PHC Vital Signs Profile: Indicator Description Sheets

KENYA

List of Indicators

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 $)

Full Name of Indicator	GDP per capita, PPP (current international dollars)
Short name of indicator	GDP per capita ($PPP international dollars)
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Context
Construction	*Numerator:* 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. *Denominator:* Total population
Rationale	GDP per capita is an important contextual indicator that provides information about the average annual income of country residents.
Data Source & Year	World Development Indicators (World Bank), 2017.
Limitations	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.
VSP Methodology	N/A

2. Population living in poverty (Under $1.90 int'l dollars / day)

Full Name of Indicator	Proportion of population below international poverty line of $1.90 per day (2011 PPP)
Short name of indicator	% Living in poverty
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Context
Construction	*Numerator:* Total population living on less than $1.90 international dollars per day *Denominator:* Total population
Rationale	Populations living in poverty may face greater barriers to health services access and utilization.
Data Source & Year	World Development Indicators (World Bank), 2015. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments.
Limitations	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.
VSP Methodology	N/A

3. Government health spending as percentage of GDP

Full Name of Indicator	Domestic General Government Health Expenditure as % of Gross Domestic Product (GDP)
Short name of indicator	Government health spending as % of GDP
Description	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.
Comparability	Comparable/Standard indicator
VSP Domain and Sub-Domain	Financing
Construction	*Numerator:* Domestic General Government Health Expenditure *Denominator:* Gross Domestic Product (GDP)
Rationale	Contributes to understanding overall government expenditure on health in relation to the size of the national economy.
Data Source & Year	WHO Global Health Expenditure Database, 2015.
Limitations	The indicator value presented may differ from country data sources due to the adoption of methods to enhance international comparability.
VSP Methodology	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)

Full Name of Indicator	Life expectancy at birth (years)
Short name of indicator	Life expectancy
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Outcomes
Construction	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.
Rationale	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.
Data Source & Year	Global Health Observatory (GHO), 2016. 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.
Limitations	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.
VSP Methodology	N/A

5. Maternal mortality ratio (per 100,000 live births)

Full Name of Indicator	Maternal mortality ratio (per 100,000 live births)
Short name of indicator	Maternal mortality ratio
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Outcomes
Construction	*Numerator:* Number of maternal deaths *Denominator:* Number of live births (expressed per 100,000 live births)
Rationale	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.
Data Source & Year	Global Health Observatory (GHO), 2015. 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.
Limitations	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.
VSP Methodology	N/A

6. Neonatal mortality rate (per 1,000 live births)

Full Name of Indicator	Neonatal mortality rate (probability of dying within the first 28 days of life per 1,000 live births)
Short name of indicator	Neonatal mortality rate
Description	The neonatal mortality rate is the probability of a newborn dying before reaching 28 days of age, expressed per 1,000 live births.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Outcomes
Construction	*Numerator:* Number of deaths of neonates at ages 0-28 days *Denominator:* Number of live births for a specified year (expressed per 1,000 live births)
Rationale	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.
Data Source & Year	UN IGME, 2016. 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.
Limitations	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.
VSP Methodology	N/A

7. Premature noncommunicable disease (NCD) mortality (probability)

Full Name of Indicator	Mortality between ages 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases (probability)
Short name of indicator	Premature NCD mortality
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Outcomes
Construction	*Numerator:* Number of deaths between ages 30 to 70 years from cardiovascular disease, cancer, diabetes, or chronic respiratory disease in a synthetic life table population. *Denominator:* Population at exact age 30 in the synthetic life table population.
Rationale	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.
Data Source & Year	Global Health Observatory (GHO), 2016. 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.
Limitations	The reliability of estimates depends on the accuracy and completeness of reporting and recording of births and deaths. Underreporting and misclassification are common.
VSP Methodology	N/A

8. Causes of death

Full Name of Indicator	Cause-specific mortality
Short name of indicator	Causes of death
Description	Causes of death disaggregated by percentage attributable to non-communicable diseases (NCDs), injuries, and communicable and other conditions (including maternal, perinatal, and nutritional conditions).
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Outcomes
Construction	*Numerator:* Total number of deaths by cause in a given year *Denominator:* Total number of deaths in a given year
Rationale	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.
Data Source & Year	Global Health Observatory (GHO), 2016. 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.
Limitations	The reliability of estimates depends on the accuracy and completeness of reporting and recording of births and deaths. Underreporting and misclassification are common.
VSP Methodology	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)

