

SDG indicator metadata

(Harmonized metadata template - format version 1.1)

0. Indicator information (SDG_INDICATOR_INFO)

0.a. Goal (SDG_GOAL)

Goal 3: Ensure healthy lives and promote well-being for all at all ages

0.b. Target (SDG_TARGET)

Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all

0.c. Indicator (SDG_INDICATOR)

Indicator 3.8.2: Proportion of population with large household expenditures on health as a share of total household expenditure or income

0.d. Series (SDG_SERIES_DESCR)

Applies to all series (SH_XPD_EARN25 and SH_XPD_EARN10)

0.e. Metadata update (META_LAST_UPDATE)

2023-05-15

0.f. Related indicators (SDG_RELATED_INDICATORS)

SDG indicators: 3.8.1; 1.1.1 and 1.2.1

0.g. International organisations(s) responsible for global monitoring

(SDG_CUSTODIAN_AGENCIES)

World Health Organization (WHO) and the World Bank

1. Data reporter (CONTACT)

1.a. Organisation (CONTACT_ORGANISATION)

World Health Organization (WHO)

2. Definition, concepts, and classifications (IND_DEF_CON_CLASS)

2.a. Definition and concepts (STAT_CONC_DEF)

Definition:

Proportion of the population with large household expenditure on health as a share of total household expenditure or income. Two thresholds are used to define “large household expenditure on health”: greater than 10% and greater than 25% of total household expenditure or income.

Concepts:

Indicator 3.8.2 is defined as the “Proportion of the population with large household expenditure on health as a share of total household expenditure or income”. In effect, it is based on a ratio exceeding a threshold. The two main concepts of interest behind this ratio are household expenditure on health (numerator) and total household consumption expenditure or, when unavailable, income (denominator).

Numerator

Household expenditure on health is defined as any expenditure incurred at the time of service use to get any type of care (promotive, preventive, curative, rehabilitative, palliative or long-term care), including all medicines, vaccines and other pharmaceutical preparations, as well as all health products, *from any type of provider and for all members of the household*. These health expenditures are characterized by direct payments that are financed by a household's income (including remittances), savings or loans **but do not include any third-party payer reimbursement**. They are labelled Out-Of-Pocket (OOP) payments in the classification of health care financing schemes (HF) of the International Classification for Health Accounts (ICHA). They are the most inequitable source of funding for the health system as they are solely based on the willingness and ability to pay of the household; they only grant access to the health services and health products individuals can pay for, without any solidarity between the healthy and the sick beyond the household¹, the rich and the poor; they represent a barrier to access for those people who are unable to find the economic resources need to pay out of their own pocket.

The components of household expenditure on health should be consistent with division 06 on the health of the UN Classification of Individual Consumption According to Purpose (COICOP) on medicines and medical products (06.1), outpatient care services (06.2), inpatient care services (06.3) and other health services (06.4)².

Further information on definitions and classifications of health expenditures should be consistent with the [International Classification for Health Accounts \(ICHA\)](#) and its family of classifications (for example, by type of provider).

Denominator

Expenditure on household consumption and household income are both monetary welfare measures. Household consumption is a function of permanent income, which is a measure of a household's long-term economic resources that determine living standards. Consumption is generally defined as the sum of the monetary values of all items consumed by the household on a domestic account during a common reference period³. It includes monetary expenditures on food and non-food non-durable goods and services consumed as well as the imputed values of goods and services that are not purchased but procured otherwise for consumption (value of in-kind consumption); the value use of durables, and the value use of owner-occupied housing. Information on household consumption is usually collected in household surveys that may use different approaches to measure 'consumption' depending on whether items refer to durable or non-durable goods and/or are directly produced by households.

The most relevant measure of income is disposable income, as it is close to the maximum available to the household for consumption expenditure during the accounting period. Disposable income is defined as total income less direct taxes (net of refunds), compulsory fees and fines. Total income is generally

¹ http://www.oecd-ilibrary.org/social-issues-migration-health/a-system-of-health-accounts/classification-of-health-care-financing-schemes-icha-hf_9789264116016-9-en

² Agenda item 3(l) available at <https://unstats.un.org/unsd/statcom/49th-session/documents/>; <http://unstats.un.org/unsd/cr/registry/regcs.asp?Cl=5&Lg=1&Co=06.1>

³ <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099225003092220001/p1694340e80f9a00a09b20042de5a9cd47e>

composed of income from employment, property income, income from household production of services for own consumption, transfers received in cash and goods, and transfers received as services⁴.

