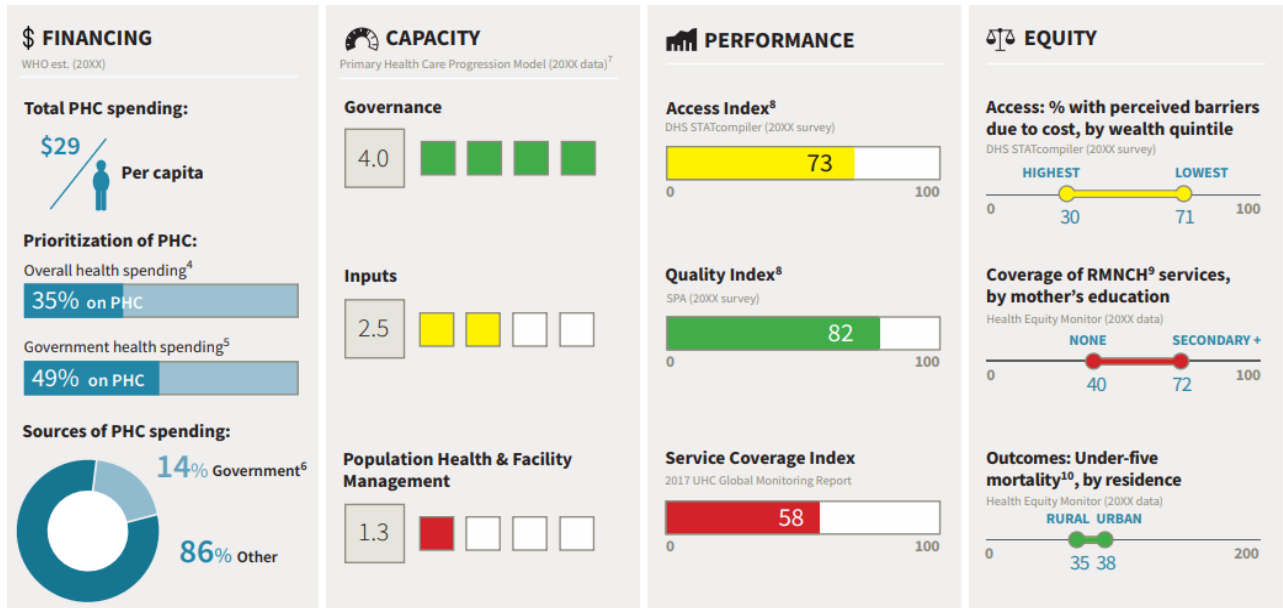
## READING THE VITAL SIGNS PROFILE

<sup>1</sup> Includes the Service Delivery Indicators (SDI) from the World Bank Group, the Service Provision Assessment (SPA) and Demographic and Health Surveys (DHS) from USAID, the Service Availability and Readiness Assessment (SARA) from WHO, and the Multiple Indicator Cluster Surveys (MICS) from UNICEF

<sup>2</sup> Veillard, J. (2017) Better Measurement for Performance Improvement in Low- and Middle-Income Countries: The Primary Health Care Performance Initiative (PHCPI) Experience of Conceptual Framework Development and Indicator Selection. *Milbank Quarterly*, 95(4), 836-883.

The VSP assesses different areas of the health system that are important to provide quality primary health care for all, categorized into four domains:

- FINANCING** measures PHC financing prioritization
- CAPACITY** assesses functional capacity, including governance, inputs and management of population health and facilities
- PERFORMANCE** focuses on service delivery: access, quality and service coverage
- EQUITY** highlights differences in equity related to wealth, geography and education



These four domains are derived from a series of sub-domains, displayed on Page 2 of the VSP.

## COUNTRY CONTEXT AT-A-GLANCE

The top section of the VSP provides broad-based health outcome measures that would be expected to improve with long-term sustained improvements in primary health care systems, as well as important contextual metrics on income, poverty, health spending and causes of death to consider when reviewing the profile. Values reported on the VSP come from global estimates which may differ from a country's own national statistics.

### COUNTRY CONTEXT AT-A-GLANCE



## THE VITAL SIGNS PROFILE DOMAINS

### Financing

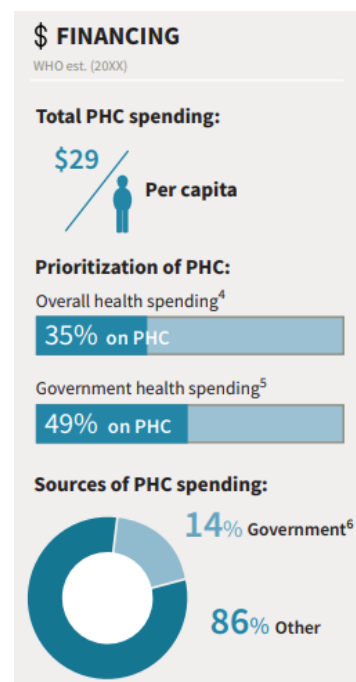
Adequate financing is key to building a strong primary health care system. The Financing domain includes information on how much money is spent on primary health care in a country, and where this money comes from.

The following categories and indicators were chosen as important measures of financing for PHC:

- **Total spending on PHC**
  - Current PHC Expenditure *per capita*
- **Prioritization of spending on PHC**
  - Current PHC expenditure *as % of current health expenditure*
  - Domestic general government PHC expenditure *as % current PHC expenditure*
- **Sources of spending on PHC**
  - Domestic general government PHC expenditure *as % domestic general government health expenditure*

*Data in this domain is not reported in relation to any benchmarks, as consensus targets have yet to be established.*

*Current Health Expenditure refers to all health care goods and services used or consumed during a year and excludes capital expenditures such as investments in buildings, machinery, IT and vaccine stocks.*

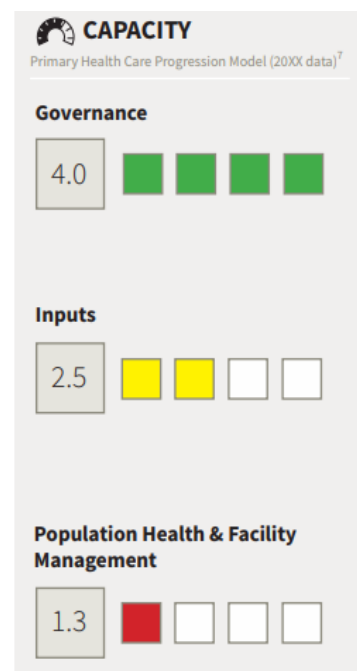


### Capacity

The Capacity domain looks at three key aspects that determine the ability of a system to deliver quality primary health care:

- **Governance** includes an assessment of PHC policies, quality management infrastructure, and social accountability, as well as the ability of the system to appropriately adjust to population health needs.
- **Inputs** reflects the availability, equitable distribution and quality of essential service delivery inputs including drugs, supplies, workforce, facility infrastructure, information systems and funds at the facility level.
- **Population health & facility management** includes an assessment of how well population health is managed, including activities such as community outreach and local priority setting. This section also assesses facility organization and management—including management capability and leadership, information system use, performance measurement, and team-based care.

Existing surveys with globally comparable data do not yet exist for measuring these elements of the primary health care system well. The Capacity domain is assessed via the PHC Progression Model, a novel mixed-methods assessment tool developed by PHCPI to systematically assess the foundational capacities of systems to deliver quality PHC. PHC Progression Model assessments were conducted in collaboration with Ministries of Health in five countries in 2018.



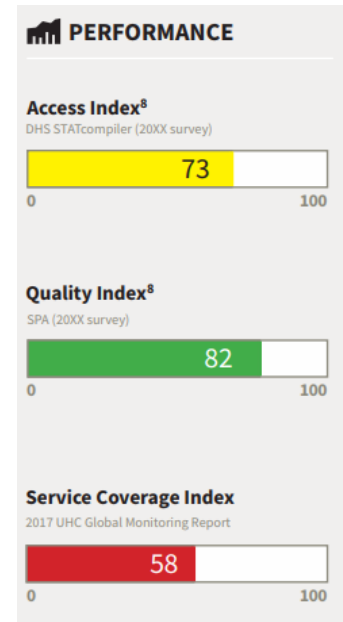
For scoring, each of 32 measures within the PHC Progression Model is assigned a score from 1 (low) to 4 (high) and sub-domain scores are calculated using a simple, unweighted average of all of the constituent measures within each subdomain. Similarly, to calculate the three headline scores that appear on the VSP, a simple, unweighted average of constituent sub-domains is calculated.

## Performance

The Performance domain looks at three key dimensions of service delivery:

- **Access** includes measurements of perceived financial and geographic barriers to care using data from USAID’s Demographic and Health Surveys (DHS).
- **Quality** of care measures include indicators of comprehensiveness of care, continuity of care, person-centeredness, provider availability and competence, and safety practices.
- **Coverage** measures the proportion of the population in need of services who receive them. These services include a broad range of PHC-focused clinical services, based on the UHC service coverage index of essential health services from the joint WHO/World Bank Group report in December 2017.<sup>3</sup>

Headline scores for Access, Quality, and Coverage are calculated by taking the unweighted average of indicator values within subdomains, and then taking the average across subdomain scores. In the case of select indicators where the desired value would be small in high-performing systems, specific variables are transformed by subtracting the value from 100 before inclusion for calculation of summary scores.

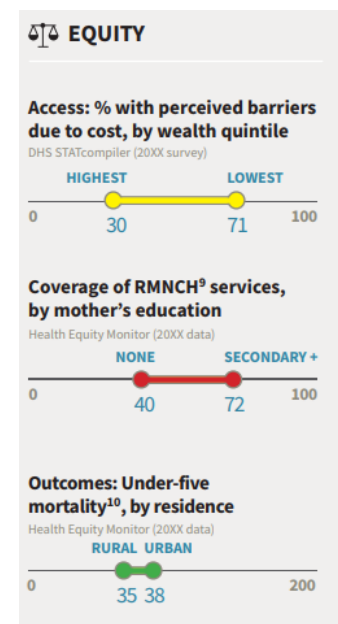


## Equity

Accessible and effective PHC can help reduce health inequities in populations. The Equity domain measures health equity in three key ways:

- **Equity in access** looks at the difference in perceived financial barriers to care between the highest and lowest levels of wealth.
- **Equity in coverage** indicates the difference in effective coverage of maternal and child health care services based on a mother’s level of education.
- **Equity in outcomes** highlights differences in mortality of children residing in urban and rural areas.

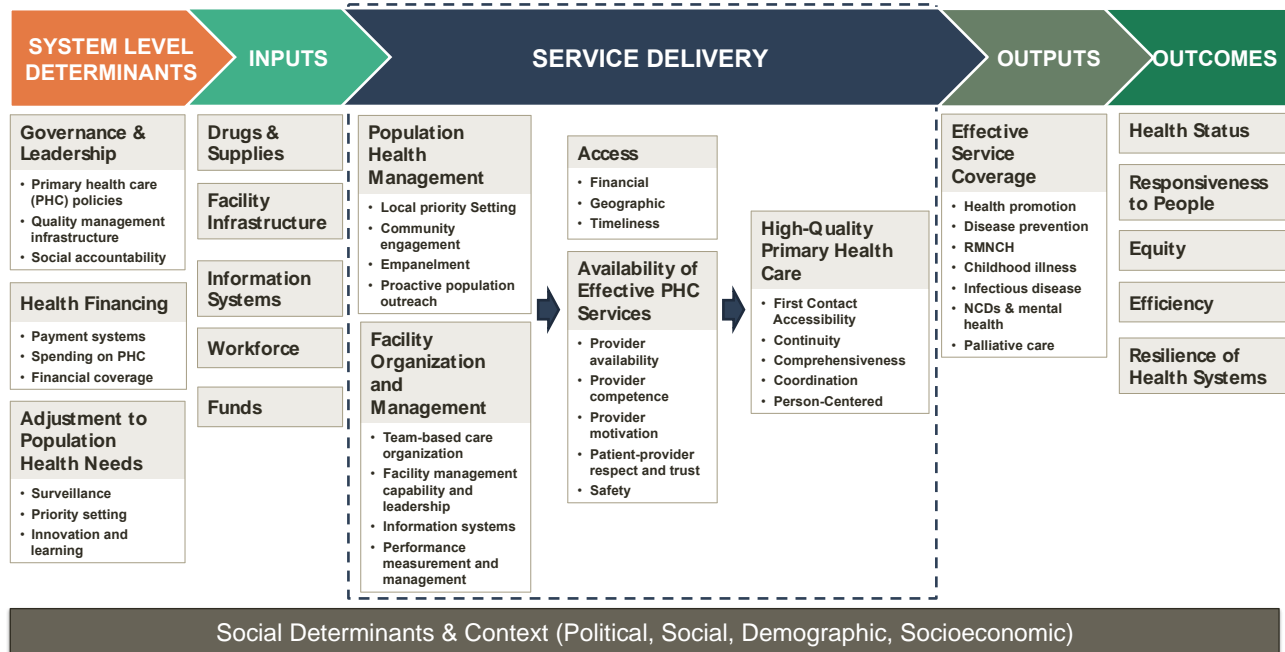
Equity in access is calculated from data from DHS surveys obtained through DHS STATcompiler whose values may differ slightly from those in the DHS report.. Data for the latter two indicators is taken from the Health Equity Monitor of the WHO using data from DHS and MICS.



<sup>3</sup> Hogan, D.R. (2017) Monitoring universal health coverage within the Sustainable Development Goals: development and baseline data for an index of essential health services. *Lancet Glob Health* [http://dx.doi.org/10.1016/S2214-109X\(17\)30472-2](http://dx.doi.org/10.1016/S2214-109X(17)30472-2)

## THE FRAMEWORK

The Vital Signs Profile is built upon a **conceptual framework** constructed by PHCPI informed by the best existing evidence on PHC, together with global expert opinion:<sup>2</sup>



Similar to a traditional logic model, the framework organizes key components of PHC into five categories: System, Inputs, Service Delivery, Outputs, and Outcomes. The VSP aims to provide metrics for many of the system components that ultimately impact the resulting Health Outputs and System Outcomes.

## METHODOLOGY

### Financing

Financing data are estimated using publically available country health accounts information, using the System of Health Accounts 2011 (SHA 2011), and calculated by WHO Health Finance Team.

Key to creation of financing indicators is how PHC expenditure is defined. In this case, PHC expenditure was defined following a global consultation process on how SHA 2011 could be used to monitor PHC expenditure, as SHA 2011 does not include readymade classifications for PHC. The consulted PHC experts were asked to map the concept of 'first contact' against the global standard to prepare a working definition (which may differ from country context-specific PHC expenditure estimates). Based on this, the definition is intended to include the following services:

- general and dental outpatient curative care
- home-based curative care
- outpatient and home-based long-term care
- preventive care
- medical goods purchased directly by patients, including medicines, glasses, and hearing aids.

