WASH Technical Paper TP/21/2021

unicef for every child

Scaling Up WASH FIT as an Innovative Quality Improvement Tool to Respond to Long-Term Challenges in Health Care Facilities

SUMMARY

The low coverage and poor quality of WASH infrastructure and services in health care facilities (HCFs) remains a persistent challenge, thrown into sharp focus during the COVID-19 pandemic. Where clean water and handwashing facilities with soap are lacking, a challenge is presented in stemming the transmission of COVID-19, alongside other outbreaks such as cholera and ebola. WASH services in HCFs are important because they help strengthen the resilience of health systems, allowing them to help prevent disease outbreaks and transmission by creating an effective response to health emergencies and bringing them under control when they occur.

To support processes and systems that promote improving coverage of WASH in HCFs, a typical and critical first step is to collect data, particularly where the quality of data is poor or unavailable. The most recent WHO/UNICEF Joint Monitoring Programme report has shown that several countries lacked data on key WASH indicators. The WASH FIT tool, developed by WHO and UNICEF, is a framework for implementing incremental quality improvements on WASH in HCFs to meet local, national and/or global standards. It has been used by WASH programmes in over 40 countries, including during COVID-19 response.

This note outlines the importance of the tool and summarizes experiences of three UNICEF WASH programmes (Venezuela, Guinea Bissau and Nicaragua), in implementing the tool during COVID-19 response. It draws out lessons learned and success factors that can be considered in a range of contexts.

Introduction

The Status of WASH in HCFs

Water, sanitation and hygiene (WASH) in health care facilities (HCFs) is a priority in the Sustainable Development Goals, shown through targets 6.1 and 6.2 on universal WASH access and target 3.8 on universal health coverage. Despite the universal targets on WASH, which includes HCFs, a quarter of all HCFs have no basic water services globally and one in three do not have adequate facilities to clean hands at the

points of care.[1] Greater concerted attention was given to WASH in HCFs when, in 2018, the United Nations Secretary General made a Call to Action for WASH in HCFs where he called on Member States, the United Nations and partners to act collectively to improve these services.[2]

Access to WASH in HCFs was thrown into sharp focus during the COVID-19 pandemic. When the pandemic struck in 2020, it exposed gaps in WASH services in HCFs, especially in low resource settings. It is known that strong health systems are the best defense against any outbreak,[3] and WASH facilities play a vital role in this. The lack of clean water and absence of handwashing facilities with soap has presented a challenge in stemming the transmission of COVID-19 and other infectious diseases that low-income countries (LIC's) contend with even previous to the pandemic, including Cholera, Ebola and diarrheal disease. Without such WASH facilities and services, HCFs and quarantine centers are more likely to become hotspots of infection and reinfection, spreading diseases to the wider community when patients are discharged or when asymptomatic staff leave the hospital. WASH services in HCFs are important because they help strengthen the resilience of health systems, allowing them to help prevent disease outbreaks and transmission by creating an effective response to emergencies and bringing them under control when they occur.

Before the pandemic, it has been shown that immediate, incremental investments in WASH can bring about big returns for citizens and societies. Safe WASH helps improve quality of care for mothers, newborns and children, improves patient safety and uptake of services, e.g. facility births and vaccinations. Improving hygiene in HCFs is a "best buy" for tackling antimicrobial resistance (AMR). It reduces health care costs because WASH reduces infections associated with healthcare, which are costly to treat. WASH on site saves time because health workers do not have to spend valuable time searching for water for hand hygiene when delivering care. WASH also improves patient satisfaction, helps health care workers model good hygiene behaviours and increases occupational health safety. During extreme climatic conditions and other emergencies, WASH helps mitigate health impacts to populations.

The scale of resources needed to improve WASH in HCFs are considerable yet affordable. Estimates by WHO and UNICEF indicate that the total cost to achieve universal coverage of WASH in the 46 least developed countries' HCFs is between US$6.5 and US$9.6 billion from 2021 to 2030 (Chaitkin et al, 2021). Data has shown that hospitals require considerably more investment in hygiene than in water or sanitation.

A key challenge in scaling up WASH improvements in HCFs is securing political commitment and leadership and engaging with communities who sue these services. Generating data can be a major stimulus within this process, where quality of data is poor or even unavailable. The most recent WHO/ UNICEF JMP report (2020) has shown that several countries lacked data and some national data sources did not provide all the information necessary for monitoring and reporting basic water services (i.e. having water available from an improved water source located on premises). In 2019, only 78 countries representing 44% of the global population had sufficient data to make estimates

[1] Data from 2020 WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) *Global progress report on WASH in health care facilities: Fundamentals first*, which showed baseline estimates for water, sanitation, hand hygiene, health care waste management and environmental cleaning (WASH) services in health care facilities (HCFs). Other important findings from the report include: Ten percent of health care facilities had no sanitation service; One third did not segregate waste safely. Also the report found that most countries in the world have insufficient data to report on basic WASH services in HCFs. Filling data gaps and setting baselines should be an immediate priority.

[2] Further details found at: https://www.washinhcf.org/about/

[3] Director-General of WHO, Tedros Adhanom Ghebreyesus, 30 March 2020: https://www.who.int/news/item/30-03-2020-who-releases-guidelines-to-help-countries-maintain-essential-health-services-during-the-covid-19-pandemic

on proportion of HCFs with no water service (Ibid).

Recent innovations to improve the timeliness and quality of data have included the use of tools to enable national level and real-time data collection to inform planning and to address WASH gaps in HCFs. One such tool is the WASH Facilities Improvement Tool (WASH FIT), developed jointly by WHO and UNICEF, which is a methodology to improve quality of care (QoC) in HCFs through safe, environmentally sustainable and climate resilient WASH infrastructure and services. It uses a step-wise approach to assess and identify areas for incremental WASH improvements in HCFs on regular basis. It has been tested in several countries both before and during the COVID-19 response. The work has included cooperation with WHO, national stakeholders, health sector partners and other partners including international non-governmental organizations (INGO's), to make accelerated improvements to WASH in HCFs in different countries.

Purpose

The purpose of this note is to underscore the importance of the WASH FIT tool and to help users accelerate improvements to WASH in HCFs. It reviews and analyzes recent UNICEF WASH FIT experiences, with reference to COVID-19 response, where actions have prepared the ground for augmenting WASH in HCFs. The note aims to share experiences on WASH FIT practices and for readers to understand how the tool can be applied to UNICEF WASH in HCFs programme at national level and other contexts.

Scope

The note looks at the use of WASH FIT with reference to the COVID-19 pandemic. It covers two situations: (a) where plans were developed to improve WASH in HCFs, either before COVID-19 or where the pandemic led to a reinvigoration of such plans, typically initiated by an assessment process; and (b) where strategic plans did not exist (despite a need for them) but additional COVID-19 response funding was made available and assessments used to scale up provision. Specifically, the note:

- Outlines the global status of WASH in HCFs and demonstrates how low coverage of WASH presents significant risks and presents challenges in handling the COVID-19 pandemic.
- Examines the available evidence on the WASH FIT as a quality improvement tool and the ways in which the tool has supported sector partners in scaling up WASH in HCFs.
- In different geographical contexts, reviews practical experiences (best practices and lessons learned) of WASH FIT implementation during the COVID-19 response.
- Outlines common elements of good practice for consideration, as well as some critical lessons learned.

