



SCOPING STUDY

Preparing for SDG reporting of WASH
in health care facilities in the East Asia
and Pacific Region

WHO Library Cataloguing-in-Publication Data

Scoping Study: Preparing for SDG reporting of WASH in health care facilities in the East Asia and Pacific Region

© UNICEF and World Health Organization 2017

All rights reserved. Publications of the World Health Organization can be obtained from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel: +41 22 791 3264; fax: +41 22 791 4857; email: bookorders@who.int).

The World Health Organization and UNICEF welcome requests for permission to reproduce or translate their publications - whether for sale or for noncommercial distribution. Applications and enquiries should be addressed to WHO, Office of Publications, through the WHO web site (http://www.who.int/about/licensing/copyright_form/en/index.html) or to UNICEF, Division of Communication, 3 United Nations Plaza, New York 10017, USA (fax: +1 212 3037985; email: nyhqdoc.permit@unicef.org).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization or UNICEF concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization or UNICEF in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization and UNICEF do not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

Photo credits: A UNICEF-trained nurse shows mothers all the steps to bathe a newborn baby at the International Peace Maternity and Child Hospital, Shanghai. © UNICEF/UNI49684/LeMoyne

Design and Layout: Nona Reuter



This study was funded by the Government of Australia Department of Foreign Affairs and Trade (DFAT)

Scoping Study

Preparing for SDG reporting of WASH in health care facilities in the East Asia and Pacific Region

Acknowledgements

The WHO/UNICEF Joint Monitoring Programme (JMP) would like to acknowledge the valuable contributions made by the following people who provided data and information throughout this scoping study: Kencho Namgyal, Ray Kangu, Mitsunori Odagiri, Reza Hendrawan, Lilik Trimaya, Aidan Cronin, Chanthea Chaing, and Sam Treglown.

Special thanks to Chander Badloe of the UNICEF East Asia and Pacific Regional Office (EAPRO) for leading these efforts.

The financial support of the Government of Australia Department of Foreign Affairs and Trade (DFAT) and the UNICEF East Asia and Pacific Regional Office (EAPRO) is gratefully acknowledged.

In addition, thanks are extended to the reviewers: Rob Bain, Tom Slaymaker, Arabella Hayter, and Rick Johnston from the JMP, in addition to the aforementioned contributors who reviewed their respective country case studies.

Special thanks is extended to Christie Chatterley for conducting the country missions, analyzing the data and information and producing this report.

Contents

1. WASH in Health Care Facilities in the SDGs	1
1.1 Regional coverage data	2
1.2 Strengthening existing national monitoring systems	3
1.3 National plans and standards	3
1.4 Bottlenecks and opportunities	3
1.5 Moving forward	4
2. Case Study – Monitoring WASH in HCFs in Indonesia	5
2.1 Existing national data	5
2.2 Existing monitoring mechanisms	5
2.3 Existing targets & standards	6
2.4 Bottlenecks and Opportunities for WASH in HCFs monitoring	6
2.5 Recommended Next Steps	7
3. Case Study – Monitoring WASH in HCFs in Papua New Guinea	8
3.1 Existing national data	8
3.2 Existing monitoring mechanisms	8
3.3 Existing targets & standards	9
3.4 Bottlenecks and Opportunities for WASH in HCFs monitoring	10
3.5 Recommended Next Steps	10
4. Case Study – Monitoring WASH in HCFs in Cambodia	11
4.1 Existing national data	11
4.2 Existing monitoring mechanisms	12
4.3 Existing targets & standards	12
4.4 Bottlenecks and Opportunities for WASH in HCFs monitoring	12
4.5 Recommended Next Steps	13

1

WASH in Health Care Facilities in the SDGs

WASH in health care facilities (HCFs) is captured in the SDG framework within targets 6.1¹ and 6.2², where the terms “universal” and “for all” highlight the need for expanding WASH monitoring from the household level to non-household settings, such as health care facilities. Relevant indicators have been defined by a global task team of WASH in HCFs professionals from various organizations and regions (see the criteria for “basic” service in Table 1-1)³. The definitions are based on global norms⁴, existing questions from international survey programmes⁵, and normative human rights criteria⁶.

To allow for progressive realization of the SDG criteria, Joint Monitoring Programme (JMP) service ladders are proposed, comprising three levels: Basic Service, Limited Service (improved facilities that don’t meet the SDG criteria for basic service), and No Service (Table 1-1). The multi-level ladders enable countries at different stages of development to track and compare progress in reducing inequities. National data will therefore not only need to include the SDG criteria, but be able to be categorized into one of the three ladder rungs for water, sanitation, hand hygiene, and health care waste. To support data collection, the global task team developed draft recommended core questions that link to the proposed ladders.³ For countries where the basic service level is not ambitious, an optional “advanced” level can be defined based on national context.

