Global report on infection prevention and control 2024

Executive summary





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Foreword



Health care-associated infections (HAIs) affect patients and health systems every day, causing immense suffering, driving higher health-care costs and hampering efforts to achieve high-quality care for all. HAIs are often difficult to treat, are the major driver of antimicrobial resistance (AMR) and cause premature deaths and disability.

The COVID-19 pandemic, as well as outbreaks of Ebola, Marburg and mpox are the most dramatic demonstrations of how pathogens can spread rapidly and be amplified in health care settings. But HAIs are a daily threat in every hospital and clinic, not only during epidemics and pandemics.

Lack of water, sanitation and hygiene (WASH) in health care settings not only affects the application of infection prevention and control (IPC) best practices but also equity and dignity among both those providing and receiving care.

However, there is strong evidence that a large proportion of these infections could be prevented with IPC measures and basic WASH services, with a high return on investment.

This second global report on IPC provides updated evidence on the harm caused to patients and health workers by HAIs and AMR, and presents an updated global analysis of the implementation of IPC programmes at the national and health care facility levels across all WHO regions.

The emerging picture is that HAIs continue to be among the most frequent adverse events in health service delivery, with the highest burden in low- and middle-income countries. Significant gaps and challenges remain, particularly in countries with limited resources, and some disinvestments from IPC and WASH have been noted as the COVID-19 pandemic has waned.

On a positive note, based on key priorities and directions indicated in the 2022 report and the response to the COVID-19 pandemic, many countries have strengthened IPC programmes and the implementation of best practices. At the 77th World Health Assembly, WHO Member States adopted the first global strategy, action plan and monitoring framework on IPC, and established an accountability mechanism to track progress towards agreed targets up to 2030.

WHO is supporting countries to achieve the 2030 targets, in collaboration with international and national partners and stakeholders. These joint efforts will make health systems safer and contribute to other major global health priorities. Strong IPC is essential for strong health systems and quality care, in emergencies and as part of every country's journey towards universal health coverage.

Dr Tedros Adhanom Ghebreyesus Director-General World Health Organization

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Abbreviations and acronyms

AIDS	acquired immunodeficiency syndrome
AMR	antimicrobial resistance
CC MR	core components' minimum requirements
DALYs	disability-adjusted life years
ECDC	European Centre for Disease Control and Prevention
EU/EEA	European Union and European Economic Area
GAP	global action plan
HAI	health care-associated infection
HIC	high-income country
HIV	human immunodeficiency virus
ICU	intensive care unit
IPC	infection prevention and control
JMP	WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene
LIC	low-income country
LMIC	low- and middle-income country
MF	monitoring framework
MMIS	multimodal improvement strategy(ies)
OECD	Organisation for Economic Co-operation and Development
SPAR	States Party Self-assessment annual reporting (tool)
TrACSS	Tracking AMR Country Self-assessment Survey
UNICEF	United Nations Children's Fund
WASH	water, sanitation and hygiene
WHO	World Health Organization

1. Purpose, target audience and methods

Over the last decade, major outbreaks such as those due to the Ebola and Marburg virus diseases, the COVID-19 pandemic and, more recently, monkeypox viral disease (mpox), have demonstrated how epidemicprone pathogens can spread rapidly through health care settings. These events have exposed the gaps in infection prevention and control (IPC) programmes that exist, irrespective of the resources available or the national income level.

Furthermore, every day across all health care systems worldwide, patients and health workers are affected by infections acquired during health care delivery, including those caused by antimicrobial-resistant microorganisms.

IPC is a clinical and public health specialty, and a set of measures based on a practical, evidence-based approach. The aim of IPC is to prevent patients, health workers and visitors to health care facilities from being harmed by avoidable infections acquired during the provision of health care services (1).

IPC occupies a unique position in the field of patient and health worker safety and quality of care as it is universally relevant to every health worker and patient at every care interaction.

This Executive summary provides a synthesis of the 2024 World Health Organization (WHO) *Global report on infection prevention and control.* Notably, it highlights the burden of health care-associated infections (HAIs) and antimicrobial resistance (AMR) and the related harm to both patients and health workers in care settings. It presents also an updated global situation analysis of the implementation of IPC programmes at the national and health care facility levels, including a focus on the WHO regions. Finally, it highlights recent landmark political and implementation documents, which indicate directions, actions, indicators and targets for countries and the international IPC community to help them to progress in the implementation and improvement of IPC.