Organization of the Note

Chapter 2 explains the context of WASH response to COVID-19 and the WASH FIT tool. Chapter 3 looks at global practices of WASH FIT. Chapter 4 describes the analysis drawn from the cases.

Context

Improving WASH in HCFs is core to UNICEF's WASH programme, which recognizes that hundreds of millions of people face an increased risk of infection by seeking care in health facilities that lack basic necessities, including water, sanitation, hygiene (WASH) and waste services (WHO and UNICEF, 2019b). UNICEF's Strategy for WASH (2016–2030) states that UNICEF will work on improving access to WASH in schools and HCFs as part of the SDG 6 agenda of universal access as well as in support of SDG targets relating to health, education and gender equality. UNICEF works with WHO and Ministries of Health (MoH) to formulate, promote and support viable approaches for ensuring adequate

WASH in HCFs. To this end, UNICEF advocates for and supports planning and monitoring of WASH in HCFs and mobilization of resources to scale up WASH in HCFs.

Specifically, in public health emergencies, both in terms of contributing to the control of disease and of ensuring continuous services in communities and HCFs, UNICEF has focused WASH efforts on the continuous delivery of WASH services where existing systems are disrupted. The objective is to prevent the spread of disease by (a) supporting health systems' responses to outbreaks to ensure adequate WASH; and (b) convening key sector partners to establish coherent guidelines and a coordinated approach to the WASH response in all major public health emergencies.

COVID-19 in HCFs – WASH as a foundation of response

Since the COVID-19 pandemic hit, UNICEF has worked with WASH partners around the globe to help countries acquire the most basic WASH measures in HCFs and thus improve infection, prevention and control (IPC) measures and the safety of patients and health care workers. The focus has been on achieving high levels of hygiene in HCFs, which has been extremely difficult in the absence of a steady supply of safe water and hand-washing facilities (hand sanitizers are less effective when hands are visibly dirty).[4] UNICEF was able to continue support in HCFs while also scaling up into new, previously unsupported areas. Its strategy is to support the efforts of Ministries of Health and Water and or Environment to secure safe IPC activities in HCFs in affected areas and areas most at risk.

Over a year since WHO declared the outbreak as a pandemic and as the disease continues to spread globally, WASH remains an important part of longer-term response for various reasons. One of these reasons is the association between WASH and care seeking behavior, an important factor in COVID-19 response. It is apparent that, although people who have contracted COVID-19 need appropriate care to support recovery, the rapidly increasing demand for such care is compounded by fear, misinformation and limitations on the movement of people and supplies that disrupt the delivery of frontline health care for everybody (IFRC, UNICEF, WHO; 2020). There is a concern that people who do not have COVID-19, but need treatment for other diseases, may fail to seek care for fear of contracting the disease when accessing health systems (Ibid). A systematic review conducted before the pandemic sought to assess the relationship between WASH in HCFs and patient satisfaction/care-seeking behavior in low- and middle-income countries (Bouzid et al, 2018). The study found an association between poor WASH provision and significant patient dissatisfaction with infrastructure and quality of care; poor provision also stopped women from seeking care at maternity service facilities (Ibid). In the context of COVID-19 in LICs, this is more reason to support WASH, alongside other measures where people may be mistrustful of attending healthcare at places where COVID-19 patients are being treated.

The WHO has highlighted that providing safe care in HCFs will not happen where WASH is sub-optimal and IPC measures are not invested in (WHO, UNICEF and WaterAid, 2019). In settings where WASH and IPC measures are low, infections are frequent which results in an over-reliance on antibiotics, driving AMR (Ibid). Health care associated infections are a constant risk to staff and care seekers and communities and present a major threat to society at large. To combat AMR, measures which promote WASH and IPC are strongly recommended (alongside antimicrobial stewardship guidelines), presenting an even greater reason for WASH improvements as a preventative measure for major crises.

[4] More details on the use of hand sanitizer in community settings can be found at the (US) Centers for Disease Control and Prevention (CDC) web page https://www.cdc.gov/handwashing/show-me-the-science-hand-sanitizer.html

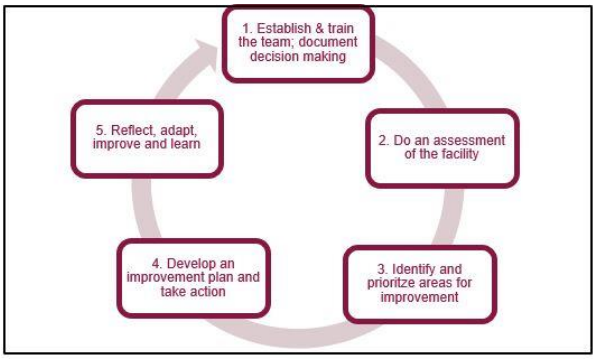
In this context, UNICEF's WASH scope of work in the COVID-19 response is to support affected, at-risk, low capacity and fragile countries to secure WASH services and IPC in HCFs. Country programmes have been fully coordinated with MoH/WHO/Health actors as part of the national COVID-19 coordination mechanism set-up, enabling WASH programmes to prioritize and integrate WASH interventions. Capacities have been increased to assure the continuity of WASH services and to improve IPC measures in HCFs, reduce transmission and contamination from diseases and infections from health facilities to communities, as well as respond to the water and sanitation service demands resulting from the increased number of patients.

Using WASH FIT to support quality improvements

Data collection, assessments and analysis form a very important part of scaling up WASH in HCFs. Garnering wider attention for improvements from decision-makers is difficult without understanding the state of WASH services. All of these activities are part of *planning, monitoring and review*, one of the building blocks in UNICEF's Enabling Environment Framework, with its five sector-strengthening building blocks: a) sector policy/strategy; b) institutional arrangements; c) sector financing; d) planning, monitoring and review; and e) capacity development.[5]

Assessments in HCFs should guide next steps, including the development of roadmaps and strategies that define the approach to interventions, intervention areas, responsibilities, targets and budgets for and monitoring of WASH improvements over a defined time period. Budgeting and resource mobilization, reporting and advocacy all need clear data that is as accurate as possible. Therefore, assessments are not just for the sake of data collection – they have several other secondary benefits and provide a solid ground on which to strategize and plan.