Table 1-1. Emerging JMP service ladders for monitoring WASH in health care facilities in the SDGs

Drinking water	Sanitation	Hygiene	Health care waste
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 from an improved ⁷ source is available on-premises	Basic service Improved ⁷ facilities are usable, separated for patients and staff, separated for women, provide menstrual hygiene facilities, and meet 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 3 bins in the consultation area, and sharps & infectious waste are safely treated & disposed
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 by are not usable, or do not meet the needs of specific groups (staff, women, people with limited mobility)	Limited service Hand hygiene station at either point of care or toilet, but not both	Limited service Waste is segregated but not disposed of safely, or bins are in place but not used effectively
No service Unprotected dug well or spring, surface water source; or there is no water source	No service Pit latrines without a slab or platform, hanging latrines, or there are no toilets or latrines at the facility	No service Hand hygiene stations are absent or they are present but without soap or water	No service Waste is not segregated or safely treated and disposed

1 Target 6.1: “By 2030, achieve universal and equitable access to safe and affordable drinking water for all”

2 Target 6.2: “By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations”

3 WHO/UNICEF (2016) Monitoring WASH in HCFs: Final core indicators and questions (available at wssinfo.org)

4 WHO (2008) *Essential Environmental Health Standards in Health Care*. Geneva: World Health Organization.

5 WASH in health care facilities is included in USAID SPA, WHO SARA, World Bank SDI, and Columbia EmONC surveys.

6 UN (2014) *Realising the human rights to water and sanitation: A handbook*, Booklets 1 and 5.

7 Based on JMP definitions (see www.wssinfo.org and the Limited Service level in Table 2-1)

1.1 Regional coverage data

In the 2015 World Health Organization (WHO) publication *Water, sanitation and hygiene in health care facilities: status in low and middle income countries and way forward*,⁸ coverage estimates were reported for four of the 27 countries in the East Asia and Pacific region⁹: Cambodia, Mongolia, Solomon Islands and Timor-Leste. Water access ranged from 17 to 100 per cent of health care facilities, nationally. All the reported coverage estimates were based on sub-national facility surveys. Two of the four included only hospitals, not health centres or clinics, and three of the four only report water data. Indicator definitions are not reported in the WHO report, but based on an in-depth review of available national data from country consultations in Cambodia, Indonesia and Papua New Guinea (Table 1-2), greater harmonization between data sources are likely needed for SDG reporting, as well as inclusion of all aspects of the proposed SDG criteria and nationally-representative surveys including all types of health care facilities.

Table 1-2. Available national data on WASH in HCFs for each proposed SDG criteria

SDG criteria		Cambodia	Indonesia	Papua New Guinea
Water	Improved source	47-90%*, 90% (running) (2014, EmONC) 35-82%* (2011-13, HSSP2) 22-80%*, 62% (running) (2009, EmONC) 67% (improved running water within 500m, 2008, HIEC) <i>*un/protected wells are grouped</i>	72% (have "clean" water, 2011, Rifaskes/MoH)	77% (water available at all times from an improved source, 2015, NDoH)
	Available	84% (functional, 2011-13, HSSP2) 99% (functioning, 2010, UNICEF/WHO)	72% (have year-round access, 2011, Rifaskes/MoH)	
	On premises			
Sanitation	Improved		97% access to a toilet (any type) (2011, Rifaskes/MoH)	38-100% (unclear if "simple pits" have slab or not, 2015, NDoH)
	Usable	96% (functioning) (2014, EmONC) 98% (available for use, 2010, UNICEF/WHO) 78% (functioning), (2009, EmONC)	74% (clean toilet with water available, 2011, Rifaskes/MoH)	
	Sex-separated MHM facilities			
	Staff/patient separated	52% (staff toilet, 2011-13, HSSP2) 39% (patient toilet, 2011-13, HSSP2)		
	Disability accessible	17% (disability accessible, 2015, WaterAid)		
Hand hygiene	With soap and water (or alcohol rub)	99% (soap, 2014, EmONC) 39% (functioning sink, 2011-13 HSSP2) 67% (soap next to handwashing area, 2010, UNICEF/WHO) 98% (soap, 2009, EmONC)		
	At points of care & toilets	50% (inside facility, 2010, UNICEF/WHO)		
Waste disposal	Waste separation	99% (sharps container, 2014, EmONC) 100% (sharps container, 2009, EmONC)	65% (medical waste separation, 2011, Rifaskes/MoH)	
	Waste treatment & disposal	90% (have autoclave, 2014, EmONC) 64% (burn in incinerator, 2010, UNICEF/WHO) 72% (have autoclave, 2009, EmONC)	27% (medical waste treatment with incinerator, 2011, Rifaskes/MoH)	9% incinerate and bury, 77% burn and bury, 2% in town garbage collection (2015, NDoH)

8 WHO (2015) *Water, sanitation and hygiene in health care facilities: status in low and middle income countries and way forward*. Geneva: World Health Organization.

9 Based on UNICEF regional classification, East Asia and Pacific region includes Cambodia, China, Cook Islands, Fiji, Indonesia, DPR Korea, Kiribati, Lao PDR, Malaysia, Marshall Islands, Micronesia, Mongolia, Myanmar, Niue, Nauru, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Thailand, Timor-Leste, Tokelau, Tonga, Tuvalu, Vanuatu, and Viet Nam.