The report and its Executive summary are primarily aimed at those in charge of making decisions and formulating policies in the field of IPC at national, subnational and facility levels. This includes policy-makers, senior managers, administrators who are managing health budgets, and IPC focal points at national (ministry of health, public health institutes, etc.), subnational and health care facility levels.

The report is the result of a cross-cutting and multidisciplinary effort involving staff at WHO headquarters and in regional offices, as well as key partners in the field of IPC. It includes information and data from many sources, including the scientific literature, WHO global databases, WHO surveys using standardized tools, as well as WHO publications and reports published by other institutions. It also includes a compilation of data and information providing overviews of IPC at the global and regional levels and by country income level, with examples of IPC implementation at both country and facility level.

2. The problem of unsafe care resulting from HAIs and AMR

HAIs are among the most frequent adverse events occurring in the context of health service delivery. These infections, many of which are caused by multidrug-resistant organisms, harm patients, visitors and health workers and place a significant burden on health systems, including the associated increased costs (2).

On average, out of every 100 patients in acute- care hospitals, seven patients in high-income countries (HICs) and 15 patients in low- and middle-income countries (LMICs) will acquire at least one HAI during their hospital stay (*3, 4*) (Fig. 1). The most recent multi-country point prevalence survey conducted in 2022–2023 in 28 countries of the European Union and European Economic Area (EU/EEA) and three Western Balkan countries/territories estimated that eight out of every 100 patients had acquired at least one HAI during their hospital stay in acute care hospitals (*5*) (Fig 1). The prevalence of HAIs varies, depending on the study methods and the local situation. However, in most studies, HAI frequency is significantly higher in LMICs than in HICs (*2, 3, 4, 6*).

Fig. 1. Average global percentage of patients with at least one HAI in acute care hospitals, 2022–2023.



Abbreviations: HAI, health care-associated infection; LMICs, low- and middle-income countries; HICs, high-income countries; EU/EEA, European Union/European Economic Area. Source: (*3*, *4*, *5*).

Almost up to one third (30%) of patients in intensive care can be affected by HAIs, with an incidence that is two to 20 times higher in LMICs than in HICs, in particular among neonates (2, 7). Approximately one in four (23.6%) of all hospital-treated sepsis cases are health care-associated and this increases to almost one half (48.7%) of all cases of sepsis with organ dysfunction treated in adult intensive care units (ICUs) (6, 8).

Based on data from 2022–2023, the European Centre for Disease Prevention and Control (ECDC) estimated that 4.8 million episodes of HAIs occur every year in patients admitted to acute care hospitals in EEA countries (5).

The global number of HAIs resistant to antibiotics was estimated to be 136 million annually (9).

The consequences of HAIs and AMR are severe, leading to prolonged hospital stays, long-term complications, disability and premature death. They also impose significant social and psychological burdens on patients, families and communities. For health systems, the burden translates into added overload and extra costs (2), (WHO, unpublished data). A pooled analysis revealed that health care-associated sepsis has a staggering impact on patient outcomes, with one in four affected individuals dying (24.4%). This figure rises dramatically to over one half (52.3%) when patients are treated in an ICU (*6*, *8*).

Globally, according to the Organization for Economic Co-operation and Development (OECD) and WHO, nearly 3.5 million people can lose their lives due to HAIs every year up to 2050. This corresponds to 4.4 times the number of global deaths in 2021 due to human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) and sexually transmitted diseases combined (WHO/OECD unpublished data).

In EU/EEA countries, the burden of the six most frequent HAIs in terms of disability-adjusted life years (DALYs)¹ was twice the burden of 32 other infectious diseases combined (*10*) (Fig. 2A). Furthermore, it was estimated that 75% of the burden associated with AMR in terms of disabilities and premature mortality was due to HAIs (*11*) (Fig. 2B).





Abbreviations: DALYs, disability-adjusted life years; HAIs, health care-associated infections; EU/EEA, European Union/European Economic Area; AMR, antimicrobial resistance. Source: (10, 11).

Mortality among patients infected with resistant microorganisms is at least two to three times higher than among those infected with sensitive microorganisms (4, 12-17).

According to recent WHO and OECD estimates², globally, IPC interventions implemented in health care facilities using MMIS, with national coordination could potentially avert 821 000 deaths per year up to 2050 (WHO/OECD unpublished data).

Estimates suggested that improving IPC programmes in LMIC health care settings could prevent at least 337 000 AMR-associated deaths per year (18).

