

Meeting Report

Expert Group Meeting on Monitoring WASH in Health Care Facilities in the Sustainable Development Goals

WHO/UNICEF Joint Monitoring Programme for water supply and sanitation

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Introduction

From June 22-23, 2016, an Expert Group Meeting on Monitoring WASH in Health Care Facilities in the Sustainable Development Goals was convened by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) in New York. A group of 16 technical experts and six members of the JMP were in attendance. Three technical experts made remote inputs via Skype. A list of meeting participants is included in the annexes. The Expert Group Meeting was convened to consider how WASH services in health care facilities could be monitored in the era of the 2030 Sustainable Development Agenda.

Background

In recognition of the importance of water, sanitation and hygiene (WASH) in health care facilities, WASH in health care facilities (WinHCF) is implicitly and explicitly captured in the 2030 Agenda for Sustainable Development. The terms “universal” and “for all” in Sustainable Development Goal (SDG) Targets 6.1 and 6.2 implicitly highlight the need for expanding WASH monitoring from the household to non-household settings, such as health care facilities and schools, as we progress from the MDG to the SDG era (Table 1). Further, Target 6.2 specifically calls for “paying special attention to the needs of women and girls and those in vulnerable situations,” who are often a target population of health care, for example immunocompromised persons and expectant mothers. Target 3.8 calls for universal health coverage, with an emphasis on quality of services, for which WinHCF is of critical importance.

Table 1. WinHCF-related SDG targets

Goals	Targets
6: Ensure availability and sustainable management of water and sanitation for all	6.1: By 2030, achieve <u>universal</u> and equitable access to safe and affordable drinking water <u>for all</u> 6.2: By 2030 achieve access to adequate and equitable sanitation and hygiene <u>for all</u> and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
3: Ensure healthy lives and promote well-being for all at all ages	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

In support of SDG monitoring and to allow for comparable data to be generated within and between countries, a *core* set of harmonized indicators and questions that address basic WASH services in health care settings is needed that will be applicable in all contexts. For national and sub-national monitoring with additional capacities and interests, an *expanded* set of questions can guide monitoring of additional criteria beyond the “basic” service level.

The Monitoring WASH in health care facilities task team is one of the four task teams working on the global action plan for WASH in HCF (the other three being advocacy, evidence and research, and facility-based improvements). The task team participated in a series of teleconferences, held between October 2015 and May 2016 to propose indicators and questions that are based on global norms¹ and look at existing questions in multi-national surveys and national monitoring systems (e.g. the WHO Service Availability and Readiness Assessment², the World Bank’s Service Delivery Indicators³, and the USAID-supported Service Provision Assessment⁴). The task team proposed a set of draft service ladders, core and expanded indicators and questions to be discussed at the expert group meeting.

¹ WHO (2008) Essential environmental health standards in health care. Geneva: World Health Organization.

² http://www.who.int/healthinfo/systems/sara_introduction/en/

³ <http://www.sdindicators.org/>

⁴ <http://dhsprogram.com/What-We-Do/Survey-Types/SPA.cfm>

Purpose

The purpose of this expert group meeting was to bring together a small group of WinHCF and monitoring experts to agree on final core indicators for “basic” water, sanitation, hygiene and health care waste management to support harmonized monitoring of WASH in HCF as part of the SDGs.

Specific objectives were:

- To review and refine the proposed service ladders and core and expanded indicators and questions for WASH in HCF
- To identify potential data sources and opportunities for field-testing indicators
- To discuss harmonization of definitions (e.g. facility levels) to allow disaggregation of data and data collection methodologies (e.g. censuses versus surveys)

Expected outputs

- Agreement on service ladders, and core indicators and questions for WASH in HCF monitoring, that are ready to be published in support of survey/questionnaire alignment with SDG monitoring
- A more comprehensive set of expanded indicators to undergo a second review process
- Agreed next steps for compiling additional modules (e.g. maternity wards)
- A meeting report summarizing the meeting outcomes and any remaining points of action.

Document Structure

This meeting report presents revised service ladders, core indicators for WinHCF and core question sets. These are followed by points of action, including opportunities for aligning surveys and Health Management Information Systems (HMIS) with the core (and expanded) questions. A set of expanded questions are included in Annex 1, followed by the list of participants (Annex 2) and meeting agenda (Annex 3).

Meeting Outcomes

Recommended service ladders

Similar to JMP monitoring of household WASH and proposed monitoring of WASH in schools (WinS), service ladders are proposed for monitoring WinHCF. 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 in reducing inequalities. Separate ladders are proposed for water, sanitation, hand hygiene, and health care waste management. A fifth ladder for cleaning practices was discussed but requires further development. Within each category, the *core* service ladders include three levels: no service, limited service, and basic service. For countries where “basic” service is not an ambitious aim, an additional “advanced” service level is suggested. The criteria for the “advanced” service level are loosely defined and countries are encouraged to further define and quantify specific elements.

Globally comparable data required to monitor the *core* indicators for “basic” service are currently scarce; the first priority for monitoring will therefore be to collect information on “basic” water, sanitation and hygiene, as guided by the *core* question set. However, additional information needed to assess “advanced” service is found in the *expanded* question set and may be included in global monitoring in the future.