1.2 Strengthening existing national monitoring systems

No regular comprehensive national monitoring mechanism was identified for WASH in HCFs in Cambodia, Indonesia or Papua New Guinea. All three countries have a Health Management Information System (HMIS), but only one WASH question was found; a question on water supply in the Indonesia HMIS. HMIS data are collected monthly and concerns were raised by government officials about the monthly collection of facility data that are unlikely to change month-to-month and have high potential to overload data analysis efforts. The HMIS are typically focused on very simple questions regarding the number of illnesses and number of supplies (e.g. vaccines, medicines) needed. While the HMIS may provide an appropriate monitoring mechanism in some countries, or for very simple questions where responses may change month to month, such as availability of water or soap, an alternative may be desired, in some cases, for the level of detail proposed in the SDG criteria.

The entry point for national monitoring of WASH in HCFs may vary widely between countries. In Cambodia, an entry point may be an annual facilities inventory checklist managed by the department of finance in the MoH, followed by a “Quality of Care” survey that has the potential to become a regular national facility survey conducted every two years. Additionally, the MoH is currently developing an assessment tool for WASH in HCFs which is aligned with the SDG criteria and could be used to develop a national baseline and/or integrated with another national survey, such as the Quality of Care assessment. In Indonesia, data exist from a 2011 MoH survey that could provide further insight with additional analysis. The environmental health section of the National Department of Health (NDoH) in Papua New Guinea has recently created and administered a survey of WASH in HCFs. Building on this momentum within national government, existing national monitoring systems were evaluated for their potential to monitor the SDGs for WASH in HCFs. NDoH officials felt the monthly HMIS questionnaire may not be an appropriate option given the frequency and type of existing questions, but suggested the “Annual Health Facility Inventory” survey as a potential entry point for monitoring the SDGs for WASH in HCFs through an existing national system.

1.3 National plans and standards

In Indonesia, there are comprehensive national standards for WASH in HCFs based on global norms, providing incentive to monitor against these existing nationally accepted standards (see section 2 for further details). Papua New Guinea includes WASH in HCFs within their national WASH policy, though specific indicator definitions lack clarity. There is also a national target that 75% of health institutions have access to WASH by 2017 included in the Ministry of Planning’s draft medium term development plan for 2016-2022. In Cambodia, there is no comprehensive policy document for WASH in HCFs¹⁰, but the newly appointed WASH in HCFs focal point in the MoH is working to create national guidelines, which may serve to raise awareness of WASH in HCFs and encourage associated monitoring (see section 4).

1.4 Bottlenecks and opportunities

Capacities for national monitoring of WASH in HCFs may be limited within existing responsibilities. One bottleneck to regular and comprehensive monitoring is the lack of a defined responsibility within national government. The SDG criteria for WASH in HCFs are often missing from national policy or scattered among various departments, including infection prevention and control, health care waste management, public works (infrastructure), and others. In Cambodia, with WaterAid and WHO support, a clear responsibility was recently defined for WASH in HCFs within the MoH: the department of hospital services. While monitoring responsibilities, specifically, are still unclear based on country consultations, identifying and clarifying responsibilities can build on recent momentum to focus on improving WASH in HCFs such as exemplified by the recently defined focal point in Cambodia and a recent government survey focused on WASH in HCFs in Papua New Guinea.

The lack of a national baseline for WASH in health care facilities in a number of countries limits target setting and progress tracking, but provides an opportunity to develop a baseline which references the relevant SDG criteria. Although many countries have limited data on WASH in HCFs, it may be more straightforward to create strong national monitoring criteria based on relevant SDG criteria where none exist, than where a national framework is already detailed and integrated. In this sense, the current bottleneck could be an opportunity for creating a very strong and streamlined framework for monitoring WASH in HCFs, which is aligned with national standards and targets, as well as the SDG criteria.

A more general bottleneck for WASH in HCFs is the lack of evidence of the link between WASH in HCFs and health.

¹⁰ Ir Por (2015) *Towards Safer and Better Quality Health Care Services in Cambodia: A Situation Analysis of Water, Sanitation and Hygiene in Health Care Facilities*. Phnom Penh: WaterAid.

Although the importance of WASH in a health care setting should be obvious, concrete evidence may facilitate policy changes, and associated monitoring efforts. The need for more evidence for WASH in HCFs was reiterated during country consultations and increased global evidence would support advocacy efforts.

1.5 Moving forward

Recommendations to streamline and harmonize national monitoring

1. Review the WASH in HCFs SDG criteria for national relevance; modifying and specifying relevant national policies, targets and standards;
2. Identify a national monitoring entry point which has the capacity to collect, analyse and report on the WASH in HCFs criteria. This may be the HMIS, an annual infrastructure survey, a regular national facility survey, or working with one of the international survey programmes (e.g. SARA, SPA, SDI) to create a baseline for WASH in HCFs;
3. Update the survey or questionnaire for the identified entry point to reflect relevant SDG criteria and national policies, based on globally recommended questions¹¹;
4. Ensure feedback of WASH data to the HCF and district level by including recent results in annual reports and online databases; and
5. In the longer-term, data validation sources should be identified, such as community surveys, health inspection reports, or the health centre accreditation system.