While best efforts were made to identify and include appropriate health care services classifications in the definition, it should be noted SHA 2011 currently does not necessarily break out services in classifications ideal for determining PHC-specific services, nor for distinguishing PHC services from other types of health care services. As a result, compromises were made in a best effort to classify services, however, in some cases specific PHC-related or

non-PHC related services may be excluded or included, respectively. The specific definition of PHC expenditure using the SHA 2011 health care services classifications can be found in Annex 1.

<b>Financing Indicator</b>	<b>Full Indicator Name</b>	<b>Rationale</b>	<b>Questions indicator addresses</b>
<b>Government spending on health as % of GDP</b> <i>(in Country Context At-A-Glance)</i>	Domestic general government health expenditure as % of gross domestic product (GDP)	Fiscal space for health – size of the pool of resources available to work with	Is the government spending enough on health in general? Could resources for health be increased?
<b>Total PHC spending per capita</b>	Total PHC expenditure per capita	Level – absolute amount of spending on PHC per person	Is enough being spent on PHC for each person to provide a basic set of essential services?
<b>Overall health spending on PHC as % of overall health spending</b>	Share of Current Health Expenditure (CHE) allocated to PHC	Prioritization – PHC spend (in all sectors) in relation to total health spending (by all sectors)	Is there a large enough share of total health spending by all sectors going to PHC?
<b>Government spending on PHC as % of government health spending</b>	Share of domestic general government health expenditure allocated to PHC	Prioritization – PHC spend (by government) in relation to total government health spending	How strongly is the government prioritizing PHC in its health spending?
<b>Government spending as % of total PHC spending</b>	Domestic general government expenditure allocated to PHC as % of total PHC expenditure	Funding sources – Share of PHC costs covered by the government [ <i>Relates to system-wide efficiency in government spending</i> ]	Is the government covering enough of the total PHC cost?
<b>Other spending as % of total PHC spending</b>	Total non-governmental PHC expenditure as % of total PHC expenditure	Funding sources – Share of PHC costs covered by the government [ <i>Relates to financial expenditure by households</i> ]	What share of PHC cost is being covered by households and other private (non-governmental) sources?

In the case of countries without SHA 2011 data, PHCPI partner leads work with countries to try to identify locally available data, and review with WHO for suitability.

## Capacity

The Capacity domain of the VSP is assessed via the PHC Progression Model, a mixed-methods assessment that uses locally available data and knowledge to measure how a country’s health system is progressing towards optimized capacity for delivery of effective PHC. The PHC Progression Model is implemented through a two-phase assessment. The first phase is an internal self-assessment that is completed by an in-country working group using methods such as document review, quantitative data mining, and qualitative interviews with key informants. In the second phase, results of the internal assessment are validated by an external assessment team to promote validity and comparability of results across countries.

The PHC System Progression Model contains 32 measures to assess a country’s capacity in nine sub-domains of the PHCPI Conceptual Framework: Governance and leadership, adjustment to population health needs, drugs and supplies, facility infrastructure, information systems, workforce, funds at the facility level, population health management, and facility organization and management. Each measure of the PHC Progression Model is scored on a scale from Level 1 (lowest performance) to Level 4 (highest performance) on a rubric like below.

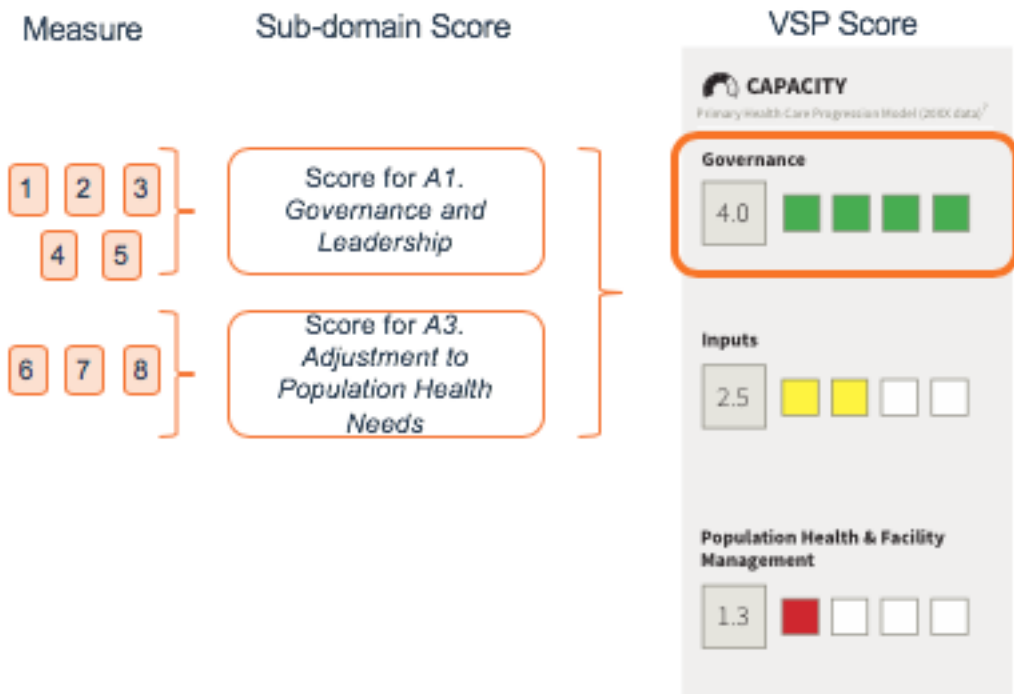
A threshold approach is employed for scoring each individual measure, wherein a score can only be achieved if all components of the measure meet the performance described in the rubric. If no or insufficient data or information

Level 1	Level 2	Level 3	Level 4
Limited (<25% of sub-national units or disease indications) or no surveillance systems in place (i.e. routine health surveillance systems).	Surveillance systems in place for some (<50%) sub-national units or some disease indications, but notifications inconsistently trigger appropriate follow-up investigation and validation.	Surveillance systems in place for all sub-national units and all relevant indications but notifications inconsistently trigger appropriate follow-up investigation, validation, and evidence of follow-up action.	Surveillance systems in place for all sub-national units and all relevant indications, notifications consistently trigger alerts and appropriate follow-up and validation, and evidence of action based on these data is available.



is available to assess a measure, it is given a score of Level 1.

Results of the PHC Progression Model assessment are summarized as three indices that appear on the VSP. The scoring strategy employs a two-stage approach, in which assessments of the 32 individual measures are rolled up into nine subdomain scores which in turn are rolled up into three VSP scores (illustrated below).





### CALCULATING SUB-DOMAIN SCORES

To calculate sub-domain scores, a simple, unweighted average of all of the constituent measures within each subdomain is calculated. For example, *Governance and Leadership* contains 5 constituent measures, and the *Governance and Leadership* subdomain score is calculated as:

$$(\text{Measure 1} + \text{Measure 2} + \text{Measure 3} + \text{Measure 4} + \text{Measure 5})/5$$

### CALCULATING VSP SCORES

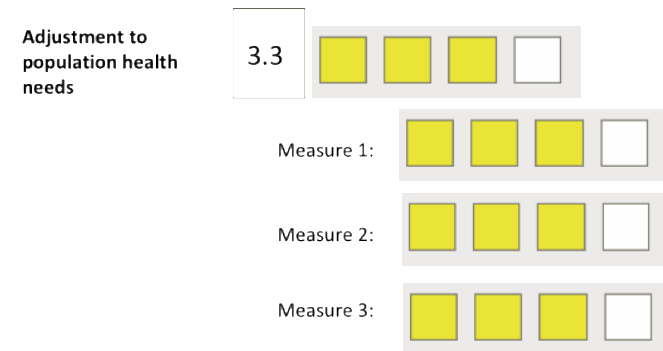
Similarly, to calculate the scores that will appear on the VSP, a simple, unweighted arithmetic mean of the constituent sub-domains are calculated. In other words, the Governance VSP score is an average of *Governance and Leadership* and *Adjustment to Population Health Needs* scores. The Inputs VSP score is an average of *Drugs and Supplies*, *Facility Infrastructure*, *Information Systems*, *Workforce* and *Funds* scores, and the Population and Facility Management VSP score is an average of *Population Health Management* and *Facility Organization and Management* scores. All scores are expressed out to one decimal place.

### DISPLAY ON THE VITAL SIGNS PROFILE



Page 1 of the Vital Signs Profile will contain three scores from the Progression Model: Governance, Inputs, and Population Health and Facility Management. Scores will be displayed out to one decimal point. The corresponding graphic includes shaded squares corresponding to the threshold achieved. For example, as shown below, a score of 2.9 will be displayed with two yellow squares.

Page 2 of the Vital Signs Profile includes all sub-domain scores and individual measure scores. As with the scores on Page 1, sub-domain scores on Page 2 will include one decimal place and the corresponding graphic will contain shaded squares corresponding to the threshold achieved, shown as the score rounded down to the nearest integer. Example shown below:



## Performance

The performance pillar includes three domains – Access, Quality, and Coverage.

Within each are several sub-domains. To create the index scores, the arithmetic mean is taken for each sub-domain and these results are meaned to create the relevant domain index score.

When the data from the preferred globally comparable source was not available, an attempt was made to identify a similar indicator using locally-available data relevant to the specific domain or sub-domain of the indicator it was replacing. These alternative indicators were selected jointly by countries and PHCPI partners, and then shared with WHO for review of suitability as an alternative indicator.

The full list of indicators and the creation of each sub-domain and domain score is shown in the annex.

## ACCESS

**Access** includes measurements of financial barriers and geographic hardship due to distance, as well as the timeliness of care provided.

COUNTRY	SCORE	PERCENTAGE	SOURCE	YEAR
<b>ACCESS</b>	86			
Financial				
Perceived access barriers due to treatment costs*		92%	DHS STATcompiler	2016
Geographic				
Perceived access barriers due to distance*		80%	DHS STATcompiler	2016

\*These variables are transformed by subtracting the value from 100 when calculating summary scores.

## QUALITY

**Quality** of care delivered is determined through measures organized around core principles proven to impact the quality of PHC service delivery at the point of care.

COUNTRY	SCORE	PERCENTAGE	SOURCE	YEAR
<b>QUALITY</b>	62			
Comprehensiveness				
Avg. availability of 5 tracer RMNCH services		65%	SPA	2015
Avg. availability of services for 3 tracer communicable diseases		56%	SPA	2015
Avg. availability of diagnosis & management for 3 tracer NCD		74%	SPA	2015
Continuity				
DTP3 dropout rate*		7%	WHO/ UNICEF	2016
Treatment success rate for new TB cases		91%	WHO TB Programme	2014
Person-Centeredness				
% of caregivers who were told sick child's diagnosis		63%	SPA	2015
Provider availability				
% of family planning, ANC, and sick child visits over 10 minutes		63%	SPA	2015
Provider absence rate*		25%	SDI	2013
Provider Competence				
Antenatal care quality score		77%	SPA	2015
Family planning quality score		55%	SPA	2015
Sick child quality score		43%	SPA	2015
Adherence to clinical guidelines		69%	SDI	2013
Diagnostic accuracy		51%	SDI	2013
Safety				
Adequate waste disposal		89%	SPA	2015
Adequate infection control		95%	SPA	2014

\*These variables are transformed by subtracting the value from 100 when calculating summary scores.

Extra data are excluded at times to enhance comparability – see details in Annex 2.

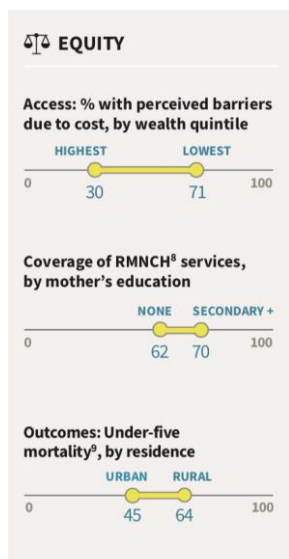
## SERVICE COVERAGE

**Coverage** looks at the effective application of a broad range of PHC-focused clinical services based on the UHC essential health services for the population in need of such services from the joint WHO/World Bank Group report in December 2017.

COUNTRY	SCORE	PERCENTAGE	SOURCE	YEAR
<b>SERVICE COVERAGE</b>	<b>52</b>			
Reproductive, Maternal, Newborn and Child Health				
Demand for family planning satisfied with modern methods		58%	JHC Global Monitoring Report 2017	
Antenatal care coverage (4+ visits)		43%	JHC Global Monitoring Report 2017	
Coverage of DTP3 immunization		89%	JHC Global Monitoring Report 2017	
Care-seeking for suspected child pneumonia		34%	JHC Global Monitoring Report 2017	
Infectious diseases				
Tuberculosis cases detected and treated with success		39%	JHC Global Monitoring Report 2017	
People living with HIV receiving anti-retroviral treatment		45%	JHC Global Monitoring Report 2017	
Use of insecticide-treated nets (ITN) for malaria prevention		52%	JHC Global Monitoring Report 2017	
Children under 5 with diarrhea receiving ORS		32%	DHS STATcompiler 2016	
Non-Communicable Diseases (NCDs)				
% of population with normal blood pressure***		58%	JHC Global Monitoring Report 2017	

\*\*\*Age-standardized (see detailed indicator descriptions). This is further scaled before use in the summary score.

## Equity



There are three representative indicators of equity in PHC on the VSP. These cover the domains of access, coverage, and outcome measures. The three indicators are:

Domain	Indicator	Disaggregation	Source
Access	Perceived barriers to care due to cost	Wealth Quintile (Q5-Q1)	DHS
Coverage	RMNCH Coverage Index	Mother's Education (At least secondary – none)	WHO Health Equity Monitor using DHS/MICS
Outcome	Under-five mortality	Place of Residence (Rural-Urban)	WHO Health Equity Monitor using DHS/MICS

The Reproductive, Maternal, Newborn and Child Health (RMNCH) Index, used in Countdown to 2030's routine reporting, covers reproductive, maternal and newborn health, as well as both preventive and curative interventions. It is described at [www.countdown2015mnch.org](http://www.countdown2015mnch.org) and is a weighted average of eight RMNCH

intervention indicators.

## ANNEX 1 – FINANCING DEFINITION

The system Health Accounts (SHA2011) provides the international accounting standard for recording health expenditure. It however does not propose a readymade classification for PHC.

