World Health Organization

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WHO UNICEF JMP

Joint Monitoring Programme for Water Supply, Sanitation and Hygiene

Health Care Facilities

GUIDANCE NOTE TO FACILITATE COUNTRY CONSULTATION ON JMP ESTIMATES OF WASH IN HEALTH CARE FACILITIES

November 2023

1. BACKGROUND

The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) was established in 1990 and has been instrumental in developing global norms and standards to enable benchmarking of progress on drinking water, sanitation and hygiene (WASH). The JMP publishes comparable estimates of progress at country, regional and global levels based on official national data. More information on the JMP is available at www.washdata.org.

Since 2016, the JMP has worked intensively through WHO and UNICEF regional and country offices to compile existing national data for the new SDG indicators, and published its first global baseline report on WASH in health care facilities in 2019, followed by updates in 2020 and 2022.

With support from WHO and UNICEF regional and country offices, the JMP team has compiled national data sources from >100 countries, areas and territories, dating from 2000 through the present. National data have been classified using a standard format to generate internationally comparable estimates which are presented in Excel Country Files, described in detail below.

The WHO/UNICEF JMP is committed to consulting national authorities on the estimates generated from national data sources. The country consultation process is facilitated by WHO and UNICEF country offices and aims to engage national statistical offices and other relevant national stakeholders to review the draft estimates and provide technical feedback to the JMP team which will finalize the estimates and publish them in a report in Q2 2024 which will supersede which will supersede previous reports.

This guidance document is designed to support the 2023 country consultation on estimates produced by the JMP on water, sanitation, hygiene, health care waste management, and environmental cleaning in health care facilities (WASH in HCF).

2. JMP ESTIMATES FOR WASH SERVICES IN HEALTH CARE FACILITIES

In support of SDG monitoring and to allow for comparable data to be generated within and between countries, the JMP has supported the development of a core set of harmonized indicators (and associated questions) that address basic WASH services in health care facilities that will be applicable in all contexts.

The core indicators define "basic" service levels for water, sanitation, hand hygiene, health care waste management and environmental cleaning in health care facilities. These indicators do not fully capture the normative ideal service levels, but represent an approximation of the normative ideal which can be readily measured. These can be applied in all types and sizes of facilities (from primary to tertiary). The indicators are generally applicable at the level of the facility as a whole, rather than a particular location within a facility.

As with JMP monitoring of household WASH and WASH in schools, service ladders are used for monitoring WASH in health care facilities. The multi-level service ladders allow for progressive realization of the SDG criteria, enabling countries at different stages of development to track and compare progress. Separate ladders are proposed for each indicator. The core service ladders include three levels: no service, limited service and basic service, as shown below. In countries where basic service is already the norm, countries may define an advanced level of service beyond basic, as appropriate.