Full Name of Indicator	Current primary health care (PHC) expenditure per capita (USD)
Short name of indicator	PHC spending per capita
Description	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)[1]. To this subset of health services are added medical goods (medicines, glasses, hearing aids)[1]. 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.
Comparability	Comparable / Standard indicator
VSP Domain and Sub-Domain	Financing
Construction	*Numerator:* Current PHC Expenditure in USD *Denominator:* Population
Rationale	Captures the level of expenditure on PHC
Data Source & Year	Estimated by WHO using country published health accounts from 2015, following the SHA 2011 global standard.
Limitations	This indicator includes expenditure on medical goods that may be serving other services than primary health care services.
VSP Methodology	N/A

[1] For more information, refer to the System of Health Accounts 2011.

Prioritization of PHC

10. PHC spending as a share of overall health spending

Full Name of Indicator	Current PHC expenditure as % of Current Health Expenditure
Short name of indicator	PHC spending as % of CHE
Description	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)[2]. To this subset of health services are added medical goods (medicines, glasses, hearing aids)[1]. 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.
Comparability	Comparable / Standard indicator
VSP Domain and Sub-Domain	Financing
Construction	*Numerator:* Current Primary Health Care Expenditure *Denominator:* Current Health Expenditure
Rationale	PHC expenditure in relation to current health expenditure
Data Source & Year	Estimated by WHO using country published health accounts from 2015, following the SHA 2011 global standard.
Limitations	This indicator includes expenditure on medical goods that may be serving other services than primary health care services.
VSP Methodology	N/A

2 For more information, refer to the System of Health Accounts 2011

11. Government PHC spending as a share of government health spending

Full Name of Indicator	Domestic General Government PHC Expenditure as a % of Domestic General Government Health Expenditure
Short name of indicator	Share of domestic government health spending allocated to PHC
Description	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)[3]. To this subset of health services are added medical goods (medicines, glasses, hearing aids)[1]. 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.
Comparability	Comparable / Standard indicator
VSP Domain and Sub-Domain	Financing
Construction	*Numerator:* Domestic General Government PHC Expenditure *Denominator:* Domestic General Government Health Expenditure
Rationale	Contributes to understanding government prioritization towards PHC within the health sector.
Data Source & Year	Estimated by WHO using country published health accounts from 2015, following the SHA 2011 global standard.
Limitations	This indicator includes expenditure on medical goods that may be serving other services than primary health care services.
VSP Methodology	N/A

3 For more information, refer to the System of Health Accounts 2011

Sources of Spending

12. Government PHC spending as share of current PHC spending

Full Name of Indicator	Domestic General Government PHC Expenditure as % of Current Primary Health Care (PHC) Expenditure
Short name of indicator	Domestic government PHC spending as % of current PHC spending
Description	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)1. Note that capital investments are excluded.
Comparability	Comparable / Standard indicator
VSP Domain and Sub-Domain	Financing
Construction	*Numerator:* Domestic General Government Health Expenditure on Primary Health Care *Denominator:* Current Primary Health Care Expenditure
Rationale	This indicator reflects the share of domestic government expenditure in total PHC expenditure. This measure indicates government commitment to primary health care.
Data Source & Year	Estimated by WHO using country published health accounts from 2015, following the SHA 2011 global standard.
Limitations	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.
VSP Methodology	N/A

Performance

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

Where comparable data are available, scores for the Performance domain are color-coded green (good, 80+), yellow (medium, 60-79), or red (poor, <60). Scores based on data from non-comparable sources are colored gray.

Access

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

13. Perceived access barriers due to treatment costs

Full Name of Indicator	Perceived barriers to accessing care due to treatment costs
Short name of indicator	Perceived access barriers due to treatment costs
Description	Access barriers due to treatment cost measures the percent of women who self-report problems in accessing health care due to cost of treatment.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Access
Construction	*Numerator:* Number of women who report specific problems in accessing health care when they are sick due to issues related to getting money for treatment *Denominator:* Number of women interviewed
Rationale	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.
Data Source & Year	Demographic and Health Survey (DHS), 2014. 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.
Limitations	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.
VSP Methodology	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

Full Name of Indicator	Perceived barriers to accessing care due to distance
Short name of indicator	Perceived access barriers due to distance
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Access
Construction	*Numerator:* Number of women who report the distance to the health facility as a big problem in getting medical advice or treatment when sick *Denominator:* Number of women interviewed
Rationale	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.
Data Source & Year	Demographic and Health Survey (DHS), 2014. 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.
Limitations	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.
VSP Methodology	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

No recent indicator available from international or national data sources.