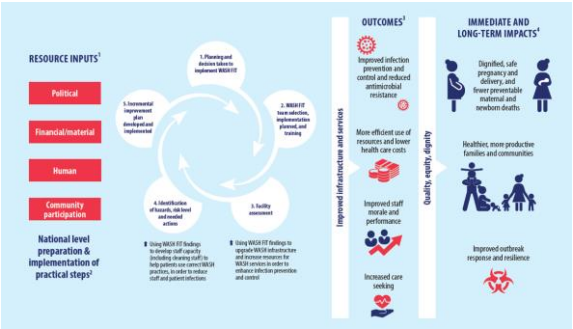
Figure 1: The Five Step Approach to WASH FIT Implementation



WHO and UNICEF, recognizing the risk-based approach needed to improve, scale up and sustain WASH in HCFs and to address the major gaps in WASH practices and processes, piloted the WASH FIT in 2015 and launched it in 2018. The WASH FIT, a quality improvement tool intended to be used on a continuous and regular basis, is a framework to guide WASH improvements through a multistep, iterative process (see Figure 1). It facilitates improvements in WASH services and the quality and experience of care in HCFs. The specific steps to be followed include: establishing quality improvement teams for WASH FIT implementation; assessment of WASH facilities; identification of quality improvement actions such as moving from one service level of WASH to the next (e.g. from no service to limited service); strengthening IPC measures to reduce infection rates; and facilitating the development of an enabling environment by bringing together all those who share responsibility for providing these services, implementation and monitoring against improvement plans and continuously improving based on lessons learnt from implementation.

[5] It is useful to note that assessments using WASHFIT are focusing on infrastructure, services, practices and processes within facilities. Typically, situation analysis is used to understand enabling environment.

Figure 2: Impacts of the WASH FIT methodology



Source: WASH FIT version 2 (forthcoming)

The WASH FIT framework is adaptable, enabling users to customize the tool. Countries can add their national level indicators and make decisions on which WASH FIT indicators to consider (based on their national context- priorities, national standards or national level indicators which may not be captured in global standards and indicators) when planning quality improvements. In some contexts, the WASH FIT indicators may not apply or may not be relevant at a particular moment in time, for instance where a HCF does not plan to provide piped water during a certain period of WASH FIT implementation due to budgetary constraints, in which case they may not include it in their immediate improvement and monitoring plans, but decide on specific indicators that are most relevant to help them achieve desired incremental improvements in the short term.

However, countries must bear in mind global core standards and indicators for which they are strongly encouraged to adopt to ensure coherence in global efforts to achieve basic (and advanced) WASH service levels and adherence to global standards and norms. This means that while countries can add their own national indicators into the tool and while they may decide to pick specific indicators from the tool, it is important to note that the criteria for and definitions of indicators and standards included in the tool cannot be changed by countries to fit their situation.

An example of adaptation is when, at the onset of the COVID-19 pandemic, UNICEF identified crucial indicators that would help poorer countries without basic or even limited WASH service levels improve and accelerate WASH services and IPC measures in HCFs to effectively respond to the pandemic.

Before the pandemic in 2020, modifications were introduced for each of the five WASH FIT steps to support inclusion of risks and new areas introduced to the tool -including climate change, equity and inclusion and linkages with health programmes on QoC, IPC and AMR. A WASH FIT guide with specific guidance on climate resilience (including green waste strategies), and on inclusion (gender and disability) with detailed explanation of each stage and its accompanying tools have also been included in the updated guide which will be published soon.[6]

BOX 1.

Practical guide developed by WHO and UNICEF on the use of the WASH FIT tool.

'Water and Sanitation for Health Facility Improvement Tool (WASH FIT): A practical guide for improving quality of care through water, sanitation and hygiene in health care facilities' (2018) contains full details.

The WASH FIT Digital website (https://washfit.org/#/), a free, open-access tool based on the guide, also contains useful information.

[6] The second version of the WASH FIT is currently being finalized as of September 2021 and will be available soon.

Global Context

WASH FIT was introduced only two years before the COVID-19 outbreak. By 2019 – before the onset of the pandemic – the tool had been implemented in 15 countries (WHO and UNICEF, 2018); and currently the tool is being implemented in over 40 countries with more than 10 countries documenting national roll-out led by MoH.[7] It has been used and is recommended in both emergency and non-emergency settings. Implementation is supported by over 10 partners including WaterAid, World Vision, Red Cross, Terre des Hommes, Save the Children, Engineers Without Borders, Oxfam GB and ICRC.

Prior to COVID-19, several countries had been able to synthesize their own experiences, with both operational reports and some limited academic articles and evaluations available. Although available evidence has been limited, in part due to the fact that the tool is quite new, documented experiences have found that the tool has fostered teamwork and accountability for improvements at the HCF level and has led to incremental improvements on and sustainability of WASH services at HCFs, as well as improved IPC practices.

In 2018, an evaluation of a WASH FIT pilot in Togo was published, which had been implemented by the Ministry of Health and Social Protection (MSPS), in collaboration with WHO and the US Centers for Disease Control and Prevention (Weber et al, 2018). The evaluation found that following the use of WASH FIT in the 3 pilot HCFs, these facilities made improvements without significant external financial or material support. Participants reported improvements in staff and patient satisfaction, hand hygiene and occupational safety.

Similarly, other countries have documented incremental improvements that have followed the use of the WASH FIT, in terms of WASH hardware and IPC measures. In Cambodia, an assessment of nine HCFs, conducted six months after WASH FIT implementation, showed noticeable improvements in hardware in all of them (WHO Cambodia, n.d.). Weber et al. (2019) found that routine use of the tool for WASH infrastructure improvements can lead to better IPC practices and supports improvements in occupational safety, QoC and overall contributes to global health security. WASH FIT contributes to positive changes in QoC through improvements to the physical environment, when adequate WASH is introduced – which includes staff being able to change behaviors because they work in an environment conducive to WASH and IPC (Ibid). Because WASH FIT provides HCF staff with clear description of their roles for WASH and IPC practices and risky behaviors, changes can subsequently lead to improvements in IPC practices (Ibid).

Institutional buy-in

From the available literature, government buy-in is required to facilitate the implementation of the WASH FIT tool. Weber et al. (2019) found that political commitment, engagement at district and national levels, as well as support from external partners and donors, can facilitate the initiation and implementation of WASH FIT. Situating the programme at the intersection of WASH, IPC and QoC with governmental stakeholders may contribute to buy-in, as these are current priorities for many countries in keeping with national SDG agendas (Ibid.). Supportive national government policies, guidelines or standards within these domains facilitate the integration and institutionalization of WASH FIT. Political advocacy can play an important role in activating the WASH FIT process and fostering ownership of WASH FIT actions (Weber et al., 2018). For WASH FIT implementation to be successful costs must be prioritized within country's health budgets

[7] As of May 2021, according to WASH FIT version 2 (draft in development)

and WASH FIT be integrated into health plans and programmes for continuous implementation.

Use of WASH FIT During Covid-19 – Detailed Cases from UNICEF Country Programmes

The cases discussed below describe some examples of WASH FIT implementation in the context of COVID-19. None of these countries' HCFs had high levels of WASH access, so there was a need to scale up WASH services even before the onset of COVID-19. The cases (Venezuela, Guinea Bissau and Nicaragua) have all been able to use the WASH FIT at different stages in scaling up WASH in HCFs. In all cases, WASH FIT was used as a tool to initiate provide baseline data; some countries introduced the tool immediately after the COVID-19 outbreak, while others, having previously introduced the tool, used the crisis to reinitiate or strengthen their plans.