The boundaries of health expenditure in the SHA2011 framework are defined by the primary purposes of the consumption of the health care goods and services. The functional classification of health care (ICHA-HC) delineates the boundaries of health care activities from an international perspective. SHA 2011 health expenditures contain all activities with the primary purpose of improving, maintaining and preventing the deterioration of the health status of persons and mitigating the consequences of ill-health through the application of qualified health knowledge. This primary purpose is pursued by the following groups of health care activities:

- Health promotion and prevention;
- Diagnosis, treatment, cure and rehabilitation of illness;
- Caring for persons affected by chronic illness;
- Caring for persons with health-related impairment and disability;
- Palliative care;
- Providing community health programs;
- Governance and administration of the health system.

In the SHA2011 framework, capital and current expenditures are separated.

The objective of this exercise is to estimate expenditure on Primary Health Care, based the concept of ‘first contact’, using a global standard working definition (which may differ from country context-specific PHC expenditure estimates). Consulted PHC experts in majority suggested to monitor PHC expenditure using the SHA 2011 functional classification, and including the following services:

- general and dental outpatient curative care
- home-based curative care
- outpatient and home-based long-term care
- preventive care
- non-durable medical goods purchased directly by patients
- glasses and hearing aids.

Summary of Primary Health Care (PHC) Expenditure Options results from technical consultations				
Scope of PHC services		SHA 2011 codes	PROPOSED OPTION	
Health Care Services (sha 2011 HC classification)	Curative Care	<i>Inpatient</i>		
		<i>Day care</i>		
		<b>General and dental outpatient</b>	<b>hc131+hc132</b>	
		<i>Specialised outpatient</i>		
		<b>Home-based</b>	<b>hc14</b>	
	Rehabilitative Care	<i>Inpatient</i>		
		<i>Day care care</i>		
		<i>Outpatient</i>		
		<i>Home-based</i>		
	Long-Term Care (health)	<i>Inpatient</i>		
		<i>Day care care</i>		
		<b>Outpatient</b>	<b>hc33</b>	
		<b>Home-based</b>	<b>hc34</b>	
	Ancillary Services	<i>Laboratory services, Imaging services</i>		
		<i>Patient transportation</i>		
		<i>Other ancillary services</i>		
	Medical Goods	<b>Medicines &amp; other medical non durable goods</b>	<b>hc51</b>	
		<b>Glasses &amp; Hearing aids</b>	<b>hc52</b>	
		<i>Other therapeutic appliances</i>		
	Preventive Care	<b>Information, education and counseling progr</b>	<b>hc61</b>	
		<b>Immunisation programmes</b>	<b>hc62</b>	
		<b>Early disease detection programmes</b>	<b>hc63</b>	
		<b>Healthy condition monitoring progr.</b>	<b>hc64</b>	
		<b>Epidemiological surv./disease contr. progr.</b>	<b>hc65</b>	
		<i>Preparing for disaster &amp; emergency response</i>		
	Governance/Health system administ.	<i>Governance / Health system administration</i>		
		<i>Administration of health financing</i>		

## ANNEX 2 – PERFORMANCE CALCULATIONS

The following three tables show all the indicators used in the creation of the VSPs and which domain and sub-domain each belongs to. To calculate the domain score, the arithmetic mean of each sub-domain is calculated and then the mean of the sub-domain scores are calculated.

Table 1 includes the complete list of indicators and how indexes are would be calculated in the ideal world where all indicators are available for all countries. In cases where an indicator is missing, that indicator is removed from the calculations (rather than including a null value in calculation of the mean) and scores are calculated using all remaining available indicators.

On the VSP, we have provided colour-coding to give a visual suggestion of the strength of a country’s performance in a given index. As this leads to comparisons across countries, we limited the addition of colour-coding to those countries where the indexes were created from a set of indicators from defined sources. Table 2 shows this subset of indicators and how they were used to create the relevant index. Please note that since the data for the service coverage index were taken directly from the UHC service coverage index, all countries are considered comparable and were colour coded. In the exceptional case where a country had all the needed data (based on the list in table) for a given index but also had data for additional indicators, the additional data were suppressed for index creation, to maintain the ability to colour code the index score.

Table 1. Complete/Ideal list of indicators and calculations for indexes in the performance domain.

	Indicator	Sub-Domain	Domain
A	Perceived access barriers due to treatment costs*	Financial = A	<b>Access=(Financial+Geographic)/2</b>
B	Perceived access barriers due to distance*	Geographic = B	
C	Average availability of 5 tracer RMNCH services	Comprehensiveness=(C+D+E)/3	<b>Quality=(Comprehensiveness+Continuity+Person-centered+provider availability+provider competence+safety)/6</b>
D	Average availability for services for 3 tracer communicable diseases		
E	Average availability of diagnosis and management of 3 tracer NCDs		
F	DTP3 dropout rate	Continuity=(F+G)/2	
G	Treatment success rate for new TB cases		
H	Percent of caregivers told sick child’s diagnosis	Person-centeredness	
I	Percentage of family planning, ANC, and sick	Provider availability=(I+J)/2	

	child visits over 10 minutes		
J	Provider absence rate*		
K	Antenatal care quality score	Provider competence=(K+L+M+N+O)/5	
L	Family planning quality score		
M	Sick child quality score		
N	Adherence to clinical guidelines		
O	Diagnostic accuracy		
P	Adequate waste disposal	Safety=(P+Q)/2	
Q	Adequate infection control		
R	Demand for family planning satisfied with modern methods	RMNCH=(R+S+T+U)/4	Coverage=(ID+NCD+RMNCH)/3
S	Antenatal care coverage (4+ visits)		
T	Coverage of DTP3 immunization		
U	Care-seeking for suspected child pneumonia		
V	Children aged < 5 years with diarrhoea receiving oral rehydration salts	Infectious Diseases=(V+W+X+Y)/4	
W	People living with HIV receiving anti-retroviral treatment (ART)		
X	TB cases detected and treated		
Y	Use of insecticide treated nets (ITN) for malaria prevention (only in malaria endemic countries)		
Z	Percent of population with	NCD	

	normal blood pressure		
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\*Note – for indicators where the desired score is low (e.g. perceived barriers to care due to costs), the scores are re-scaled such that the desired score is high (e.g. 100-% of women with perceived barrier to care due to costs).



Table 2. Indicators and calculations used for “comparable” indexes in the performance domain.

	Indicator	Sub-Domain	Domain
A	Perceived access barriers due to treatment costs*	Financial = A	<b>Access=(Financial+Geographic)/2</b>
B	Perceived access barriers due to distance*	Geographic = B	
C	Average availability of 5 tracer RMNCH services	Comprehensiveness=(C+D+E)/3	<b>Quality=(Comprehensiveness+Continuity+Person-centered+provider availability+provider competence+safety)/6</b>
D	Average availability for services for 3 tracer communicable diseases		
E	Average availability of diagnosis and management of 3 tracer NCDs		
F	DTP3 dropout rate	Continuity=(F+G)/2	
G	Treatment success rate for new TB cases		
H	Percent of caregivers told sick child's diagnosis	Person-centeredness=H	
I	Percentage of family planning, ANC, and sick child visits over 10 minutes	Provider availability=I	
K	Antenatal care quality score	Provider competence=(K+L+M)/3	
L	Family planning quality score		
M	Sick child quality score		
P	Adequate waste disposal	Safety=(P+Q)/2	
Q	Adequate infection control		
R	Demand for family planning	RMNCH=(R+S+T+U)/4	<b>Coverage=(ID+NCD+RMNCH)/3</b>

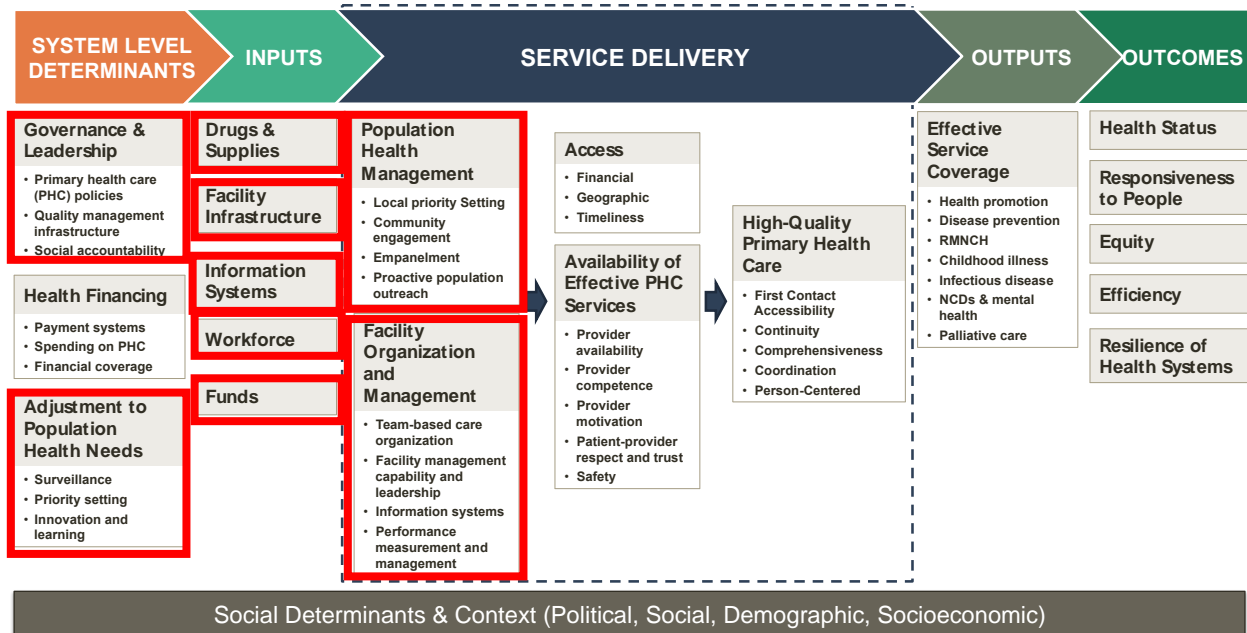
	satisfied with modern methods		
S	Antenatal care coverage (4+ visits)		
T	Coverage of DTP3 immunization		
U	Care-seeking for suspected child pneumonia		
V	Children aged < 5 years with diarrhoea receiving oral rehydration salts	Infectious Diseases=(V+W+X+Y)/4	
W	People living with HIV receiving anti-retroviral treatment (ART)		
X	TB cases detected and treated		
Y	Use of insecticide treated nets (ITN) for malaria prevention (only in malaria endemic countries)		
Z	Percent of population with normal blood pressure	NCD	

\*Note – for indicators where the desired score is low (e.g. perceived barriers to care due to costs), the scores are re-scaled such that the desired score is high (e.g. 100-% of women with perceived barrier to care due to costs).

## ANNEX 3 – PROGRESSION MODEL MEASURE DESCRIPTIONS

The Capacity domain of the Vital Signs Profile is assessed via the PHC Progression Model, a novel mixed-methods assessment tool developed by PHCPI to systematically assess the foundational capacities of PHC—an area that is poorly measured by quantitative indicators available at the global and national levels. The PHC Progression Model is designed to capitalize on the wealth of information, evidence, and data that is often available in countries but rarely captured in a way that generates usable information for decision-makers or is accessible to external audiences. The goal of the PHC Progression Model assessment is to bring together stakeholders who have varying and complementary knowledge of primary health care functioning in a country to yield an objective, comparable assessment of PHC capacity. To this end, the assessment is implemented through a joint internal/evaluation exercise consisting of an internal self-evaluation and verification by an external evaluation team.

The PHC Progression Model includes 32 measures to assess a country's capacity in the areas highlighted below.



Within *Governance and Leadership*, the PHC Progression Model assessment focuses on determining whether countries have **evidence-based primary health care policies** and strategies in place; **effective governance** structures to implement and enforce these PHC policies; robust **quality management infrastructure** for PHC, including quality policies and strategies, legislation and regulation, quality standards, and use of continuous quality improvement programs and methods; and systems that formalize and ensure strong **social accountability mechanisms**, including the systematic engagement of private sector, civil society, non-governmental organizations, and non-health actors in the integrated planning and governance of PHC and public disclosure of performance.

Related to *Adjustment to Population Health Needs*, the assessment examines whether countries have comprehensive and reliable **surveillance systems** in place to detect and respond to changing disease burden and emerging outbreaks; whether **national health priorities** are set based on disease burden, health outcomes, and user needs; and whether the PHC sector has a **learning system** that prioritizes continual reflection and improvement.

Within the sub-domains related to *Inputs*, the PHC Progression Model assessment goes beyond typical nation-wide assessments of the availability of key inputs—including **drugs and supplies, facility infrastructure, information**

**systems, health workforce, and funds at the facility level**—to assess whether these **inputs are also equitably distributed** and of **sufficiently high quality** to meet population needs.

The PHC Progression Model also assesses *Population Health Management*, the bedrock of effective and equitable primary health care. In particular, the assessment focuses on determining whether **local priorities** are evidence-based and determined in collaboration with local communities and stakeholders; whether **communities are have input** to and impact on the way that primary health care is financed, governed, and implemented; whether a system of **empanelment, or rostering**, is in place to ensure that the entire population is known to the health system and that specific service providers have responsibility for specific panels of patients; and finally, whether **proactive population outreach** occurs to deliver essential health services to those in need.

Finally, the PHC Progression Model assesses *Facility Organization and Management*, including whether services are organized and delivered by **effective provider teams**, capable of ensuring comprehensive and coordinated care; whether facilities are **effectively led** by managers with the ability to organize operations, motivate staff, and deploy resources; whether facilities **set performance targets**, have staff capacity to **capture and use data** at the point of care to monitor and improve performance, and implement **quality improvement activities**; and whether supportive supervision is routinely conducted.

The PHC Progression Model was developed through a rigorous process, including interviews, surveys, and consultations with approximately 50 global measurement and content experts, as well as policymakers, researchers, and implementers from a diverse sample of low- and middle-income countries. The development process was structured to ensure that the content of the Model reflects global norms and best practices, that it comprehensively assesses the areas of interest, and that measures included in the model are relevant, reliable, appropriately calibrated across the four performance categories, and feasible to assess.

The PHC Progression Model was piloted in five countries in 2018. Based on these experiences, PHCPI will be refining the Model to ensure that new global norms and best practices are reflected. If you are interested in partnering with PHCPI to complete a PHC Progression Model assessment in your country in the future or would like more information on the Model, please contact us at: [info@phcperformanceinitiative.org](mailto:info@phcperformanceinitiative.org).

## ANNEX 4 – BASELINE QUANTITATIVE INDICATOR DEFINITIONS

### CONTEXT

Context indicators cover important contextual details about a country, including GDP per capita, the proportion of the population living in poverty, and government spending on health.