Income is more difficult to measure accurately due to its greater variability over time. Consumption is less variable over time and easier to measure. Therefore, it is recommended that whenever there is information on household consumption and income, the former is used (see the “comments and limitations” section to learn more about the sensitivity of 3.8.2 to the income/expenditure choice in the denominator). Statistics on 3.8.2 currently produced by WHO and the World Bank predominantly rely on consumption (see the section on data sources).

Thresholds

Two thresholds are used for global reporting to identify large household expenditure on health as a share of total household consumption or income: **a lower threshold of 10% (3.8.2 10) and a higher threshold of 25% (3.8.2 25)**. With these two thresholds, the indicator measures financial hardship (see the section on comments and limitations).

2.b. Unit of measure (UNIT_MEASURE)

Percent (%) (proportion of people)

2.c. Classifications (CLASS_SYSTEM)

For the definition of health expenditures (numerator)

- http://www.oecd-ilibrary.org/social-issues-migration-health/a-system-of-health-accounts/classification-of-health-care-financing-schemes-icha-hf_9789264116016-9-en

For the components of health expenditures (numerator)

- division 06 of the UN Classification of Individual Consumption According to Purpose (COICOP) https://unstats.un.org/unsd/class/revisions/coicop_revision.asp;

For the components of household total consumption (preferred denominator)

UN Classification of Individual Consumption According to Purpose (COICOP)
https://unstats.un.org/unsd/class/revisions/coicop_revision.asp;

3. Data source type and data collection method (SRC_TYPE_COLL_METHOD)

3.a. Data sources (SOURCE_TYPE)

The recommended data sources for the monitoring of the “Proportion of the population with large household expenditure on health as a share of total household expenditure or income” are household surveys with information on both household consumption expenditure on health and total household consumption expenditures, which are routinely conducted by national statistical offices. Household budget surveys (HBS) and household income and expenditure surveys (HIES) typically collect these as they are primarily undertaken to provide inputs to the calculation of consumer price indices or the compilation of national accounts. Another potential source of information is socio-economic or living standards surveys; however, some of these surveys may not collect information on total household consumption expenditures – for example, when a country measures poverty using income as the welfare indicator⁵. The most important criterion for selecting a data source to measure SDG indicator 3.8.2 is the

⁴ <http://www.ilo.org/public/english/bureau/stat/download/17thicls/r2hies.pdf>

⁵ <http://unstats.un.org/sdgs/metadata/files/Metadata-01-01-01a.pdf>

availability of both household consumption expenditure on health and total household consumption expenditures.

3.b. Data collection method (COLL_METHOD)

The World Health Organization (WHO) and the World Bank contact Ministries of Health and/or National statistical offices for two purposes: a) request access to the household survey microdata in order to produce SDG indicator 3.8.2; b) request estimates produced by the country itself.

A) The first type of request is done by each organization separately. WHO obtains access to the household survey microdata from national statistical offices through its regional offices or country offices. The access request is often part of technical assistance programs on health financing issues.

The World Bank also typically receives data from National Statistical Offices (NSOs) directly. In other cases, it uses NSO data received indirectly. For example, it receives data from Eurostat and LIS (Luxembourg Income Study), which provide the World Bank NSO data in its original form or harmonized for comparability. The Universidad Nacional de La Plata, Argentina and the World Bank jointly maintain the SEDLAC (Socio-Economic Database for Latin American and Caribbean) database that includes harmonized statistics on poverty and other distributional and social variables from 24 Latin American and Caribbean countries, based on microdata from household surveys conducted by NSOs. Data is obtained through country-specific programs, including technical assistance programs and joint analytical and capacity-building activities. The World Bank has relationships with NSOs on work programs involving statistical systems and data analysis. Poverty economists from the World Bank typically engage with NSOs broadly on poverty measurement and analysis as part of technical assistance activities.

The World Health Organization and the World Bank regularly undertake training events on the measurement of lack of financial protection coverage to produce SDG 3.8.2 indicator. This type of activity involves participants from the Ministry of Health as well as from the National Statistical Office.