As it is suggested that WASH FIT's existing guidance on the safe management of drinking-water, sanitation and health care waste along with hand hygiene recommendations all apply to COVID-19, and that no additional or different measures are needed[8] – therefore the cases below describe how WASH programs have approached using the WASH FIT in the context of COVID-19, and what longer term benefits might be achieved to scale up HCFs.

Figure 3: Map of Venezuela

Venezuela

Context: Venezuela's UNICEF WASH emergency-focused programme began in 2019, in response to the social and economic crisis. The priority of the programme was health access and quality, focusing on the main hospitals given that health care had deteriorated intensely because of the crisis. Neonatal health was a top priority, as mortality in hospitals was high. In many hospitals, the lack of WASH, staff and operational capacity led to a deteriorated situation amidst a protracted crisis.

To address these issues, the MoH and UNICEF's first step was to look at the status of WASH infrastructure in HCFs to gain an understanding of the structural causes of poor QoC in hospitals (including salaries, management, staff and leadership from the MoH). To prioritize the many needs, UNICEF initiated a strategic cooperation with partners to start compiling data and indicators, finding evidence on the importance of WASH and planning to bring about scale.

Venezuela's Response to COVID-19: The pandemic added yet another layer of crisis to a country already very vulnerable and necessitated WASH improvements to rebuild the Health sector. The pandemic led to increased funding, enabling work in more than 190 HCFs instead of the previous 10–20.[9] Additional funding allowed the hiring of more WASH staff, including a WASH doctor to link WASH and IPC strategies, whilst maintaining a link with the Pan American Health Organization (PAHO). A medical "added value" was needed to build capacities, to negotiate scope of interventions and establish communication feedback with hospital management and MoH authorities.

Earlier on, several activities had taken place to gain authority and trust of actors to implement IPC commitments across HCFs. This included: linking

[8] WASH FIT Version 2 (currently in development)

[9] Once COVID19 response was activated in Venezuela, the possibilities to leverage funding for WASH in Health, IPC and COVID-19 response included: 1) the current projects were adapted to respond to COVID-19, as WASH in Health was a critical program for COVID19 response: 2) existing donors activated new funding mechanisms to support COVID-19 response (prioritizing WASH and Health programs).

clusters to streamline approaches within the Cluster system (WASH Cluster, Health Cluster and WASH/IPC technical working groups), intensive capacity-building in more than 83 HCFs, and supply support to hospitals nationwide (more than 171 HCFs). UNICEF also worked together with the ICRC on improving WASH infrastructure, in maternal and newborn and emergency areas, respectively; the aim was to make a direct, resilient and immediate impact on WASH services in major Hospitals and primary HCFs. Activities included drilling boreholes, installing saline electrolytic chlorinators, installing generators, repairing/installing pumps and water storage tanks. WASH infrastructure rehabilitation, which meant high investments in water, was the starting point for IPC improvements in HCFs.

WASH FIT as a tool for implementation in Venezuela: The WASH FIT tool was first introduced through the WASH Cluster in the early stages of the COVID-19 crisis. The main purpose was to establish a common assessment, monitoring and evaluation framework for all humanitarian partners working in Venezuela, and to establish the most important gaps.

Since the "WASH-FIT" online platform was unavailable in the Spanish language and not adapted to COVID-19, UNICEF and Cluster members decided to design the tool manually. To scale-up its deployment, further support was needed from the WASH and Health Cluster members to adapt the tool to COVID-19, Venezuelan context and needs, keeping the same indicators and format. Additional JMP indicators were added on a later revision, for future JMP data collection.

The WASH FIT tool was then published online using the "KoBo Toolbox" – developed specifically for Venezuela by UNICEF and the WASH Cluster (with both a survey form and visualization tool using Microsoft Excel) - to compile bulk data on WASH-FIT assessments. A specialized national WASH FIT/IPC committee was assembled with UNICEF, PAHO and ICRC to carry out specific training to all WASH partners on how to collect and view data, using smartphones and paper.

UNICEF then partnered with 10 NGOs[10] to use the WASH FIT tool to plan, monitor and evaluate future and ongoing interventions, supporting a total of 116 HCFs[11], distributed by field offices and partners. Alongside WASH FIT, UNICEF and partners supported on WASH rehabilitation and supply of key hygiene items in priority HCFs.

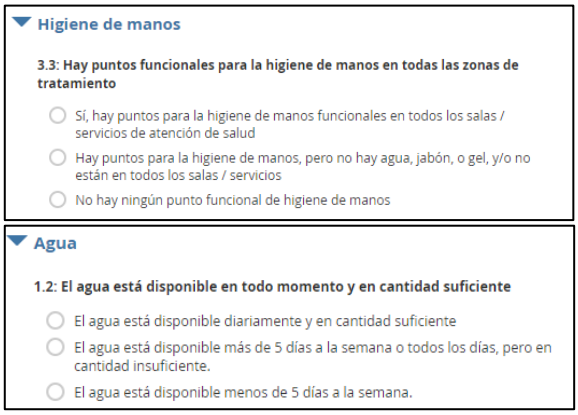
Every month, raw data was manually discharged into an Excel spreadsheet and cleaned for future analysis. As of May 2021, the platform contained a total of 350 WASH-FIT surveys covering 116 HCFs[12] in Venezuela, across 10 states. This has included 88 primary HCFs (0.68% nationwide coverage), and 28 major hospitals (10% coverage).

Figure 4: Locations of HCFs and hospitals assessed and examples of WASH FIT questions in Spanish used in Venezuela)

Note: each question has 3 possible answers

[10] As of 16 May 2021

[12] On average, approximately 3 WASH-FIT assessments were done per HCF



Source: Venezuela WASH Country Programme

During implementation of the tool, some adjustments were made, to help decide on priority interventions in the most affected HCFs. The Excel worksheet containing all the raw data was organized according to:

- Thematic visualizations: Allowing to visualize the evolution of WASH services over time (at sub-sector level) to see how UNICEF and its partners have been working together to improve these services. Also, to detect gaps, and allocate existing funding to areas most needed.
- Geographic visualizations: By state and municipality, to advocate/inform regional and local governmental health authorities, on access to WASH for a specified time frame.
- Implementing partner visualizations: By NGO/implementing partner and HCF. This enabled adjustable viewing of current programming gaps and provide tailor-made feedback to partners on how to prioritize interventions. Variations of these types of visualizations are also possible.

Outcomes: The WASH FIT tool was useful to target interventions in a landscape of “infinite needs”, especially because Venezuela of the emergency context. It was useful on three different levels:

- Deciding which HCFs to support, by understanding the most vulnerable based on access to WASH.
- Within each HCF, understanding which activities to support (either water, sanitation, hygiene, etc, or a combination).
- Providing constant feedback to humanitarian organizations, HCF staff, communities and governmental actors.