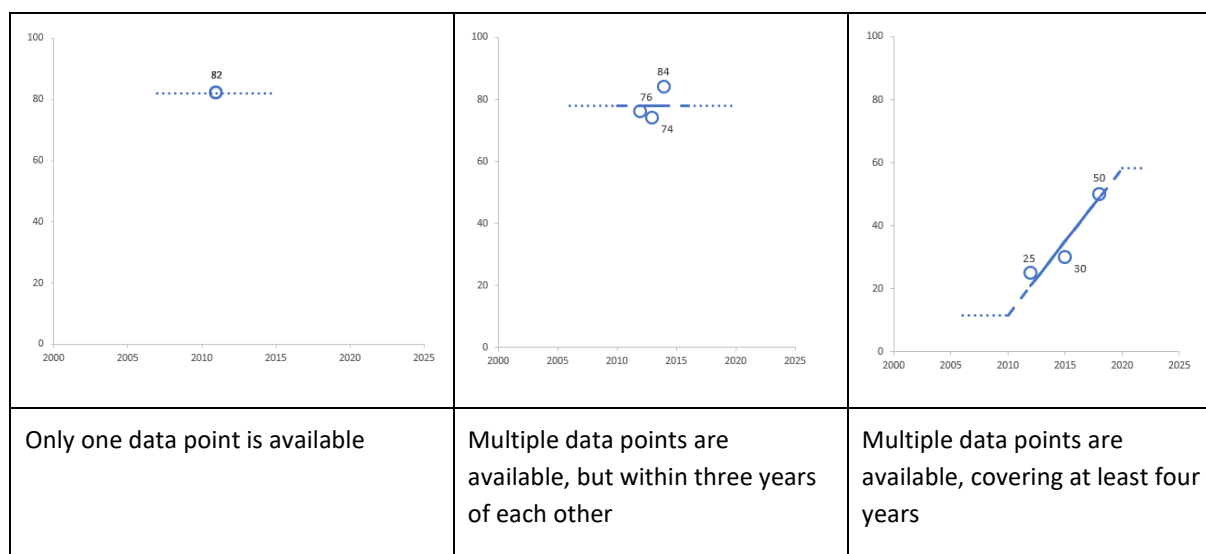|	WATER	SANITATION	HYGIENE	WASTE MANAGEMENT	ENVIRONMENTAL CLEANING
	Advanced service To be defined at national level	Advanced service To be defined at national level	Advanced service To be defined at national level	Advanced service To be defined at national level	Advanced service To be defined at national level
BASIC SERVICE	Water is available from an improved source on the premises.	Improved sanitation facilities are usable, with at least one toilet dedicated for staff, at least one sex-separated toilet with menstrual hygiene facilities, and at least one toilet accessible for people with limited mobility.	Functional hand hygiene facilities (with water and soap and/or alcohol-based hand rub) are available at points of care, and within five metres of toilets.	Waste is safely segregated into at least three bins, and sharps and infectious waste are treated and disposed of safely.	Basic protocols for cleaning are available, and staff with cleaning responsibilities have all received training.
LIMITED SERVICE	An improved water source is within 500 metres of the premises, but not all requirements for basic service are met.	At least one improved sanitation facility is available, but not all requirements for basic service are met.	Functional hand hygiene facilities are available either at points of care or toilets but not both.	There is limited separation and/ or treatment and disposal of sharps and infectious waste, but not all requirements for basic service are met.	There are cleaning protocols and/or at least some staff have received training on cleaning.
NO SERVICE	Water is taken from unprotected dug wells or springs, or surface water sources; or an improved source that is more than 500 metres from the premises; or there is no water source.	Toilet facilities are unimproved (e.g. pit latrines without a slab or platform, hanging latrines, bucket latrines) or there are no toilets.	No functional hand hygiene facilities are available either at points of care or toilets.	There are no separate bins for sharps or infectious waste, and sharps and/or infectious waste are not treated/disposed of safely.	No cleaning protocols are available and no staff have received training on cleaning.

The service levels, and the core questions recommended for use in data collection, are described in detail in the report "Core questions and indicators for monitoring WASH in health care facilities in the Sustainable Development Goals".

3. JMP ESTIMATION METHODS

The JMP uses simple linear regression among all available data points to produce estimates. The regression model is done outside the Country File, using a standard statistical software package (Stata).

If all data points are within three years of each other, an average is taken instead of using a regression. Regressions are extrapolated by two years, and the resulting estimates are extended for up to four years. No estimates can be produced more than six years later than the most recent data point.

By using linear regression, estimates can be produced for years in which no data source is available, and information from different data sources can be combined and integrated to produce composite indicators such as the basic service levels.

Only one data point is available	Multiple data points are available, but within three years of each other	Multiple data points are available, covering at least four years

For a detailed explanation of the methods used to produce the estimates, see the draft Methodological Note.

4. COUNTRY CONSULTATION

Following agreement of the 2030 Sustainable Development Agenda by UN member states, the Inter-Agency & Expert Group on SDG Indicators (IAEG-SDGs) nominated WHO and UNICEF to serve as the custodian agencies responsible for compilation and reporting of the official global indicators for Sustainable Development Goal targets for drinking water (6.1), sanitation and hygiene (6.2). According to the instructions from the IAEG-SDGs, international agencies responsible for producing country estimates on SDG indicators are expected to consult with countries on the interpretation and use of country data in global estimates and reports. The JMP country consultation on WASH in health care facilities is a process whereby UNICEF and WHO seek feedback from national authorities on the JMP country files and estimates of progress on WASH in health care facilities. It is therefore important that relevant country authorities are familiar with the essential elements of the JMP country file and estimation methods to effectively provide feedback through this consultation. This guidance note serves to provide necessary background information.