#### 1. GDP PER CAPITA (PPP CURRENT INTERNATIONAL \$)

<b>Full Name of Indicator</b>	GDP per capita, PPP (current international dollars)
<b>Short name of indicator</b>	GDP per capita (\$PPP international dollars)
<b>Description</b>	Gross domestic product per capita converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. Data are in current international dollars.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Context
<b>Construction</b>	<i>Numerator:</i> GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. <i>Denominator:</i> Total population
<b>Rationale</b>	GDP per capita is an important contextual indicator that provides information about the average annual income of country residents.
<b>Data Source &amp; Year</b>	World Development Indicators (World Bank), year varies.
<b>Limitations</b>	GDP as a measure has some limitations including: (1) it doesn't capture non-market production; (2) it doesn't capture underground or non-official economies; (3) it doesn't measure the possible negative effects (e.g. on quality of life or environment of the production captured in the measure; and (4) trending can be difficult due changes in the quality of products and the inclusion of new goods. Additionally, GDP estimates can vary greatly depending on the basket of goods captures and the currency used for reporting. There may be differences in national accounting and demographic reporting procedures and practices between countries.
<b>VSP Methodology</b>	N/A

#### 2. POPULATION LIVING IN POVERTY (UNDER \$1.90 INT'L DOLLARS / DAY)

<b>Full Name of Indicator</b>	Proportion of population below international poverty line of \$1.90 per day (2011 PPP)
<b>Short name of indicator</b>	% Living in poverty
<b>Description</b>	Percentage of the population living in poverty, defined as living on less than \$1.90 international dollars per day. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. Data are in constant 2011 international dollars.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Context
<b>Construction</b>	<i>Numerator:</i> Total population living on less than \$1.90 international dollars per day <i>Denominator:</i> Total population
<b>Rationale</b>	Populations living in poverty may face greater barriers to health services access and utilization.
<b>Data Source &amp; Year</b>	World Development Indicators (World Bank), year varies. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments.
<b>Limitations</b>	The timeliness, frequency, quality, and comparability of household surveys may be poor, particularly in the poorest countries. The availability and quality of poverty monitoring data remains low in small

states, countries with fragile situations, and low-income countries and even some middle-income countries.  
N/A

### 3. GOVERNMENT HEALTH SPENDING AS PERCENTAGE OF GDP

<b>Full Name of Indicator</b>	Domestic General Government Health Expenditure as % of Gross Domestic Product (GDP)
<b>Short name of indicator</b>	Government health spending as % of GDP
<b>Description</b>	Domestic General Government Health Expenditure as % of GDP measures current government expenditure on health, from domestic sources, relative to the country's GDP. Domestic General Government Health Expenditure tracks expenditure by all public and compulsory sources for health, exclusively from domestic revenue. The numerator refers to health care goods and services used or consumed during a year. Note that capital investments are excluded.
<b>Comparability</b>	Comparable/Standard indicator
<b>VSP Domain and Sub-Domain</b>	Financing
<b>Construction</b>	<i>Numerator:</i> Domestic General Government Health Expenditure <i>Denominator:</i> Gross Domestic Product (GDP)
<b>Rationale</b>	Contributes to understanding overall government expenditure on health in relation to the size of the national economy.
<b>Data Source &amp; Year</b>	WHO Global Health Expenditure Database, year varies.
<b>Limitations</b>	
<b>VSP Methodology</b>	N/A

## OUTCOMES

Outcomes focus on the health status of the population, including life expectancy, mortality, and causes of death.

### 4. LIFE EXPECTANCY AT BIRTH (YEARS)

<b>Full Name of Indicator</b>	Life expectancy at birth (years)
<b>Short name of indicator</b>	Life expectancy
<b>Description</b>	The average number of years that a newborn could expect to live if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory or geographical area.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Outcomes
<b>Construction</b>	Life expectancy at birth is derived from life tables and is based on sex- and age-specific death rates. United Nations values for life expectancy at birth correspond to mid-year estimates, consistent with the corresponding United Nations fertility medium-variant quinquennial population projections. Procedures used to estimate WHO life tables for Member States vary depending on the data available to assess child and adult mortality.
<b>Rationale</b>	Life expectancy at birth is one of the key measures of a population's health and is a reflection of the overall mortality level and pattern across all age groups within the population.
<b>Data Source &amp; Year</b>	Global Health Observatory (GHO), year varies. Data on maternal mortality and other relevant variables are obtained through databases maintained by WHO, UNPD, UNICEF, and the World Bank. Data available from countries vary in terms of the source and methods. Given the variability of the sources of data, different methods are used for each data source in order to arrive at country estimates that are comparable and permit regional and global aggregation.

<b>Limitations</b>	The lack of complete and reliable mortality data, especially for low income countries and particularly on mortality among adults and the elderly, necessitates the application of modelling (based on data from other populations) to estimate life expectancy. This may lead to minor differences compared with official life tables prepared by Member States.
<b>VSP Methodology</b>	N/A

## 5. MATERNAL MORTALITY RATIO (PER 100,000 LIVE BIRTHS)

<b>Full Name of Indicator</b>	Maternal mortality ratio (per 100,000 live births)
<b>Short name of indicator</b>	Maternal mortality ratio
<b>Description</b>	The annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, expressed per 100,000 live births, for a specified time period.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Outcomes
<b>Construction</b>	<i>Numerator:</i> Number of maternal deaths <i>Denominator:</i> Number of live births (expressed per 100,000 live births)
<b>Rationale</b>	Complications during pregnancy and childbirth are a leading cause of death and disability among women of reproductive age in developing countries. The maternal mortality ratio represents the obstetric risk associated with each pregnancy and monitors deaths related to pregnancy and childbirth. It reflects the capacity of the health system to provide effective health care in preventing and addressing the complications occurring during pregnancy and childbirth that can result in maternal death.
<b>Data Source &amp; Year</b>	Global Health Observatory (GHO), year varies. Data on maternal mortality and other relevant variables are obtained through databases maintained by WHO, UNPD, UNICEF, and the World Bank. Data available from countries vary in terms of the source and methods. Given the variability of the sources of data, different methods are used for each data source in order to arrive at country estimates that are comparable and permit regional and global aggregation.
<b>Limitations</b>	Vital registration and health information systems in most developing countries are weak and thus cannot provide an accurate assessment of maternal mortality. Even estimates derived from complete vital registration systems, such as those in developed countries, suffer from misclassification and underreporting of maternal deaths.
<b>VSP Methodology</b>	N/A

## 6. NEONATAL MORTALITY RATE (PER 1,000 LIVE BIRTHS)

<b>Full Name of Indicator</b>	Neonatal mortality rate (probability of dying within the first 28 days of life per 1,000 live births)
<b>Short name of indicator</b>	Neonatal mortality rate
<b>Description</b>	The neonatal mortality rate is the probability of a newborn dying before reaching 28 days of age, expressed per 1,000 live births.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Outcomes
<b>Construction</b>	<b>Numerator:</b> Number of deaths of neonates at ages 0-28 days <b>Denominator:</b> Number of live births for a specified year (expressed per 1,000 live births)
<b>Rationale</b>	Mortality during the neonatal period accounts for a large proportion of child deaths and is considered to be a useful indicator of maternal and newborn neonatal health care. Neonatal mortality rate is a Sustainable Development Goal Indicator for monitoring child health.
<b>Data Source &amp; Year</b>	<b>UN IGME 2015.</b> The Inter-agency Group for Child Mortality of Estimation, which includes representatives from UNICEF, WHO, the World Bank and the United Nations Population Division, produces trends of neonatal mortality with standardized methodology by group of countries

	depending on the type and quality of source of data available. These neonatal rates are estimates, derived from the estimated UN IGME neonatal rate and infant population from World Population Prospects to calculate the live births; hence they are not necessarily the same as the official national statistics.
<b>Limitations</b>	The reliability of estimates of neonatal mortality depends on the accuracy and completeness of reporting and recording of births and deaths. Underreporting and misclassification are common.
<b>VSP Methodology</b>	N/A

## 7. PREMATURE NONCOMMUNICABLE DISEASE (NCD) MORTALITY (PROBABILITY)

<b>Full Name of Indicator</b>	Mortality between ages 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases (probability)
<b>Short name of indicator</b>	Premature NCD mortality
<b>Description</b>	Probability of dying between the ages of 30 and 70 years from non-communicable diseases, defined as the percent of 30-year-old-people who would die before their 70th birthday from cardiovascular disease, cancer, diabetes, or chronic respiratory disease, assuming that s/he would experience current mortality rates at every age and s/he would not die from any other cause of death.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Outcomes
<b>Construction</b>	<i>Numerator:</i> Number of deaths between ages 30 to 70 years from cardiovascular disease, cancer, diabetes, or chronic respiratory disease in a synthetic life table population. <i>Denominator:</i> Population at exact age 30 in the synthetic life table population.
<b>Rationale</b>	Non-communicable diseases account for an increasing proportion of morbidity and mortality in many countries. Prevention, diagnosis, and treatment of these diseases to avoid premature mortality are a critical part of primary health care.
<b>Data Source &amp; Year</b>	Global Health Observatory (GHO), year varies. Data are derived from re-analysis of Demographic and Health Surveys (DHS) micro-data, which are publicly available using the standard indicator definitions as published in DHS documentation.
<b>Limitations</b>	The reliability of estimates depends on the accuracy and completeness of reporting and recording of births and deaths. Underreporting and misclassification are common.
<b>VSP Methodology</b>	N/A

## 8. CAUSES OF DEATH

<b>Full Name of Indicator</b>	Cause-specific mortality
<b>Short name of indicator</b>	Causes of death
<b>Description</b>	Causes of death disaggregated by percentage attributable to non-communicable diseases (NCDs), injuries, and communicable and other conditions (including maternal, perinatal, and nutritional conditions).
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Outcomes
<b>Construction</b>	<i>Numerator:</i> Total number of deaths by cause in a given year <i>Denominator:</i> Total number of deaths in a given year
<b>Rationale</b>	Cause-of-death statistics allow governments to determine priorities for public health actions, such as increasing health spending in areas to which high mortality is attributed.



<b>Data Source &amp; Year</b>	Global Health Observatory (GHO), year varies. Data are derived from re-analysis of Demographic and Health Surveys (DHS) micro-data, which are publicly available using the standard indicator definitions as published in DHS documentation.
<b>Limitations</b>	The reliability of estimates depends on the accuracy and completeness of reporting and recording of births and deaths. Underreporting and misclassification are common.
<b>VSP Methodology</b>	N/A

## FINANCING

Financing includes measurements of per capita expenditures on Primary Health Care (PHC), share of health expenditure allocated to PHC, and health expenditures as percent of GDP.

### 9. PHC SPENDING PER CAPITA (USD)

<b>Full Name of Indicator</b>	Current primary health care (PHC) expenditure per capita (USD)
<b>Short name of indicator</b>	PHC spending per capita
<b>Description</b>	Primary Health Care (PHC) expenditure monitors current health expenditure on a given set of health services defined within the System of Health Accounts 2011 (SHA 2011) framework. This includes government and non-government expenditures. The selected subset of health services includes general outpatient care, dental care, home-based curative care, outpatient and home-based long-term care, and preventive care (IEC, immunisation, early disease detection, healthy condition monitoring, disease control programme) <sup>4</sup> . To this subset of health services are added medical goods (medicines, glasses, hearing aids) <sup>1</sup> . Note that capital investments are excluded. Current primary health care expenditure is converted into USD and divided by population to derive a per capita USD estimate of spending.
<b>Comparability</b>	Comparable/Standard indicator
<b>VSP Domain and Sub-Domain</b>	Financing
<b>Construction</b>	<i>Numerator:</i> Current PHC Expenditure in USD <i>Denominator:</i> Population
<b>Rationale</b>	Captures the level of expenditure on PHC
<b>Data Source &amp; Year</b>	Estimated by WHO using country published health accounts from most recent available year, following the SHA 2011 global standard.
<b>Limitations</b>	This indicator includes expenditure on medical goods that may be serving other services than primary health care services.
<b>VSP Methodology</b>	N/A

## PRIORITIZATION OF PHC

### 10. PHC SPENDING AS A SHARE OF OVERALL HEALTH SPENDING

<b>Full Name of Indicator</b>	Current PHC expenditure as % of Current Health Expenditure
<b>Short name of indicator</b>	PHC spending as % of CHE
<b>Description</b>	Primary Health Care (PHC) expenditure monitors current health expenditure on a given set of health services defined within the System of Health Accounts 2011 (SHA 2011) framework. This includes government and non-government expenditures. The selected subset of health services includes general outpatient care, dental care, home-based curative care, outpatient and home-based long-term care, and preventive care (IEC, immunisation, early disease detection, healthy condition monitoring,

<sup>4</sup> For more information, refer to the System of Health Accounts 2011.

disease control programme)<sup>5</sup>. To this subset of health services are added medical goods (medicines, glasses, hearing aids)<sup>1</sup>. Note that capital investments are excluded.  
 Current health expenditure (CHE) refers to all health care goods and services used or consumed during a year by residents of a country. Note that capital investments are excluded.