Investment in AMR initiatives are estimated to avert up to 200 000 deaths annually in Africa, including 90 000 deaths among children under five years of age (19).

¹ DALYs: years of life lost due to premature mortality and years lived with a disability resulting from a condition.

² For these calculations a modified version of the OECD Strategic Public Health Planning for infectious diseases model was used. OECD; 2023 (http://oecdpublichealthexplorer.org/amr-doc/).

3. Situation analysis of the implementation of IPC around the world

3.1 IPC implementation at national level

In 2023–2024, according to the system established to monitor the status of country progress towards the implementation of the AMR global action plan (the Tracking AMR Country Self-assessment Survey [TrACSS]), 9% of countries did not yet have an IPC programme or plan (Fig. 3, level A). Only 39% of countries had IPC programmes fully implemented nationwide (Fig. 3, levels D and E), with some being monitored for their effectiveness (Fig. 3, level E) (20).

Fig. 3. Country/area map of the 2024 TrACSS results according to levels A to E (indicator 3.5)

- A. No national infection prevention and control (IPC) programme or operational plan is available.
- B. A national IPC programme or operational plan is available. National IPC and water, sanitation and hygienea (WASH) and environmental health standards exist but are not fully implemented.
- C. A national IPC programme and operational plan are available and national guidelines for health care IPC are available and disseminated. Selected health facilities are implementing the guidelines, with monitoring and feedback in place.
- D. A national IPC programme available, according to the WHO IPC core components guidelines and IPC plans and guidelines implemented nationwide. All health care facilities have a functional built environment (including water and sanitation), and necessary materials and equipment to perform IPC, per national standards.
- E. IPC programmes are in place and functioning at national and health facility levels, according to the WHO IPC core components guidelines. Compliance and effectiveness are regularly evaluated and published. Plans and guidance are updated in response to monitoring.
- Data not available
- Not applicable

Abbreviations: TrACSS, Tracking AMR Country Self-Assessment Survey; IPC, infection prevention and control. Map creation date: 04 October 2024.

Map production: WHO Geographic Information Systems (GIS) Centre for Health, Department of Data and Analytics (DNA) within the Division of Data, Analytics and Delivery for Impact (DDI).

Source: (20).

The results of a detailed global survey on the minimum requirements for national IPC programmes carried out by WHO in 2023–2024 showed that an active national IPC programme (that is, a functioning programme with an annual workplan and budget) existed in 71.3% (107 of 150) of countries (WHO, unpublished data).

Only 6% (9 of 150) of countries met all the WHO minimum requirements and 14% (21 of 150) met 90% at the national level (WHO, unpublished data) (Fig. 4).



Fig. 4. Proportion of countries meeting IPC minimum requirements by World Bank income level, 2023–2024

Abbreviations: CC MR: core components' minimum requirements.

Source: WHO global survey on IPC minimum requirements at the national level, 2023–2024 (WHO, unpublished data).

This survey showed areas of advanced implementation and gaps for further improvement in national IPC programmes. Significant discrepancies were observed across income levels, with HICs generally reporting better implementation, but gaps remaining in budget allocation, training, HAI surveillance and monitoring systems, especially in LICs.

High level of implementation

- Guideline development: approximately 9 out of 10 countries (90.7% [136 of 150]) have mandates to produce guidelines for preventing HAIs. Among these, 88% of countries (132 of 150) reported to use evidence-based, scientific knowledge in the development of IPC guidelines and 82% (123 of 150) actively addressed guideline adaptation to local conditions.
- Multimodal improvement strategies (MMIS): approximately 7 out of 10 countries (71.3% [107 of 150]) have trained IPC focal points and 75.3% (113 of 150) promote multimodal strategies. HICs show high implementation, with 72.9% (35 of 49) having trained IPC focal points and 83.3% (40 of 49) promoting MMIS.

Gaps needing improvement

- Budget allocation: fewer than one half (44% [66 of 150]) of countries have a dedicated IPC budget and only 33% in LICs (8 of 24).
- Training and education: while in more than 8 out of 10 countries (81.3% [122 of 150]) the national IPC programme provides content for IPC training, only 38% (57 of 150) have a national IPC curriculum, indicating a need for broader training programmes.
- HAI surveillance: just over one half (53.3% [80 of 150]) of countries have a multidisciplinary technical group for HAI surveillance, but LICs lag notably, with only 25% (6 of 24) having established such a group.
- Monitoring and evaluation: slightly more than one half (51.3% [77 of 150]) of countries have a strategic plan and system for IPC monitoring, with HICs leading at 58.3% (28 of 49) and lower proportions in LICs (45.8% [11 of 24]).