Each level is defined in the following graphic, followed by normative definitions of the indicators for “basic” services.

Water	Sanitation	Hand hygiene	Health care waste
Advanced service <i>To be defined at national level</i>	Advanced service <i>To be defined at national level</i>	Advanced service <i>To be defined at national level</i>	Advanced service <i>To be defined at national level</i>
Basic service Water from an improved source ⁵ is available on premises.	Basic service Improved sanitation facilities ⁶ are available and usable, separated for patients and staff, separated for women and allowing menstrual hygiene management, and meeting the needs of people with limited mobility.	Basic service Hand hygiene materials, either a basin with water and soap or alcohol hand rub, are available at points of care and toilets.	Basic service Waste is safely segregated into at least three bins in the consultation area and sharps and infectious wastes are treated and disposed of safely.
Limited service Water from an improved source is available off-premises or an improved water source is on site but water is not available.	Limited service Improved sanitation facilities are present but are not usable, or do not meet the needs of specific groups (staff, women, people with limited mobility).	Limited service Hand hygiene materials are available at some, but not all, points of care and toilets.	Limited service Waste is segregated but not disposed of safely, or bins are in place but not used effectively.
Unimproved/No facility Unprotected dug well or spring, surface water source; or there is no water source at the facility.	Unimproved/No facility Pit latrines without a slab or platform, hanging latrines and bucket latrines, or there are no toilets or latrines at the facility.	Unimproved/No facility Hand hygiene stations are absent or present but without soap or water.	Unimproved/No service Waste is not segregated or safely treated and disposed.

Figure 1. JMP service ladders for monitoring WASH in health care facilities

Normative definitions of core indicators for “basic” service

The *core* indicators define “basic” water, sanitation, hand hygiene and healthcare waste management facilities.

1: The proportion of health care facilities with basic water supply

Facilities where the main source of water is an improved source (**W1**), located on premises (**W2**), from which water is available at the time of the survey (**W3**), or if not, water is available from an alternative improved source (**W4**).

2: The proportion of health care facilities with basic sanitation

Facilities with improved toilets or latrines for patients located on premises (**S1**), that are functional at the time of visit, with at least one toilet designated for women/girls with facilities to manage menstrual hygiene needs (**S2**), at least one separated for staff (**S3**), and at least one meeting the needs of people with limited mobility (**S4**).

⁵ Improved water sources in healthcare settings include piped water, boreholes/tubewells, protected wells, protected springs, rainwater, and packaged or delivered water.

⁶ Improved sanitation facilities in healthcare settings include flush/pour flush toilets connected to a piped sewer system, septic tank or pit latrine; pit latrines with slab; ventilated improved pit latrines; and composting toilets. For the purpose of this document “toilets” is taken to mean any of these improved facilities.

3: The proportion of health care facilities with basic hand hygiene

Facilities with hand hygiene stations including a basin with water and soap, or alcohol-based hand rubs, present at critical points of care (H1) and within 5 m of toilets (H2).

4: The proportion of health care facilities practicing basic healthcare waste management

Facilities where waste is safely segregated in the consultation area (M1) and infectious (M2) and sharps wastes (M3) are treated and disposed of safely.

The Expert Group reviewed proposed indicators for basic cleaning services, but considered that the indicators and questions needed further development. The draft questions are included in Annex 1: Recommended Expanded Questions.

Recommended Core Questions

A set of core questions are recommended that are sufficient to generate data for the core indicators. These questions are the *minimum* needed to monitor WinHCF as part of the SDGs and are drawn from applicable standards, predominantly the 2008 WHO Essential Environmental Health Standards in Health Care¹, and relevant questions from existing survey instruments. The core indicators focus on a basic level of service which is universally applicable and relevant for national monitoring and international comparisons. Questions will be promoted for use in enumerator-collected surveys and health management information systems (HMIS) questionnaires which are filled out by health care workers. Questions should be suitable for use in both formats, where possible, but in some cases, different options may be necessary for enumerator surveys and for administrative questionnaires.

Water

W1	What is the main source of water for the facility?
Responses	Piped supply from outside the facility Tube well Borehole Protected dug well Unprotected dug well Protected spring Unprotected spring Rain water Tanker truck Surface water (river/dam/lake/pond) Other _____ (Specify) Don't know No water source
Notes	The question refers to the source of water for general purposes, including drinking, washing, and cleaning. In case of water being available at multiple points, record the response closest to the outpatient area. Indicator in line with WHO/UNICEF definition of improved water sources.

W2	Where is the main water source for the facility?
Responses	On premises Within 500 m

Further than 500 m
No water source available

Notes

W3 Is water available from the main source at the time of the survey?

Responses Yes, observed (skip to S1)
Yes, reported but not observed (skip to S1)
No (continue to W4)

Notes Confirm that water is available from this source at the time of the survey, e.g. check that taps or hand pumps deliver water. Availability of water from off premises sources may be reported.

W4 If water is not available from the main source at this time, what is the alternative source of water for this facility?

Responses Piped supply from outside the facility
Tube well
Borehole
Protected dug well
Unprotected dug well
Protected spring
Unprotected spring
Rain water
Tanker truck
Surface water (river/dam/lake/pond)
Other _____ (Specify)
No alternative source available

Notes Confirm that water is available from this source on the day of the survey, e.g. check that taps or hand pumps deliver water. Availability of water from off premises sources may be reported rather than observed.