All the country-year estimates produced by both organizations are assembled in a joint database following a quality assessment process (see section 4.j). Such estimates are included in a country consultation conducted to give an opportunity to i) review the estimates, the data sources and the methods used for computation; ii) provide information about additional data sources; iii) build a mutual understanding of the strengths and weaknesses of available data and ensure broad ownership of the results; and iv) request estimates produced by the country as further explained hereafter.

B) Estimates produced by each country are requested through a country consultation conducted by the World Health Organization. Following the WHO Executive Board resolution (EB107.R8), this process starts with WHO sending a formal request to ministries of health to nominate a focal point for the consultation. WHO sends draft estimates and methodological descriptions to them, copying countries' focal points for SDG reporting where nominated at the request of the UN Statistics Division. Codes are available to reproduce the estimates shared. The focal points then send to WHO their comments, often including new data or revised country estimates that are used to update the country estimates. Estimates produced by the countries are subject to the same quality assessment process and included in the joint database if they are not flagged in consumption or the health budget share (see section 4.j).

3.c. Data collection calendar (FREQ_COLL)

A country consultation on SDG 3.8.2 estimates is typically conducted between January and March every two years.

3.d. Data release calendar (REL_CAL_POLICY)

SDG 3.8.2 estimates at country, regional and global levels are released every two years either on December 12 (Universal Health Coverage day) or in September (UN General Assembly).

3.e. Data providers (DATA_SOURCE)

National Statistical Offices in collaboration with Ministries of Health. See 3.a Data sources for further details.

3.f. Data compilers (COMPILING_ORG)

The World Health Organization and the World Bank.

3.g. Institutional mandate (INST_MANDATE)

WHO support for monitoring the financial protection dimension of Universal Health Coverage (target 3.8, indicator 3.8.2 specifically) is underpinned by Resolution [WHA58.33](#) on sustainable health financing, universal coverage and social health insurance.

4. Other methodological considerations (OTHER_METHOD)

4.a. Rationale (RATIONALE)

Target 3.8 is about universal health coverage (UHC) and is defined as “Achieve universal health coverage, including *financial risk protection*, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all”. The concern is with all people and communities receiving the quality health services they need (including medicines and other health products) without financial hardship. Financial hardship is a key consequence of inadequate financial risk protection mechanisms and can be experienced in any country, regardless of the income level and type of health system. Indicator 3.8.2 is about identifying people with out-of-pocket health spending on health exceeding their ability to pay, which might lead to cutting spending on other basic needs such as education, food, housing and utilities. Reducing financial hardship in health is important on the global development agenda as well as a priority of the health sector of many countries across all regions.

4.b. Comment and limitations (REC_USE_LIM)

It is feasible to monitor indicator 3.8.2 on a regular basis using the same household survey data that is used to monitor SDG targets 1.1 and 1.2 on poverty⁶. These surveys are also regularly conducted for other purposes, such as calculating weights for the Consumer Price Index. These surveys are typically undertaken by National Statistical Offices (NSOs). Thus, monitoring the proportion of the population with large household expenditures on health as a share of total household consumption or income does not

⁶ <http://unstats.un.org/sdgs/metadata/files/Metadata-01-01-01a.pdf>

add any additional data collection burden so long as the health expenditure component of the household non-food consumption data can be identified. While this is an advantage, indicator 3.8.2 suffers from the same challenges of timeliness, frequency, data quality and comparability of surveys as SDG indicator 1.1.1. However, indicator 3.8.2 has its own conceptual and empirical limitations.

First, challenges to track out-of-pocket health spending (numerator): indicator 3.8.2 attempts to identify financial hardship that individuals face when using their income, savings or taking loans to pay for health care. However, most household surveys fail to identify the source of funding used by a household that is reporting health expenditure. In countries where there is no retrospective reimbursement of household spending on health, this is not a problem. If a household does report any expenditure on health, it would be because it will not be reimbursed by any third-party payer. It is, therefore, consistent with the definition given for direct health care payments (the numerator). For those countries, on the other hand, where there is retrospective reimbursement – for example, via a contributory health insurance scheme - the amount reported by a household on health expenditures might be totally or partially reimbursed at some later point, perhaps outside the recall period of the household survey.