<b>Comparability</b>	Comparable/Standard indicator
<b>VSP Domain and Sub-Domain</b>	Financing
<b>Construction</b>	<i>Numerator:</i> Current Primary Health Care Expenditure <i>Denominator:</i> Current Health Expenditure
<b>Rationale</b>	PHC expenditure in relation to current health expenditure
<b>Data Source &amp; Year</b>	Estimated by WHO using country published health accounts from most recent available year, following the SHA 2011 global standard.
<b>Limitations</b>	This indicator includes expenditure on medical goods that may be serving other services than primary health care services.
<b>VSP Methodology</b>	N/A

## 11. GOVERNMENT PHC SPENDING AS A SHARE OF GOVERNMENT HEALTH SPENDING

<b>Full Name of Indicator</b>	Domestic General Government PHC Expenditure as a % of Domestic General Government Health Expenditure
<b>Short name of indicator</b>	Share of domestic government health spending allocated to PHC
<b>Description</b>	Domestic General Government Health Expenditure on PHC tracks current expenditure by all domestic public and compulsory sources on PHC. PHC expenditure includes general outpatient care, dental care, home-based curative care, outpatient and home-based long-term care, and preventive care (IEC, immunisation, early disease detection, healthy condition monitoring, disease control programme) <sup>6</sup> . To this subset of health services are added medical goods (medicines, glasses, hearing aids) <sup>1</sup> . Note that capital investments are excluded. Domestic General Government Health Expenditure tracks current expenditure by all public and compulsory sources for health, exclusively from domestic revenue. The indicator refers to health care goods and services used or consumed during a year. Note that capital investments are excluded.
<b>Comparability</b>	Comparable/Standard indicator
<b>VSP Domain and Sub-Domain</b>	Financing
<b>Construction</b>	<i>Numerator:</i> Domestic General Government PHC Expenditure <i>Denominator:</i> Domestic General Government Health Expenditure
<b>Rationale</b>	Contributes to understanding government prioritization towards PHC within the health sector.
<b>Data Source &amp; Year</b>	Estimated by WHO using country published health accounts from most recent available year, following the SHA 2011 global standard.
<b>Limitations</b>	This indicator includes expenditure on medical goods that may be serving other services than primary health care services.
<b>VSP Methodology</b>	N/A

## SOURCES OF SPENDING

<sup>5</sup> For more information, refer to the System of Health Accounts 2011

<sup>6</sup> For more information, refer to the System of Health Accounts 2011

## 12. GOVERNMENT PHC SPENDING AS SHARE OF CURRENT PHC SPENDING

<b>Full Name of Indicator</b>	Domestic General Government PHC Expenditure as % of Current Primary Health Care (PHC) Expenditure
<b>Short name of indicator</b>	Domestic government PHC spending as % of current PHC spending
<b>Description</b>	Government PHC expenditure tracks current expenditure by all domestic public and compulsory sources on PHC. The denominator, current PHC expenditure, includes government, non-government, and private sector sources of PHC spending (including household out-of-pocket spending). Current PHC expenditure includes general outpatient care, dental care, home-based curative care, outpatient and home-based long-term care, and preventive care (IEC, immunisation, early disease detection, healthy condition monitoring, disease control programme). To this subset of health services are added medical goods (medicines, glasses, hearing aids) <sup>1</sup> . Note that capital investments are excluded.
<b>Comparability</b>	Comparable/Standard indicator
<b>VSP Domain and Sub-Domain</b>	Financing
<b>Construction</b>	<i>Numerator:</i> Domestic General Government Health Expenditure on Primary Health Care <i>Denominator:</i> Current Primary Health Care Expenditure
<b>Rationale</b>	This indicator reflects the share of domestic government expenditure in total PHC expenditure. This measure indicates government commitment to primary health care.
<b>Data Source &amp; Year</b>	Estimated by WHO using country published health accounts from most recent available year, following the SHA 2011 global standard.
<b>Limitations</b>	Currently, it is not feasible to distinguish among non-governmental sources of PHC expenditure, such as out-of-pocket household expenditures on PHC. This indicator includes expenditure on medical goods that may be serving other services than primary health care services.
<b>VSP Methodology</b>	N/A

## PERFORMANCE

The Performance domain includes measures of access, quality, and service coverage.

### ACCESS

Access includes measurements of financial barriers and geographic hardship due to distance.

## 13. PERCEIVED ACCESS BARRIERS DUE TO TREATMENT COSTS

<b>Full Name of Indicator</b>	Perceived barriers to accessing care due to treatment costs
<b>Short name of indicator</b>	Perceived access barriers due to treatment costs
<b>Description</b>	Access barriers due to treatment cost measures the percent of women who self-report problems in accessing health care due to cost of treatment.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Access
<b>Construction</b>	<i>Numerator:</i> Number of women who report specific problems in accessing health care when they are sick due to issues related to getting money for treatment <i>Denominator:</i> Number of women interviewed
<b>Rationale</b>	This indicator reflects user-reported access barriers and is a complement to measurement of overall out-of-pocket expenditures on health. Financial access is a critical component of health services access, and access barriers due to cost can have detrimental effects on the utilization and effectiveness of health services.
<b>Data Source &amp; Year</b>	Demographic and Health Survey (DHS), year varies. DHS is a nationally-representative household survey that provides data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition. Standard DHS surveys have large sample sizes (usually between 5,000 and 30,000 households) and typically are conducted about every 5 years, to allow

	comparisons over time. Data were accessed from the DHS STATcompiler which may, in some cases, differ slightly from the results reported in the country's DHS report.
<b>Limitations</b>	This indicator captures access barriers due to treatment costs, but it may not capture financial barriers to access that are related to transport or medicines required following diagnosis. Results are taken from surveys and as a result are subject to recall bias and limitations due to survey design. Note that this variable relies on perceived, rather than actual costs.
<b>VSP Methodology</b>	For calculation of summary scores in the VSP, this variable was transformed by subtracting the value from 100.

## 14. PERCEIVED ACCESS BARRIERS DUE TO DISTANCE

<b>Full Name of Indicator</b>	Perceived barriers to accessing care due to distance
<b>Short name of indicator</b>	Perceived access barriers due to distance
<b>Description</b>	Access barriers due to distance measures the percent of women who self-report that the distance they have to travel to receive medical advice or treatment is a big problem.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Access
<b>Construction</b>	<i>Numerator:</i> Number of women who report the distance to the health facility as a big problem in getting medical advice or treatment when sick <i>Denominator:</i> Number of women interviewed
<b>Rationale</b>	This indicator reflects user-reported geographic access barriers complements measures of other barriers to access. Geographic access is a critical component of health services access, and extensive distance traveled to receive treatment can have detrimental effects on the utilization and effectiveness of health services.
<b>Data Source &amp; Year</b>	Demographic and Health Survey (DHS), year varies. DHS is a nationally-representative household survey that provides data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition. Standard DHS surveys have large sample sizes (usually between 5,000 and 30,000 households) and typically are conducted about every 5 years, to allow comparisons over time. Data were accessed from the DHS STATcompiler which may, in some cases, differ slightly from the results reported in the country's DHS report.
<b>Limitations</b>	This indicator captures access barriers due to need to travel for care, but depending on how questions are asked, it may not capture barriers to access that are related to cost of transport or travel to obtain medicines required following diagnosis.
<b>VSP Methodology</b>	For calculation of summary scores in the VSP, this variable was transformed by subtracting the value from 100.

## QUALITY

Quality of care measures are focused on principles that are proven to impact the quality of PHC service delivery at the point of care. These include comprehensiveness of care, continuity of care, person-centeredness, availability and competence of providers, and safety practices.

### Comprehensiveness

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#### 15. AVERAGE AVAILABILITY OF 5 TRACER RMNCH SERVICES

<b>Full Name of Indicator</b>	Average availability of tracer RMNCH services (family planning, ANC, PMTCT, routine child immunization, and curative care for children under five)
<b>Short name of indicator</b>	Average availability of 5 tracer RMNCH services
<b>Description</b>	Proportion of maternal and child health services provided and for which guidelines are available (sick child, vaccination, family planning, antenatal care, and prevention of mother-to-child transmission of HIV) across all facilities.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Comprehensiveness
<b>Construction</b>	Weighted average of the percentage of five maternal and child health services (child, vaccination, family planning, antenatal care, and prevention of mother-to-child transmission of HIV) provided at each facility surveyed.
<b>Rationale</b>	Maternal and child health services are a critical part of primary health care and must be widely available throughout all facilities in order to support maternal and child health.
<b>Data Source &amp; Year</b>	Service Provision Assessment (SPA), year varies. SPA is a survey is a health facility assessment that provides a comprehensive overview of a country's health service delivery. It collects information on the overall availability of different facility-based health services in a country and their readiness to provide those services.  Service Availability and Readiness Assessment (SARA), year varies. SARA is a health facility assessment tool designed to assess and monitor the service availability and readiness of the health sector and to generate evidence to support the planning and managing of a health system. SARA is designed as a systematic survey to generate a set of tracer indicators of service availability and readiness.
<b>Limitations</b>	While this indicator provides information on the extent to which maternal and child health services are offered, it does not fully assess the readiness of facilities to provide care that follows evidence-based practices, or the quality of the care itself. Use of an indicator reflecting questions related to assessing service readiness would provide additional information.
<b>VSP Methodology</b>	N/A

#### 16. AVERAGE AVAILABILITY OF SERVICES FOR 3 TRACER COMMUNICABLE DISEASES

<b>Full Name of Indicator</b>	Average availability of tracer communicable disease services (HIV, STI, and TB)
<b>Short name of indicator</b>	Average availability of services for 3 tracer communicable diseases
<b>Description</b>	Proportion of infectious diseases services provided and for which guidelines are available for sexually transmitted infections, tuberculosis, and HIV across all facilities.
<b>Comparability</b>	Comparable / Standard indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Comprehensiveness
<b>Construction</b>	Weighted average of the percentage of service for three tracer communicable diseases (HIV, STI, and HIV) provided at each facility surveyed.

<b>Rationale</b>	Populations must have adequate access to services that support prevention, diagnosis and treatment of infectious diseases. If few facilities offer these services, access to needed care is compromised.
<b>Data Source &amp; Year</b>	Service Provision Assessment (SPA), year varies. SPA is a survey is a health facility assessment that provides a comprehensive overview of a country's health service delivery. It collects information on the overall availability of different facility-based health services in a country and their readiness to provide those services.
<b>Limitations</b>	Service Availability and Readiness Assessment (SARA), year varies. SARA is a health facility assessment tool designed to assess and monitor the service availability and readiness of the health sector and to generate evidence to support the planning and managing of a health system. SARA is designed as a systematic survey to generate a set of tracer indicators of service availability and readiness. As defined, this indicator does not include services for malaria. Malaria could be added in for select countries, depending on the extent to which the service is required. While this indicator provides information on the extent to which infectious disease services are provided, it does not fully assess the readiness of facilities to provide care that follows evidence-based practices, or the quality of the care itself. Use of an indicator reflecting questions related to assessing service readiness would provide additional information.
<b>VSP Methodology</b>	N/A

## 17. AVERAGE AVAILABILITY OF DIAGNOSIS AND MANAGEMENT OF 3 TRACER NCDs

<b>Full Name of Indicator</b>	Average availability of tracer noncommunicable disease diagnosis and management (diabetes, chronic respiratory disease, and chronic cardiovascular disease)
<b>Short name of indicator</b>	Average availability of diagnosis and management of 3 tracer NCDs
<b>Description</b>	Proportion of non-combinable disease services provided and for which guidelines are available (diabetes, chronic respiratory disease, and chronic cardiovascular disease) across all facilities.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Comprehensiveness
<b>Construction</b>	Weighted average of the percentage of diagnosis and management services for three tracer NCDs (diabetes, chronic respiratory disease, and chronic cardiovascular disease) provided at each facility surveyed.
<b>Rationale</b>	Non-communicable diseases account for an increasing proportion of morbidity and mortality in many countries. Diagnosis and treatment of these diseases are a critical part of primary health care and must be widely available throughout all facilities in order to support the health of the population.
<b>Data Source &amp; Year</b>	Service Provision Assessment (SPA), year varies. SPA is a survey is a health facility assessment that provides a comprehensive overview of a country's health service delivery. It collects information on the overall availability of different facility-based health services in a country and their readiness to provide those services.  Service Availability and Readiness Assessment (SARA), year varies. SARA is a health facility assessment tool designed to assess and monitor the service availability and readiness of the health sector and to generate evidence to support the planning and managing of a health system. SARA is designed as a systematic survey to generate a set of tracer indicators of service availability and readiness.
<b>Limitations</b>	While this indicator provides information on the extent to which NCD services are offered, it does not fully assess the readiness of facilities to provide care that follows evidence-based practices, or the quality of the care itself. Use of an indicator reflecting questions related to assessing service readiness would provide additional information.
<b>VSP Methodology</b>	N/A

## 18. DTP3 DROPOUT RATE

<b>Full Name of Indicator</b>	Dropout rate between 1 <sup>st</sup> and 3 <sup>rd</sup> DTP vaccination
<b>Short name of indicator</b>	DTP3 dropout rate
<b>Description</b>	Diphtheria-tetanus-pertussis (DTP) dropout rate is the percent of children who do not receive the full three doses of DTP vaccination after receiving the initial dose.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Continuity
<b>Construction</b>	<i>Numerator:</i> [DTP1 Immunization Coverage - DTP3 Immunization Coverage] <i>Denominator:</i> DTP1 Immunization Coverage
<b>Rationale</b>	Immunization is an essential component for reducing under-five mortality. Immunization coverage estimates are used to monitor coverage of immunization services and to guide disease eradication and elimination efforts. Measuring the gap between DTP1 and DTP3 reflects continuity within a health system, including the system’s ability to capture and follow up with patients.
<b>Data Source &amp; Year</b>	WHO/UNICEF, year varies. The WHO and UNICEF regularly report and release updated immunization coverage data related to the Global Vaccine Action Plan.
<b>Limitations</b>	Given the prevalence of global support for immunization efforts, a high coverage rate of DTP3 immunization may be reflective of strong support from vertical programming in some countries. As such, DTP3 coverage alone is not necessarily a proxy for primary care health system performance.
<b>VSP Methodology</b>	For calculation of summary scores in the VSP, this variable was transformed by subtracting the value from 100.

