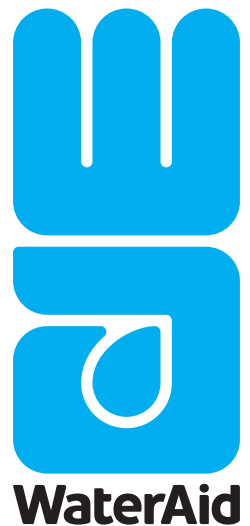
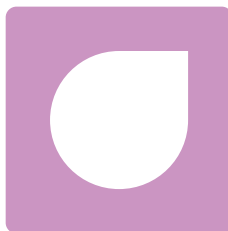


# Creating a new reality for water, sanitation and hygiene in healthcare: WaterAid Zambia's journey



# Foreword

When WaterAid Zambia began work in healthcare facilities (HCFs) in the rural districts of Kazungula, Mwandwi, Monze, Samfya and Mwense in 2017, we were surprised by what we found. In the majority of HCFs, patients and healthcare workers had no access to safe water and adequate toilets. Unfortunately, these conditions are prevalent in HCFs across Zambia.

National statistics<sup>1</sup> tell us that at least 60% of HCFs provide less than a 'basic service' for water, some facilities have no water, sanitation or hygiene (WASH) services at all – and at least 7% of facilities do not even have a toilet.<sup>2</sup>


This has resulted in detrimental consequences for the safety and dignity of patients and healthcare workers, and for the quality of healthcare in Zambia. WaterAid Zambia's response aims to match the scale of the problem. Our approach has been to demonstrate how inclusive WASH services can be delivered in HCFs in Zambia. Through our work in 40 HCFs in five districts across three provinces (Southern, Luapula and Western), we have created a model that can be replicated nationally.

With the outbreak of COVID-19, the need to have adequate WASH services in HCFs is brought into sharp focus, with gaps in access that need to be urgently addressed to help ensure quality of care and safety of health workers and patients.

In a 2018 survey<sup>3\*</sup> conducted by WaterAid, 95% of facilities did not reach the basic service level for hygiene. More needs to be done to address this gap, as hand hygiene is a critical first line of defence against COVID-19, and in disease prevention and addressing health acquired infections.

Government and other stakeholders must invest in water, sanitation, hygiene, environmental cleaning and waste management in HCFs to get the basics of safe quality care right.

It is our sincere hope that this publication will help galvanise communities, the Government and other stakeholders to invest in WASH in HCFs for the development of our beloved nation Zambia.



**Pamela M.N. Chisanga**  
Country Director, WaterAid Zambia



◀ WaterAid and non-governmental organisation (NGO) WASH forum team at the parliament after advocating for increased funding to the WASH sector.

1. WHO/UNICEF (2019). Joint Monitoring Programme. Available at: [washdata.org/](http://washdata.org/) (accessed 2 Jul 2020).
2. WHO/UNICEF (2019). *WASH in health care facilities: Global Baseline Report 2019*. Available at: [who.int/water\\_sanitation\\_health/publications/wash-in-health-care-facilities-global-report/en/](http://who.int/water_sanitation_health/publications/wash-in-health-care-facilities-global-report/en/) (accessed 2 Jul 2020).
3. WaterAid Zambia/Zambia Ministry of health (2018). Assessment Report for WASH in 40 healthcare facilities in five districts across Southern, Luapula and Western provinces. \*Assessment criteria based on JMP service levels as set out in: WHO/UNICEF (2018). *Core questions and indicators for monitoring WASH in health care facilities in the Sustainable Development Goals*. Available at: [who.int/water\\_sanitation\\_health/publications/core-questions-and-indicators-for-monitoring-wash/en/](http://who.int/water_sanitation_health/publications/core-questions-and-indicators-for-monitoring-wash/en/) (accessed 2 Jul 2020).

# The shocking reality of childbirth in a typical rural HCF in Zambia

Many women from rural areas avoid going to HCFs to give birth because of a lack of cleanliness, privacy and safety. When women go, this is often the common experience:

Mutinta is eight months pregnant and begins her journey to the nearest HCF – 20 kilometres away from her village. Due to the distance of the HCF from her home, Mutinta has to spend the last weeks of her pregnancy at a mothers' shelter.