Figure 5: Displays of geographical view showing colour coding, to indicate priority

Estado	# HCFs	Average of Avg Global	Average of Avg Gestion	Average of Avg Agua	Average of Avg Higiene Manos	Average of Avg Saneamiento	Average of Avg Limpieza	Average of Avg Residuos
anzoátegui	1	1.32	1.75	1.33	1.25	0.86	1.38	1.33
bolívar	17	1.09	1.26	1.55	1.17	0.84	1.07	0.62
delta_amacuro	1	0.96	1.63	0.33	1.25	0.86	1.25	0.44
distrito_capital	13	1.33	1.56	1.21	1.58	1.27	1.23	1.16
la_guaira	2	1.48	1.66	1.57	1.65	1.40	1.53	1.09
miranda	12	1.34	1.43	1.30	1.59	1.33	1.14	1.23
táchira	16	1.36	1.54	1.53	1.58	1.43	1.39	0.73
zulia	28	1.37	1.63	1.33	1.32	1.33	1.45	1.16
Grand Total	**90**	**1.31**	**1.52**	**1.35**	**1.43**	**1.25**	**1.30**	**1.03**

Estado	Municipio	# HCFs	Average of Avg Global	Average of Avg Gestion	Average of Avg Higiene Manos	Average of Avg Agua	Average of Avg Saneamiento	Average of Avg Residuos	Average of Avg Limpieza
zulia	cabimas	7	0.85	1.10	0.51	0.71	1.05	0.83	0.91
	mara	4	1.43	1.53	1.38	1.75	1.29	1.22	1.42
	maracaibo	19	1.11	1.42	1.03	0.94	1.17	0.93	1.15
	rosario_de_perija	2	0.55	0.73	0.38	0.87	0.63	0.37	0.31
	san_francisco	3	0.83	0.71	0.00	1.50	0.71	0.55	1.09
táchira	andrés_bello	1	0.80	0.88	0.75	1.17	1.00	0.11	0.88
	ayacucho	1	0.60	0.57	0.50	0.67	1.14	0.22	0.50
	bolívar	1	0.04	0.14	0.00	0.00	0.00	0.00	0.13
	cárdenas	2	0.54	0.50	0.75	0.92	0.79	0.06	0.20
	córdoba	1	0.66	0.75	1.00	0.83	0.71	0.25	0.43
	fernández_feo	2	0.44	0.50	0.25	0.67	0.71	0.06	0.44
	junín	2	0.38	0.38	0.38	0.25	0.61	0.17	0.50
	libertad	1	0.64	1.13	0.25	0.83	1.00	0.11	0.50
	libertador	1	0.50	0.38	0.75	0.33	0.86	0.33	0.38

Source: Venezuela WASH Country Programme

The use of WASH FIT during the COVID-19 pandemic was also a trigger for improved coordination, at HCF level. Before WASH FIT, both WASH and Health Clusters had difficulties coordinating activities in HCFs, especially when emergencies occurred (e.g. water shortages). Local and regional actors would support WASH interventions for the same areas simultaneously, creating duplications. Having an in-depth analysis of a HCF allowed to distribute tasks and assignments between humanitarian actors. A roadmap for each HCF was developed from

WASH FIT, allowing the Cluster to analyze hospital management and input capacity with partners. The WASH Cluster compared data and shared findings, and this process helped to build capacity for partners.

WASH FIT's visual nature allowed for a general understanding of the main strengths and weaknesses within WASH in HCFs across the country and how they evolve through time. For example, the 3 most important areas for interventions are the ones with the lowest scores: healthcare waste management (*residuos*), environmental cleaning (*limpieza*) and sanitation (*saneamiento*).

Figure 6: Demonstration of scoring across different sub-sectors (average across all sectors, water, sanitation, hand hygiene, environmental cleaning and waste management).

Values	Columr Qtr1	Qtr2	Qtr3	Qtr4
Average of Avg Gestion	0.76	0.63	1.22	1.06
Average of Avg Agua	0.82	0.67	1.25	0.84
Average of Avg Saneamiento	0.72	0.14	0.98	0.96
Average of Avg Higiene Manos	0.58	0.75	0.97	0.96
Average of Avg Limpieza	0.56	0.13	1.00	0.90
Average of Avg Residuos	0.38	0.22	0.70	0.73

Source: Venezuela country programme

One of the main challenges in the Venezuelan context is that data is not shared publicly. In fact, a major finding during implementation of WASH in HCFs was that public data on WASH services were not available. Each WASH FIT Committee that was created in each HCF, was able to submit their own surveys, after which an NGO with the committee would present findings to the HCF director together, creating a constant feedback mechanism. This has improved the culture of data sharing, as the WASH FIT process allows for photography in HCFs for accountability and record keeping purposes. The process was also found to be useful for advocacy and to reinforce ownership by national actors – in the sense that the Hospitals, with PAHO, were able to look at the deficiencies through the roadmaps, and were thus empowered to use the data collected to choose the improvements to be prioritized. The Hospitals were enabled to undertake their own comprehensive risk analysis and collaborate with the WASH and Health Clusters to decide on next steps.

Lessons from the Venezuela experience:

- Feedback to NGOs needs to be provided on a regular basis (i.e. biweekly or monthly), with regular working (or online) sessions to discuss how the WASH services are working, what worked well, which aspects need to be improved, etc.
- The tool does not measure intangible aspects, for example a lack of ownership at the HCF level, which could lead to a low score. The general overview also allowed UNICEF to give feedback to donors and advocate for more targeted funds.
- Having a doctor working inside the WASH team has been important as a point of contact with the HCFs, to be able to "speak their language", making the link between Health and WASH that enabled better identification of infection risks and priorities.
- Working through the organized sector coordination groups, for instance the WASH Cluster in Venezuela (as a tangible representation of the WASH sector) was important to bestow full representation on the responding actors.
- WASH FIT helped to bridge an advocacy gap, enabling links between WASH, IPC/Health. Support for water and sanitation infrastructure in hospitals was important, as it allowed for advocacy with the management on other issues.

BOX 2.

VIEWS FROM THE COUNTRY OFFICE

We started our programme to improve WASH in HCFs in mid-2019. Our main activities were to simply repair existing WASH infrastructure, such as pumps. We found the same pumps were broken again and again after six months of operation. The hospitals were always calling to ask for repairs, but we were working in too many HCFs to go and repair pumps continuously. We needed to be part of the system. WASH FIT empowered HCF workers to identify problems and develop plans to act on them. This is important – in Venezuela, HCF staff (doctors, nurses, maintenance staff) only get less than USD 3 a month as salary. Motivation is very low, and staff usually rotate every 6 months. The only way to support the staff is by giving them tools and the capacity to use them – and to motivate them, because the situation is dire.

The process of mobilizing WASH FIT allowed us to find motivated people, working hard in keeping these HCFs functional. These are the people we started to work with, empowering them to undertake tasks and find data. The digital tools allowed visualization, making WASH FIT an accountability mechanism. Visuals were generated at the sector level, and we hope to expand them into the Health sector. We took a big commitment to lead the WASH IPC technical working group, and there are plans improve on this.

Figure 7: Map of Nicaragua

Nicaragua

Context: In mid-2019, and in response to a request from the Nicaraguan Ministry of Health (MINSA), UNICEF trained ministry staff on the use of the WASH FIT tool to improve WASH services in HCFs. The process started with a national workshop to launch the tool and discussions around national monitoring of WASH services in HCFs. Attendees included officials responsible for environmental health in 19 *Sistemas Locales de Atención Integral en la Salud* (SILAIS), as well as representatives from other WASH governmental institutions. At the time, as WASH was not a key strategy in the health sector, implementation of the tool was not taken further due to other priorities.