## 19. TREATMENT SUCCESS RATE FOR NEW TB CASES

<b>Full Name of Indicator</b>	Treatment success rate for new TB cases
<b>Short name of indicator</b>	Treatment success rate for new TB cases
<b>Description</b>	Percentage of tuberculosis (TB) cases successfully treated (cured plus treatment completed) among TB cases notified to national health authorities during a specified period, usually one year.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Continuity
<b>Construction</b>	<i>Numerator:</i> Number of TB cases registered in a specified time period that were successfully treated with or without bacteriological evidence of success <i>Denominator:</i> Total number of TB cases registered in the same period
<b>Rationale</b>	Treatment success is an indicator of the performance of national TB programs. It also serves as a proxy for a number of aspects of successful service delivery within a health system, including diagnostic and treatment accuracy and the system’s ability to capture and follow up with patients over time.
<b>Data Source &amp; Year</b>	Global Health Observatory (GHO), year varies. Preferred data sources include patient record and surveillance systems.
<b>Limitations</b>	This indicator measures only public-sector TB programs and does not include results from private-sector treatment programs or facilities. Therefore, in countries with strong private-sector TB programs, these results do not reflect the totality of the TB treatment success rate. Further, this indicator does not capture the system’s ability to identify new TB patients. As a result, a country could perform well on this indicator, but poorly on the identification of new TB cases.
<b>VSP Methodology</b>	N/A

## Person-Centeredness

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### 20. PERCENT OF CAREGIVERS WHO WERE TOLD SICK CHILD’S DIAGNOSIS

<b>Full Name of Indicator</b>	Percent of caregivers who were told sick child’s diagnosis
<b>Short name of indicator</b>	Percent of caregivers who were told sick child’s diagnosis
<b>Description</b>	Proportion of observed sick child visits where the health worker told the child’s caretaker what illness(es) the child has.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Person-centeredness
<b>Construction</b>	<i>Numerator:</i> Number of sick child visits observed where the health worker told the child’s caretaker what illness(es) the child has <i>Denominator:</i> Total number of sick child visits observed
<b>Rationale</b>	Communication of diagnoses and illnesses to a child’s caretaker is important to ensure the caretaker has a sufficient understanding of their child’s condition and to build a relationship of trust between the health worker and caretaker.
<b>Data Source &amp; Year</b>	Service Provision Assessment (SPA), year varies. SPA is a survey is a health facility assessment that provides a comprehensive overview of a country’s health service delivery. It collects information on the overall availability of different facility-based health services in a country and their readiness to provide those services.
<b>Limitations</b>	While a diagnosis may be communicated to the child’s caretaker, the health worker must be sufficiently trained and experienced to ensure that the diagnosis is the most appropriate one.
<b>VSP Methodology</b>	N/A

## Provider Availability

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### 21. PERCENTAGE OF FAMILY PLANNING, ANC, AND SICK CHILD VISITS OVER 10 MINUTES

<b>Full Name of Indicator</b>	Percentage of family planning, ANC, and sick child visits over 10 minutes
<b>Short name of indicator</b>	Percentage of family planning, ANC, and sick child visits over 10 minutes
<b>Description</b>	The proportion of antenatal care, family planning, and sick child visits that last for more than 10 minutes.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Provider Availability
<b>Construction</b>	<i>Numerator:</i> The number of observed client visits for antenatal care, family planning, and sick child care where the time the duration of the visit was over 10 minutes. Visit length is measured based on the time noted as the start of observation and the earliest of the times noted for end of observation, start of exit interview, and start of next observation. The use of the earliest of the three possible end times was used to account for errors in data collection. <i>Denominator:</i> The total number of ANC, FP and sick child visits observed



<b>Rationale</b>	It is important that health workers spend sufficient time with clients and patients to listen to their concerns and descriptions of symptoms, ask appropriate questions, and provide adequate information about diagnosis, treatment, and/or next steps. Greater satisfaction with the visit may be associated with visit duration and may also increase the quality of the health worker-client relationship. A 10-minute visit may represent the lower limit of what is sufficient.
<b>Data Source &amp; Year</b>	Service Provision Assessment (SPA), year varies. SPA is a survey is a health facility assessment that provides a comprehensive overview of a country's health service delivery. It collects information on the overall availability of different facility-based health services in a country and their readiness to provide those services.
<b>Limitations</b>	While increased visit length can support better health work-client communication and provide sufficient time for the communication between health worker and client, it does not ensure that the health worker has communicated effectively with the client by asking the right questions, listening to the client's responses, and providing information in a way that the client can understand. Visit length may modulate not only experiential quality but also technical quality; a visit length of great than 10 minutes does not guarantee that appropriate diagnostic questions, adequate physical exam or accompanying diagnostics were conducted or that appropriate treatment plan was prescribed.
<b>VSP Methodology</b>	N/A

## 22. PROVIDER ABSENCE RATE (%)

<b>Full Name of Indicator</b>	Provider absence rate (%)
<b>Short name of indicator</b>	Provider absence rate (%)
<b>Description</b>	Provider absence rate measures the number of clinical staff actually present at a facility compared to the expected number of staff at a given time.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Provider Availability
<b>Construction</b>	<i>Numerator:</i> Number of health professionals that are not off duty who are absent from the facility on an unannounced visit <i>Denominator:</i> Ten randomly sampled workers who are supposed to be on duty at the facility on the day of the assessment. The only health workers that are removed from the denominator are those on shift work (i.e., not present because it is not their shift) or those on long absences due to long term sick leave or maternity.
<b>Rationale</b>	Not only is having health professionals present in primary health care facilities a necessary condition for delivering health services, staff absenteeism is also a reflection of the quality of organization and management processes within a health facility.
<b>Data Source &amp; Year</b>	Service Delivery Indicators (SDI), year varies. SDI is a set of health indicators that examine health workers' effort and ability, as well as the availability of key inputs and resources that contribute to the functioning of a health facility. Data are derived from facility surveys.
<b>Limitations</b>	Having providers present in facilities is necessary but not sufficient for delivery of quality health services, which is dependent on other aspects of service delivery including provider competence and motivation, and availability of equipment.
<b>VSP Methodology</b>	For calculation of summary scores in the VSP, this variable was transformed by subtracting the value from 100.

## Provider Competence

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## 23. ANTENATAL CARE QUALITY SCORE

<b>Full Name of Indicator</b>	Antenatal care quality score based on WHO guidelines
<b>Short name of indicator</b>	Antenatal care quality score
<b>Description</b>	Average quality score for observed antenatal care visits based on WHO antenatal care guidelines.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Provider Competence
<b>Construction</b>	Each observed visit will receive a score between 0 and 1 where 1 means all tracer items were observed during the visit. See Appendix 1 for a list of tracer items for antenatal care visits. <i>Numerator:</i> The sum over all facilities of the average number of tracer items completed by health workers for first and follow-up antenatal care visits divided by the total possible score. <i>Denominator:</i> Total number facilities where antenatal care visits were observed.
<b>Rationale</b>	The WHO has identified a number of standard elements of antenatal care that should be present in initial or follow-up visits to support improved pregnancy outcomes. This indicator provides information on the extent to which these are observed during visits for antenatal care.
<b>Data Source &amp; Year</b>	Service Provision Assessment (SPA), year varies. SPA is a survey is a health facility assessment that provides a comprehensive overview of a country's health service delivery. It collects information on the overall availability of different facility-based health services in a country and their readiness to provide those services.
<b>Limitations</b>	The average scores recorded are only for the visits observed (sampled). Depending on the number of visits observed and the way they are sampled, the average facility score may be limited in representativeness of the facility.
<b>VSP Methodology</b>	N/A

## 24. FAMILY PLANNING QUALITY SCORE

<b>Full Name of Indicator</b>	Family planning quality score based on WHO guidelines
<b>Short name of indicator</b>	Family planning quality score
<b>Description</b>	Average quality score for observed family planning visits based on WHO Family Planning guidelines.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Provider Competence
<b>Construction</b>	Each observed visit will receive a score between 0 and 1 where 1 means all tracer items were observed during the visit. See Appendix 2 for a list of tracer items for family planning visits. <i>Numerator:</i> The sum over all facilities of the average number of tracer items completed by health workers for family planning visits divided by the total possible score. <i>Denominator:</i> Total number facilities where family planning visits were observed
<b>Rationale</b>	A number of key elements for quality family planning services have been defined by the WHO. This indicator provides information on the extent to which these are observed during visits for family planning.
<b>Data Source &amp; Year</b>	Service Provision Assessment (SPA), year varies. SPA is a survey is a health facility assessment that provides a comprehensive overview of a country's health service delivery. It collects information on the overall availability of different facility-based health services in a country and their readiness to provide those services.
<b>Limitations</b>	The average scores recorded are only for the visits observed (sampled). Depending on the number of visits observed and the way they are sampled, the average facility score may be limited in representativeness of the facility.
<b>VSP Methodology</b>	N/A

## 25. SICK CHILD CARE QUALITY SCORE

<b>Full Name of Indicator</b>	Sick child care quality score based on IMCI guidelines
<b>Short name of indicator</b>	Sick child care quality score
<b>Description</b>	Average quality score for observed sick child visits based on the WHO’s Integrated Management of Childhood Illness (IMCI) program guidelines.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Provider Competence
<b>Construction</b>	Each observed visit will receive a score between 0 and 1 where 1 means all tracer items were observed during the visit. See Appendix 3 for a list of tracer items for sick child visits. <i>Numerator:</i> The sum over all facilities of the average number of IMCI tracer items completed by health workers for sick child visits divided by the total possible score. <i>Denominator:</i> Total number facilities where sick child visits were observed
<b>Rationale</b>	The WHO’s IMCI program was first launched in the 1990s to “promote accurate identification of childhood illnesses, ensure appropriate combined treatment of all major illnesses, strengthen the counseling of caretakers and speed up the referral of severely ill children.” This indicator measures the extent to which the guidelines for diagnosing, determining and providing treatment and counseling are followed by health workers.
<b>Data Source &amp; Year</b>	Service Provision Assessment (SPA), year varies. SPA is a survey is a health facility assessment that provides a comprehensive overview of a country’s health service delivery. It collects information on the overall availability of different facility-based health services in a country and their readiness to provide those services.
<b>Limitations</b>	The average scores recorded are only for the visits observed (sampled). Depending on the number of visits observed and the way they are sampled, the average facility score may be limited in representativeness of the facility.
<b>VSP Methodology</b>	N/A

## 26. ADHERENCE TO CLINICAL GUIDELINES

<b>Full Name of Indicator</b>	Adherence to clinical guidelines
<b>Short name of indicator</b>	Adherence to clinical guidelines
<b>Description</b>	Adherence to clinical guidelines measures the number of relevant history and examination questions asked by a provider during a clinical encounter compared to the total number of relevant history and examination questions that <i>should have been asked</i> .
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Provider Competence
<b>Construction</b>	<i>Numerator:</i> Total number of relevant history and examination questions asked by the provider <i>Denominator:</i> Total number of relevant history and examination questions that should have been asked by the provider
<b>Rationale</b>	Delivery of high-quality care requires the presence of competent providers who provide evidence-based clinical care. Clinical vignettes can be used to evaluate a provider’s clinical approach on a set of tracer conditions, including (i) malaria with anemia; (ii) diarrhea with severe dehydration; (iii) pneumonia; (iv) pulmonary tuberculosis; (v) diabetes; (vi) post-partum hemorrhage; and (vii) neonatal asphyxia.
<b>Data Source &amp; Year</b>	Service Delivery Indicators (SDI), year varies. SDI is a set of health indicators that examine health workers’ effort and ability, as well as the availability of key inputs and resources that contribute to the functioning of a health facility. Data are derived from clinical vignettes used in facility surveys.
<b>Limitations</b>	The limitation of clinical vignettes is that they measure a provider’s abilities in a theoretical scenario, but do not capture “real world” phenomena. They are designed to approximate and isolate aspects of the decision-making process that occur in real world settings (i.e., assess the provider “know-do” gap). Other approaches to evaluate adherence to guidelines include use of standardized patients, patient reporting, and observations of clinical encounters. Guidelines also

VSP Methodology	rarely account for multi-morbidity encountered in “real world” patients at the first contact point-of-care. N/A
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## 27. DIAGNOSTIC ACCURACY

<b>Full Name of Indicator</b>	Diagnostic accuracy
<b>Short name of indicator</b>	Diagnostic accuracy
<b>Description</b>	Diagnostic accuracy measures the number of cases that are correctly diagnosed out of the number of patients examined, as observed through clinical vignettes on multiple common conditions, including pulmonary tuberculosis, pneumonia, acute diarrhea, diabetes, and malaria with anemia.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Provider Competence
<b>Construction</b>	<i>Numerator:</i> For each clinical case, a score of one is assigned for each clinical case if the diagnosis is mentioned. The numerator is the sum of the total number of correct diagnoses identified. Where multiple diagnoses were provided by the clinician, the diagnosis is coded as correct as long as it is mentioned, irrespective of what other alternative diagnoses were given <i>Denominator:</i> Total number of clinical cases tested
<b>Rationale</b>	Having health professionals present in facilities is a necessary but not sufficient condition for delivering quality health services. This indicator is a proxy for the clinical quality of care that is delivered to patients.
<b>Data Source &amp; Year</b>	Service Delivery Indicators (SDI), year varies. SDI is a set of health indicators that examine health workers’ effort and ability, as well as the availability of key inputs and resources that contribute to the functioning of a health facility. Data are derived from clinical vignettes used in facility surveys.
<b>Limitations</b>	The limitation of clinical vignettes is that they measure a provider’s abilities in a theoretical scenario, but do not capture “real world” phenomena. They are designed to approximate and isolate aspects of the decision-making process that occur in real world settings (i.e., assess the provider “know-do” gap). Other approaches to evaluate adherence to guidelines include use of standardized patients, patient reporting, and observations of clinical encounters. Individual vignettes also assess performance based on a typical presentation for a specific diagnosis, and do not account for the multi-morbidity nor atypical presentations commonly encountered in “real world” patients at the first contact point-of-care.
VSP Methodology	N/A

## Safety

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## 28. ADEQUATE WASTE DISPOSAL

<b>Full Name of Indicator</b>	Adequate waste disposal system in place
<b>Short name of indicator</b>	Adequate waste disposal
<b>Description</b>	Average score (out of 3) on adherence to standards for disposing of medical and hazardous waste, sharps, and having guidelines for waste disposal in place.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Safety
<b>Construction</b>	<i>Numerator:</i> Total of the average number of the 3 waste disposal tracer items in place in a facility <i>Denominator:</i> Total number of facilities

<b>Rationale</b>	See Appendix 5 for a list of waste disposal tracer items. Good waste control practices are required to support infection control and as well as the safety of both health workers and staff and clients.
<b>Data Source &amp; Year</b>	Service Provision Assessment (SPA), year varies. SPA is a survey is a health facility assessment that provides a comprehensive overview of a country's health service delivery. It collects information on the overall availability of different facility-based health services in a country and their readiness to provide those services.
<b>Limitations</b>	Service Availability and Readiness Assessment (SARA), 20XX. SARA is a health facility assessment tool designed to assess and monitor the service availability and readiness of the health sector and to generate evidence to support the planning and managing of a health system. SARA is designed as a systematic survey to generate a set of tracer indicators of service availability and readiness. The indicator conveys the extent to which waste disposal tracer items are present, but it does not indicate how well health workers adhere to infection control practices—for example, whether the posted guidelines are followed or if sharps are always disposed in the designated place/manner.
<b>VSP Methodology</b>	N/A

## 29. ADEQUATE INFECTION CONTROL

<b>Full Name of Indicator</b>	Proportion of clinic rooms with all control items
<b>Short name of indicator</b>	Adequate infection control
<b>Description</b>	Proportion of rooms (family planning, sick child, antenatal care, and non-communicable disease) where all infection control tracer items are present.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Quality / Safety
<b>Construction</b>	See Appendix 4 for a list of infection control tracer items. <i>Numerator:</i> Number of rooms where all the infection control tracer items were observed <i>Denominator:</i> Total number of rooms observed
<b>Rationale</b>	Adequate infection control practices are a key element in protecting both health workers and clients from the transmission of infection. The list of infection control items included in this indicator forms a basic foundation for infection control in the health facility setting.
<b>Data Source &amp; Year</b>	Service Provision Assessment (SPA), year varies. SPA is a survey is a health facility assessment that provides a comprehensive overview of a country's health service delivery. It collects information on the overall availability of different facility-based health services in a country and their readiness to provide those services.  Service Availability and Readiness Assessment (SARA), year varies. SARA is a health facility assessment tool designed to assess and monitor the service availability and readiness of the health sector and to generate evidence to support the planning and managing of a health system. SARA is designed as a systematic survey to generate a set of tracer indicators of service availability and readiness.
<b>Limitations</b>	The indicator conveys the extent to which infection control items are present, but it does not indicate how well health workers adhere to infection control practices—for example, whether they use soap and water to wash their hands, wear gloves, or disinfect surfaces.
<b>VSP Methodology</b>	N/A

## SERVICE COVERAGE

**Coverage** looks at the effective application of a broad range of PHC-focused clinical services for the population in need of such services.