Clearly, more work is needed to ensure that survey instruments gather information on the sources of funding used by the household to pay for health care or that the household survey instrument always specifies that health expenditures should be net of any reimbursement. The survey instrument and sample design should also be carefully reviewed to minimize measurement errors due to both non-sampling errors such as very short or very long recall periods precluding proper data collection of all health care components (overnight stay, medicines, etc.); or sampling errors such as over-sample of areas with a particularly low burden of disease.

Second, the sensitivity of the indicator to the choice of the welfare metric for disaggregation (consumption or income in the denominator): in the current definition of indicator 3.8.2, large health expenditures can be identified by comparing how much household spend on health to either household income or total household expenditure. Expenditure is the recommended measure of a household's resources (see concept section), but recent empirical work has demonstrated that while statistics on 3.8.2 at the country level are fairly robust to such choice, their disaggregation by income group is pretty sensitive to it. Income-based measures show a greater concentration of the proportion of the population with large household expenditure on health among the poor than expenditure-based measures (see Chapter 2 in the WHO and World Bank 2017 report on tracking universal health coverage as well as Wagstaff et al. 2018).

Third, cut-off values to identify large health expenditures: indicator 3.8.2. relies on a single cut-off point to identify what constitutes 'large health expenditure as a share of total household expenditure or income'. People just below such threshold are not taken into account, which is always the problem with measures based on cut-offs. This is simply avoided by plotting the cumulative distribution function of the health expenditure ratio behind 3.8.2. By doing so, it is possible to identify for any threshold the proportion of the population that is devoting any share of its household's budget to health.

Fourth, there are other indicators used to measure financial hardship, all based on the same data sources. The current definition of SDG indicator 3.8.2 is based on methodologies dating back to the 1990s developed in collaboration with academics at the World Bank and the World Health Organization. It corresponds to an indicator of the incidence of catastrophic health spending using a budget share approach (see references). In addition to SDG indicator 3.8.2, WHO also defines large health expenditure

in relation to non-subsistence spending^{7,8,9}, and both WHO and the World Bank use indicators of impoverishing health spending to assess to what extent OOP health spending deters efforts to “End poverty in all its form everywhere” (SDG 1).

Fifth, SDG indicator 3.8.2. needs to be tracked jointly with SDG indicator 3.8.1, as well as indicators of barriers to access. Two indicators have been chosen to monitor target 3.8 on Universal Health Coverage within the SDG framework. SDG indicator 3.8.1 is for the health service coverage dimension of universal health coverage (UHC), and SDG indicator 3.8.2 tracks the financial protection dimensions. These two indicators should always be monitored jointly. Indeed, some of the people seeking care face barriers to access related to financial constraints, acceptability issues, unavailability of services, or accessibility. Those unable to overcome such barriers (financial and non-financial ones) will not report any spending on health, which will tend to reduce SDG indicator 3.8.2 rates. When this happens, SDG indicator 3.8.1 levels should also be low as the tracer indicators of service coverage should reflect that large fractions of the population are unable to get the services they need. But specific indicators on barriers to access ought to be tracked to understand which type of barriers is precluding access to needed services.

4.c. Method of computation (DATA_COMP)

Population weighted average number of people with large household expenditure on health as a share of total household expenditure or income

$$\frac{\sum_i m_i \omega_i 1\left(\frac{\text{health expenditure of the household } i}{\text{total expenditure of the household } i} > \tau\right)}{\sum_i m_i \omega_i}$$

where i denotes a household, $1()$ is the indicator function that takes on the value 1 if the bracketed expression is true, and 0 otherwise, m_i corresponds to the number of household members of i , ω_i corresponds to the sampling weight of household i , τ is a threshold identifying large household expenditure on health as a share of total household consumption or income (i.e., 10% and 25%). Household health expenditure and household expenditure or income are defined as explained in the 2.a Definitions and concepts section. For more information about the methodology, please refer to Wagstaff et al. (2018) and Chapter 2 in the WHO and World Bank 2017 report on tracking universal health coverage.