¹¹ See results of the 2016 expert group meeting convened by the JMP: http://www.wssinfo.org/fileadmin/user_upload/resources/160825-FINAL-WASH-in-HCF-Core-Questions.pdf

2

Case Study – Monitoring WASH in HCFs in Indonesia

Contributors: Mitsunori Odagiri, Aidan Cronin and Lilik Trimaya (UNICEF Indonesia)

2.1 Existing national data

There is no comprehensive national assessment of WASH in HCFs. There is a baseline for some WASH elements from the Rifaskes 2011; an assessment of public and private hospitals and local primary health centres (“puskesmas”) conducted by the National Institute for Health Research Development in the Ministry of Health (Table 2-1). However, the Rifaskes report does not include data from all the WASH-related questions in the survey, such as handwashing station observation, and additional analysis of the microdata would be useful. The national Health Management Information System (HMIS) includes one question asking about the type of water source, with three options (piped, dug well, others), but data were unavailable for this study. The service quality criteria captured in the global indicators for WASH in HCFs based on the SDGs, are not comprehensively reflected in the existing data available in Indonesia. A forthcoming UNICEF assessment of WASH in selected primary health centres (currently including 34 primary health centres and 48 local health offices) in three provinces provides an opportunity to better understand the quality of WASH services in HCFs based on the SDG criteria; the assessment survey is based on the globally recommended questions to ensure quality criteria are captured, beyond the presence of infrastructure.

Table 2-1. Available data related to the proposed SDG criteria for WASH in HCFs (Rifaskes, 2011)

SDG criteria	Available data	
Water	Improved source	72% (have “clean” water)
	Available	72% (have year-round access)
	On premises	No available data
Sanitation	Improved	97% access to a toilet (any type)
	Useable (functional and available)	74% (clean toilet with water available)
	Sex-separated	No available data
	Menstrual hygiene facilities	No available data
	Staff/patient separated	No available data
	Disability accessible	No available data
Hand hygiene	With soap and water (or alcohol rub)	No available data
	At all points of care and toilets	No available data
Waste disposal	Bins for waste separation near points of generation	65% (medical waste separation)
	Safely disposed sharps & infectious waste	27% (medical waste treatment with incinerator)

2.2 Existing monitoring mechanisms

There is no regular national monitoring mechanism for WASH in HCFs. The HMIS (called PUSDATIN) which collects data monthly from hospitals and health centres includes limited information on water source type, but no other WASH indicators. The existence of a WASH question in the current survey suggests that the HMIS may be an appropriate entry for SDG monitoring, but monthly data collection may be too frequent for the number of additional questions that would be needed to align this monitoring with the SDGs. Additionally, HMIS data are self-reported. However, hospital accreditation, conducted every three years by central government officials, may serve as a validation source for HMIS or other self-reported data. Data from different units within the Ministry of Health (MoH) also feed into the HMIS, which may be a more appropriate entry point for WASH in HCFs. Under the Sub-directorate of Environmental Health within the MoH, the water and sanitation unit may provide an entry point for monitoring WASH in HCFs. A more strategic entry point may be to work through the planning bureau and see if there are any existing WASH indicators or targets for HCFs that could be leveraged and built on for national monitoring of WASH in HCFs.

2.3 Existing targets & standards

The MoH has comprehensive national standards for WASH in HCFs that are based on WHO global norms (Table 2-2). Strengthening national monitoring of WASH in HCFs would support tracking against these national standards, as well as the SDGs.

Table 2-2. National standards for WASH in HCFs in Indonesia compared with global norms