Continuity

15. DTP3 dropout rate

Full Name of Indicator	Dropout rate between 1st and 3rd DTP vaccination
Short name of indicator	DTP3 dropout rate
Description	Diptheria-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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Quality / Continuity
Construction	*Numerator:* [DTP1 Immunization Coverage - DTP3 Immunization Coverage] *Denominator:* DTP1 Immunization Coverage
Rationale	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.
Data Source & Year	WHO/UNICEF, 2017. The WHO and UNICEF regularly report and release updated immunization coverage data related to the Global Vaccine Action Plan.
Limitations	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.
VSP Methodology	For calculation of summary scores in the VSP, this variable was transformed by subtracting the value from 100.

16. Treatment success rate for new TB cases

Full Name of Indicator	Tuberculosis cases detected and treated with success
Short name of indicator	Treatment success rate for new TB cases
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Quality / Continuity
Construction	*Numerator:* Number of TB cases registered in a specified time period that were successfully treated with or without bacteriological evidence of success *Denominator:* Total number of TB cases registered in the same period
Rationale	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.
Data Source & Year	WHO TB Programme, 2015. Preferred data sources include patient record and surveillance systems.
Limitations	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.
VSP Methodology	N/A

Person-Centeredness

No recent indicator available from international or national data sources.

Provider Availability

17. Provider absence rate (%)

Full Name of Indicator	Provider absence rate (%)
Short name of indicator	Provider absence rate (%)
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Quality / Provider Availability
Construction	*Numerator:* Number of health professionals that are not off duty who are absent from the facility on an unannounced visit *Denominator:* 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.
Rationale	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.
Data Source & Year	Service Delivery Indicators (SDI), 2012. 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.
Limitations	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.
VSP Methodology	For calculation of summary scores in the VSP, this variable was transformed by subtracting the value from 100.

18. Adherence to clinical guidelines

Full Name of Indicator	Adherence to clinical guidelines
Short name of indicator	Adherence to clinical guidelines
Description	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 *should have been asked.*
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Quality / Provider Competence
Construction	*Numerator:* Total number of relevant history and examination questions asked by the provider *Denominator:* Total number of relevant history and examination questions that should have been asked by the provider
Rationale	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.
Data Source & Year	Service Delivery Indicators (SDI), 2012. 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.
Limitations	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 rarely account for multi-morbidity encountered in "real world" patients at the first contact point-of-care.
VSP Methodology	N/A

19. Diagnostic accuracy

Full Name of Indicator	Diagnostic accuracy
Short name of indicator	Diagnostic accuracy
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Quality / Provider Competence
Construction	*Numerator:* 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 *Denominator:* Total number of clinical cases tested
Rationale	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.
Data Source & Year	Service Delivery Indicators (SDI), 2012. 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.
Limitations	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

No recent indicator available from international or national data sources.

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

20. Demand for family planning satisfied with modern methods

Full Name of Indicator	Demand satisfied with modern methods among women 15-49 years who are married or in a union (%)
Short name of indicator	Demand for family planning satisfied with modern methods
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Coverage / RMNCH
Construction	*Numerator:* 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 *Denominator:* Total demand for family planning (the sum of contraceptive prevalence (any method) and the unmet need for family planning)
Rationale	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. This is SDG indicator 3.7.1.
Data Source & Year	Taken from joint World Bank/WHO "Tracking Universal Health Coverage: 2017 Global Monitoring Report" based on data from 2015. Data are sourced from UNPD estimates based on household surveys, including Demographic and Health Survey (DHS). 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.
Limitations	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.
VSP Methodology	N/A

21. Antenatal care coverage (4+ visits)

Full Name of Indicator	Antenatal care coverage, four or more visits (ANC4) (%)
Short name of indicator	Antenatal care coverage (4+ visits)
Description	Antenatal care coverage (4+) visits is the percent of women with a live birth who received antenatal care (ANC) 4 or more times.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Coverage / RMNCH
Construction	*Numerator:* 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 *Denominator:* Total number of women aged 15-49 with a live birth in the same period
Rationale	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.
Data Source & Year	Taken from joint World Bank/WHO "Tracking Universal Health Coverage: 2017 Global Monitoring Report" based on data from 2011. 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.
Limitations	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.
VSP Methodology	N/A