4.d. Validation (DATA_VALIDATION)

The microdata obtained by WHO is requested to National Statistical Offices with the denominator (household total consumption expenditure) already constructed following their own guidelines and

⁷ Chapter 2 in “Tracking universal health coverage: 2017 global monitoring report”, World Health Organization and International Bank for Reconstruction and Development/ The World Bank; 2017; <http://www.who.int/healthinfo/indicators/2015/en/>;

⁸Xu, K., Evans, D. B., Carrin, G., Aguilar-Rivera, A. M., Musgrove, P., and Evans, T. (2007), “Protecting Households From Catastrophic Health Spending,” *Health Affairs*, 26, 972–983. Xu, K., Evans, D., Kawabata, K., Zeramdini, R., Klavus, J., and Murray, C. (2003), “Households Catastrophic Health Expenditure: A Multi-Country Analysis,” *The Lancet*, 326, 111–117.

⁹ http://www.euro.who.int/en/health-topics/Health-systems/health-systems-financing/publications/clusters/universal-health-coverage-financial-protection;http://applications.emro.who.int/dsaf/EMROPUB_2016_EN_19169.pdf?ua=1 ; http://apps.searo.who.int/uhchttp://www.paho.org/hq/index.php?option=com_content&view=article&id=11065%3A2015-universal-health-coverage-latin-america-caribbean&catid=3316%3Apublications&Itemid=3562&lang=en

follows those guidelines when the denominator is not provided. WHO generates the numerator (household total health spending) following the definitions and classifications described in 2.a and 2.c.

The microdata obtained by the World Bank is provided by country governments and typically includes the denominator and the numerator already constructed. Sometimes, the World Bank has to construct the welfare aggregate or adjust the aggregate provided by the country.

The microdata obtained by both institutions to track SDG indicator 3.8.2 has typically already been checked for quality to track other important indicators (e.g. SDG indicator 1.1.1). A quality assessment is performed before consulting countries on SDG 3.8.2 estimates (see section 4.k).

The estimates produced by both organizations are included in a consultation to obtain the country's feedback and revise as needed.

4.e. Adjustments (ADJUSTMENT)

Not applicable

4.f. Treatment of missing values (i) at country level and (ii) at regional level (IMPUTATION)

- **At country level**

At the country level, no imputation is attempted to produce estimates. The proportion of the population with large household expenditure on health as a share of total household expenditure or income is estimated for all years for which a nationally representative survey on the household budget, household income and expenditure, socio-economic conditions or living standards is available with information on both total household expenditure or income and total household expenditure on health. When there are multiple surveys over time for the same country from different collections, a preference is given to estimates produced based on the same type of survey. A series of tests is performed to retain the best performing series (see 4.k).

- **At regional levels**

Because surveys are not conducted yearly in most countries, SDG 3.8.2 estimates across countries are computed for different years. To compute regional and global aggregates for a common reference year (i.e. every five years between 2000 and 2015; every two years from 2015.), survey-based country estimates are "lined-up" using one of the following different methods depending upon the availability of information for that country around or at the reference year (T^*): In countries for which there is an observed incidence rate of the SDG indicator 3.8.2 in the reference year T^* , this point is used. When there are at least two observed incidence rates of the SDG indicator 3.8.2 around the reference over a 5-year window around the reference year [T^*-5 ; T^*+5], linear interpolation is used to project the value of SDG indicator 3.8.2 in the reference year. If these conditions are not met but there are at least two observed incidences rates of the SDG indicator 3.8.2, a multilevel model is estimated using the aggregate share of out-of-pocket health spending over total consumption expenditure as the explanatory variable if that information is available. If such information is not available or there aren't two incidence rates of the SDG indicator 3.8.2, the incidence rate is imputed in the reference year with the median incidence in that year among countries within the same income group (low, lower-middle, upper-middle, or high) as classified by the World Bank. If such classification is missing, the regional median value of the SDG indicator 3.8.2 at the 10% threshold is used. The regional classification used for the imputation is M49

level 1. The country estimates for the reference year are then aggregated up to the regional and global levels to compute the “Total population with household expenditures on health greater than 10% of total household income or expenditure” in millions. The proportion of the total population at the global and regional levels is then calculated by expressing these numbers as a share of the relevant population, equivalent to taking a population-weighted average of the relevant country rates. For more information, please consult the [WHO Global Health Observatory metadata registry](https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4844) (<https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4844>).