It has been agreed that WHO Country Offices will lead the country consultation on WASH in health care facilities and coordinate with counterparts at UNICEF. Country Offices are not expected to undertake complex analysis, or to review the estimation methodology, but should support national authorities to identify any missing data sets and to provide feedback on the interpretation and classification of existing data. Country Offices are best placed to know which sectoral ministries should be consulted (e.g. water, sanitation, health, environment) but in all cases Country Offices are encouraged to engage with the National Statistics Office which will be primarily responsible for SDG reporting, and to involve both WHO and UNICEF offices.

JMP global and regional estimates are derived by aggregating country trends so establishing comparable estimates of progress across countries is paramount. Because the JMP applies a common methodology across all countries its estimates often differ from government estimates which use different definitions and/or methods.

The purpose of this consultation is not to compare JMP and national estimates of WASH coverage but rather to review the comprehensiveness of the datasets in the JMP country file and to verify the interpretation of national data in JMP estimates.

5. STRUCTURE OF THE JMP COUNTRY FILES

The MS Excel Country Files contain all of the national data on WASH in health care facilities currently available in the JMP global database, and show how these data have been classified and used to generate internationally comparable estimates. They include a number of different worksheets. The last five worksheets include all of the relevant data that the JMP was able to gather from different data sources. These data are summarized in the Data Summary worksheet, and serve as inputs to a simple regression model which produces estimates for multiple years, which are shown in the Estimates sheet. The Estimates are then summarized in the Ladders and Charts sheets (the Charts sheet also shows graphically the data points used to produce the estimates). Additional explanation is provided below for each sheet.

5.1 INTRODUCTION

The Introduction sheet is a convenient way to navigate the country file, as it provides shortcuts to all of the worksheets of interest.

5.2 'LADDERS' FOR THE MOST RECENT ESTIMATES

This sheet displays the service ladders used by the JMP for global monitoring. The ladders show the service level estimates for the year 2023, or the most recent year with estimates available. This is a good place to start viewing the Country File, to quickly see which parameters have estimates and which ones don't. Note that in some cases the information available only allowed estimation of the *no services* level of the ladder, or only the *basic services* level, or no service levels at all could be estimated. In such cases the ladders are coloured grey to indicate that insufficient information was available. The estimates shown in the ladders are also displayed in the tables below the ladders, along with the reference year.

Make sure to scroll to the right to see the different service ladders on this page. Each ladder is shown for different domains: national, urban, rural, hospital, non-hospital, government, and non-government.
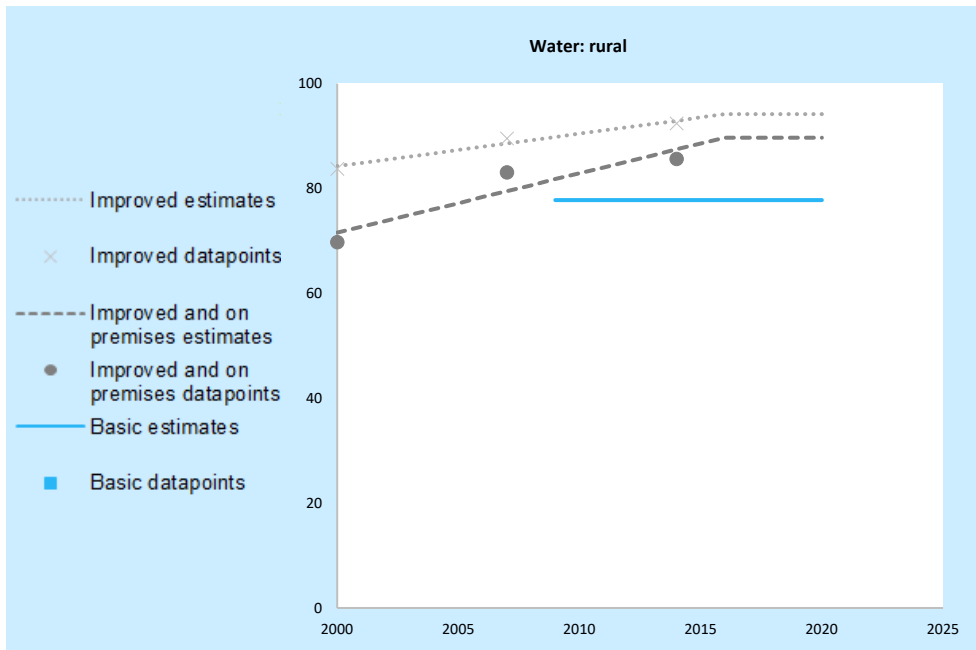