	MoH	WHO
Water quantity (Outpatient)	<ul style="list-style-type: none"> 15-20 L/person/day 	<ul style="list-style-type: none"> 5 L/Consultation
Water quantity (Inpatients)	<ul style="list-style-type: none"> 40-60 L/bed/day 	<ul style="list-style-type: none"> 40-60 L/patient/day
Water quantity (Others)	<ul style="list-style-type: none"> Not indicated 	<ul style="list-style-type: none"> Operating theatre /maternity unit: 100 L/intervention Cholera treatment centre: 60 L/patient/day ...etc
Water quality	<ul style="list-style-type: none"> Water meets the physical, chemical, bacteriological requirements in accordance with applicable regulations Water sampling from a water tank and the furthest faucet is performed at least 2 times (dry & rainy season) / year (No indications on the implementation of water testing in Rifaskes) 	<ul style="list-style-type: none"> Drinking water meets WHO guidelines or national standards Water of appropriate quality is supplied for medical activities
Sanitation (Outpatient)	<ul style="list-style-type: none"> Employees: 1 bathroom and 1 toilet per 15 people Outpatients: 1 bathroom and 1 toilet per 40 people 	<ul style="list-style-type: none"> 4 toilets per outpatient setting (one for staff and three for patients - females, males and children)
Sanitation (Inpatient)	<ul style="list-style-type: none"> 3 bathroom and 1 toilet for 10 people 	<ul style="list-style-type: none"> 1 toilet per 20 users for inpatient settings
Sanitation access	<ul style="list-style-type: none"> Not indicated 	<ul style="list-style-type: none"> Easily accessible (i.e., no more than 30 m from all users)
Waste water	<ul style="list-style-type: none"> A septic tank that meets health requirements The channels of wastewater should be waterproof, clean of trash and equipped with a box control for every 5 meters. Disposal of waste water after SPAL* is by way of letting it absorbed into the soil. 	<ul style="list-style-type: none"> All open drainage systems should be covered. If the sewer does not lead to a treatment facility, an on-site retention system with treatment will be necessary. At least 1.5 m between the bottom of the infiltration system and the groundwater table (more in coarse sands, gravels and fissured formations), and the system should be at least 30 m from any groundwater source.
Handwashing points	<ul style="list-style-type: none"> Not indicated specifically for sanitation facilities 	<ul style="list-style-type: none"> Water points, with soap and adequate drainage, should be provided at the exit of all toilets.
Handwashing stations	<ul style="list-style-type: none"> A sink is available in rooms such as Dental Room, Maternal & Child Health (MCH) Room, Treatment Room, Examination Room, Injection Room, Laboratory, Radiology Room and other rooms that require water It functions well and it is equipped with an elbow water valve or tap. It has soap or an anti-septic. 	<ul style="list-style-type: none"> A reliable water point, with soap or a suitable alternative, is available at all critical points within the health-care setting (operating theatres, wards, consulting rooms, dressing stations, etc.) and in service areas (sterilization, laboratory, kitchen, laundry, showers, toilets, waste zone and mortuary).
Medical and domestic waste (Segregation and collection)	<ul style="list-style-type: none"> Infectious waste must be separated from non-infectious. Each room must be provided with a garbage bin for (1) infectious waste, (2) sharp objects/needles and (3) domestic waste. 	<ul style="list-style-type: none"> Segregation, separate storage and collection for (1) sharps, (2) non-sharps, (3) non-sharps non-infectious waste and (4) hazardous waste
Medical and domestic waste (Treatment and disposal)	<ul style="list-style-type: none"> Infectious waste is destroyed in an incinerator. No specific guidelines on sharp disposal. Domestic waste can be buried, burned or transported to a landfill. Infectious waste originating from lab, clinic and delivery room is handled by soaking in 3% chlorine solution for one night, boiled until simmer for 1 hour or heated in an autoclave for 15 mins and burned/buried under the soil. 	<ul style="list-style-type: none"> Sharps should be disposed of in buried drums...etc. Non-sharps infectious waste should be buried in a pit fitted with a sealed cover and ventilation pipe for on-site treatment in small health-care settings or, high-temperature incinerated or steam sterilized on-site or off-site.

2.4 Bottlenecks and Opportunities for WASH in HCFs monitoring

Bottlenecks

- There is no comprehensive baseline for WASH in HCFs in Indonesia and the status has not been consolidated or documented;
- There is no existing national monitoring mechanism or clear entry point for WASH in HCFs;
- It is unclear who is responsible for monitoring, reporting and follow-up action; and
- There is limited global and national evidence for the impact of WASH improvements in HCFs.

Opportunities

- The national standards for WASH in HCFs are comprehensive and aligned with global norms, providing a national framework that is closely aligned with the SDGs;

- The water and sanitation unit under the sub-directorate of environmental health in the MoH may provide a good entry point for defining WASH in HCFs responsibilities; and
- WASH in HCFs is becoming a global research priority and more evidence is expected to support the advocacy for accelerated action on this critical issue.

2.5 Recommended Next Steps

The following actions are recommended to build on the identified opportunities and address bottlenecks:

1. Align upcoming UNICEF WASH in HCFs assessment survey with proposed SDG criteria;
2. Advocate for identification of a WASH in HCFs focal point (including monitoring responsibilities) within the MoH;
3. Support inclusion of a comprehensive set of WASH questions in the HMIS or other regular monitoring system;
4. Investigate the potential of the HCFs accreditation system to serve as a data validation source for WASH in HCFs;
5. Support inclusion of WASH in HCFs in national reporting and feedback to provinces/districts; and
6. Advocate for more detailed WASH targets in national plans that are aligned with the comprehensive national standards.

3

Case Study – Monitoring WASH in HCFs in Papua New Guinea

Contributors: Kencho Namgyal (UNICEF PNG) and Ray Kangu (NDoH)

3.1 Existing national data

There is no comprehensive national baseline for WASH in HCFs. However, five of the 13 SDG criteria are captured in a recent survey by the Environmental Health section of the National Department of Health (NDoH). Data were collected from accessible health care facilities; hospitals and remote facilities are not included due to logistical and financial limitations. Findings provide some insight into the WASH situation in HCFs based on the SDG criteria (Table 3-1).

