ACHIEVING QUALITY UNIVERSAL HEALTH COVERAGE THROUGH BETTER WATER, SANITATION AND HYGIENE SERVICES IN HEALTH CARE FACILITIES

A focus on Cambodia and Ethiopia
© World Health Organization 2017
Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: “This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition.”

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (http://www.wipo.int/amc/en/mediation/rules).


Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris. Sales, rights and licensing. To purchase WHO publications, see http://apps.who.int/bookorders. To submit requests for commercial use and queries on rights and licensing, see http://www.who.int/about/licensing.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. 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 WHO 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 and dashed 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 WHO 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.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.
A focus on Cambodia and Ethiopia

INTRODUCTION

Water, sanitation and hygiene (WASH) in health care facilities (HCFs) are essential for improving quality within the context of universal health coverage (UHC). Focused attention to this triangulation between quality, UHC and WASH can catalyse improvements in a number of other areas including health and safety, service delivery, staff moral and performance, health care costs and disaster/outbreak resilience as well as being linked to, and integrated with, improvements in infection prevention and control. With nearly 40% of HCFs in low- and middle-income countries lacking improved water and nearly 20% without sanitation, there is much to be done to improve WASH services. WASH is a necessary prerequisite to achieve quality UHC and its implementation as such, will shape health systems across the world.

UHC is a global health priority and part of the Sustainable Development Goals (SDGs) under target 3.8. WASH in health care facilities is also implicitly and explicitly captured in the 2030 Agenda for Sustainable Development with the terms “universal” and “for all” in SDG Targets 6.1 and 6.2, which recognizes that access to water and sanitation is a basic human right.

The WHO/UNICEF Global Action Plan for WASH in HCFs recognises that sustained improvements in WASH in HCFs require integration between quality of care efforts and WASH. To date, little evidence is available on how such integration occurs at country level. To address this knowledge gap, WHO has conducted several in-depth situational analysis in countries that are undertaking actions to improve WASH in HCFs as part of their quality of care improvement efforts. The purpose of the situation analyses was to capture mechanisms that “jointly support” WASH in HCF and quality of care improvements and also identify barriers and challenges to implementing and sustaining these improvements.

---

1 WHO states that universal health coverage (UHC) "means that all people and communities can use the promotive, preventative, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship."
OBJECTIVES

(1) Describe the system level changes to support integration of WASH in HCF improvements and practices into quality of care mechanisms.

(2) Understand how changes in attitudes and behaviours can be made at the national, regional, district and facility levels to sustain these improvements.

(3) Identify bottlenecks that prevent improvements in WASH services or enablers where improvements have been made and sustained in areas such as leadership, policy, financing, monitoring & evaluation, evidence and facility improvements.

(4) Develop recommendations with the Ministry of Health (MoH) and key stakeholders for improving quality efforts and WASH services, within the context of UHC.

APPROACHES

(1) A rapid review of policy and standards documents, and assessment tools, including documentation related to quality and UHC to identify key linkage points between quality, UHC and WASH.

(2) Key informant interviews with stakeholders at the district, regional and national levels, including government, NGOs, facilities, staff members and communities.

(3) Assessments of facilities and related WASH in HCF activities such as the application of existing assessment tools and interventions in regional and district facilities.

Note that this approach is non-prescriptive and was developed in collaboration with countries.
A focus on Cambodia and Ethiopia

**CAMBODIA**

<table>
<thead>
<tr>
<th><strong>GENERAL</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>15.3 million</td>
</tr>
<tr>
<td>Number of facilities in country: health centres</td>
<td>1,141</td>
</tr>
<tr>
<td>referral hospitals</td>
<td>99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>HEALTH</strong>&lt;sup&gt;(3)(4)&lt;/sup&gt;</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal mortality ratio per 100,000 live births (2017)</td>
<td>181</td>
</tr>
<tr>
<td>Neonatal mortality rate per 1,000 live births (2014)</td>
<td>18</td>
</tr>
<tr>
<td>Diarrhoeal diseases (0-5 years) (%) (2014)</td>
<td>12.8</td>
</tr>
<tr>
<td>Births attended by a skilled health professional (%) (2014)</td>
<td>89.0</td>
</tr>
<tr>
<td>Life expectancy at birth (m/f, years) (2015)</td>
<td>66.6/70.7</td>
</tr>
<tr>
<td>Total expenditure on health per capita (USD) (2014)</td>
<td>70</td>
</tr>
<tr>
<td>Total expenditure on health as % of GDP (2014)</td>
<td>6.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>WASH</strong>&lt;sup&gt;(1)(9)&lt;/sup&gt;</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to basic water supply (%)&lt;sup&gt;2&lt;/sup&gt;</td>
<td>91</td>
</tr>
<tr>
<td>Access to basic sanitation (%)&lt;sup&gt;3&lt;/sup&gt;</td>
<td>39</td>
</tr>
<tr>
<td>Access to basic hand hygiene (%)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>15</td>
</tr>
<tr>
<td>Basic health care waste management (%)&lt;sup&gt;5&lt;/sup&gt;</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>POPULATION ACCESS TO WASH</strong>&lt;sup&gt;(9)&lt;/sup&gt;</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population using basic drinking water sources (%) (2015)</td>
<td>75 (urban 96, rural 70)</td>
</tr>
<tr>
<td>Population using basic sanitation facilities (%) (2015)</td>
<td>49 (urban 88, rural 39)</td>
</tr>
</tbody>
</table>