Sanitation

S1 Is there at least one usable improved toilet available for patients at the facility?

Responses Yes, at least one usable improved toilet
No, improved toilets are present but not usable
No, unimproved or no toilets at the facility

Observation Confirm that the toilets (or latrines) are usable.

Notes Improved sanitation facilities include flush toilets, ventilated improved pit (VIP) latrines, pit latrines with slab, and composting toilets. For questions S1-S4 “toilets” is taken to mean any of these improved facilities. Usable means accessible, functional, and private.

To be included in an accompanying instruction manual: To be considered **usable**, a toilet should be functional and should provide sufficient privacy for users. In a functional toilet the hole or pit should not be blocked, water should be available for flush/pour flush toilets, and there should be no cracks, or leaks in the toilet structure. In order to provide sufficient privacy, the toilet stall should have walls without major holes, and a door which is unlocked when not in use (or for which a key is available at any time) and which can be locked from the inside during use.

S2	Is there at least one usable improved toilet designated for women and girls, which provides facilities to manage menstrual hygiene needs?
Responses	Yes No, female-only toilets do not have menstrual hygiene facilities <i>No, there are no female-only toilets</i>
Note	Refer to definition of usable improved toilets in S1. This refers to staff or patient toilets. A toilet can be considered to meet the needs of menstrual hygiene management if it meets both of the following conditions: <ul style="list-style-type: none"> • a bin with a lid on it within the cubicle • water and soap available in a private space for washing.

S3	Is there at least one usable improved toilet designated for staff?
Responses	Yes, No
Note	Refer to definition of usable improved toilets in S1.

S4	Is there at least one usable improved toilet that meets the needs of people with reduced mobility?
Responses	Yes, No
Note	Refer to definition of usable improved toilets in S1. This refers to staff or patient toilets. A toilet can be considered accessible if it meets relevant national or local standards. In the absence of such standards, it should meet the following conditions: <ul style="list-style-type: none"> • can be accessed without stairs or steps, • handrails for support are attached either to the floor or sidewalls, • the door is at least 80 cm wide, and • the door handle and seat are within reach of people using wheelchairs or crutches/sticks⁷.

Hand hygiene

H1	Are there functional hand hygiene stations available at points of care on the day of the survey?
Responses	Yes No, hand hygiene stations are available but not functional, or lacking materials <i>No, no hand hygiene stations are available</i>
Note	Points of care are any location in the outpatient setting where care or treatment is delivered (i.e. consultation/exam rooms). For facilities with multiple consultation rooms, select one at random from the area where most general outpatient services occur to check for hand hygiene stations. A functional hand hygiene station may consist of soap and water with a basin/pan for washing hands, or an alcohol-based hand rub dispenser. If alcohol-based hand rub is used, healthcare staff may carry a dispenser around between points of care.

H2	Are there functional hand hygiene stations available at toilets on the day of the survey?
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⁷ Jones, H. (2013) Mainstreaming disability and ageing in water, sanitation and hygiene programmes. WaterAid and WEDC.

Responses	Yes No, hand hygiene stations are available but not functional, or lacking materials <i>No, no hand hygiene stations are available</i>
Note	If a usable toilet was identified in question S1, it should be inspected for the availability of a functional hand hygiene station (soap and water with a basin/pan for washing hands), within 5 m of the toilet.

Health care waste management

M1	Is waste safely segregated into at least three labelled bins in the consultation area?
Responses	Yes Bins are present but don't meet all requirements (see Notes) <i>No</i>
Notes	For facilities with multiple consultation rooms, select one at random from the area where most general outpatient services occur and observe whether at least three bins are in place to separate (1) sharps waste, (2) infectious waste, and (3) non-infectious general waste. The bins should be clearly labelled (either colour coded, written labels or signs), no more than three quarters (75%) full, and each bin should not contain waste other than that corresponding to their label.

M2	How does this facility treat and/or dispose of sharps waste?
Responses	Autoclaved Incinerated (two chamber, 850-1000C incinerator) Incinerated (brick incinerator) Open burning <i>Open dumping without treatment</i> Chemical disinfection with hypochlorite Not treated, but buried in lined, protected pit <i>Not treated and added to general waste</i> Not treated, but collected for medical waste disposal Other (specify)
Note	

M3	How does this facility treat and/or dispose of infectious waste?
Responses	Autoclaved Incinerated (two chamber, 850-1000C incinerator) Incinerated (brick incinerator) Open burning <i>Open dumping without treatment</i> Chemical disinfection with hypochlorite Not treated, but buried in lined, protected pit <i>Not treated and added to general waste</i> Not treated, but collected for medical waste disposal Other (specify)
Note	

Mapping core questions to the service ladders

Responses from the core questions can be mapped to the proposed ladders as shown in the following table. The “Advanced Service” level is to be defined at national level and is excluded from the table.