Table 3-1. Available data related to the proposed SDG criteria for WASH in health care facilities

	SDG criteria	Available data
Water	Improved source	77% (improved and available at all times, 2015, NDoH)
	Available	
	On premises	100% (within 50m of buildings, 2015, NDoH)
Sanitation	Improved	38-100% (unclear if “simple pits” have slab or not, 2015, NDoH)
	Useable (functional and available)	No available data
	Sex-separated	No available data
	Menstrual hygiene facilities	No available data
	Staff/patient separated	No available data
	Disability accessible	No available data
Hand hygiene	With soap and water (or alcohol rub)	No available data
	At all points of care and toilets	No available data
Waste disposal	Waste segregation in exam rooms	No available data
	Safely disposed sharps and infectious waste	9% (incinerate and bury, 2015, NDoH) (77% burn and bury, 2% in town garbage collection)

3.2 Opportunities within existing monitoring mechanisms

The NDoH manages a monthly questionnaire in the Health Management Information System (HMIS, called NHIS in Papua New Guinea). The four page HMIS questionnaire is completed by administrators at all public health care facilities, including hospitals and health centres. There are no WASH questions; the questionnaire focuses on the number of patients, illnesses and needed medications. Monthly data collection may be too frequent for WASH given the limited analysis and reporting capacities; less frequent monitoring may also allow for more detailed questions. The facility inventory survey is an existing annual data collection system that may provide a more appropriate entry point for monitoring WASH in HCFs in the SDGs in Papua New Guinea.

Aligning the annual facility inventory survey would enable the NDoH to track progress toward the national targets for WASH in HCFs set in the WASH Policy 2015-2030, as well as the SDGs. For inclusion in the NDoH annual survey, the globally recommended questions will need to be simplified and adjusted for use in a self-administered questionnaire. A simplified version of the globally recommended questions are found in Box 3-1 for consideration by the NDoH and WASH PMU for inclusion in the annual facility inventory survey. Question four (italicized) was added to the question list, in addition to the globally recommended core questions, by a NDoH representative based on national priorities and interests. These questions should be modified and further simplified by national government based on local context, including common facility types and modifying the wording to ensure questions are understood by HCF staff.

Box 3-1. Example questions for inclusion in the annual healthcare facility inventory survey in PNG

1. Main water source (select one): Piped Protected well/spring Rainwater
 Unprotected well/spring River/Lake/Canal Tanker truck No water source
2. Main water source is on premises: Yes No
3. Water from main source is currently available: Yes No
4. Is running water available at labour ward / labour rooms? Yes No
5. Type of toilets (select one – most common): Flush/Pour-flush Pit with slab/covered
 Pit without slab/open Composting Hanging Latrine None
6. Number of usable (accessible, functional, private) toilets for outpatient facility: _____ (insert number)
7. Toilets separated for men and women: Yes No
8. Women’s toilets have facilities to manage menstrual hygiene (covered bin, water, soap): Yes No
9. Toilets separated for staff and patients: Yes No
10. At least one toilet accessible to those with limited mobility: Yes No
11. Soap and water (or alcohol gel) currently available in a randomly selected outpatient consultation room:
 Yes Somewhat (not functional or lacking materials) No
12. Soap and water currently available near toilets: Yes Either no soap or no water No soap or water
13. Sharps, infectious and general waste are safely separated into three bins in a randomly selected consultation room: Yes Somewhat (bins are full or include other waste) No
14. Treatment/disposal of sharps waste: Autoclave Incinerate (2 chamber, 850-1000C) Brick incinerator
 Open burning Open dumping without treatment Chemical disinfection (e.g. with hypochlorite)
 Not treated, but buried in lined, protected pit Not treated and added to general waste
 Not treated, but collected for medical waste disposal Other:_____ (specify)
15. Treatment/disposal of infectious waste: Autoclave Incinerate (2 chamber 850-1000C) Brick incinerator
 Open burning Open dumping without treatment Chemical disinfection (e.g. with hypochlorite)
 Not treated, but buried in lined, protected pit Not treated and added to general waste
 Not treated, but collected for medical waste disposal Other:_____ (specify)

3.3 Existing targets & standards

There are no comprehensive national standards for WASH in HCFs, but there are national targets. The Water, Sanitation and Hygiene Project Management Unit (WASH PMU) within the Department of Planning has set targets in the *National Water, Sanitation and Hygiene Policy 2015-2030*. Household targets for water and sanitation are set at 70% (below the SDG target of 100% by 2030) due to the very low current coverage figures, however household handwashing and WASH in institutions targets are 100% by 2030, including:

- 100% of medical centres (including hospitals, health centres and aid posts) have access to a safe, convenient and sustainable water supply
- 100% of medical centres have access to safe, convenient and sustainable sanitation facilities
- 100% of medical centres have handwashing facilities with running water and soap

Further details of what “safe, convenient and sustainable” facilities comprise are needed and may provide an opportunity for alignment with SDG indicators. Due to the recent development of these targets, there is limited monitoring of progress toward them. Monitoring WASH in institutions is included in the Ministry of Planning’s Draft *Medium Term Development Plan Monitoring and Evaluation Framework 2016-2022*. The framework specifies a target of 75% by 2017 for access to WASH in health care facilities.