---

1. Coverage of WASH in health facilities (referral hospital, outpatient departments and health centres). None of the assessed HCFs had basic sanitation as defined by JMP: HCFs with improved toilets located on the premises that are functional at the time of visit, with at least one designated for women/girls with facilities to manage menstrual hygiene needs, one separated for staff, and one meeting the needs of people with limited mobility.
2. % of HCFs with water available from improved sources on premises (2016).
3. % of HCFs with at least three improved and usable toilets.
4. % of HCFs with functional hand hygiene station available at outpatient departments and delivery room/area and within five meters of toilets.
5. % of HCFs where waste is segregated in consultation area and infectious/sharps wastes are treated/disposed of safely.
### ETHIOPIA

#### GENERAL

<table>
<thead>
<tr>
<th>Population in thousands</th>
<th>90 602</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of facilities in country: hospitals</td>
<td>125 existing, 185 under construction</td>
</tr>
<tr>
<td>health centres</td>
<td>3 245</td>
</tr>
<tr>
<td>health posts</td>
<td>16 048</td>
</tr>
</tbody>
</table>

#### HEALTH

| Maternal mortality ratio per 100 000 live births (2015) | 353 (247-567) |
| Neonatal mortality rate per 1000 live births (2015) | 28 (18-41) |
| Diarrhoeal (0-5 years) (%) | 17.8 |
| Births attended by a skilled health professional (%) (2015) | 28 |
| Life expectancy at birth (m/f, years) (2015) | 62.8/66.8 |
| Total expenditure on health per capita (USD) | 73 |
| Total expenditure on health as % of GDP (2014) | 4.9 |

#### WASH

| Coverage of WASH in facilities |
| Improved water source (%) (2014) | 77 (urban 94, rural 65) |
| Access to piped water (%) (2014) | 52 (urban 83, rural 30) |

| Coverage of WASH in health posts |
| Improved water source (%) (2014) | 45 (urban 50, rural 45) |
| Access to piper water (%) (2014) | 3 (urban 28, rural 2) |

#### POPULATION ACCESS TO WASH

| Population using improved drinking water sources (%) (2015) | 57 (urban 93, rural 49) |
| Population using improved water sanitation facilities (%) (2015) | 28 (urban 27, rural 28) |
| Mortality rate attributed to unsafe WASH services (per 100 000) | 29.6 |
CAMBODIA

CHALLENGES AND BOTTLENECKS

- **Leadership and management:** Though WASH is acknowledged in health policies and incorporated in quality of care improvement mechanisms, it is not consistently represented across all policy documents and mechanisms.

- **Policy and standards:** Currently there are no agreed minimum standards for WASH in HCF.

- **Financial resources:** The new results-based financing mechanism, namely the service delivery grant, is not clearly understood by all health managers, and there are no explicit permissions to use the grant for WASH and IPC expenditure.

- **Empowerment:** There is a lack of leadership and knowledge of WASH and IPC at the facility level.

- **Governance:** There is no formal coordination mechanism or agreement on alignment of WASH in HCF targets between the Ministry of Health and ministries responsible for WASH such as the Ministry of Rural Development.

ENABLING FACTORS

- There is high level commitment to improve quality of care. Quality is at the forefront of the new National Health Strategic Plan 2016-2020.

- There is strong recognition from all health partners including national policy makers and Health Equity and Quality Improvement Project (H-EQIP) members that WASH should underpin quality of care.

- Cross-sector commitment: There are targets for universal access to household WASH by 2025. The Ministry of Rural Development has set targets for 70% access to improved WASH in health centres and schools by 2025. The MoH has set targets for all 95% of health facilities to have basic water supply and 90% of health facilities to have basic sanitation by 2020.