Striking differences in the implementation of IPC at national level were observed across World Bank country income levels across all surveys and data sets mentioned in this report, with low- and lower middle-income countries, significantly less advanced than other income levels (Fig. 4).

A review of data from TrACSS (20) over the past seven-year period (2018–2024) showed slow progress in IPC globally. However, a steady increase in the proportion of countries implementing national IPC programmes nationwide (levels D-E) was observed between 2020 (26%) and 2024 (37%) (Fig. 5, solid red line).

Fig. 5. IPC programme levels according to TrACSS results, 2018–2024



Seven-year trend: national IPC programmes (% of N=194)

Numbers are percentages of countries (N=194) reporting levels A to E for that survey year. *Abbreviations:* IPC, infection prevention and control; TrACSS, Tracking AMR Country Self-assessment Survey. Source: (20).

3.2 IPC implementation at health care facility level

In the WHO global survey conducted in 2023–2024, only 15.8% of 5537 participating health care facilities met all WHO IPC minimum requirements, but 34% met 90% (WHO, unpublished data) (Fig. 6).

Notable differences in the level of implementation of IPC programmes were observed according to the country income level (Fig. 6). Overall, among primary, secondary and tertiary care facilities, 75.5% of facilities met at least 50% of the IPC minimum requirements, while 15.8% fulfilled all of them. In LICs, only 35.7% of facilities met at least 50% of requirements, and a mere 0.6% met all of them. In contrast, HICs showed a much higher rate of meeting the requirements, with 98.8% meeting at least 50% and 27.9% fulfilling all requirements (WHO, unpublished data).



Fig. 6. Proportion of facilities meeting IPC minimum requirements by World Bank income level, 2023–2024

Abbreviations: CC MR: core components' minimum requirements. Source: WHO global survey on IPC minimum requirements at the national level, 2023–2024 (WHO, unpublished data).

HICs were more advanced in the implementation of all IPC core components, while LICs had a notably limited implementation of IPC guidelines, training and education, monitoring, audit, feedback and HAI surveillance (WHO, unpublished data).

Even where IPC programmes exist, they are often not able to function appropriately and sustainably in an enabling environment. In 2019, IPC programmes existed in almost all secondary and tertiary health care facilities (*21*). However, particularly in LMICs, the facilities lacked full-time IPC professionals, an allocated IPC budget, routine microbiological laboratory support, and appropriate workload, staffing and bed occupancy.

This is still the case with respect to overall scores on the implementation of IPC minimum requirements in 2023–2024, highlighting the ongoing disparity in IPC programme effectiveness and resource availability between different income levels. In particular, this is evident regarding human and financial resources dedicated to IPC. Conversely, the median scores for HAI surveillance and IPC monitoring were very high in tertiary and secondary health care facilities. However, the WHO minimum requirements for HAI surveillance are not demanding as they cover only having a strategic plan and not a system for HAI surveillance.

Despite the surge in response to the COVID-19 pandemic, not all essential IPC human resources, supplies and products are available in 2023–2024. For example, a lack or limited availability of personal protective equipment was reported in four WHO pulse surveys on the continuity of essential health services during the COVID-19 pandemic (22-25). In these surveys, conducted in 2020 and repeated until the first quarter of 2023, up to 65% of countries cited the lack of IPC supplies and a poor application of best practices as major reasons for the disruption of essential health services (26). As a sign of recovery of the health systems in the fourth survey round in 2023, only 24% (23 of 93 countries) reported disruption to their in-country supply chain system, a decrease from almost 50% in the fourth quarter of 2021 (25).

In the 2023–2024 WHO global survey on IPC minimum requirements, 65.6% of primary facilities, 75.4% of secondary facilities, and 83.2% of tertiary facilities reported having sufficient personal protective equipment, with significant differences across income levels (WHO, unpublished data).

The 2024 report by the WHO/United Nations Children's Fund (UNICEF) Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene provided a striking picture (2022 data; (27)): 1.7 billion people were using health care facilities that lack basic water services and 697 million were using facilities with unimproved toilets or no toilets.

Yet, implementing water, sanitation and hygiene (WASH) services in health care facilities across the 46 leastdeveloped countries would require a relatively modest investments (US\$ 6.5 to US\$ 9.6 billion until 2030) (28).