Nicaragua's Response to COVID-19: After initial sensitization efforts and after COVID-19 hit the country, WASH in HCFs then became a key priority – fundamentally to support water quality and handwashing efforts and to support capacity building for health personnel in WASH issues. The WASH FIT tool was thus re-introduced through MINSA, to assess more than 500 facilities to update data on WASH service coverage in the country. These findings have been fundamental for government and partners to support evidence-based prioritization of WASH services in HCFs and have been critical for preventing the spread of the pandemic and other infections in HCF settings.

Small modifications were made to the tool to suit the Nicaragua context and to adjust to the COVID-19 response. Indicators were adapted, for instance to standardize with national regulations on water quality surveillance (i.e. Indicator 1.10 for residual chlorine was adjusted according to national regulations 066 for Water Quality Surveillance). Indicators to reinforce aspects of water quality and hygiene in correspondence with MINSA regulations on COVID-19 (Normative Water Regulation -161 "Guide for Water, Sanitation, Hygiene, Cleaning and Waste Management in Health Establishments in the Context of Covid-19") to reduce risks to health personnel, patients and visitors was also added.

Following implementation of WASHFIT, deficiencies were found in the quality of water; thus, an evaluation emphasized improvement of

quality through adequate disinfection and increasing the number of hand washing devices. In a complementary way, hand hygiene campaigns were developed, and posters were displayed at HCFs showing the five steps for hand hygiene in all health establishments.

Supplementary information that was added to the tool includes:

- Examples of water quantity calculation exercises in comparison with national regulations.
- Emphasis was placed on the five moments of hand hygiene with the patient.
- Printed posters showing measures to ensure safe water, sanitation and hygiene.
- A hygiene kit consisting of detergent, chlorine, alcohol, gloves, boots, and masks was delivered.

To implement the WASHFIT tool, 7 workshops were held at the national and regional levels targeting hygiene coordinators, hygiene technicians, environmental health managers, hygienists, environmental technicians, epidemiologists and laboratory assistants. A total of 275 staff were trained. The trained personnel have since implemented the tool and reports shared with the Directorate of Environmental Health of MINSA for follow up on the improvement plans.

WASH FIT implementation in Nicaragua:

WASH FIT is considered innovative since it allowed for the very first time, a comprehensive evaluation of WASH services, as hospital waste and water quality were the only areas previously addressed. The assessment of the full package of WASH services allows for the comprehensive preparation of WASH improvement plans in HCFs, which helps drive action towards achieving the SDG 6.1 and 6.2 on universal WASH coverage. The implementation of WASH FIT has made it possible for health workers to take lead in evaluating outcomes and results of its implementation in a more systematic way, ensuring that gaps and weaknesses are addressed to reduce the risk of infections among patients and health care workers.

Photo 1: WASH FIT training and locally developed materials from Nicaragua

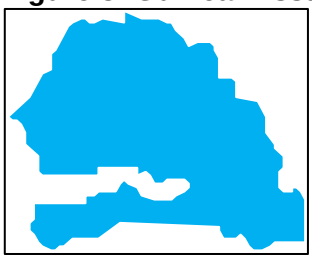
Source: UNICEF Nicaragua

Lessons Learned from the Nicaragua experience:

- Although the tool is clearly suitable for the COVID-19 context and other health emergencies it is less clear how it can be used in a sudden emergency context. In the case of Nicaragua, which was recently hit by two hurricanes that destroyed a large part of the water and sanitation infrastructure in the communities and in the health establishments of the affected areas, there is a lack of clarity on how the tool can be used to build back better.

- The implementation of WASH FIT in HCFs must be accompanied by technical personnel who have knowledge of WASH and who can transmit this knowledge to the WASH FIT evaluation committee.

Figure 8: Guinea-Bissau



Guinea-Bissau

Context: WASH FIT was introduced as a pilot in Guinea-Bissau, as part of staff training, accompanied by the ambitious health center rehabilitation project funded by Ebola Viral Disease response funds between 2016 and 2019. It was again used in the response to the COVID-19 pandemic and to accompany the rollout of the UNICEF /Guinea-Bissau foot-operated handwashing devices to 43 priority HCFs. It was introduced as a continuous improvement framework and was used to train staff on hygiene and the division of tasks and responsibilities for cleaning and disinfection points. The idea was to make the HCF staff responsible and to better understand protocols for cleaning and task division.

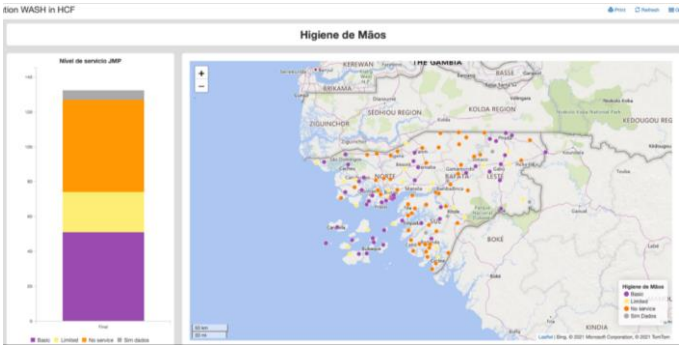
During 2016 baseline estimates were obtained in all 136 HCFs in the country. The estimates showed that 37% of HCFs of type C, the most common and basic center, had running water on site. Following these initial activities, an end-line survey showed that 80% of HCFs (type C) had running water.

Following an increase of funding, in response to the COVID-19 pandemic, a more intensified approach to the WASH FIT was possible to assess and analyze the WASH status in more detail, with partners. There was a clear recognition of the need to collect and assess WASH data and display the changes needed at a strategic level for action. Key steps have been taken to implement the WASH FIT – from assessment, improvement plans and implementation, monitoring of progress and review of data as well as work force development.

It was very clear from the initial steps that a sense of ownership was lacking at the HCFs level. Previously, 40 new solar powered water pumps were installed, with public taps attached to them and the idea was that there would be a cost recovery at the water points that could finance maintenance and repair. Despite the innovative business model and established shared responsibilities, it proved very difficult to ensure that these funds were used for the maintenance of the infrastructure. HCF staff held the view that maintenance was the responsibility of the central level government while central level government also thought that the responsibility to maintain WASH services in HCFs must be borne by HCFs themselves.

In the first quarter of 2021, preparedness funds for Ebola allowed UNICEF and partners to expand further to WASH FIT implementation, involving communities. In a joint program with the MoH and the Ministry responsible for water, HCF staff will be accountable for the functioning of the water systems in HCFs. These interventions will be part of the Ebola response targeting communities along the border areas.

Figure 9: Mapping of HCF status with the use of mWater portal, specifically mapping of handwashing (basic, limited, no service, no data) available in HCFs.



Source: UNICEF Guinea-Bissau

As the main issue in Guinea-Bissau is to reinforce accountabilities from the MoH, HCF management and engagement of communities, data on the status of WASH in HCFs was visually displayed to communities and the next process would be outlining activities to be implemented to make WASH improvements at the HCFs level.