The aggregate proportion of the population with large household expenditure on health as a share of total household expenditure or income for a region corresponds to the total number of people across all the countries in that region with such large expenditures divided by the total number of people in that region.

4.g. Regional aggregations (REG_AGG)

Regional and global aggregates correspond to population-weighted averages of the “lined-up” country estimates (see 4.f).

The World Bank and the World Health Organization use their own regional grouping in addition to the regional breakdown used for SDG reporting.

4.h. Methods and guidance available to countries for the compilation of the data at the national level (DOC_METHOD)

All documentation needed to compile the data at the national level is shared with nominated focal points every two years. It can be requested by National Statistical Offices as well as Ministries of Health along with Stata codes, to uhc_stats@who.int, subject: package to produce SDG indicator 3.8.2.

4.i. Quality management (QUALITY_MGMNT)

The quality of the estimates is managed through WHO Health Financing and Economics unit and the World Bank Health, Nutrition and Population Global Practice, Global Engagement Unit

4.j Quality assurance (QUALITY_ASSURE)

The estimates released by the World Health Organization and the World Bank are quality checked by members of the WHO Health Financing and Economics unit and the World Bank Health, Nutrition and Population Global Practice, Global Engagement Unit and submitted to a country consultation composed of members of the relevant National Statistical Offices and Ministry of health every two years.

4.k Quality assessment (QUALITY_ASSMNT)

The World Health Organization and the World Bank generate indicator 3.8.2 following the methods, validation and treatment of missing values described in sections 4.c. to 4.d. Both institutions combine estimates at the meso-level. Eligibility of the estimates included in a joint global database at a country level and used to produce regional and global estimates is based on the following quality assessment:

For the denominator of the health expenditure ratio

- Compare the average monthly total household per capita consumption or income in a benchmark source with the average monthly value estimated from the survey. The comparison is based on the ratio of both averages (benchmark source to the survey-based estimate). If the ratio is greater than 20% (when both averages are based on consumption) or 30% (when the benchmark source estimate is based on income and the survey-based one on consumption), the survey point is identified as an outlier in terms of consumption per capita and flagged for possible exclusion. Both averages are expressed in international dollars. The source for the benchmark average is either the Poverty and Inequality Platform¹⁰ (already expressed in international dollars), or derived from the World Development Indicators (WDI)¹¹ and computed as the household final consumption expenditures in constant international dollars divided by the total population. The average estimated from the survey is available in local nominal currency units. It is converted into international dollars using purchasing power parities (PPP) for private consumption and consumer index prices. PPP data are downloadable from the World Bank's (WDI) data website¹⁴ and the Poverty and Inequality Platform (PIP). Data on CPIs is also downloadable from the Poverty and Inequality Platform (PIP). PIP is the preferred data source for both CPIs and PPPs.
- Compare the poverty headcount estimated from the survey using international poverty lines with the poverty incidence reported in Poverty and Inequality Platform at the same poverty lines (benchmark value). When the absolute difference between the benchmark value and the survey-based estimate exceeds 10 percentage points, the survey-based point is identified as an outlier to track poverty using international poverty lines and flagged for possible exclusion. An extreme and moderate poverty line are used for this assessment. The latest value of international extreme poverty line is \$2.15 per day per capita using 2017 purchasing power parities (PPPs) for private consumption and replaces the \$1.90 poverty line based on 2011 PPPs. The latest value of the moderate international poverty line is \$3.65 per person per day is based on 2017 PPPs which replaces the \$3.20 poverty line based on 2011 PPPs. It corresponds to the typical standard used to assess national poverty levels in lower-middle-income countries. **For more information about the latest purchasing power parity revision (PPP), please consult <https://www.worldbank.org/en/news/factsheet/2022/05/02/fact-sheet-an-adjustment-to-global-poverty-lines>**

For the numerator of the health expenditure ratio

- Compare the average health expenditure ratio in the survey to a benchmark average health budget share. The latter is constructed from national health accounts data as the ratio of the aggregate measure of household out-of-pocket expenditures to the final consumption expenditure of households and profit institutions serving households, both in current local currency. When the absolute difference exceeds 5 percentage points, the survey point is identified as an outlier in terms of household budget share spent on health and flagged for possible exclusion. The macro-indicators are available from the [Global Health Expenditure Database](#) (GHED)¹².