In the 2023–2024 WHO global survey, 74.7%, 83.3% and 85.4% of primary, secondary and tertiary care facilities, respectively, reported having continuously available water services, with HICs always reporting 100% availability and significant differences with other income levels.

Appropriate hand hygiene can save lives. Such hand hygiene practices prevent infections, generate economic savings and are therefore a minimum requirement for IPC in all health care facilities.

In 2019, the WHO global survey on hand hygiene programmes in 3206 health care facilities in 90 countries showed an intermediate implementation level (350 of 500 points) overall, with significant differences according to the income level of participating countries ("advanced" in HICs and "basic" in LICs), showing a disparity between hand hygiene practice implementation in resource-rich and resource-poor settings (29).

The 2024 JMP report revealed that globally, about two out of five (43%) health care facilities lacked hand hygiene services (either soap and water or alcohol-based handrubs) at the point of care or at toilets (*27*).

However, in the facilities included in the WHO 2023–2024 global survey, 75.2%, 81% and 84.2% of primary, secondary, and tertiary health care facilities, respectively, reported having functioning hand hygiene stations at all points of care, with significant differences between HICs and LICs (WHO, unpublished data). This difference with JMP data may depend on the differences in the study sample and the fact that facilities participated in the WHO global survey on IPC on a voluntary basis and might be more advanced in IPC than others.

This translated to 3.4 billion people using health care facilities that lacked basic hygiene services (hand hygiene facilities at points of care and toilets).

3.3 IPC implementation at the regional level

Since the COVID-19 pandemic, countries have demonstrated recognition of the critical role played by IPC during public health emergencies and a strong commitment to sustain IPC policies and practices.

Overall, the strengthening of IPC programmes and implementation of best IPC practices have accelerated across all regions. However, significant gaps and challenges still remain, especially regarding those elements of IPC programmes that require investments and long-term sustainability.

All WHO regional and country offices have been using a uniform approach to support countries in capacity building and progressing IPC action. This relies on joint assessments of the status of IPC programmes and IPC interventions with local authorities and partners, plan development, including impact and sustainability evaluations using a quality improvement cycle and a step-wise approach, as well as MMIS.

The 2023–2024 WHO global survey on IPC minimum requirements at the national level revealed some differences across WHO regions in the implementation of IPC core components (WHO, unpublished data).

- Improvements were reported by countries, particularly in the following areas: having an appointed IPC-trained national focal point; updating and further developing evidence-based, national IPC guidelines according to international standards; local adaptation of guidelines and implementation through standard operating procedures; and establishing hand hygiene compliance as a key national indicator.
- Some significant gaps remained across WHO regions in the implementation of IPC core components. In particular, securing dedicated budgets, ensuring operational IPC programmes at national and facility levels, evaluation of training effectiveness, the use of results for targeted improvements in IPC, and the improvement of HAI surveillance and monitoring systems.

These gaps were particularly evident in the African Region, especially concerning financial and human resources and national strategic plans for HAI surveillance and IPC monitoring. Although the overall scores were higher, a similar situation was reported in the Eastern Mediterranean Region regarding the gaps. The Region of the Americas reported remarkable improvements in several core components compared to data collected in 2021–2022, but only very rare availability of a curriculum for IPC in-service training. The most frequent gaps in the South-East Asia Region were a lack of a dedicated budget, an in-service training curriculum for IPC, and strategic plans for HAI surveillance. In the Western Pacific and European Regions, strong improvements were recently achieved. However, gaps still exist in the minimum requirements related to training in the Western Pacific Region, and a lack of active national IPC programmes with a dedicated budget and national guidelines in the European region.

In 2023, the global average for IPC capacity assessed through the States Parties Self-assessment annual reporting (SPAR) tool remained at the same level as in previous years. However, among the WHO regions, the South-East Asia Region reported an increase in capacity level over the years while the Western Pacific Region reported a decrease. Overall, the European Region showed the highest and the African Region the lowest capacity levels (*30*) (Fig. 7).



Fig. 7. Average score per SPAR indicator for IPC (C.9) globally and per WHO region, 2021–2023

Abbreviations: IPC, infection prevention and control; SPAR: State Party self-assessment annual reporting (tool). Source: (*30*).