Service level	W1	W2	W3	W4	S1	S2	S3	S4
Basic Service	Improved source	On premises	Available from main source at time of survey (W3) or water is available from an alternative improved source at time of survey (W4)		Improved facilities for patients located on premises and usable at time of visit	Sex-separated and have facilities to manage menstrual needs	At least one toilet designated for staff	At least one toilet meets the needs of people with limited mobility
Limited service	Improved water source	A “No” response for ANY (W2, W3, W4)			Improved facilities but not usable	A “No” response for ANY (S2, S3, S4)		
Unimproved / No facility	An unimproved or no water source (W1) OR An improved water source (W1) that is more than 500m from the facility (W2)				Unimproved or no facilities	N/A	N/A	N/A

Service level	H1	H2	M1	M2	M3
Basic Service	Hand hygiene stations (water and soap or alcohol based hand rub) at points of care	Hand hygiene (water and soap) available within 5m of toilets	Waste safely segregated in consultation room	Infectious waste treated and disposed of safely	Sharps waste treated and disposed of safely
Limited service	Hand hygiene stations at either points of care (H1) or toilets (H2), but not both		Bins are in place but not used effectively.	Waste is segregated but either infectious or sharps waste (or both) are not disposed of safely	
Unimproved / No facility	No hand hygiene stations available or available without soap or water or alcohol based hand rub		There are no bins for sharps and infectious waste	Waste is not safely treated and disposed	Waste is not safely treated and disposed

Figure 3: Mapping core questions to the service ladders

Methodological considerations: types of HCF assessments

Core and expanded indicators may be collected through a number of different assessments and surveys. Health care facility surveys can be nationally representative or sub-nationally representative; they can also measure all facility types, or they might focus on certain types (for example, facilities providing HIV services, surgical services or maternal care services).

		Health care facility types measured in instruments	
		All health care facility types	Subset of health care facility types
Level of country coverage	National	<p>Definition: Nationally representative surveys, censuses of all HCF types within a country</p> <p>Examples: SPA, SDI, HFC, SARA, HMIS, facility inventories, SAM</p>	<p>Definition: Nationally representative surveys, censuses of certain types or one type of HCF within a country</p> <p>Examples: WHO SA, HSPA, EmONC</p>
	Sub-national	<p>Definition: all HCF within a sub-region, program, project, or municipality</p> <p>Examples: SARA⁸, Local/district monitoring, R-HFA, QSDS, project monitoring</p>	<p>Definition: subset of HCF within a sub-region, multiple districts, program, project, or municipality</p> <p>Examples: IMCI, QIQ, MMIS, ELMS, project monitoring</p>

WHO Essential Environmental Health Standards in Health Care Facilities¹ define three broad types of health care settings, 1) large health care settings providing a range of outpatient and inpatient care, 2) small health care settings providing outpatient care and outreach services, and 3) emergency or isolation settings. HCF facility definitions vary by instrument making comparisons between surveys and countries difficult. In addition, certain facility types are measured infrequently, for example, nursing homes, dental facilities, small private clinics and pharmacies. Most assessments consider hospitals (sometimes separated into national/referral and district/provincial) and smaller facilities, such as health center/clinic and health post. Some reports disaggregate results by hospital and non-hospital facilities.

Sampling: censuses vs. nationally representative facility surveys

There are advantages and disadvantages to using censuses versus nationally representative surveys, as with household surveys. Censuses are more expensive than representative surveys but provide a greater level of detail, which is valuable for targeting, disaggregation and sub-national reporting and comparisons. Some household surveys also sample HCFs from the same frame, for example the older World Bank LSMS from Cote d'Ivoire and Jamaica in the late 1980s and more recently the PMA 2020 project.⁹ PMA2020 uses a 2-stage cluster design, using urban-rural and major regions as strata. A sample of enumeration areas is then drawn and households and health service delivery points systematically selected from each enumeration area.

⁸ SARA surveys can be either national (e.g. Kenya) or sub-national (e.g. Zambia and Sierra Leone) and are therefore included in the table twice http://www.who.int/healthinfo/systems/sara_reports/en/

⁹ <http://www.pma2020.org/publications>

Way Forward

Plans for additional modules

Once the module for the OPD is finalised, the group will start working on additional modules. In the absence of data on outputs from all outpatient settings, it is important to consider if just one area (e.g. the maternity ward) would be enough to generate national estimates. Maternity areas are critical from a WASH perspective and may be a useful place to start. A patient satisfaction survey was also suggested, however this has many limitations. Firstly, satisfaction depends on expectation: very poor households might be satisfied with poorer services. Secondly, satisfaction can vary greatly according to when people are asked (i.e. on leaving a facility or after a number of days.) and finally, it is harder to get such data collection through the Institutional Review Board (IRB) for human subjects' research.

Group action items

The following actions should be completed by 22 July, unless otherwise noted, to support timely dissemination of recommended indicators and questions.

- 1. Circulate final core indicators for 4 of 5 ladders within 2 weeks of meeting (excluding cleaning)**
 - a. Revised wording on selected questions
 - b. Final version of core indicators ready by end of July
 - c. Share core indicators with all members of monitoring task team for agreement
- 2. Form a work stream on adapting core questions to an HMIS format**
 - a. Liaise with DHS2 group
- 3. Work stream on expanded indicators**
 - a. Link with Quality of Care colleagues at WHO for QOC indicators
 - b. Work with IPC on cleaning indicators (WHO, CDC, ICAN)
 - c. Circulate current agreements on wording as starting point
- 4. Subcommittee to link with groups working on facility classification, e.g. HDC**
- 5. Work stream on module for maternity wards**
- 6. Teleconference to discuss results in late August/early September**

Individual action items

The following summarizes the actions and opportunities for piloting identified by expert group members in a final roundtable before the closing of the meeting.