3.4 Bottlenecks and Opportunities for WASH in HCFs monitoring

Bottlenecks

- There is no comprehensive baseline for WASH in HCFs in Papua New Guinea;
- There is no comprehensive policy document for WASH in HCFs within the NDoH;
- There is no existing national monitoring mechanism or clear entry point for WASH in HCFs; and
- The HMIS questionnaire is collected monthly which may be too frequent for WASH data.

Opportunities

- Although new, the WASH PMU is a strong unit in the Department of Planning, they are aware and advocating the WASH targets in the SDGs, and have clear responsibility for national WASH monitoring;
- The recent results from the WASH in HCFs assessment conducted by the Department of Health (Environmental Health section) provides momentum to build upon;
- The Environmental Health section within the NDoH may be a good focal point for reporting WASH in HCFs data to the WASH PMU; and
- The existing annual facility inventory survey could provide an opportunity to collect national WASH in HCFs data.

3.5 Recommended Next Steps

The following actions are recommended to build on the identified opportunities and address bottlenecks:

1. Investigate the potential to include WASH in HCFs questions in the annual facility inventory survey, aligned with the SDGs (Box 3-1);
2. Investigate potential data validation mechanisms;
3. Include WASH in HCFs in national reporting and feedback to provinces/districts; and
4. Create a comprehensive policy document, including national standards based on relevant global norms within the NDoH for WASH in HCFs (with WASH PMU).

4

Case Study – Monitoring WASH in HCFs in Cambodia

Contributors: Chanthea Chaing and Sam Treglown (UNICEF Cambodia)

4.1 Existing national data

There is no comprehensive national assessment of WASH in HCFs.¹² There are sub-national assessments that include WASH indicators, but they are not comprehensive or aligned. Existing coverage data provide limited evidence of the service quality criteria in the SDGs, including but not limited to, the availability of soap in key locations, sex-separated toilets, and water source type categories that allow for analysis of “improved” and “unimproved” sources (Table 4-1). Available data present a snapshot of WASH infrastructure but may mask challenges of poor service quality. The National WASH in HCFs assessment conducted in late 2016 in five provinces by the National Institute of Public Health (NIPH) (within the MoH) with support from UNICEF, WHO and WaterAid provides an opportunity to understand the quality of WASH services in HCFs by including the global SDG criteria. The assessment results are expected in 2017.

Table 4-1. Available SDG-relevant data on WASH in health care facilities in Cambodia

WASH Data	Year	Sample	Source
<ul style="list-style-type: none"> 90% have running water Water source: 46% piped, 43% well or bore, 1% rainwater, 7% surface water, 3% other 96% have functioning toilet 99% have soap 99% have puncture proof sharps container 90% have an autoclave 	2014	90 hospitals 88 health centres	Columbia University (2014) Emergency Obstetric and Newborn Care Survey
<ul style="list-style-type: none"> 62% have running water Water source: 21% piped, 57% well or bore, 1% rainwater, 13% surface water, 5% other 78% have functioning toilet 98% have soap 100% have puncture proof sharps container 72% have an autoclave 	2009	77 hospitals 66 health centres	Columbia University (2009) Emergency Obstetric and Newborn Care Survey
<ul style="list-style-type: none"> 84% have a functional water source (20% piped, 15% rainwater, 47% well) 52% have at least a functioning toilet for staff 39% have at least a functioning toilet for patients 39% have a functioning sink 	2011	280 health centres	MoH (2013) Second Health Sector Support Program (HSSP2).
<ul style="list-style-type: none"> The average score for WASH-related component was low, but unclear specifics; hygiene practices were collected but not reported separately 	2013	564 health centres & 41 hospitals in 8 provinces	MoH (2014) Quality of Care Assessment Level 2. Hospital Services Dept
<ul style="list-style-type: none"> 67% have improved running water source within 500m 	2008	447 facilities in 7 ODS	Macro International (2009) Cambodia Health Impact Evaluation
<ul style="list-style-type: none"> 99% have functioning source of water (not always accessible in exam rooms or from improved source) 98% have a toilet available for use 50% have handwashing facilities inside the health centre (not always in exam rooms) 67% have soap next to the handwashing area 64% burn medical waste in an incinerator 	2010	120 facilities	MoH (2010) Health Facility Survey in Cambodia 2010. Supported by WHO/UNICEF
<ul style="list-style-type: none"> 100% have water and toilets 17% provided drinking water to clients 17% have disability accessible toilets (hospitals) 100% hospitals and 75% health centres have functional, improved sanitation 	2015	12 facilities in Kampong & Prey Veng	WaterAid/WHO (2015) Pilot healthcare facility WASH assessment

12 Ir Por (2015) Towards Safer and Better Quality Health Care Services in Cambodia: A Situation Analysis of Water, Sanitation and Hygiene in Health Care Facilities. WaterAid: Phnom Penh.