5.3 'CHARTS'

This worksheet shows the data that were used to produce the estimates (as markers) and the resulting estimates (as lines). Data are shown for the basic service level using the corresponding colour (e.g. blue for water services). In addition, two of the elements necessary for calculation of the basic service level are shown with grey lines and markers.

Note that not all of the data used in calculations can be shown on the Charts: for example, to calculate the basic drinking water services level, data are needed on (1) improved water facilities which are (2) located on premises, and from which (3) water is available. The Charts show only the data and estimates for the first two of these elements. In the example below, there is a positive trend for both improved water (dotted line, three data points) and improved water located on premises (dashed line, three data points), with estimates around 94% and 90%, respectively, in 2020. However, in this example water availability (available from two data points in 2015 and 2017, not shown on the graph) is lower and causes the estimate of basic services to be around 78% in 2020. Because the most recent data points on improved water are from 2014, the regression lines can be extrapolated for two years to 2016, and then held constant for four years (2017-2020). But the JMP doesn't produce estimates

that extend more than six years past the latest data point, so in this example no estimates of water services can be produced for 2021 or later years.

Water: rural

Improved estimates

× Improved datapoints

Improved and on premises estimates

● Improved and on premises datapoints

Basic estimates

■ Basic datapoints

5.4 'ESTIMATES'

Drawing on the data summarized in the Data Summary worksheet, service level estimates are produced, where data allow, from 2000-2023 and are separately shown for different groupings of health care facilities:

- National
- Urban
- Rural
- Hospital
- Non-hospital
- Government
- Non-government

For each type of service, the service levels (basic, limited and no service) are shown with their corresponding colours. In addition, two other relevant variables, which contribute to the basic service level, are shown in grey. A summary of how estimates are produced is provided in the JMP Estimation Methods section in this document.

5.5 'DATA SUMMARY'

The Data Summary sheet lists all of the data sources used in the Country File, and is a convenient way to quickly see which data sources have been used (and to identify any key data sets which are missing).

All numbers represent proportions of different groups of health care facilities meeting the conditions for the different indicators. Some numbers are shown in square brackets, e.g. [100]. This indicates that data points were calculated from a data source but were not used to produce estimates. The reasons that data were not used are recorded in the Notes section of the corresponding data sheets.

Summary of data from national surveys and censuses
[values in square brackets not used]
Water

Source	Type	Year	Total					Urban					Rural					Hospital					Non-hospital					Government					Non-government			
			Facility	Improved	Improved & available	Improved & on premises	Basic (improved, available & on-premises)	Facility	Improved	Improved & available	Improved & on premises	Basic (improved, available & on-premises)	Facility	Improved	Improved & available	Improved & on premises	Basic (improved, available & on-premises)	Facility	Improved	Improved & available	Improved & on premises	Basic (improved, available & on-premises)	Facility	Improved	Improved & available	Improved & on premises	Basic (improved, available & on-premises)	Facility	Improved	Improved & available	Improved & on premises	Basic (improved, available & on-premises)	Facility	Improved	Improved & available	Improved & on premises	Basic (improved, available & on-premises)
IDN_2000_IFLS	Survey with microdata	2000	100	92		85		100	97		94		100	84		70							100	92		85											
IDN_2007_IFLS	Survey with microdata	2007	100	95		93		100	98		97		100	90		83							100	95		93											
IDN_2011_CEN	Census	2011	73	[82]	58			[73]	[73]				[97]	[80]									73	[82]	58			73	[82]	58							
IDN_2014_IFLS	Survey with microdata	2014	100	97		94		100	98		98		100	92		86							100	97		94											
IDN_2015_PMA	Survey with microdata	2015	[92]	88				[92]	90				[90]	85				97	97				[90]	85				[94]	90				[80]	78			
IDN_2017_PMA	Survey with microdata	2017	[93]	74				[93]	77				[93]	71				98	85				[92]	70				[94]	75				[88]	67			
IDN_2020_EVM2	Survey with microdata	2020																																			
IDN_2021_IPCAF	Survey	2021																97	93																		