The way forward, as per the MoH is to put in place an operations and maintenance fund, where official channels of payments can be made for maintenance of the WASH services in HCFs. The WASH FIT tool can be used to start the process to implement some of these drastic changes that need to occur, to scale up WASH services in HCFs.

Lessons Learned from the Guinea Bissau experience: Once the WASH FIT assessment results are produced, ample time must be given to discuss the next steps, which includes engagement amongst stakeholders. Understanding what people are doing to assume their role takes a lot of time and budget (i.e. for staff and their travel to HCFs). It might take up to 10 times to visit a HCF before a sensitization process can start. This process of sensitization is essential for sustainability – you can't just demonstrate the data, there are many more issues at play.

BOX 3.

WASH FIT TRAINING DURING COVID-19: VIRTUAL ASSESSMENTS IN INDONESIA

Indonesia is continuing to improve WASH in HCFs. A 2019 Health Facility Survey (Risfaskes) report, 15% community health centers (Puskesmas) did not have basic water services, and almost 3% of Puskesmas surveyed do not practice waste segregation, which can increase the risk of infection for health care workers, patients and waste handlers.

To support improvements in coverage, WHO worked with the Ministry of Health (MoH) to implement the WASH FIT in November 2020, during the COVID-19 crisis. A training of trainers (ToT) across Indonesia was held on the application of WASH FIT and how to form efficient WASH teams in HCFs to identify needs, gaps and create improvement plans. Guided by the facilitators, participants had the opportunity to conduct a virtual assessment of WASH services in a HCF using WASH FIT and drafted improvement plans for a Puskesmas.

Throughout the training, WHO used various methods to stimulate interactive and lively discussions. Presenters facilitated small group discussions in break out rooms. As advocacy work is an important part of WASH FIT, presenters and participants conducted several role-plays to demonstrate how to advocate for WASH improvement to health facility managers and government. Using these methods, participants learned not only about WASH FIT, but how to identify opportunities and respond to common challenges to improve WASH in HCFs. Participants brought insights from their provinces, for example, the importance of involving local governments in the WASH FIT assessment, cultural aspects on the use of WASH facilities, and the challenges of smaller facilities with very few staff. With participants joining virtually, staff from remote areas, who otherwise would not have had the funds to travel, were able to participate in the training. Using a video tour of the facility allowed to share "real life" practices of using WASH FIT and was found to be a good alternative to an in-person visit.

Around 30 participants attended the training, including MoH, Provincial Health Offices, UNICEF, and professional associations and NGOs that work with WASH in different provinces in Indonesia.

By the end of the training, several participants had drawn up plans to roll out WASH FIT training programmes for Puskesmas. The MoH is further committed to develop a national road map of WASH in Health Care Facilities in 2021.

Source: WHO website, https://www.who.int/indonesia/news/detail/26-12-2020-who-strengthens-wash-in-health-care-facilities-through-water-and-sanitation-for-health-facility-improvement-tool-(wash-fit)

Analysis

From the country experiences examined, it can be broadly summarized that the WASH FIT tool implemented during the COVID-19 pandemic has been useful to support generation of the data required for influencing and/or planning for the scaling up of WASH in HCFs nation-wide. In settings where access to WASH in HCFs is low, the challenge is often that of poor-quality data, and with such widespread needs it is difficult to target actions for the most affected communities during the COVID-19 response. However, the cases also demonstrate that such actions as WASH FIT implementation have been the most effective where long term plans have been in place for system wide scale up of WASH in HCFs.

The WASH FIT tool has been instrumental for processes where national data generation is needed for several reasons:

Firstly, the tool is useful to establish baselines that contribute to both improvements of individual HCFs, but also, when used widely, help to establish a more representative data set on access to WASH in HCFs at national level. This information can be valuable to develop road maps and to establish WASH in national budgets and programmes. Although there are no concrete examples of how the tool has led to specific scale up plans in the limited cases explored, there is an intent to continue improving coverage through the WASH FIT to drive leadership and political commitment. As the WASH FIT enables an iterative process that helps to facilitate improved access to services in the long term, the findings are being used to contribute to changes in the enabling environment (i.e. support situation analyses which look to the enabling environment). As one WASH expert has stated: "*The WASH Fit does not deliver the vision on its own, it is a starting point*", there is a huge need for data in scaling up WASH and processes and WASH FIT is one part of it.

Secondly, as a quality improvement tool which uses an incremental approach to making improvements in individual HCFs, the WASH FIT has been successful in driving ownership for the improvements that need to be made. In all cases, different agencies (i.e. UNICEF, WHO, NGOs and CSOs, governments, local health authorities) have all been involved in implementing the WASH FIT, but the responsibility for the improvements have largely been managed by the managers and staff of HCFs themselves, supported by agencies. The WASH FIT has been useful in many cases in driving efficiency and effectiveness of improvements. As quick changes on an individual level are most likely to take place independently and internally and at the local level, the WASH FIT helps to drive ownership and accountability.

Thirdly, WASH FIT has supported IPC and QoC as it provides an in depth understanding of needs at the individual HCF level. If an assessment finds that there is no water at all, the HCF supports a discussion on not only the need for clean water but also where to place the water infrastructure and required behaviour changes on the part of health workers and patients. Discusions during WASH FIT implementation help health care staff define what quality improvement actions are needed in terms of QoC, IPC and AMR. All of these are very important in the context of COVID-19 which has shown us that important IPC measures, particularly hand hygiene, need to be implemented and practiced frequently and consistently. In busy clinical settings, such as treatment centers for COVID-19, the siting of WASH interventions needs to be at the point of care, so that there is no time lapse.

UNICEF is committed to continue disseminating WASH FIT as part of its strategy to scale up WASH in HCFs and experiences have shown that the tool is widely appropriate in a range of contexts and health emergencies, including COVID-19 response. WASH FIT's attention to planning and quality improvement within the facility has improved WASH access in HCFs in various settings and has helped to make

sustainable and incremental improvements. By producing data on the specific measures that need to be improved, HCFs can make plans, and put measures in place to make improvements. The examples have demonstrated that the process of conducting the WASH FIT has furthered a process of collaboration at the facility level, establishing teams to make plans, document and conduct assessments together, then reflecting and prioritizing for future action. The process has been effective to build teams to address deficiencies in a coordinated way, feeding back on progress to government partners. The process should be integrated into regular health plans and systems and national monitoring processes. More widely, the production, compilation and analysis of data, can help to benchmark and compare service levels across HCFs in a particular country as well.

The experiences have also reinforced the necessity of ingrained, long term collaboration with the health sector (health actors, including within UNICEF), at all stages of assessment, planning and implementing improvements. In the cases presented, longer-term collaboration with health authorities have been critical to set the basis for WASH FIT for quick scale up during the pandemic. In several countries, the WASH Section has worked collaboratively with Health Section to promote linkages between WASH and health at programming but also at facility level. At the facility level, outlining critical WASH actions that can contribute to improved QoC, IPC and a reduction of AMR are all important. Administrators should be included in the planning and implementation of the WASH FIT tool in HCFs so that they are supportive and understand the need to comply with the activities that are reflected in the improvement plans, especially for budgetary reasons.