WHO EURO: In Kazakhstan, two regions are interested in looking more systematically at WASH in HCF and are interested in piloting the questions. This will also provide an opportunity to align the proposed questions with existing national monitoring mechanisms (e.g. HMIS, Annual Facility Inventories). In the week following the meeting, there is a meeting on the European Protocol, to be held in Geneva, with 53 member states. At the meeting a 3-year plan on WASH in HCF will be drafted and countries will be given the opportunity to volunteer to pilot the questions.

UNC: Fiji is planning a national assessment of WinHCF and has already integrated an earlier draft of the core questions into their draft survey instrument. UNC will follow up to find out how well the indicators are being received. There is also an opportunity to integrate the indicators into an urban WASH in HCF assessment in the Solomon Islands, UNC will follow up on the timeline of this work. In Malawi, a small scale assessment of 45 HCF in three regions is planned, which includes qualitative semi-structured interviews, and assessment of WASH and environmental health conditions. The work will start in August and be finished in December 2016.

UNICEF: will continue to engage with health colleagues in different regions. In WCARO, a number of countries have requested the global monitoring tool for use in the region. UNICEF SEARO will share the indicators and questions with national partners in South Asia. The indicators will be useful for aligning assessments (both national and regional). UNICEF Afghanistan will continue working with the Afghanistan government to update HMIS, which already includes some questions on water and sanitation.

SPA: Bangladesh and Haiti will be doing SPA surveys in 2017 and would be happy to pilot the core questions. They will also try to limit duplication with other surveys.

World Vision: WV has lots of examples of work on WASH in HCF in ten African countries, however they do not have many data points for HCF. They are in the process of finalizing a more robust WASH in HCF survey with 55 HCFs in Zambia, in partnership with Emory University. They are considering expanding this to other countries in southern Africa. WV have also been managing all the HCF in one island of Haiti and are now transitioning their management over to the government. They would be interested in using WASH FIT to support these facilities. WV also has the 'Baby WASH coalition', a key feature of which is the maternity module. WV would like to continue the discussion around this and are interested to support the JMP. Finally, the first phase of the WV WASH program plan which targets more than 26,000 schools and HCF is finishing this year. They are now going into the second phase of work and expanding into Asia. This will provide an operational opportunity to leverage work.

FHI360/AMDD: AMDD are revising their generic modules and would be interested in updating questions based on the discussions from this meeting (the modules are publicly available). Ghana is doing a second assessment soon, Ethiopia and Zambia assessments are on-going, and Nigeria may begin one shortly. Although they can't change existing questions in ongoing assessments, they will make sure that WASH is analyzed and highlighted in subsequent reports. There may also be opportunities to carry out analyses on existing datasets.

PAHO: Pilot assessments using the PAHO Protocol are underway in Peru and will continue in the coming months. The assessment will then be extended to seven priority PAHO countries. There is a regional meeting in August in Cartagena, Columbia on WASH in the SDGs, with some time dedicated to WinHCF. All participants of the meeting are invited to attend.

SHARE: The government of Gujarat (India) are working with the MoH looking at WASH in outpatient areas so there may be opportunities to align the indicators. SHARE would be happy to support in the development of the maternity module.

CDC: is working on the Global Security Agenda, providing support at the national level on strengthening WASH and IPC guidance, primarily in the three Ebola countries and neighboring countries. Although funding is not confirmed, there are possible opportunities for work in Togo as well as Burkina Faso, Mauritania and DRC.

WaterAid: will share results of this work internally with WaterAid and continue to support this work both directly and indirectly through liaison with countries.

UNICEF: is working on an annual expanded HMIS in Papua New Guinea who are keen to include the new indicators. In Cambodia, work is ongoing on an inventory facility with WaterAid who are also interested in the indicators.

JMP: JMP have committed to maintain the momentum and will establish a global database for WinHCF over the next year. The JMP will continue discussions related to issues such as sampling and representativeness as they move toward generating estimates. The JMP will ask group members for additional support and input.

WHO: will provide feedback on the outcomes of the meeting to the three-Ebola countries who are in the process of finalizing a set of IPC/WASH indicators. They will also work with those responsible for HMIS to provide support on integration of indicators with HMIS.

Annex 1: Recommended Expanded Questions

The following questions provide a *draft* menu of options for countries to consider where there is greater capacity for monitoring. The expanded questions may be most valuable where there are national or sub-national priorities beyond the criteria for “basic” such as those where the focus is on providing “advanced services” according to national definitions. Questions are based on the global norms¹ and other priorities that are not captured in the core questions. Where a question is not finalised, a comment is included in the note.

Question numbers are aligned with core questions (e.g. W for water, S for sanitation etc.). Questions beginning X indicate they are an Expanded Question.