5.6 'DATA SHEETS'

The last five worksheets include all of the relevant data that the JMP was able to gather from different national data sources for each of the five service ladders:

- Water Data
- Sanitation Data
- Hygiene Data
- Waste Management Data
- Cleaning Data

Each Data Sheet records information from a single national data source in nine columns, and information from each data source is divided horizontally into three sections:

- An upper section, where key indicators are summarized for the six groupings of health care facilities.
- A middle section, showing the original indicator definitions, and how these correspond with the international standardized classification used by JMP. This section includes a Notes field where specific information about the data source is recorded.
- A lower section, where it is recorded whether or not each indicator in the upper section is used for estimation. This section also records the number of health care facilities in each group assessed and, if available, the total number of health care facilities in the country.

Data may be included in the Country File but not used for estimates for a number of reasons:

- The data may not be representative of the group of health care facilities (e.g. a survey focused only in a few districts of a country). The JMP will use data if they are representative of at least 80% of a group.
- The data set may be too small. The JMP will use data if they are drawn from at least 50 facilities in a group, or at least 30% of all the facilities in that group.
- The data may have been collected with questions that don't match well to the global indicators.
- The data may be inconsistent with other data sources from the same country which are considered to be more reliable or more representative.

6. ACTIONS TO TAKE DURING THE CONSULTATION

In order to review the draft estimates, the following steps are recommended to understand how the draft estimates have been produced:

- On the **Ladders** sheet, see the different service level estimates, presented in bar charts and tables.
- On the **Charts** sheet, see the data points that were used to produce the estimates.
- On the **Data Summary** sheet, see the data sources that were used to compile data points.
- On the individual Data sheets (**Water Data, Sanitation Data, Hygiene Data, Waste Management Data, Cleaning Data**) see the detailed information extracted from individual national data sources.

The country consultation should focus on the Data Summary tab which lists those sources of data on water, sanitation, hygiene, waste management, and cleaning which have been collected to date. The consultation should focus on three main questions:

a. Is the country file missing any relevant national sources of data on drinking water, sanitation, hand hygiene, health care waste management, and environmental cleaning in health care facilities that would allow for a better estimate?

If the country file is missing any relevant sources of data, the JMP team will be grateful to receive these data and include them to update the estimates. For example, if data on usable (or functional) toilets are missing from the country file but available from national partners, these could potentially be used to calculate and report on the indicator for basic sanitation services.

b. Are the data sources listed considered reliable and suitable for use as official national statistics?

If any of the data sources listed in the Data Summary tab are not considered to be reliable and suitable for use in calculating the SDG indicators, please inform the JMP team. Data points can be excluded for global estimates if they are unsuitable, unreliable or simply incorrect.

c. Is the JMP interpretation and classification of the data extracted from national sources accurate and appropriate?

Finally, if the data extracted from the listed sources (shown in detail in the last five 'data' sheets) has not been accurately extracted or interpreted, please inform the JMP team. In some cases, data extracted might have been misinterpreted or misclassified by the JMP team, and therefore will require correction.

Note that the Country Files contain formulas and links. Due to the statistical modelling approach used, we kindly ask you to **not work directly in the MS Excel worksheets** but rather provide data for consideration including its source in an additional document to the JMP team so they can insert the data and run the models accordingly. Results of the consultation should be shared with WHO country and regional offices, and copied to info@washdata.org.

Please note that the final deadline for feedback from JMP country consultations is 31 January 2024.