The mothers' shelter is ten years old and was constructed by the community as a means of encouraging mothers to give birth at the HCF.

Unfortunately, the mothers' shelter and HCF do not have adequate WASH facilities. As a result, Mutinta is forced to carry a bucket and other supplies needed for delivery, as the HCF is not able to provide them.

When Mutinta arrives at the facility she finds there is no water, it needs to be collected from an unprotected source outside and is too far for her to walk. There is nowhere to wash. The nearest toilet is some 50 metres away along an unlit path with snakes and other potential dangers.

The thought of using it fills Mutinta with dread, but she has no choice.

▶ Unprotected water source at Matua Rural Health Centre in Siavonga District.



◀ A dilapidated mothers' shelter at Hakunkula rural health centre with no WASH facilities.

▶ Bath shelter at a rural health centre in Luapula Province.



## Assessment of 40 rural HCFs by WaterAid Zambia in 2018.<sup>4\*</sup>



**Water: 80% below basic service**  
including 35% no service



**Waste management: 95% below basic service**  
including 15% no service



**Sanitation: 100% below basic service**  
including 10% no service



**Environmental cleaning: 65% below basic service**  
i.e 65% with no cleaning protocol and/or training for cleaning staff



**Hand hygiene: 95% below basic service**  
including 5% no service

**But it doesn't have to be this way. WaterAid Zambia is working to create a new reality.**

4. WaterAid Zambia/Zambia Ministry of health (2018). Assessment Report for WASH in 40 healthcare facilities in five districts across Southern, Luapula and Western provinces. \*Assessment criteria based on JMP service levels as set out in: WHO/UNICEF (2018). *Core questions and indicators for monitoring WASH in health care facilities in the Sustainable Development Goals*. Available at: [who.int/water\\_sanitation\\_health/publications/core-questions-and-indicators-for-monitoring-wash/en/](http://who.int/water_sanitation_health/publications/core-questions-and-indicators-for-monitoring-wash/en/) (accessed 2 Jul 2020).



# WASH is a vital part of healthcare

Poor WASH in HCFs means healthcare workers cannot ensure quality care, and therefore frequently put themselves, their patients and surrounding communities at risk of infection and even death.

The impact of the inadequate WASH in HCFs is devastating – contributing to preventable infection-related deaths each year. When these infections do not result in death, they can cause prolonged hospital stays, long-term disability, increased antibiotic resistance, and economic burden on families and healthcare systems.

In addition, both lack of adequate WASH and high-risk of infection can adversely affect patients' willingness to seek care at HCFs, which increases the risk of further health complications.

Similarly, lack of WASH and increased risk of infection negatively impact on healthcare staff attendance, morale, retention and safety.



▲ WaterAid Zambia removed barriers to make the healthcare centre accessible for everyone.



◀ Inside the newly refurbished ablution block in the maternity wing at the HCF.

▶ Handwashing with soap is key to breaking the cycle of infections and diseases.

# Creating a new reality

In this document, we highlight the key learnings from our work so far, to serve as recommendations for achieving sustainable WASH in HCFs for everyone, everywhere across Zambia.

We implemented a WASH in HCFs project targeting 40 HCFs in five Districts of Mwandi District in Western Province, Kazungula and Monze Districts in Southern Province, and Mwense and Samfya Districts in Luapula Province.

Our approach was to focus beyond the project outputs to achieve a broader outcome – ensuring wider ownership of the efforts beyond the life of the programme. This meant:

- Building partnerships with communities and a wide range of governmental agencies to ensure that needs were understood, and facilities will be maintained.
- Creating model facilities that demonstrate how new standards can be delivered in practice.
- Developing and using tools for ensuring quality and facilitating delivery of the standards.
- Focusing on ensuring access to WASH services in HCFs for all people throughout their lifetimes.
- Influencing for the integration of WASH services in healthcare strategies with adequate resourcing for maintenance and the continuous operation of HCFs.



**Figure 1: Key factors for sustainable and inclusive WASH in HCFs services.**



## Invest in partnerships

### 1. Invest in understanding community relationships

Understanding the relationships and power dynamics within each community is crucial. We used a power analysis mapping tool to assess who had the most control and influence in each community. This enabled us to engage the right people to ensure that we created WASH services in HCFs that meet the needs of each community.