22. Coverage of DTP3 immunization

Full Name of Indicator	One-year-old children who have received 3 doses of diphtheria-tetanus-pertussis vaccine (DTP3), (%)
Short name of indicator	Coverage of DTP3 immunization
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Coverage / RMNCH
Construction	*Numerator:* 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 *Denominator:* Total population of children aged 12 months surveyed
Rationale	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.
Data Source & Year	Taken from joint World Bank/WHO "Tracking Universal Health Coverage: 2017 Global Monitoring Report" based on data from 2015. 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.
Limitations	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.
VSP Methodology	N/A

23. Care-seeking for suspected child pneumonia

Full Name of Indicator	Care-seeking behavior for children with suspected pneumonia (%)
Short name of indicator	Care-seeking for suspected child pneumonia
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Coverage / RMNCH
Construction	*Numerator:* Number of children (0-59 months) with suspected pneumonia in the two weeks preceding the survey taken to an appropriate health provider *Denominator:* Number of children (0-59 months) with suspected pneumonia in the two weeks preceding the survey
Rationale	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.
Data Source & Year	Taken from joint World Bank/WHO "Tracking Universal Health Coverage: 2017 Global Monitoring Report" based on data from 2014. Data are sourced from the UNICEF global database from Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS).
Limitations	Results are taken from surveys and as a result are subject to recall bias and limitations due to survey design.
VSP Methodology	N/A

24. TB cases detected and treated with success

Full Name of Indicator	Tuberculosis cases detected and treated with success (%)
Short name of indicator	Tuberculosis cases detected and treated with success
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Coverage / Infectious Diseases
Construction	*Numerator:* Number of new and relapse cases notified and treated in a given year *Denominator:* Number of estimated incident cases in the same year
Rationale	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.
Data Source & Year	Taken from joint World Bank/WHO "Tracking Universal Health Coverage: 2017 Global Monitoring Report" based on data from 2014. 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: 1. incidence = case notifications/estimated proportion of cases detected; 2. incidence = prevalence/duration of condition; 3. incidence = deaths/proportion of incident cases that die. 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.
Limitations	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.
VSP Methodology	N/A

25. People living with HIV receiving anti-retroviral treatment

Full Name of Indicator	People living with HIV receiving Antiretroviral Therapy (ART) (%)
Short name of indicator	People living with HIV receiving anti-retroviral treatment
Description	Percentage of people living with HIV currently receiving antiretroviral therapy (ART) among the estimated number of adults and children living with HIV.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Coverage / Infectious Diseases
Construction	*Numerator:* Number of adults and children who are currently receiving ART at the end of the reporting period *Denominator*: Estimated number of adults and children living with HIV
Rationale	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.
Data Source & Year	Taken from joint World Bank/WHO "Tracking Universal Health Coverage: 2017 Global Monitoring Report" based on data from 2015. 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.
Limitations	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.
VSP Methodology	N/A

26. Use of insecticide-treated nets (ITN) for malaria prevention

Full Name of Indicator	Population at risk sleeping under insecticide-treated bed nets (%)
Short name of indicator	Use of insecticide-treated nets (ITN) for malaria prevention
Description	Percentage of population in malaria-endemic areas who slept under an insecticide-treated net (ITN) the previous night.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Coverage / Infectious Diseases
Construction	*Numerator:* Number of people in malaria-endemic areas who slept under an ITN *Denominator:* 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.
Rationale	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%.
Data Source & Year	Taken from joint World Bank/WHO "Tracking Universal Health Coverage: 2017 Global Monitoring Report" based on data from 2015. 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.
Limitations	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.
VSP Methodology	N/A

27. Children under 5 with diarrhea receiving ORS

Full Name of Indicator	Treatment of diarrhea: Oral rehydration solution (ORS)
Short name of indicator	Children under 5 with diarrhea receiving ORS
Description	The percent of children with diarrhea, a leading cause of death in children under five, who received appropriate treatment with oral rehydration solution.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Coverage / Infectious Diseases
Construction	*Numerator:* 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 *Denominator:* Total number of children aged 0–59 months with diarrhea in the two weeks prior to the survey
Rationale	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.
Data Source & Year	Demographic and Health Survey (DHS), 2014. 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.
Limitations	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 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.
VSP Methodology	N/A