## RMNCH

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### 30. DEMAND FOR FAMILY PLANNING SATISFIED WITH MODERN METHODS

<b>Full Name of Indicator</b>	Demand satisfied with modern methods among women 15-49 years who are married or in a union (%)
<b>Short name of indicator</b>	Demand for family planning satisfied with modern methods
<b>Description</b>	Proportion of married or in-union women of reproductive age (aged 15-49 years) who are married or in a union and have their need for family planning satisfied with modern methods.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Coverage / RMNCH
<b>Construction</b>	<i>Numerator:</i> Number of married or in-union women of reproductive age (15–49 years old) who are currently using, or whose sexual partner is currently using, at least one modern contraceptive method <i>Denominator:</i> Total demand for family planning (the sum of contraceptive prevalence (any method) and the unmet need for family planning)
<b>Rationale</b>	Use of modern contraception is a critical component of women’s, maternal, and population health. This indicator serves as a proxy for population access to reproductive health services, particularly women’s access, which are frequently delivered through the primary health care system and are essential for meeting many health targets. Demand satisfied with a modern method is SDG indicator 3.7.1.
<b>Data Source &amp; Year</b>	Taken from joint World Bank/WHO “Tracking Universal Health Coverage: 2017 Global Monitoring Report” based on data from most recent year available. Data are sourced from UNPD estimates based on household surveys, including Demographic and Health Survey (DHS), year varies. DHS is a nationally-representative household survey that provides data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition. Standard DHS surveys have large sample sizes (usually between 5,000 and 30,000 households) and typically are conducted about every 5 years, to allow comparisons over time.
<b>Limitations</b>	In some surveys, the lack of probing questions, asked to ensure that the respondent understands the meaning of the different contraceptive methods, can result in an underestimation of contraceptive prevalence. Sampling variability may be an issue, particularly when contraceptive prevalence, modern methods is measured for a specific subgroup (according to method, age-group, level of educational attainment, place of residence, etc.) or when analyzing trends over time. This indicator is a measure of both service coverage and fertility preferences and, as such, no target exists. This indicator also specifically addresses only those women who are married or in a union, and may fail to account for any barriers to access encountered by those women who are not but may still desire or benefit from contraception.
<b>VSP Methodology</b>	N/A

### 31. ANTENATAL CARE COVERAGE (4+ VISITS)

<b>Full Name of Indicator</b>	Antenatal care coverage, four or more visits (ANC4) (%)
<b>Short name of indicator</b>	Antenatal care coverage (4+ visits)

<b>Description</b>	Antenatal care coverage (4+) visits is the percent of women with a live birth who received antenatal care (ANC) 4 or more times.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Coverage / RMNCH
<b>Construction</b>	<i>Numerator:</i> The number of women aged 15-49 surveyed with a live birth in a given time period who received antenatal care four or more times from any provider <i>Denominator:</i> Total number of women aged 15-49 with a live birth in the same period
<b>Rationale</b>	Antenatal care coverage is an indicator of access and use of health care during pregnancy. The antenatal period presents opportunities for reaching pregnant women with interventions that may be vital to their health and wellbeing and that of their infants. Receiving antenatal care at least four times, as recommended by WHO, increases the likelihood of receiving effective maternal health interventions during antenatal visits.
<b>Data Source &amp; Year</b>	Taken from joint World Bank/WHO “Tracking Universal Health Coverage: 2017 Global Monitoring Report” based on data from most recent year available. Data are sourced from the WHO/RHR global database, which compiles empirical data from DHS, MICS and other national household surveys. Available survey data on this indicator usually do not specify the type of provider; therefore, in general, receipt of care by any provider is measured. At the global level, data from facility reporting are not used. Before data are included into the global databases, UNICEF undertakes a process of data verification that includes correspondence with field offices to clarify any questions regarding estimates.
<b>Limitations</b>	Receiving antenatal care during pregnancy does not guarantee the receipt of interventions that are effective in improving maternal health (effective coverage). Although the indicator for “at least one visit” refers to visits with skilled health providers (doctor, nurse, or midwife), “four or more visits” usually measures visits with any provider because national-level household surveys do not collect provider data for each visit. In addition, standardization of the definition of skilled health personnel is sometimes difficult because of differences in training of health personnel in different countries (UNICEF). Recall error is a potential source of bias in the data.
<b>VSP Methodology</b>	N/A

## 32. COVERAGE OF DTP3 IMMUNIZATION

<b>Full Name of Indicator</b>	One-year-old children who have received 3 doses of diphtheria-tetanus-pertussis vaccine (DTP3), (%)
<b>Short name of indicator</b>	Coverage of DTP3 immunization
<b>Description</b>	Diphtheria-tetanus-pertussis (DTP) coverage measures the percent of one-year-olds who have received three doses of the combined diphtheria, tetanus toxoid and pertussis vaccine in a given year.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Coverage / RMNCH
<b>Construction</b>	<i>Numerator:</i> Number of children of aged 12 months surveyed who have received three doses of the combined diphtheria, tetanus toxoid and pertussis vaccine in a given year <i>Denominator:</i> Total population of children aged 12 months surveyed
<b>Rationale</b>	Immunization is an essential component for reducing under-five mortality. Immunization coverage estimates are used to monitor coverage of immunization services and to guide disease eradication and elimination efforts.
<b>Data Source &amp; Year</b>	Taken from joint World Bank/WHO “Tracking Universal Health Coverage: 2017 Global Monitoring Report” based on data from most recent year available. The WHO and UNICEF regularly report and release updated immunization coverage data related to the Global Vaccine Action Plan. Data are based on country reported administrative data and household surveys.
<b>Limitations</b>	Given the prevalence of global support for immunization efforts, a high coverage rate of DTP3 immunization may be reflective of strong support from vertical programming in some countries. As such, DTP3 coverage alone is not necessarily a proxy for health system performance.
<b>VSP Methodology</b>	N/A

### 33. CARE-SEEKING FOR SUSPECTED CHILD PNEUMONIA

<b>Full Name of Indicator</b>	Care-seeking behavior for children with suspected pneumonia (%)
<b>Short name of indicator</b>	Care-seeking for suspected child pneumonia
<b>Description</b>	Percentage of children under 5 years of age with suspected pneumonia (cough and difficulty breathing NOT due to a problem in the chest and a blocked nose) in the two weeks preceding the survey taken to an appropriate health facility or provider.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Coverage / RMNCH
<b>Construction</b>	<i>Numerator:</i> Number of children (0-59 months) with suspected pneumonia in the two weeks preceding the survey taken to an appropriate health provider <i>Denominator:</i> Number of children (0-59 months) with suspected pneumonia in the two weeks preceding the survey
<b>Rationale</b>	Pneumonia is a leading cause of child illness and mortality. The strategy for ending preventable child deaths from pneumonia and diarrhea includes a focus on encouraging appropriate care seeking, a key link to receiving appropriate treatment. A number of strategies and programmes to improve care seeking have been developed and implemented in a number of countries.
<b>Data Source &amp; Year</b>	Taken from joint World Bank/WHO “Tracking Universal Health Coverage: 2017 Global Monitoring Report” based on data from most recent year available. Data are sourced from the UNICEF global database from Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS).
<b>Limitations</b>	Results are taken from surveys and as a result are subject to recall bias and limitations due to survey design.
<b>VSP Methodology</b>	N/A

## Infectious Diseases

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### 34. TB CASES DETECTED AND TREATED WITH SUCCESS

<b>Full Name of Indicator</b>	Tuberculosis cases detected and treated with success (%)
<b>Short name of indicator</b>	Tuberculosis cases detected and treated with success
<b>Description</b>	Number of new and relapse cases of tuberculosis (TB) that were notified and treated successfully in a given year, divided by the estimated number of incident TB cases in the same year, expressed as a percentage.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Coverage / Infectious Diseases
<b>Construction</b>	<i>Numerator:</i> Number of new and relapse cases notified and treated in a given year <i>Denominator:</i> Number of estimated incident cases in the same year
<b>Rationale</b>	This indicator combines case detection rate with treatment success rate to estimate how well the system is detecting and successfully treating TB cases. Treatment success is an indicator of the performance of national TB programs. It also serves as a proxy for a number of aspects of successful service delivery within a health system, including diagnostic and treatment accuracy and the system’s ability to capture and follow up with patients.
<b>Data Source &amp; Year</b>	Taken from joint World Bank/WHO “Tracking Universal Health Coverage: 2017 Global Monitoring Report” based on data from most recent year available. Estimates of TB incidence are produced through a consultative and analytical process led by WHO and are published annually. These



	estimates are based on annual case notifications, assessments of the quality and coverage of TB notification data, national surveys of the prevalence of TB disease, and information from death (vital) registration systems. Estimates of incidence for each country are derived, using one or more of the following approaches depending on available data: <ol style="list-style-type: none"> <li>1. incidence = case notifications/estimated proportion of cases detected;</li> <li>2. incidence = prevalence/duration of condition;</li> <li>3. incidence = deaths/proportion of incident cases that die.</li> </ol>
<b>Limitations</b>	These estimates of TB incidence are combined with country-reported data on the number of cases detected and treated, and the percentage of cases successfully treated, as described above. The proposed data source for this indicator measures only public sector TB programs and does not include results from private-sector treatment programs or facilities. Therefore, in countries with strong private-sector TB programs, the results do not reflect the totality of the TB treatment success rate.
<b>VSP Methodology</b>	N/A

### 35. PEOPLE LIVING WITH HIV RECEIVING ANTI-RETROVIRAL TREATMENT

<b>Full Name of Indicator</b>	People living with HIV receiving Antiretroviral Therapy (ART) (%)
<b>Short name of indicator</b>	People living with HIV receiving anti-retroviral treatment
<b>Description</b>	Percentage of people living with HIV currently receiving antiretroviral therapy (ART) among the estimated number of adults and children living with HIV.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Coverage / Infectious Diseases
<b>Construction</b>	<i>Numerator:</i> Number of adults and children who are currently receiving ART at the end of the reporting period <i>Denominator:</i> Estimated number of adults and children living with HIV
<b>Rationale</b>	ART has been shown to reduce HIV-related morbidity and mortality among people living with HIV and to reduce transmission of HIV. Effective provision of ART can be a marker of how well a health system reaches marginalized populations with higher HIV prevalence.
<b>Data Source &amp; Year</b>	Taken from joint World Bank/WHO "Tracking Universal Health Coverage: 2017 Global Monitoring Report" based on data from most recent year available. Data are sourced from WHO/UNAIDS estimates. Data on receipt of ART can be collected from facility-based ART registers or drug supply management systems. To estimate the denominator, a standard modelling HIV estimation method, such as in the Spectrum model, is recommended.
<b>Limitations</b>	The indicator permits monitoring trends in coverage but does not attempt to distinguish between different forms of antiretroviral therapy or to measure the cost, quality or effectiveness of, or adherence to the treatment regimen provided. These will each vary within and between countries and are liable to change over time. The indicator measures the number of people provided with medication but does not measure whether the individual took the medication thus it is not a measure of adherence.
<b>VSP Methodology</b>	N/A

### 36. USE OF INSECTICIDE-TREATED NETS (ITN) FOR MALARIA PREVENTION

<b>Full Name of Indicator</b>	Population at risk sleeping under insecticide-treated bed nets (%)
<b>Short name of indicator</b>	Use of insecticide-treated nets (ITN) for malaria prevention

<b>Description</b>	Percentage of population in malaria-endemic areas who slept under an insecticide-treated net (ITN) the previous night.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Coverage / Infectious Diseases
<b>Construction</b>	<i>Numerator:</i> Number of people in malaria-endemic areas who slept under an ITN <i>Denominator:</i> Total number of people in malaria endemic areas  Mathematical models can be used to combine data from household surveys on access and use with information on ITN deliveries from manufacturers and ITN distribution by national malaria programmes to produce annual estimates of ITN coverage. WHO uses this approach in collaboration with the Malaria Atlas Project. Methodological details can be found in the Annex of the World Malaria Report 2015. Due to fluctuations in estimated results, ITN is reported as a three year moving average.
<b>Rationale</b>	ITNs are a form of personal protection that has been shown to reduce malaria illness, severe disease, and death due to malaria in endemic regions. In community-wide trials in several African settings, ITNs have been shown to reduce the death of children under 5 years from all causes by about 20%.
<b>Data Source &amp; Year</b>	Taken from joint World Bank/WHO “Tracking Universal Health Coverage: 2017 Global Monitoring Report” based on data from most recent year available. Data are compiled by WHO from Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), and Malaria Indicator Surveys. Data on the number of ITNs delivered by manufacturers to countries are compiled by Milliner Global Associates, and data on the number of ITNs distributed within countries are reported by National Malaria Control Programs.
<b>Limitations</b>	Survey data is subject to recall bias and the estimate of total bed net usage is derived from a model. Malaria is not endemic everywhere, and thus this indicator is not collected or available for all countries.
<b>VSP Methodology</b>	N/A

### 37. CHILDREN UNDER 5 WITH DIARRHEA RECEIVING ORS

<b>Full Name of Indicator</b>	Treatment of diarrhea: Oral rehydration solution (ORS)
<b>Short name of indicator</b>	Children under 5 with diarrhea receiving ORS
<b>Description</b>	The percent of children with diarrhea, a leading cause of death in children under five, who received appropriate treatment with oral rehydration solution.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Coverage / Infectious Diseases
<b>Construction</b>	<i>Numerator:</i> Number of children under 5 years of age with diarrhoea in the two weeks preceding the survey given fluid from ORS packets or pre-packaged ORS fluids and zinc supplement <i>Denominator:</i> Total number of children aged 0–59 months with diarrhea in the two weeks prior to the survey
<b>Rationale</b>	Diarrhea is a leading cause of child illness and mortality. This is an important indicator of access to health commodities and effective treatment of a common cause of child mortality. This indicator reflects trust in the primary health care system, access to facilities, availability of common home treatments, and health knowledge and behavior.
<b>Data Source &amp; Year</b>	Demographic and Health Survey (DHS), year varies. DHS is a nationally-representative household survey that provides data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition. Standard DHS surveys have large sample sizes (usually between 5,000 and 30,000 households) and typically are conducted about every 5 years, to allow comparisons over time. Data were accessed from the DHS STATcompiler which may, in some cases, differ slightly from the results reported in the country’s DHS report.
<b>Limitations</b>	This indicator does not reflect whether oral rehydration salts and continued feeding were given appropriately. Most diarrhea-related deaths are due to dehydration, and many of these deaths can be prevented with the use of oral rehydration salts at home. However, recommendations for the use of oral rehydration therapy have changed over time based on scientific progress, so it is difficult to