We engaged traditional and civic leaders, and actively consulted facility-level structures – such as the Safe Motherhood Action Groups (SMAGs), Neighbourhood Health Committees (NHCs), Disabled People’s Organisations (DPOs) and service users.

We also facilitated interface meetings between Government and communities so that communities could hold the government accountable on commitments.

Investing time in understanding the needs and dynamics of the community helps ensure the long-term operation and maintenance (O&M) of the HCF. For all HCFs, we worked with community structures to identify four volunteers within the surrounding community of a targeted HCF. In many cases, women have taken the lead. All appointed volunteers were trained in maintaining the piped water network newly installed in the HCFs. The availability of these volunteers in close proximity to the facility ensures a quick turnaround time in addressing faults and day-to-day maintenance of the system to keep the water running.



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▲ Engagement of traditional leaders and other community members in designing and O&M training in Luapula Province.





## 2. Ensure communities take an active role

WaterAid Zambia recognised that communities have a crucial part to play right from the start. Communities helped create an accurate picture of the status of existing HCFs by supporting and participating in accessibility audits. They shaped and facilitated the design process – for example, helping to determine the look and location of the toilets for a labour ward, ensuring optimal proximity, safety and privacy for patients.

Communities helped WaterAid Zambia understand cultural reasons why many women avoid giving birth in HCFs. We discovered many recorded instances of women giving birth on the way to the HCFs, so we investigated this further to understand why this was happening. We discovered it is likely that many women give birth at home and only go to HCFs to register the birth because of the strict requirement for all women to give birth at a facility. We also learnt that cultural sensitivity to the lack of privacy at HCFs is another main reason why women avoid going – this is a key issue that we address when designing facilities.

After the design phase was over, communities took an active role in monitoring the construction process to ensure it was correctly implemented. This approach empowered communities to make real-time decisions as it progressed. For example, the community at Njola Mwanza Rural Health Centre in Monze District guided the MoH in the siting of various structures and in another instance prevented a contractor from wrongly locating a borehole near a contaminated source.

► Government stakeholder engaging community on compliance requirements at a HCF in Luapula.

## 3. Government should take the lead

Government leadership in facilitating these services and mobilising donors and NGOs to respond to community needs is a critical component for success. The Ministries of Health, Works and Supply, local authorities and others at district level played a critical role in the supervision and certification of the infrastructure contributing to buy in and quality of the facilities. A multi-sectoral approach to interventions of this kind is key to integrating high quality inclusive and sustainable services.

Since we began our project, the Government of Zambia has set targets for WASH in HCFs – projecting that by 2022, 90% of facilities will have basic water and sanitation, and 80% will have adequate healthcare waste management and handwashing facilities.

The Government will focus on strengthening key health systems, implementing the *National Health Strategic Plan (2017–2021)*<sup>5</sup> by increasing the number of health workers with WASH competencies and rolling out the national health insurance scheme – ensuring that WASH is integrated into all health programmes.



WaterAid/Chileshe Chanda

5. Ministry of Health, Zambia. *Zambia Nation Health Strategic Plan 2017–2021*. Available at: [moh.gov.zm/docs/ZambiaNHSP.pdf](http://moh.gov.zm/docs/ZambiaNHSP.pdf) (accessed 6 Feb 2020).



## Design inclusive service

### 4. Build understanding that inclusion is about removing barriers

There is common misconception that inclusion means focusing on people with specific kinds of disability. Universal design is a better approach for creating inclusive services. Universal design emphasises creating access to the greatest extent possible for everyone, regardless of age, size, ability or disability, and by removing barriers to access:



We therefore trained partners including the Government, Disabled Peoples' Organisations (DPOs), implementing NGOs, community and contractors, so universal design could become a fundamental part of our approach.

### 5. Understand that access for all increases use

Integrating inclusive access to WASH for all helps construct a HCF that is well-designed, inclusive and sustainable that people can use throughout their lifetime.

When inclusive access to WASH for all is not at the heart of the process, communities end up with HCFs that are not fit-for-purpose. For example, unsafe toilets with a lack of privacy that are located too far from the HCF for pregnant women and older people to use. Community members then avoid seeking medical attention when they need it the most.

▶ A safe HCF is a requisite for good maternal health.