Water

XW1	Does the water available in the outpatient department meet national standards for <i>E. coli</i>, residual chlorine and Arsenic?
Responses	<p><i>E. coli</i> [Yes meet national standards, Tested but results not known, Not tested, No]</p> <p>Residual chlorine [Yes meet national standards, Tested but results not known, Not tested, No]</p> <p>Arsenic [Yes meet national standards, Tested but results not known, Not tested, No]</p>
Note	<p>Based on water at point-of-use. WHO guidelines recommend a standard of no detectable <i>E. coli</i> (or thermotolerant coliform) bacteria in any 100-mL sample of drinking water.¹⁰ WHO guidelines for free chlorine residual in drinking water at point of delivery states a minimum of 0.2 mg/L.¹⁰ This may be increased during emergencies (i.e. cholera outbreaks). Ask to see records of testing for purposes of quality assurance. If testing is done internally, ask staff to demonstrate how to measure chlorine.</p> <p>WHO guidelines on water quality recommend a standard of maximum arsenic level of 0.01 mg/L.¹⁰ Ask to see the records for quality assurance.</p> <p><i>Add a footnote about parameters of local importance, and flexibility on parameters if this in a matrix.</i></p>
XW2	Is the water being treated onsite?
Responses	<p>Yes, by boiling</p> <p>Yes, by UV</p> <p>Yes, by chemical disinfection.</p> <p>Yes, by coarse filtration (e.g. ceramic filter, sand filter)</p> <p>Yes, by membrane filtration (e.g. reverse osmosis)</p> <p>No</p>
Note	Multiple answers may be chosen.
XW3	Are different water sources used for different purposes, e.g. drinking, washing and cleaning, medical procedures?
Responses	<p>Yes, No</p> <p>If yes, explain.</p>

¹⁰ [WHO \(2011\) Guidelines for Drinking Water Quality. 4th edition.](#)

Note	<i>Guidance note needed</i>
XW4	Are procedures in place and followed consistently for keeping different water supplies independent and well identified?
Responses	Yes, procedures in place and followed consistently Yes, procedures in place and but not followed consistently No
Note	Only applies if response to XW3 is yes
XW5	In the last two weeks, did the outpatient department have enough water for drinking, food preparation, personal hygiene, medical activities, cleaning and laundry?
Responses	Drinking: [Yes sufficient quantity; No, minor water shortages; No, major water shortages] Food preparation: [Yes sufficient quantity; No, minor water shortages; No, major water shortages] Personal hygiene: [Yes sufficient quantity; No, minor water shortages; No, major water shortages] Medical activities: [Yes sufficient quantity; No, minor water shortages; No, major water shortages] Cleaning: [Yes sufficient quantity; No, minor water shortages; No, major water shortages] Laundry: [Yes sufficient quantity; No, minor water shortages; No, major water shortages]
Note	To be considered “enough water”, the quantity of water available should meet national standards. Where national standards do not exist, use the WHO guideline of 5 litres per outpatient consultation (and 0.5-5 litres/consultation for dry or supplementary feeding centres; 15 litres/consultation for wet feeding centres). To calculate if the outpatient department meets standards, the amount of water available per day should be divided by the number of litres per consultation required by standards multiplied by the average number of daily consultations. Where direct measurement is not possible, the amount of water available compared to the amount of water required by standards, can be estimated.
XW6	In the previous two weeks, was drinking water from the main source available for staff, patients and carers throughout each day?
Responses	Yes No
Note	To be considered available, water must be available from a piped water system or safely stored in a covered container with a tap in the outpatient area, and it must be available to staff, patients and carers throughout each day in the previous two weeks.
XW7	Is there routinely a time of year when the facility has a severe shortage or lack of water?
Responses	Yes No
Note	To be considered available, water must be available from a piped water system or safely stored in a covered contained with a tap in the outpatient area, and it must be available to staff, patients and carers each day of the year.

XW8a	Is there are least one drinking water point within the outpatient area?
Responses	Yes No
Note	Drinking water may be provided from a piped water system or via a covered container with a tap where there is no piped supply. Drinking water points should be clearly labelled and accessible at sitting level.

XW8b	Is there are least one drinking water point within the outpatient area accessible to people with limited mobility?
Responses	Yes No
Note	Drinking water may be provided from a piped water system or via a covered container with a tap where there is no piped supply. Drinking water points should be clearly labelled and accessible at sitting level.

Sanitation

XS1	Are toilets visibly clean?
Responses	Yes No
Note	Clean means with no excreta, blood or body substances that could pose a human health risk. Assess this question at the same time as assessing S1.

XS2	Do the toilets have adequate light, including at night?
Responses	Yes No
Note	There should be sufficient general or overhead light to see all areas within the toilet stall at night, as well as in areas that users will travel to and from the toilets, particularly if not located within the health facility (e.g. if outside).

XS3	Are toilets available no more than 30 metres from consultation rooms?
Responses	Yes No
Note	This question refers to improved, usable toilets.