- There is an informal active multi-sectorial working group on WASH in HCF led by the Department of Hospital Services that includes representation from development partners, NGOs and research institutes. This group works cooperatively to align all activities and support the implementation of WASH in HCF improvements as part of quality of care mechanisms.

- The H-EQIP, co-funded by the Government and development partners, has made financing available through lump sum and performance-based grants that allow an opportunity for WASH improvements at the facility level.

- Scaling up of social health protection schemes, in particular the health equity fund and social health insurance for salaried workers and civil servants, provides a platform for developing and implementing an accreditation process for public and private facilities.
ETHIOPIA

CHALLENGES AND BOTTLENECKS

- **Leadership and management:** Integration and coordination of national activities is limited, resulting in duplication of efforts in some areas (e.g., multiple WASH programs).

- **Financial resources:** Limited WASH budget, dated and deficient infrastructure (e.g., water supply, sewerage system, electricity, space constraints, and old buildings). Budget constraints prevent renovation of infrastructure, training and capacity building.

- **Support:** Limited implementation support and guidance to support facilities to make improvements once problems have been identified. The current audit tool does not cover all relevant aspects of global standards for WASH and IPC.

- **Training:** Lack of a specialized health work force (environmental health workers, medical specialists) and training for WASH and IPC standards.

- **Advocacy:** Lack of awareness of the importance of IPC, WASH, safety and quality in health care facilities and the community.

ENABLING FACTORS

- **High level leadership, governance and political commitment.**

- **Strong involvement of senior management at facilities implementing CASH.**

- **The decentralised health system enhance local autonomy to manage budgets and services according to needs.**

- **Involvement of influential public figures as CASH ambassadors have helped to raise its profile.**

- **Lead CASH hospitals provide support, mentorship and technical advice to health facilities in their catchment area through facility visits and supervision of CASH activities and audits.**

- **Changing the attitudes and behaviour of all staff and patients by ensuring that everyone is involved and motivated to make improvements has been important to drive change in health care facilities.**

- **CASH emphasises people-centred care by engaging with patients and the community through feedback mechanisms such as patient satisfaction surveys and town hall meetings.**

- **The practice of regular internal and external audits helps to encourage and maintain quality.**

- **Health Management Information System (HMIS) and Key Performance Indicators (KPI) have the potential to track CASH-related indicators.**

- **NGOs and partners assist in raising awareness, provide technical assistance, share best practice, conduct quality improvement opportunities, involve communities, support information management and guidance in implementation.**

- **Twinning partnerships enable capacity building and have aided implementing health facilities to make changes.**
A focus on Cambodia and Ethiopia

CAMBODIA

RECOMMENDATIONS
Ministry of Health

• Formalize or build on the existing, informal multisectoral working group, establish a formal coordination mechanism for health and WASH actors to set targets and monitor progress in a joined up approach.

• Develop agreed minimum standards and guidelines for WASH in HCF to support implementation and accreditation.

• Strive for the inclusion and alignment of WASH in all relevant policies, strategies and guidelines to ensure consistent and collaborative WASH in HCF progress.

• Expand human resources focussed on quality and support subnational staff to improve WASH facilities and practices as part of quality of care improvements.

ETHIOPIA

RECOMMENDATIONS
Ministry of Health

• Review and revise audit tools and develop an implementation plan toolkit for improvements in WASH and quality.

• Strengthen capacity building by involving partners and private organizations who can then provide technical support in implementation, monitoring and evaluation, training of trainers, information management.

• Facilitate the implementation and coordination of WASH-focused national initiatives through formal peer support learning mechanisms and benchmarking.

• Improve national monitoring of CASH, quality and WASH by including audit indicators in HMIS and developing quality indicators for inclusion in HMIS.
GENERAL RECOMMENDATIONS FOR WHO

- Document and share lessons learned from Cambodia and Ethiopia.
- Provide technical support to MoHs and WHO country offices on integration of WASH and UHC on emerging needs.
- Provide platforms to share experiences from other countries to inform and support progress globally.
- Disseminate global indicators for monitoring WASH in HCF and support integration of indicators into national surveys and HMIS.
REFERENCES


FURTHER INFORMATION

Quality universal health coverage
For more information, contact: Gll4quhc@who.int

WHO Global learning Laboratory (GLL) for Quality Universal Coverage (UHC)

WASH in health care facilities
For more information, contact washinhcf@who.int

WHO and UNICEF Knowledge portal on the Global Action Plan for
WASH in health care facilities www.washinhcf.org

WHO UNICEF Joint Monitoring Programme for Water Supply,
Sanitation and Hygiene https://washdata.org/