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## 6. Make inclusive access to WASH an integral part of standards

It is essential that inclusive access to WASH is at the heart of the standards for WASH in HCFs – and that this should no longer be an optional add on. Our project kept inclusion at the heart of all our designs, implementation and collaborations.

Keeping access for all on the agenda is part of our collaboration with the MoH and other key partners in developing national standards for WASH in HCFs.

With this principle included in national standards, governments and other stakeholders are better equipped to ensure that this is integrated into all new programme designs.



▲ Healthcare worker demonstrating the challenges of a wheelchair user in accessing a facility at pre-intervention stage.



▼ MOH staff and WaterAid Head of Policy administering the assessment tool with healthcare staff.



## 7. Use tools for achieving inclusive access to WASH

We developed practical tools for achieving inclusive access to WASH in HCFs. These tools enabled stakeholders to take a systematic and consistent approach across all HCFs.

At pre-design, we used assessment and accessibility audit tools to provide an overview of the condition of existing facilities and pinpoint the areas for improvement.

For the design, construction and handover process, a toolkit and checklists were used in addressing access for all at every stage. These checklists were linked to the certification and payment process – this helped ensure that contractors achieved their goals in making the WASH services in the HCF inclusive and accessible.



## Ensure quality

### 8. Build an evidence base and strengthen monitoring

In order to obtain an accurate understanding of the condition and status of WASH services in HCFs, we developed a WASH in HCFs Assessment Tool. This tool is based on international guidance to introduce systematic and regular monitoring of WASH status in HCFs.

This has been a critical component of our project's success and we believe it has a wider application for the Government to monitor and gather evidence and clarity on the accessibility of HCFs across Zambia.

The evidence from assessments, will equip the MoH and partners with the information they need to form an action plan to improve the condition of HCFs. The action plan, once developed, can be used to direct the efforts of donors and NGOs, avoiding ineffective and piecemeal development.

### 9. Build capacity to close the gap between policy and practice

During project implementation, we frequently detected a gap between policy and practice. For example, when the MoH pledged their commitment to the provision of piped water schemes in HCFs, many contractors lacked the skills and experience to achieve this goal.

To work around this, we upskilled contractors and collaborated with utility companies who were equipped to deliver what was required.

There was also a lack of standard drawings at local level – for example, medical waste management structures. To address this gap, we worked with the MoH, Director of Works (DoW) under the five local authorities, the Zambia Agency for Persons with Disabilities (ZAPD) and other affiliate disabled people's organisations (DPO), and the communities around the 40 HCFs sites to develop quality models.



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◀ WaterAid Zambia Head of Programmes discussing drawing plans with district and healthcare staff at a HCF.

## 10. Use Quality programme standards

We deliver our work through implementing partners and contractors. To ensure our requirements for quality are understood and implemented, we contextualised WaterAid's *Quality programme standards* (QPS)<sup>6</sup> to inform design and implementation. For example, we ensured that all of the water points and networks that were established met the water quality minimum standards through onsite testing by Environmental Health Technologists from the MoH.

WaterAid Zambia also performs routine water quality checks to ensure the water quality standards are maintained.

## 11. Use a procurement system for quality construction

We developed a procurement system that drives quality construction. For the early procurement stages, we integrate the QPS into the contract award process; and we provide orientations so requirements are clear from the outset. To ensure quality is delivered in practice, we tie quality construction with payment. We did this by integrating the QPS into checklists for the certification and payment process. Supervisors use the checklists to monitor, inspect and sign off each stage of work, and contractors are only paid when the technical specifications are achieved. This helps us ensure that the infrastructure we deliver is hygienically and technically safe, gender-sensitive, inclusive and meets the needs of everyone.



WaterAid/Chileshe Chanda



## 12. Implement according to national standards for WASH in HCFs

Developing standards for ensuring that WASH is recognised as a key component of delivering quality healthcare. With the MoH, we are supporting the development of standards for WASH in HCFs and the adaptation of the WASH-FIT<sup>7</sup> into a national WASH in HCFs Assessment Tool<sup>8</sup> to enable a more realistic assessment of the HCFs for improved healthcare service provision and reduction of healthcare associated infections.