XS4	How are faecal wastes managed in improved toilets?
Responses	Flush to sewer, onsite storage in septic tank, onsite storage in latrine, don't know

Note	This question refers to all improved, usable toilets. <i>Make similar to WinS version: e.g. Are latrines or septic tanks emptied (or latrines safely covered) when they fill up?</i>
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XS5a	In the past year, has there been any flooding on the grounds?
Responses	Yes, No
Note	<i>Add definition of flooding.</i>

XS5b	If so were toilet blocks flooded?
Responses	Yes, No
Note	<i>Add definition of flooding</i>

XS6	Were any signs of open defecation observed during the facility visit?
Responses	Yes, No
Note	<i>Alternative question: Are patients practicing open defecation? Alternative question: Is open defecation practiced in or near the facility? (If using this, agree on definition of what 'near' the facility means?)</i>

Hygiene

The following draft indicator was proposed by the task team but not agreed during the meeting, therefore it is included here for further development.

Indicator: The proportion of facilities practicing basic cleaning routines.

Facilities where all toilets, floors and surfaces are cleaned, at least once a day or when soiled, with water and detergent.

(X)H0	Are the health care facility floors, surfaces and toilets cleaned at least once a day with water and detergent and/or whenever they are soiled?
Responses	Yes, cleaned every day with water and detergent Cleaned with water and detergent, but less than once a day No
Note	If facilities are cleaned without detergent, or if not all the facility is cleaned, including toilets, mark "No"

XH1	Is the outpatient area visibly clean?
Responses	Yes, No
Note	The outpatient area should be visibly clean, free from dust and soil, free from general clutter (e.g. unnecessary or unused equipment or furniture). <i>Consider a question based on SPA's index for cleanliness</i>

Floor: swept, no obvious dirt or waste
 Counters/tables/chairs: wiped clean-no obvious dust or waste
 Needles, sharps outside the sharps box
 Bandages/infectious waste lying uncovered
 Walls: significant damage
 Doors: significant damage
 Ceiling: water stains or damage

XH2 Is soiled linen produced in the outpatient area pre-disinfected and washed in water?

Responses Yes
 Soiled linen is washed in water, but not pre-disinfected
 No

Note *Pre-disinfection in the standards applied to linens to be used in operating theatres. Seek guidance if there are appropriate guidelines for routine linens.*

XH3 Is the soiled linen used in the outpatient area kept in separate, sealed, marked bags for transport and storage?

Responses Yes
 Yes, but not labelled/marked
 No

Note

XH4 Are bed linens changed between patients and whenever soiled with body fluids?

Responses Yes
 They are washed whenever soiled, but not always between patients
 No

Note Soiled linen should not be sorted in patient care areas, and should be handled with minimum agitation to avoid releasing pathogens. Soiled linen should be cleaned and autoclaved before being used again.

XH5 At each hand hygiene stations and/or patient waiting areas is there a hygiene promotion poster?

Responses Yes at each assessment site
 Yes, but only some
 No

Note

XH6a Can clinical staff demonstrate the 5 Key Moments¹¹?

Responses Yes, all clinical staff
 Yes, some but not all staff
 No

¹¹ http://www.who.int/gpsc/tools/Five_moments/en/

Note	Adapted from IPC and WASH Ebola 3-country indicators
XH6b	Can clinical staff demonstrate appropriate hand hygiene techniques?
Responses	Yes, all clinical staff Yes, some but not all staff No
Note	Adapted from IPC and WASH Ebola 3-country indicators

XH7	Are all cleaners, kitchen staff and waste technicians trained in essential cleaning and infection prevention techniques?
Responses	Yes, all cleaners are trained received it Yes, some but not all staff have received it No training program currently available
Note	Ask to see training program materials. <i>Need operational definition of essential techniques if this question is kept</i>

XH8	Are there sufficient cleaning materials at the facility?
Responses	Yes, all cleaners are trained received it Yes, some but not all staff have received it No training program currently available
Note	<i>Need to decide suitable wording for the question</i>

Health care waste management

XM1	In the exam room, if there is a sharps bin, are functional needle cutters or hub cutters available next to the bin?
Responses	Yes, No
Note	Observe if any method of needle destruction, such as a “needle destroyer”, “needle cutter”, “hub cutter” or similar.

XM2	Are bins out of reach of patients and visitors, particularly children?
Responses	Yes, No
Note	Patients and visitors, particularly children should not be able to access the waste containers and thus they should be kept out of reach. <i>Consensus was not reached: there was a long debate about how to measure something being ‘out of reach’ and whether this was operationally possible</i>

XM3	How often is non-sharp infectious waste collected from the outpatient ward?
Responses	More than once per day Once per day Less than once per day

Note	If possible, ask when bins were last emptied
XM4	Are the sharps containers collected from the ward when they are three quarters (75%) full?
Responses	Yes, always Yes, but not always No
Note	If possible, check if sharps containers are overflowing. <i>Agreed to have this reviewed by survey experts</i>
XM5	Is infectious waste transported in separate dedicated containers from non-infectious waste within the facility?
Responses	Yes, No
Note	<i>Agreed to define criteria for containers based on norms at a later date</i>
XM6	Is there a designated area where infectious waste is safely stored while awaiting treatment/disposal?
Responses	Yes, No
Note	<i>Agreed to define safely stored based on norms at a later date</i>
XM7	How long is infectious waste stored before treatment/disposal?
Responses	Less than 1 day 1-2 days 2-3 days More than 3 days
Note	If infectious waste is collected at different frequencies depending on the time of year, record the higher frequency (shortest length of time)
XM8	How is general (non-hazardous) waste treated or disposed?
Responses	Regular pick up of the municipality or transport by the facility to the public disposal site Irregular and insufficient pick up by the municipality Disposal on the premises of the facility Piled but not buried at the facility Buried and regularly covered with soil at the facility Open burning on the premise of the facility
Note	General waste refers to non-infectious, non-hazardous waste <i>Question parked for further discussion</i>
XM9	Are fenced and protected areas available for the storage of waste awaiting removal from the facility and for the disposal pits if applicable?
Responses	Yes, No
Note	<i>Need to add a note on treatment area</i>