VSP Methodology

accurately compare use rates across countries. Until the current recommended method for home management of diarrhea is adopted and applied in all countries, the data should be used with caution.  
 The prevalence of diarrhea may vary by season. Since country surveys are administered at different times, data comparability is further affected.  
 N/A

## Noncommunicable Diseases

### 38. PREVALENCE OF RAISED BLOOD PRESSURE (AGE-STANDARDIZED ESTIMATE)

<b>Full Name of Indicator</b>	Age standardized prevalence of raised blood pressure, regardless of treatment status (%)
<b>Short name of indicator</b>	Prevalence of raised blood pressure (age-standardized estimate)
<b>Description</b>	Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure $\geq 140$ mmHg and/or diastolic blood pressure $\geq 90$ mmHg).
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Performance / Coverage / NCDs
<b>Construction</b>	<i>Numerator:</i> Number of respondents with systolic blood pressure $\geq 140$ mmHg or diastolic blood pressure $\geq 90$ mmHg <i>Denominator:</i> All survey respondents with a valid measurement
<b>Rationale</b>	Hypertension is a leading risk factor for cardiovascular disease. The results for this indicator represent effective coverage for hypertension, a core part of management of NCDs to reduce complications including renal and cardiovascular disease. This indicator represents a proxy for effective health promotion and service coverage.
<b>Data Source &amp; Year</b>	Taken from joint World Bank/WHO "Tracking Universal Health Coverage: 2017 Global Monitoring Report" based on data from most recent year available. Data are sourced from NCD-RisC/WHO estimates based on household surveys including DHS and STEPS. Demographic and Health Survey (DHS), year varies. DHS is a nationally-representative household survey that provides data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition. Standard DHS surveys have large sample sizes (usually between 5,000 and 30,000 households) and typically are conducted about every 5 years, to allow comparisons over time. <a href="#">The STEPwise approach to non-communicable disease risk factor surveillance (STEPS)</a> focuses on obtaining core data at each level on the established risk factors that determine the major disease burden. It is based on survey data and may be supplemented by physical and biometric data.
<b>Limitations</b>	The defined adult population age range differs by country. Rates of normal blood pressure are also influenced by a range of determinants beyond health care service delivery, and thus even appropriate and robust provision of PHC clinical services may only have a limited impact on overall population-based prevalence of some NCDs.
<b>VSP Methodology</b>	For calculation of summary scores in the VSP, this variable was transformed by subtracting the value from 100 to determine the prevalence of normal blood pressure. These estimates were rescaled to provide finer resolution for the index, based on the observed minima across countries. The rescaled indicator = $(X-50)/(100-50)*100$ , where X is the prevalence of normal blood pressure.

## EQUITY

Equity in health service delivery and health outcomes is determined through measures that compare coverage, access and outcome measures across different population groups such as education levels, income, or place of residence.

### 39. PERCEIVED BARRIERS TO CARE DUE TO TREATMENT COSTS, BY WEALTH QUINTILE

<b>Full Name of Indicator</b>	Perceived barriers to care due to treatment costs: difference between richest wealth quintile and lowest wealth quintile
<b>Short name of indicator</b>	Perceived barriers to care due to treatment costs, by wealth quintile
<b>Description</b>	Difference in perceived access barriers due to cost for women of the fifth (highest) income quintile versus those of the first (lowest) income quintile.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Equity / Access
<b>Construction</b>	This indicator is disaggregated by wealth quintile. <i>Numerator:</i> Number of women who report specific problems in accessing health care when they are sick due to issues related to getting money for treatment <i>Denominator:</i> Number of women interviewed
<b>Rationale</b>	Financial access is a critical component of health services access, and access barriers due to cost can have detrimental effects on the utilization and effectiveness of health services. Achieving equitable access to health care across income groups is an essential goal of primary health care.
<b>Data Source &amp; Year</b>	Demographic and Health Survey (DHS), year varies. DHS is a nationally-representative household survey that provides data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition. Standard DHS surveys have large sample sizes (usually between 5,000 and 30,000 households) and typically are conducted about every 5 years, to allow comparisons over time. Data were accessed from the DHS STATcompiler which may, in some cases, differ slightly from the results reported in the country's DHS report.
<b>Limitations</b>	This indicator captures access barriers due to treatment costs, but it may not capture financial barriers to access that are related to transport or medicines required following diagnosis. Results are taken from surveys and as a result are subject to recall bias and limitations due to survey design. Note that this variable relies on perceived, rather than actual costs.
<b>VSP Methodology</b>	N/A

### 40. COVERAGE OF RMNCH SERVICES, BY MOTHER'S EDUCATION

<b>Full Name of Indicator</b>	Coverage of RMNCH services: difference between at least secondary education and no education
<b>Short name of indicator</b>	Coverage of RMNCH services, by mother's education
<b>Description</b>	Difference in RMNCH coverage index for households with mothers that have completed secondary level education versus those without secondary level education.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Equity / Coverage
<b>Construction</b>	Weighted score of eight RMNCH interventions, including: <ol style="list-style-type: none"> <li>1. Demand for family planning satisfied (modern methods);</li> <li>2. Antenatal care coverage (at least four visits);</li> <li>3. Births attended by skilled health personnel;</li> <li>4. BCG immunization coverage among one-year-olds;</li> <li>5. Measles immunization coverage among one-year-olds;</li> <li>6. DTP3 immunization coverage among one-year-olds;</li> <li>7. Children aged less than five years with diarrhoea receiving oral rehydration therapy and continued feeding; and</li> <li>8. Children aged less than five years with pneumonia symptoms taken to a health facility - disaggregated by mother's education.</li> </ol>
<b>Rationale</b>	Achieving equitable coverage of basic services is a goal of primary health care.

<b>Data Source &amp; Year</b>	Health Equity Monitor, year varies. Data are based on DHS and MICS.
<b>Limitations</b>	Results are taken from surveys and as a result are subject to recall bias and limitations due to survey design.
<b>VSP Methodology</b>	N/A

#### 41. UNDER-FIVE MORTALITY RATE, BY RESIDENCE

<b>Full Name of Indicator</b>	Under-five mortality rate: difference between urban and rural residence
<b>Short name of indicator</b>	Under-five mortality rate, by residence
<b>Description</b>	Difference in under 5 mortality rates between residents of urban areas and rural areas. Probability (expressed as a rate per 1000 live births) of a child born in a specific year or period dying before reaching the age of five years, if subject to age-specific mortality rates of that period.
<b>Comparability</b>	Comparable / Standard Indicator
<b>VSP Domain and Sub-Domain</b>	Equity / Mortality
<b>Construction</b>	This indicator is disaggregated by place of residence (urban or rural). <i>Numerator:</i> Deaths among children aged 0–4 years (0–59 months of age) <i>Denominator:</i> Number of live births (expressed per 1,000 live births)
<b>Rationale</b>	Achieving equitable health outcomes, across geographic areas, is an essential goal of primary health care. Under-five mortality includes infant and neonatal deaths and reflects the effectiveness of numerous essential services that children receive during their first years of life through primary health care systems, including but not limited to vaccinations, breastfeeding promotion, and nutrition counselling for mothers. It also reflects the social, economic and environmental conditions in which children (and others in society) live. Because data on the incidence and prevalence of diseases (morbidity data) frequently are unavailable, mortality rates are often used to identify vulnerable populations. This indicator captures more than 90% of global mortality among children under age 18.
<b>Data Source &amp; Year</b>	WHO Health Equity Monitor, year varies. Data are based on DHS and MICS.
<b>Limitations</b>	The reliability of estimates of under-five mortality depends on the accuracy and completeness of reporting and recording of births and deaths. Underreporting and misclassification are common.
<b>VSP Methodology</b>	N/A

## APPENDICES

### APPENDIX 1: TRACER ITEMS FOR TECHNICAL QUALITY OF ANC VISITS

	First visit	All follow-up visits*
<b>History Taking - Provider asked:</b>		
• Maternal age	1	0
<b>Past pregnancy history</b>		
• Miscarriage / stillbirth	1	0
• Infant death < week	1	0
• Heavy bleeding ~ delivery	1	0
• Assisted delivery	1	0
• Spontaneous abortions	1	0
<b>Asked about danger signs in current pregnancy</b>		
• Bleeding	1	1
• Fever	1	1

	First visit	All follow-up visits*
• Headache or blurred vision	1	1
• Swollen face or hands	1	1
• Tiredness or breathlessness	1	1
• Felt baby moving	1	1
• Other symptoms or problems	1	1
• Last menstrual period to calculate gestational age	1	0
• Previous complications on record	0	1
<b>Routine Examination - Provider examined for or assessed</b>		
• Pallor	1	1
• Oedema	1	1
• Breast	1	0
• Blood pressure	1	1
• Client weight	1	1
• Fundal height	1	1
• Vaginal exam	1	0
• Fundal height	1	1
• Fetal heart rate	0	1
• Ultrasound	1	0
<b>Laboratory Investigations - Provider asked about, performed, or referred patient for</b>		
• Anaemia test	1	2/3
• Syphilis test	1	1/3
• HIV testing and counseling	1	1/3**
• Urine test (proteinuria, bacteriuria)	1	2/3
• Blood group test	1	0
<b>Client Treatment</b>		
• Prescribed or gave iron or folic acid or both	1	1
• Provider prescribed or gave tetanus toxoid injection	1	1/3
• Provider discussed diet and nutrition	1	1
• Prescribed or gave intermittent preventive treatment in pregnancy (IPTp)	0	1
<b>Counseling</b>		
• Nutrition	1	1
• Sleeping under an insecticide-treated net	1	1
<b>Delivery plans</b>		
• Where to go	1	1
• Preparation (\$, transport)	1	1
• Health professional assistance	1	1
• What to have on hand for delivery	1	1
• Emergency planning: supplies for home delivery	1	1
• Newborn immunization	1	1
• Provider gave (exclusive) breastfeeding advice	0	2/3
• Post-partum and postnatal care	0	2/3
• Pregnancy spacing	0	2/3
<b><i>Danger signs requiring return to clinic</i></b>		

	First visit	All follow-up visits*
• Bleeding	1	1
• Fever	1	1
• Headache or blurred vision	1	1
• Swollen face or hands	1	1
• Tiredness or breathlessness	1	1
<b>Communication</b>		
• Visual aids	1	1
• Check ANC card	1	1
• Write on ANC card	1	1
• Encourage questions	1	1
• Explained purpose of TT	1	1
• Explained purpose of iron / folate	1	1
• Explained how to take iron / folate	1	1
• Explained side effects of iron / folate	1	1

\*Items not required at every follow-up visit are weighted by the number of times each should be done out of the three follow-up visits.

\*\*Included in follow-up visit only for countries with generalized HIV epidemics (>1% prevalence among women at ANC). WHO recommends routine re-testing for generalized epidemics, targeted re-testing for concentrated epidemics.

## APPENDIX 2: TRACER ITEMS FOR TECHNICAL QUALITY OF FP VISITS

### Reproductive history

- Age
- Living children
- Last delivery date
- Pregnancy complications
- Last menstrual period
- Desire for child / more children
- Desired timing for birth of next child
- Breastfeeding
- Menses

### Health history / exam

- Blood pressure
- Weight
- Smoking
- STI symptoms
- Chronic illness
- Pelvic exam

### Counsel on method

- Any counseling on method
- Explain how to use the method
- Talk about possible side effects
- Tell client what to do if have any problems

### Privacy

- Ensured visual privacy

- Ensured auditory privacy
- Assured client of confidentiality

**Discuss**

- Discussed partner attitude
- Discussed partner status
- Discussed risk of STI / HIV
- Discussed condoms
- Discussed dual method use

**Communication**

- Asked client about concerns regarding current method
- Visual aids
- Check card
- Write on card

### APPENDIX 3: TRACER ITEMS FOR TECHNICAL QUALITY OF SICK CHILD VISITS

	IMCI < 2 months	IMCI >=2 months
<b>History taking - Provider asks:</b>		
• Inability to drink anything	1	1
• Normal feeding pattern	1	0
• Sick feeding pattern	1	0
• Cough or difficult breathing	0	1
• Diarrhoea and blood in stool (dysentery)	1	1
• Fever	0	1
• Vomiting	0	1
• Convulsions	1	1
• Maternal HIV status	1	1
• Ear problems	0	1
<b>Routine Examination</b>		
• Weight	1	1
• Plotted weight on chart	1	1
• Temperature	1	1
• Pallor	0	1
• Oedema of feet	0	1
• Count respirations	1	1
• Mouth (thrush in IMCI)	1	0
<b>Drug Administration and Immunization</b>		
• Immunized during visit/Checks Immunization Card	1	1
• Vitamin A dosage	1	1
• Deworming medication	0	1
<b>Client Education and Counselling**</b>		
• Explains how to administer prescribed medication	1	1
• Directions for feeding	1	1
• Describes danger signs requiring return to facility	1	1
• Scheduled/discussed return visit	1	1
• Gave diagnosis	0	1



## **APPENDIX 4: TRACER ITEMS FOR INFECTION CONTROL**

- Soap and running water, or hand disinfectant
- Appropriate storage of sharps waste (sharps box)
- Gloves
- Surface disinfectant
- Appropriate storage of infectious waste\*
- Single use – standard disposable or auto-disable syringes\*

\*Available on SARA surveys only

## **APPENDIX 5: TRACER ITEMS FOR WASTE DISPOSAL**

- Safe final disposal of sharps: disposed externally, or incinerated or burned in a protected area or pit, or dumped in a protected area or covered pit; and no unprotected waste is observed on the day of the survey
- Safe final disposal of infectious/hazardous waste: disposed externally, or incinerated or burned in a protected area or pit, or dumped in a protected area or covered pit; and no unprotected waste is observed on the day of the survey
- Facility has guidelines in place for waste management and standard precautions