4.2 Existing monitoring mechanisms

There is no regular national monitoring mechanism for WASH in HCFs.¹² The MoH 2016 assessment tool was aligned with the globally recommended questions for WASH in HCFs and will provide valuable baseline data, but a regular monitoring mechanism is still needed to track progress over time. The Health Management Information System (HMIS) collects data each month from HCFs but does not include WASH data.

During country consultations, MoH representatives expressed hesitation about the inclusion of WASH in the monthly HMIS as data collection seemed too frequent for WASH information. Considering the seasonal water supply variations in Cambodia, the monthly HMIS may provide an opportunity for monitoring aspects of WASH that are more likely to change frequently, such as water availability and soap. For comprehensive WASH monitoring, MoH officials felt the annual “facility inventory checklist” is a more appropriate entry point for monitoring WASH. The annual checklist should already include WASH infrastructure, but details were not available for this case study. The 2013 MoH Quality of Care assessment includes some WASH questions (bins for waste segregation and hand hygiene in consultation rooms) and may also be a promising entry point for national WASH monitoring if it becomes a regular national assessment (i.e. annual or every few years).

4.3 Existing targets & standards

Strengthened and consolidated standards and targets for WASH in HCFs would support increased and aligned monitoring, but to date, comprehensive national policies, targets or standards for WASH in HCFs still need to be developed and operationalized.¹² The *National Strategic Plan for Rural Water Supply, Sanitation and Hygiene 2014-2025* does include mention of plans to “develop a national standard for the number of latrines per inpatient and outpatient, defined separately for males and females and people with disabilities” and “prepare and maintain an inventory of existing toilets, water and sanitation facilities, including functionality, in all health centres and other institutions”. The draft monitoring framework for the *Health Strategic Plan 2016-20* and the draft *Cambodian SDGs 2016-2030* include functional water and sanitation in HCFs (indicators 74 and 75), both of which are positive developments. WASH is also included to a limited extent in some national policy documents, including the following (for more details see the source in footnote 12):

- *The Minimum Package of Activities (MPA) 2008-2015*¹³ guideline for health centres has broad reference to safe water, hand hygiene & waste disposal. The upcoming MPA is expected to have more. The MPA links to the Quality of Care assessment; MPA alignment with the SDGs for WASH in HCFs would therefore ensure that the SDG criteria for basic WASH service are included in the Quality of Care survey;
- *The Complementary Package of Activities (CPA)*¹⁴ guideline for hospitals references WASH, including sanitation facilities, quality and quantity of water, hygiene, and healthcare waste disposal;
- *The National Guideline on Health Care Waste Management*¹⁵ (2012) has specific criteria for safe healthcare waste disposal; and
- *The Infection Prevention and Control (IPC) guidelines*¹⁶ includes WASH and the IPC strategic plan¹⁷ has a target that 60-100% (depending on facility type) have “sufficient equipment and appropriate infrastructure to implement IPC precautions,” including WASH.

4.4 Bottlenecks and Opportunities for WASH in HCFs monitoring

Bottlenecks

- There is no comprehensive national baseline for WASH in HCFs in Cambodia and consequently the status is not well-understood or documented;
- Existing regular national monitoring mechanisms for HCFs don’t include comprehensive WASH criteria; and
- There is potential for further clarifying responsibilities for monitoring, although the Department of Hospital Services (DHS) is responsible for developing guidance for WASH in HCFs.

13 MoH (2007) *Guidelines on Minimum Package of Activities For Health Center Development 2008-2015*. Phnom Penh: Ministry of Health.

14 MoH (2014) *Guidelines on Complementary Package of Activities for Referral Hospital Development*. Phnom Penh: Ministry of Health.

15 MoH (2012) *National Guideline on Health Care Waste Management*. Phnom Penh: Department of Hospital Services and Working Group on Health Care Waste Management, Ministry of Health.

16 MoH (2010) *Infection Prevention and Control Guidelines for Health Care Facilities*. Phnom Penh: Ministry of Health.

17 MoH (2010) *National strategic plan for infection and control in health care facilities 2011-2015*. Phnom Penh: Ministry of Health.

Opportunities

- A focal point for WASH in HCFs within the MoH has been identified: the DHS;
- The MPA guidelines, which link to the Quality of Care assessment, are currently being revised;
- The facilities inventory annual checklist may be an entry point for regular national monitoring; and
- The MoH has created an assessment tool for WASH in HCFs that is aligned with the SDGs.

4.5 Recommended Next Steps

The following actions are recommended for discussion with the MoH to build on the identified opportunities and address bottlenecks:

1. Establish a WASH in HCFs baseline to support advocacy for comprehensive standards, targets & monitoring (using the MoH assessment tool, if possible);
2. Build upon the recent identification of a WASH in HCFs focal point within the MoH to develop capacity and systems to support strengthened WASH in HCFs monitoring within the MoH;
3. Increase focus on WASH in the MPA guideline (which links to the Quality of Care assessment), including service quality components as specified in the SDG criteria;
4. Investigate the potential to include WASH in the annual MoH facilities inventory checklist; and
5. Include WASH in HCFs in national reporting and feedback to provinces/districts.