Annex 2. List of Participants

JMP

Rob Bain	JMP
Christie Chatterley	JMP
Arabella Hayter	JMP
Guy Hutton	JMP
Rick Johnston	JMP
Tom Slaymaker	JMP
Lydia Abebe	UNC
Paul Ametepi	ICF
Tim Brewer	WaterAid
Ryan Cronk	UNC
Erin Flynn	SHARE/LSHTM
Fabrice Fotso	UNICEF WCARO
Malick Kante	Columbia (AMDD)
Emily Keyes	FHI 360 / Columbia (AMDD)
Andrea Martinsen	CDC
Teofilo Monteiro	PAHO
Ben Nemser	SDI
Dan Irvine	World Vision International
Henk van Norden	UNICEF ROSA
Nasratullah Rasa	UNICEF Afghanistan
Christophe Rockmore	SDI (presented remotely)
Kate Robb	Emory
Oliver Schmoll	WHO EURO
Ruth Stringer	Health Care without Harm (participated remotely)
Kavitha Viswanathan	WHO SARA (presented remotely)

Apologies

Patsy Bailey	FHI 360
John Brogan	Terre des Hommes
Jean-Charles Albert Dubourg	WHO
Chaitali Chatopadhyay	WSSCC
Alison Macintyre	WaterAid
Michaela Pfeiffer	WHO Energy
Julie Storr	WHO IPC
Waly Wane	SDI

Annex 3: Meeting Agenda

Day 1: Wednesday 22 June 2016

Session	Item	Responsibility
8:30	Arrival; morning coffee	
9:00 - 9:30	Introduction <ul style="list-style-type: none"> Meeting objectives Brief introductions Background on global monitoring of WASH in HCF and progress to date (10 min) 	Moderator: Tom Slaymaker Rick Johnston
9:30 – 11:00	Overview of existing survey instruments and tools (10 min per presentation) <ul style="list-style-type: none"> SPA SARA SDI PAHO Protocol AMDD WASH FIT Plenary discussion	Moderator: Rick Paul Ametepi Kavitha Viswanathan Ben Nemser Teofilo Monteiro Malick Kante Arabella Hayter
COFFEE BREAK		
11:20-12:00	Overview of settings ladders and indicators <ul style="list-style-type: none"> Overview of agreed ladders, indicators & questions for WASH in Schools (10 min) Presentation of proposed service ladders and core and expanded indicators (30 mins) 	Moderator: Arabella Christie Chatterley Rick
12:00-13:00	Survey methodology <ul style="list-style-type: none"> Facility classification Weighting Censuses vs surveys 	Moderator: Guy Hutton Ryan Cronk
LUNCH		
14:00-15:15	Group work (1): core and expanded indicators <ul style="list-style-type: none"> Water and cleaning Sanitation and hygiene Health care waste management and quality 	Group moderators: Rick Arabella Tom
COFFEE BREAK		
15:30 - 16:40	Group work (2): core and expanded indicators <ul style="list-style-type: none"> Water and cleaning Sanitation and hygiene Health care waste management and quality 	Group moderators: Rick Arabella Tom
16.40-17:00	Feedback, conclusions and wrap up	Arabella

Day 2: Thursday 23 June 2016

Session	Item	Responsibility
8:45 - 9:00	Recap of Day 1 & objectives for Day 2	Christie
9:00 - 10:00	Group work (2): core and expanded indicators <ul style="list-style-type: none"> • Water and cleaning • Sanitation and hygiene • Health care waste management and quality 	Group moderators: Rick Arabella Tom
10:00 - 10:45	Water and cleaning <ul style="list-style-type: none"> • Presentation of group work • Discussion 	Moderator: Tim Brewer
COFFEE BREAK		
11:00– 11:45	Sanitation and hygiene <ul style="list-style-type: none"> • Presentation of group work • Discussion 	Moderator: Teofilo
11:45 – 12:30	Health care waste and quality <ul style="list-style-type: none"> • Presentation of group work • Discussion 	Moderator: Fabrice Fotso
LUNCH		
13:30 - 14:30	Beyond readiness <ul style="list-style-type: none"> • Output and outcome indicators • Differences between HMIS and facility assessments 	Moderator: Oliver Schmoll
14:30 - 15:15	Next steps <ul style="list-style-type: none"> • Plans for additional modules • Potential piloting opportunities 	Moderator: Arabella
COFFEE BREAK		
15:30 – 16:00	Parking lot	Moderator: Tom
16:00 – 16:30	Summary recommendations and action points Close of meeting	Moderator: Rick