28. Prevalence of raised blood pressure (age-standardized estimate)

Full Name of Indicator	Age standardized prevalence of raised blood pressure, regardless of treatment status (%)
Short name of indicator	Prevalence of raised blood pressure (age-standardized estimate)
Description	Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure ≥ 140 mmHg and/or diastolic blood pressure ≥ 90 mmHg).
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Performance / Coverage / NCDs
Construction	*Numerator:* Number of respondents with systolic blood pressure ≥ 140mmHg or diastolic blood pressure ≥ 90mmHg *Denominator:* All survey respondents with a valid measurement
Rationale	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.
Data Source & Year	Taken from joint World Bank/WHO "Tracking Universal Health Coverage: 2017 Global Monitoring Report" based on data from 2015. Data are sourced from NCD-RisC/WHO estimates based on household surveys including Demographic and Health Survey (DHS) and STEPS. 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. The STEPwise approach to non-communicable disease risk factor surveillance (STEPS) 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.
Limitations	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.
VSP Methodology	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. For this reason, this indicator is shown as "percent of the population with normal blood pressure" on the VSP. 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.

Where comparable data are available, scores for the Equity domain are color-coded based on the difference between values to reflect good (green), medium (yellow), and poor (red). Scores based on data from non-comparable sources are colored gray.

29. Perceived barriers to care due to treatment costs, by wealth quintile

Full Name of Indicator	Perceived barriers to care due to treatment costs: difference between richest wealth quintile and lowest wealth quintile
Short name of indicator	Perceived barriers to care due to treatment costs, by wealth quintile
Description	Difference in perceived access barriers due to cost for women of the fifth (highest) income quintile versus those of the first (lowest) income quintile.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Equity / Access
Construction	This indicator is disaggregated by wealth quintile. *Numerator:* Number of women who report specific problems in accessing health care when they are sick due to issues related to getting money for treatment *Denominator:* Number of women interviewed
Rationale	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.
Data Source & Year	Demographic and Health Survey (DHS), 2014. 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.
Limitations	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.
VSP Methodology	N/A
Indicator cut points	Access: Difference between highest and lowest wealth quintiles Red > 50 Yellow 5-50 Green ≤ 5

30. Coverage of RMNCH services, by mother's education

Full Name of Indicator	Coverage of RMNCH services: difference between at least secondary education and no education
Short name of indicator	Coverage of RMNCH services, by mother's education
Description	Difference in RMNCH coverage index for households with mothers that have completed secondary level education versus those without secondary level education.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Equity / Coverage
Construction	Weighted score of eight RMNCH interventions, including: 1. Demand for family planning satisfied (modern methods); 2. Antenatal care coverage (at least four visits); 3. Births attended by skilled health personnel; 4. BCG immunization coverage among one-year-olds; 5. Measles immunization coverage among one-year-olds; 6. DTP3 immunization coverage among one-year-olds; 7. Children aged less than five years with diarrhoea receiving oral rehydration therapy and continued feeding; and 8. Children aged less than five years with pneumonia symptoms taken to a health facility - disaggregated by mother's education.
Rationale	Achieving equitable coverage of basic services is a goal of primary health care.
Data Source & Year	Health Equity Monitor, 2014. Data are based on DHS and MICS.
Limitations	Results are taken from surveys and as a result are subject to recall bias and limitations due to survey design.
VSP Methodology	N/A
Indicator cut points	Coverage: Difference between none and secondary education Red > 30 Yellow 3-30 Green ≤ 3

31. Under-five mortality rate, by residence

Full Name of Indicator	Under-five mortality rate: difference between urban and rural residence
Short name of indicator	Under-five mortality rate, by residence
Description	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.
Comparability	Comparable / Standard Indicator
VSP Domain and Sub-Domain	Equity / Mortality
Construction	This indicator is disaggregated by place of residence (urban or rural). *Numerator:* Deaths among children aged 0—4 years (0—59 months of age) *Denominator:* Number of live births (expressed per 1,000 live births)
Rationale	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.
Data Source & Year	WHO Health Equity Monitor, 2014. Data are based on DHS and MICS.
Limitations	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.
VSP Methodology	N/A
Indicator cut points	Outcomes: Difference between urban and rural Red > 40 Yellow 3-40 Green ≤ 3