These benchmarks are also used to decide which estimates to accept between two estimates for those countries and the years for which both institutions have the same data source. For a survey-based estimate of SDG indicator 3.8.2 to be included in the joint database and, therefore, in the country consultation conducted every two years previously described, it cannot be an outlier in consumption, nor in terms of the health budget share.

Estimates produced by the countries and shared through the country consultation are subject to the same quality assurance process. They are included in the joint database if they are not flagged neither in consumption nor in the health budget share.

¹⁰ <https://pip.worldbank.org/home>

¹¹ <https://datacatalog.worldbank.org/dataset/world-development-indicators>

¹² <https://apps.who.int/nha/database>

5. Data availability and disaggregation (COVERAGE)

Data availability:

The number of countries or territories with SDG 3.8.2 data increases over time as more surveys become available.. For more information and to get the latest updates, please use WHO and World Bank dedicated data portals:

<https://www.who.int/data/gho/data/themes/topics/financial-protection> and
<https://datatopics.worldbank.org/universal-health-coverage/>

Time series:

The frequency of such data is similar to the frequency of the data used to produce SDG indicator 1.1.1. It varies across countries but on average, this ranges from an annual 1-year basis to 3 to 5 years.

Disaggregation:

The following disaggregation is possible in so far as the survey has been designed to provide representative estimates and/or there are enough observations collected at such level:

- Geographic location (rural/urban)
- Sex of the head of the household (male/female);
- Age and sex of the head of the household (below 60 years old/ 60 years or older; male/female);
- Age composition of the household based on the following grouping: “Adults only (20-59 years old)” - households that consist of members aged between 20 and 59 years old; “Adults with children and adolescents (below 60 years old members)” - households that consist of members aged below 60 only as follows: at least one member below 20 years old AND at least one member aged between 20 and 59 years old; “Multigenerational households (all ages)” - households that include at least one person below 20 years old AND at least one person aged between 20 and 59 years old AND at least one person ≥ 60 years old; “Adults with older persons (from 20 years old)” - households that consist of members aged ≥ 20 only as follows: at least one person aged between 20 and 59 years old AND at least one person ≥ 60 years old; “Only older adults (≥ 60 years old)” - households that consist of members aged ≥ 60 years old only; “Only members below 20 years old” - households that consist of members aged below 20 years old only.
- Geographic location (rural/urban)
- Other possible disaggregation are possible such as by quintiles of the household welfare measures (total household consumption expenditure or income). See section 4.b on comments and limitations for the sensitivity of the disaggregation to the choice of the welfare measure.

6. Comparability / deviation from international standards (COMPARABILITY)

Sources of discrepancies:

Country-level estimates are all based on nationally representative surveys with information on both household total expenditure or income and household expenditure on health (see data sources). In most cases, such data come from non-standard household surveys, and ex-post-standardization processes can be designed to increase the degree of comparability across countries. For instance, regional teams from the World Bank produce standardized versions of raw datasets following common regional

procedures such as the Eastern Europe and Central Asia poverty harmonized datasets (ECAPOV¹³); the Survey based Harmonized Indicators (SHIP) collection results from a poverty program on harmonized household surveys in the World Bank's African region, while the Standardized Household Economic Survey (SHES) collection was developed by the World Bank for the international comparison program. The Luxembourg income study (LIS) datasets result from an effort to harmonize datasets from many high and middle-income countries¹⁴.

In some cases, the raw data is accessible to produce country-level estimates. In some countries, both raw data and standardized versions are available; in some countries, only the standardized version is available. When multiple versions of the same survey are available, the estimate which performed best in a series of quality assurance tests is retained (see collection process). When a standardized version of a nationally designed survey instrument is chosen, there are differences between expenditure variables generated using the raw data and the expenditure variables generated using the harmonization procedures, which might result in the different estimated incidence of the population with large household expenditure on health as a share of household total expenditure or income.

7. References and Documentation (OTHER_DOC)

URL:

<https://www.who.int/data/gho/data/themes/topics/financial-protection;>
<http://datatopics.worldbank.org/universal-health-coverage/>

References:

Global monitoring reports (e.g. 2015, 2017, 2019, 2021)

<https://www.who.int/teams/health-systems-governance-and-financing/global-monitoring-report>

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