4. The way forward

The report provides a situation analysis of the status of IPC programmes worldwide and highlights that although some progress has been made, several gaps in implementation still exist. Furthermore, some improvements achieved during the COVID-19 pandemic may have been recently lost, due to disinvestment from IPC and WASH and reallocation of resources and funds to other areas. Significant and striking differences emerge in IPC capacity and progress between LICs and LMICs and other income levels across all data sets on IPC indicators at the national and facility level.

The 2022 edition of the report (2) highlighted the call for action made by the WHO Global IPC Network since 2017 (31) and indicated key priorities and directions. Based on these and lessons learned during the COVID-19 pandemic, Member States have made unprecedented steps forward in the past two years in recognizing and elevating the importance of IPC in the global and national health agenda.

A resolution focusing on IPC as a critical priority across the continuum of the health system was adopted at the 75th World Health Assembly (*32*) in 2022, requesting the development of a global strategy, action plan and monitoring framework on IPC.

One year later, the first ever WHO global strategy (*33*) was approved by all Member States and served as the backbone of the 2024–2030 WHO global action plan and monitoring framework (GAP/MF) (*34*) adopted by all countries at the 77th World Health Assembly in May 2024 (*35*).

The strategy is underpinned by an ambitious, yet inspirational vision.

By 2030, everyone accessing or providing health care is safe from associated infections.

Eight strategic directions are indicated in the WHO global strategy as being critical to achieve improvement in IPC (Fig. 8). The GAP/MF describes actions, indicators and targets to achieve the effective implementation of these strategic directions and to track and report progress over time between 2024 and 2030 at the global, national, subnational and facility level. The GAP/MF primarily targets those responsible for developing plans and implementing action on IPC at the national and health care facility level and is aimed at guiding and supporting them.

Within the WHO MF, eight targets have been prioritized to be achieved at national level and four at facility level (Table 1). These targets can mostly be monitored using existing monitoring systems.

The achievement of the WHO IPC minimum requirements should be an urgent priority for all countries and health care facilities in order to provide minimum protection and safety to patients, health and care workers, as well as families and visitors to facilities, and achieve targets for AMR reduction.

Fig. 8. Strategic directions as the overall guiding framework of the WHO global strategy and action plan on IPC.



Abbreviation: IPC, infection prevention and control. Source: (33).

Table 1. Core targets of the IPC MF at the global and national level

Eight core targets at global^a **level**

- 1. Increase of proportion of countries with a costed and approved national action plan and monitoring framework on IPC.
- 2. Increase of proportion of countries with legislation/regulations to address IPC.
- **3.** Increase of proportion of countries having an identified protected and dedicated budget allocated to the national IPC programme and action plan.
- 4. Increase of proportion of countries meeting all WHO IPC minimum requirements for IPC programmes at national level (through WHO global IPC portal).
- 5. Increase of proportion of countries with national IPC programmes at levels 4 or 5 according to SPAR C.9.1 and levels D and E in TrACSS.
- 6. Increase of the proportion of countries with (1) basic water, (2) sanitation, (3) hygiene, and (4) waste services in all health care facilities.

7. Increase of proportion of countries that have achieved their national targets on reducing HAIs.

8. Increase of proportion of countries with a national HAI surveillance system.

Four core targets at national^b level

1. Increase of proportion of facilities meeting all WHO IPC minimum requirements for IPC programmes.

- 2. Increase in the proportion of facilities with a dedicated and sufficient funding for WASH services and activities.
- **3.** Increase of proportion of facilities providing training to all frontline clinical and cleaning staff upon employment and annually and to managers upon employment.
- 4. Increase of proportion of tertiary/secondary health care facilities having an HAI and related AMR surveillance system.

Abbreviations: HAI, health care-associated infections; IPC, infection prevention and control; MF, monitoring framework; SPAR, States Party Self-assessment annual reporting tool; TrACSS, Tripartite AMR Country Self-assessment Survey; WASH, water, sanitation and hygiene; AMR, antimicrobial resistance.

^a Reflecting progress at national level.
^b Reflecting progress at facility level.

Source: (34).

Significant investments are required by all countries to achieve these targets and resource mobilization is also needed for stakeholders supporting them. However, compelling data demonstrate that a high return can derive from investments in IPC, both in terms of lives saved and economic gains (2, 18, 28), (WHO, unpublished data).

WHO, at the global, regional and country levels, is at the forefront to support all countries in this endeavour. Action and investment by other international key players, donors and nongovernmental organizations will also make a huge difference both at the global level and for countries and facilities, in particular where resources and expertise are limited.

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