RESOURCE CONSIDERATIONS FOR INVESTING IN HAND HYGIENE IMPROVEMENT IN HEALTH CARE FACILITIES

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ISBN 978-92-4-002588-2 (electronic version)
ISBN 978-92-4-002589-9 (print version)

Graphic design by Maraltro.

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Acknowledgements

This document was developed by the World Health Organization (WHO) Department of Integrated Health Services (Universal Health Coverage and Life Course division). WHO gratefully acknowledges the contributions that many individuals and organizations have made to the development of this document.

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1 Introduction

1.1 Focus and purpose

Investment in all the drivers and facilitators of hand hygiene action in health care to ensure that it occurs at the point of care and other critical moments requires a multidisciplinary, multifaceted approach. WHO describes such an approach as a **"multimodal improvement strategy"** (MMIS) which is at the core of its implementation models for hand hygiene and infection prevention and control (IPC) programmes.

The focus of this document is on the **resource considerations** for investing in hand hygiene improvement in health care (primary, secondary and tertiary) using the MMIS approach. It presents the inputs (such as equipment, supplies and activities) required to:

- estimate the investments needed to implement and sustain a comprehensive hand hygiene programme based on the MMIS; and
- support health workers to perform hand hygiene at the point of care and at other important times for safe, high-quality care.

Where available, costing and other relevant tools that can aid in the estimation of required resources are listed.

The document **strengthens the narrative** around the overall resources required to develop and implement hand hygiene improvements in health care using an MMIS. Strengthening this narrative will also support related work of the WHO and United Nations Children's Fund (UNICEF) Hand Hygiene for All Global Initiative, launched in 2020 (1).

1.2 Intended audience

The intended audience of this publication includes policy-makers, senior facility managers, infection prevention and control (IPC) leads, planners and others involved in developing and implementing hand hygiene improvement programmes at the primary and secondary/tertiary care level.

1.3 Background

Improving hand hygiene in health care is one of the key areas of focus of the global **WHO/UNICEF Hand Hygiene for All Initiative**; in 2020 this was reinforced with new recommendations calling to action Member States to achieve **universal access to hand hygiene** in the context of COVID-19 (1, 2). This builds on over a decade of work by WHO on providing guidance and tools for improvement of hand hygiene in health care[a].

Hand hygiene in health care is a modifiable behavioural intervention, and the MMIS is a well established WHO approach (1). It is presented as part of the WHO's minimum requirements for IPC (3)

[a] https://www.who.int/teams/integrated-health-services/infection-prevention-control/hand-hygiene

and within the guidelines on core components of IPC programmes (4) as an evidence-based strategy to improve hand hygiene (5), among other IPC interventions, at all levels. It was initially conceived in the context of WHO's hand hygiene guidelines (6) and related implementation tools (7).

1.4 Brief overview of the MMIS

The MMIS comprises **five synergistic elements***, each of which is essential and complementary. They must all be in place, to some degree, as part of interventions to achieve outcome improvements and optimal hand hygiene behavioural change.

The MMIS is grounded in **behavioural science** and incorporates different constructs of multiple behavioural models, including the Health Belief Model and the Theory of Planned Behaviour (6). These models reinforce the need for the five elements that comprise the strategy:

- system change
- training and education
- monitoring and feedback
- reminders in the workplace/communications
- safety climate/culture change.

To aid understanding, these MMIS elements can be simplified to just five words: **build, teach, check, sell and live.**

> **The MMIS has proved to be highly effective, leading to a significant improvement in hand hygiene compliance and other key hand hygiene indicators and a reduction in health care-associated infections and antimicrobial resistance (4-6,8), as well as having played an important role in contributing to stop outbreaks. Multimodal hand hygiene improvement programmes are also highly cost saving (9).**

Implementation of the MMIS requires resources at the initial planning and implementation phase (including capital/infrastructure and ongoing costs), as well as for assessing its impact and ongoing costs over a multiyear period. This is needed to sustain hand hygiene interventions and behaviours that will help prevent health care-associated infections and antimicrobial resistance, as part of an IPC programme.