This has included aspects of financing, where experiences have shown that WASH FIT implementation should be budgeted for, including training of staff in its use and implementation of prioritized activities. To maximize effectiveness, it is necessary to do all the steps of WASH FIT. Although resources may be insufficient, launching the tool should be done with a plan and budget to be able to support all steps of the process. For long term sustainability, funding must be made available for institutions, and the WASH FIT must be seen as integral to the health sector and as an ongoing process and not a one-off.

As WASH FIT experiences continue to accumulate and grow across UNICEF country programmes, lessons will continue to be documented to aid wider replication, in collaboration with WHO and the health sector.

References

Bouzid, M., Cumming. O. & Hunter P.R., 2018. *What is the impact of water sanitation and hygiene in healthcare facilities on care seeking behaviour and patient satisfaction? A systematic review of the evidence from low-income and middle-income countries. BMJ Global Health*, *3*(3).

Chaitkin M, McCormick S, Torreano J, Amongin I et al, 2021. *Estimating the Cost of Achieving Universal Basin WASH Standards in Health Care Facilities in the 46 Least Developed Countries. The Lancet – publication forthcoming.* Pre-print available: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3858515

Hirai M, Nyamandi V, Siachema C, Shirihuru N et al, 2021. *Using the Water and Sanitation for Health Facility Improvement Tool (WASH FIT) in Zimbabwe: A Cross-Sectional Study of Water, Sanitation and Hygiene Services in 50 COVID-19 Isolation Facilities.* International Journal of Environmental Research and Public Health, Vol 18, 5641

IFRC, UNICEF, WHO, 2020. *Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic.* WHO: Geneva.

Weber N, Patrick M, Hayter A, Martinsen A et al, 2019. *A conceptual evaluation framework for the water and sanitation for health facility improvement tool (WASH FIT).* Journal of Water, Sanitation and Hygiene for Development, Vol 9 No 6. Available at: https://www.researchgate.net/publication/331140198_A_conceptual_evaluation_framework_for_the_water_and_sanitation_for_health_facility_improvement_tool_WASH_FIT

Weber N, Martinsen A, Sani A, Assigbley E et al, 2018. *Strengthening Healthcare Facilities Through Water, Sanitation and Hygiene (WASH) Improvements: A Pilot Evaluation of "WASH FIT" in Togo.* Health Security, Vol 16 No S1. Available at: https://www.liebertpub.com/doi/10.1089/hs.2018.0042?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub++0pubmed&

World Health Organization (WHO) and United Nations Children's Fund (UNICEF) Joint Monitoring Program (JMP), 2018. *Water and Sanitation for Health Facility Improvement Tool (WASH FIT): A practical guide for improving quality of care through water, sanitation and hygiene in health care facilities*, WHO: Geneva.

World Health Organization (WHO) and United Nations Children's Fund (UNICEF) Joint Monitoring Program (JMP), 2019a. *Water, Sanitation and Hygiene in Health Care Facilities: Practical Steps to Achieve Universal Access to Quality Care*, WHO: Geneva.

World Health Organization (WHO) and United Nations Children's Fund (UNICEF) Joint Monitoring Program (JMP), 2019b. *WASH in Health Care Facilities: Global Baseline Report*, WHO: Geneva.

World Health Organization (WHO) and United Nations Children's Fund (UNICEF) Joint Monitoring Program (JMP), 2020. *Global Progress Report on WASH in Health Care Facilities: Fundamentals First.* WHO: Geneva.

WHO, UNICEF and WaterAid, 2019. *Combatting Antimicrobial Resistance through Water, Sanitation and Hygiene and Infection Prevention and Control in Health Care.* Fact Sheet. WHO: Geneva.

WHO Cambodia, n.d. *WASH FIT in Cambodia: An Adaptive Management Tool to Drive WASH Improvements and Enhance Quality of Care.* PowerPoint presentation. WHO: Geneva.

Photo Credits

Cover photo © UNICEF/UNI317998/Choufany

Acknowledgements

Special thanks to WHO colleagues - Maggie White and Arabella Hayter - for guidance and inputs.

About the Authors

The technical paper was developed by Irene Amongin and Leslie Morris-Iveson and reviewed by Silvia Gaya, Senior Adviser WASH; Guy Hutton, Senior Adviser WASH and Anu Paudyal Gautam, Knowledge Management Specialist

Inputs provided by:

LACRO Regional Office: Sunny Guidotti, sgiudotti@unicef.org

Venezuela: David Simon, dsimon@unicef.org, Pedro Ogando Dos Santos, pogando@unicef.org, and David Alford.

Guinea Bissau: Fredrik Asplund, fasplund@unicef.org

Nicaragua: Maria Delia Espinoza, mdespinoza@unicef.org, and Luz Lozano (Director of Ministry of Health, Nicaragua)

About the Series

UNICEF's water, sanitation and hygiene (WASH) country teams work inclusively with governments, civil society partners and donors, to improve WASH services for children and adolescents, and the families and caregivers who support them. UNICEF works in over 100 countries worldwide to improve water and sanitation services, as well as basic hygiene practices. This publication is part of the UNICEF WASH Learning Series, designed to contribute to knowledge of good practice across UNICEF's WASH programming. In this series:

Discussion Papers explore the significance of new and emerging topics with limited evidence or understanding, and the options for action and further exploration.

Fact Sheets summarize the most important knowledge on a topic in few pages in the form of graphics, tables and bullet points, serving as a briefing for staff on a topical issue.

Field Notes share innovations in UNICEF's WASH programming, detailing its experiences implementing these innovations in the field.

Guidelines describe a specific methodology for WASH programming, research or evaluation, drawing on substantive evidence, and based on UNICEF's and partners' experiences in the field.

Reference Guides present systematic reviews on topics with a developed evidence base or they compile different case studies to indicate the range of experience associated with a specific topic.

Technical Papers present the result of more in-depth research and evaluations, advancing WASH knowledge and theory of change on a key topic.

WASH Diaries explore the personal dimensions of users of WASH services, and remind us why a good standard of water, sanitation and hygiene is important for all to enjoy. Through personal reflections, this series also offers an opportunity for tapping into the rich reservoir of tacit knowledge of UNICEF's WASH staff in bringing results for children.

WASH Results show with solid evidence how UNICEF is achieving the goals outlined in Country Programme Documents, Regional Organizational Management Plans, and the Global Strategic Plan or WASH Strategy, and contributes to our understanding of the WASH theory of change or theory of action.

COVID-19 WASH Responses compile lessons learned on UNICEF's COVID-19 response and how to ensure continuity of WASH services and supplies during and after the pandemic.

Readers are encouraged to quote from this publication but UNICEF requests due acknowledgement. You can learn more about UNICEF's work on WASH here: https://www.unicef.org/wash/

www.unicef.org/wash

United Nations Children's Fund
3 United Nations Plaza, New York, NY 10017, USA
For more information, please contact: WASH@unicef.org

Document No: WASH/TP/21/2021