## 13. Demonstrate what good looks like

Use visualisation as a tool to allow partners to get a clear understanding of what quality WASH services in HCFs should look like. This enables them to really understand accessibility concerns, know what to aim for in the breadth of services and get practical insight into how to achieve inclusive access to WASH in planning, design and construction. By building model facilities for WASH in HCFs that fulfil the needs of the communities through a robust assessment and monitoring process, we were able to show partners what a 'good' HCF looks like.

◀ An attendant and a proud mother, showing off her baby who was safely delivered in the newly refurbished facility.

6. WaterAid (2018). *Quality programme standards*. Available at: [washmatters.wateraid.org/publications/quality-programme-standards](https://washmatters.wateraid.org/publications/quality-programme-standards) (accessed 19 Mar 2020).
7. WHO/UNICEF (2018). WASH FIT Digital. *Water and Sanitation for Health Facility Improvement Tool*. Available at: [washfit.org](https://washfit.org) (accessed 19 Mar 2020).
8. Republic of Zambia Ministry of Health National Technical Assessment Tool for WASH in Health Care Facilities (2020).





## Strengthen services

### 14. Build capacity of healthcare staff to manage WASH services

The creation and running of high-quality WASH services in HCFs is completely reliant on healthcare staff. WaterAid Zambia worked hard to engage, listen to and work with healthcare staff. To build capacity, we developed training and a practical manual for HCFs managers and staff, including cleaners.

The training package included roles and responsibilities of the various stakeholders, the practical steps required to maintain and operate the facilities, and the reporting procedures and finances required to maintain the facilities.

We designed checklists to help people put new behaviours into practice – be it cleaning, managing the supply chain or managing people. Tools like this are essential so that staff are able to deliver quality sustainable WASH services.

► Support staff are often lacking in full personal protective equipment (PPE). But all staff must have adequate PPE for their own safety, the safety of patients and to maintain a safe environment.

### 15. Invest in O&M throughout the lifecycle of all HCFs

WASH in HCFs has often been an afterthought – many lack adequate plans and budgets for maintaining WASH facilities in the long term. This negatively affects the quality of health services provided. To address this, we are supporting district authorities to use a lifecycle costing approach to inform the planning and budgeting process for WASH services.

This approach provides a more realistic and holistic perspective of capital and ongoing operational costs, to enable better planning so that WASH services are maintained in the long term.



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# The journey for WaterAid and our partners is not over

We have taken some important steps, but more progress is needed to ensure sustainable and inclusive WASH services are a reality in HCFs across Zambia.

Now more than ever, as the country battles COVID-19 and works to build a strong health system resilient to future needs, Zambia needs to urgently invest in WASH services, infrastructure, supplies and training.

Zambia was instrumental in helping to pass the WHA 72.7 resolution on WASH in HCFs and now has the opportunity to push ahead on progress in meeting its commitments. We will continue to support the government and its partners in reaching this crucial goal.

We will scale up our work by searching for new projects across Zambia and will support the roll-out of the recently developed standards for WASH in HCFs.

As we scale up our work, we will continue developing tools and processes that strengthen WASH in HCF systems. We will also advocate for other partners to use our assessment, procurement, design and standard tools in order to strengthen the quality of WASH services in HCFs across Zambia.

Delivery of sustainable WASH services in HCFs across Zambia needs a clear strategy and funding. We will advocate for closer integration of WASH as part of overall healthcare strategy, with allocated and protected funding. We will collaborate with the Government at national and district level to budget for WASH in HCFs based on full life-cycle costing.

We will advocate for donors to move away from one-off 'projectised' approaches to a more sustainable method of funding the system and services that sustain WASH in HCFs – supporting the scaling of WaterAid Zambia's model and the further development of standards and application to existing facilities.

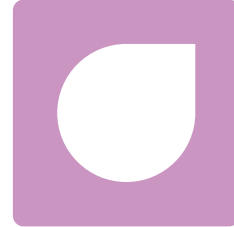
We aspire for Zambia to be regarded as a leading country in excellence in WASH in HCFs, and will share our learning and showcase our work internationally.



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◀ A well-equipped facility motivates healthcare workers.



▶ Investment in HCFs secures the future generations.



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 @WaterAid\_Zambia

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WaterAid is an international not-for-profit, determined to make clean water, decent toilets and good hygiene normal for everyone, everywhere within a generation. Only by tackling these three essentials in ways that last can people change their lives for good.

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