



**World Health
Organization**

Strengthening Infection Prevention and Control Activities and Embedding IPC in AMR NAP implementation

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8 September 2021

AMR Global Action Plan: 5 strategic objectives



1. Improve awareness and understanding of AMR

Risk communication

Education

2. Strengthen knowledge through surveillance and research

National AMR surveillance

Laboratory capacities

Research and development

3. Reduce the incidence of infection

IPC, WASH, HAI

Community level prevention

Animal health: prevention and control

4. Optimize the use of antimicrobial medicines

Access to qualified antimicrobial medicines, regulation, AMS

Use in veterinary and agriculture

5. Ensure sustainable investment in countering antimicrobial resistance

Measuring the burden of AMR

Assessing investment needs

Establishing procedures for participation

WHO POLICY GUIDANCE ON INTEGRATED ANTIMICROBIAL STEWARDSHIP ACTIVITIES



World Health
Organization



Antibiotics
Antivirals
Antifungals
Antiparasitics

PILLAR 1:

Establish and develop national coordination mechanisms for antimicrobial stewardship and develop guidelines

1. Establish and maintain a national coordinating mechanism for AMS that is functional at national, subnational and district levels.
2. Develop national treatment and stewardship guidelines, standards and implementation tools.

PILLAR 2:

Ensure access to and regulation of antimicrobials

3. Improve access to essential, quality-assured, safe, effective and affordable antimicrobials.
4. Regulate social triggers and remuneration policies that promote responsible antimicrobial prescription and dispensing behaviours.
5. Legislate and regulate responsible and appropriate use and disposal of antimicrobials.

PILLAR 3:

Improve awareness, education and training

6. Improve awareness and engagement to support behavioural change of antimicrobials use.
7. Strengthen health worker capacity through the provision of tailored education and training packages according to health worker roles and functions.

PILLAR 4:

Strengthen water, sanitation and hygiene and infection prevention and control

8. Enhance WASH in health facilities and communities.
9. Implement IPC core components in health facilities.

PILLAR 5:

Surveillance, monitoring and evaluation

10. Surveillance of antimicrobial use and consumption.
11. Surveillance of AMR.
12. Monitoring and evaluation of AMS activities.

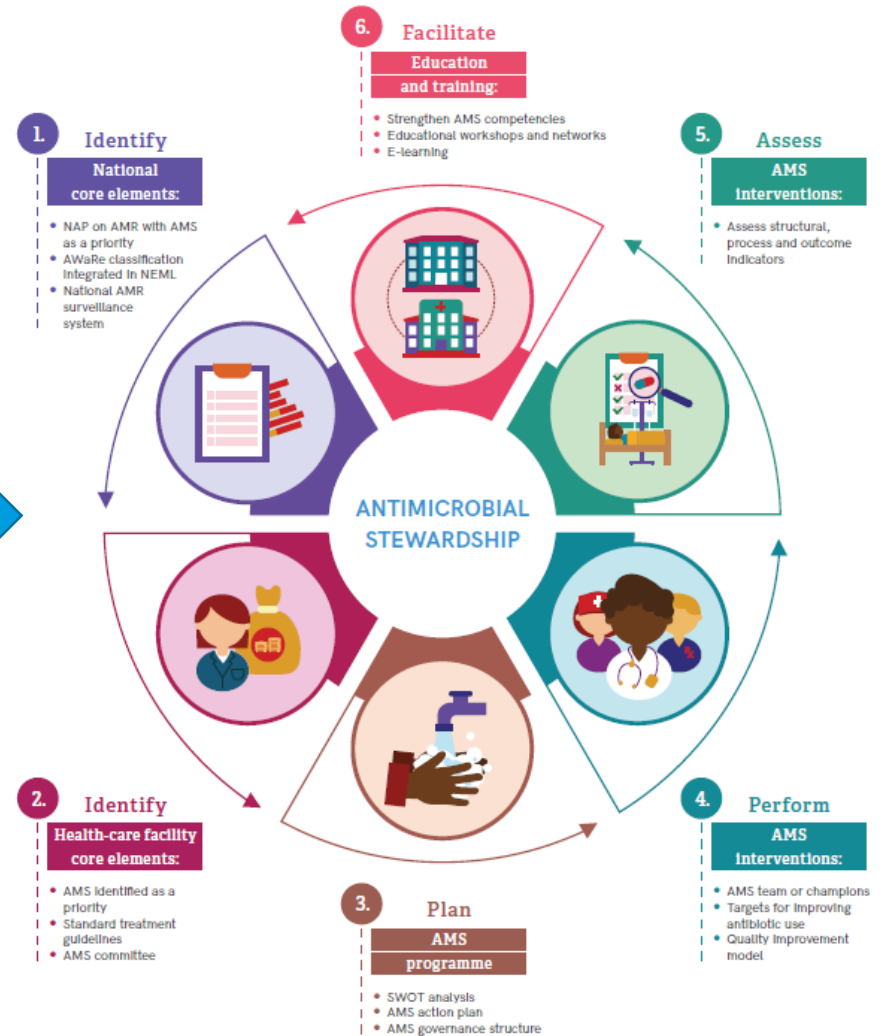
Annex:

Periodic National and Health-Care Facility Assessment Tools

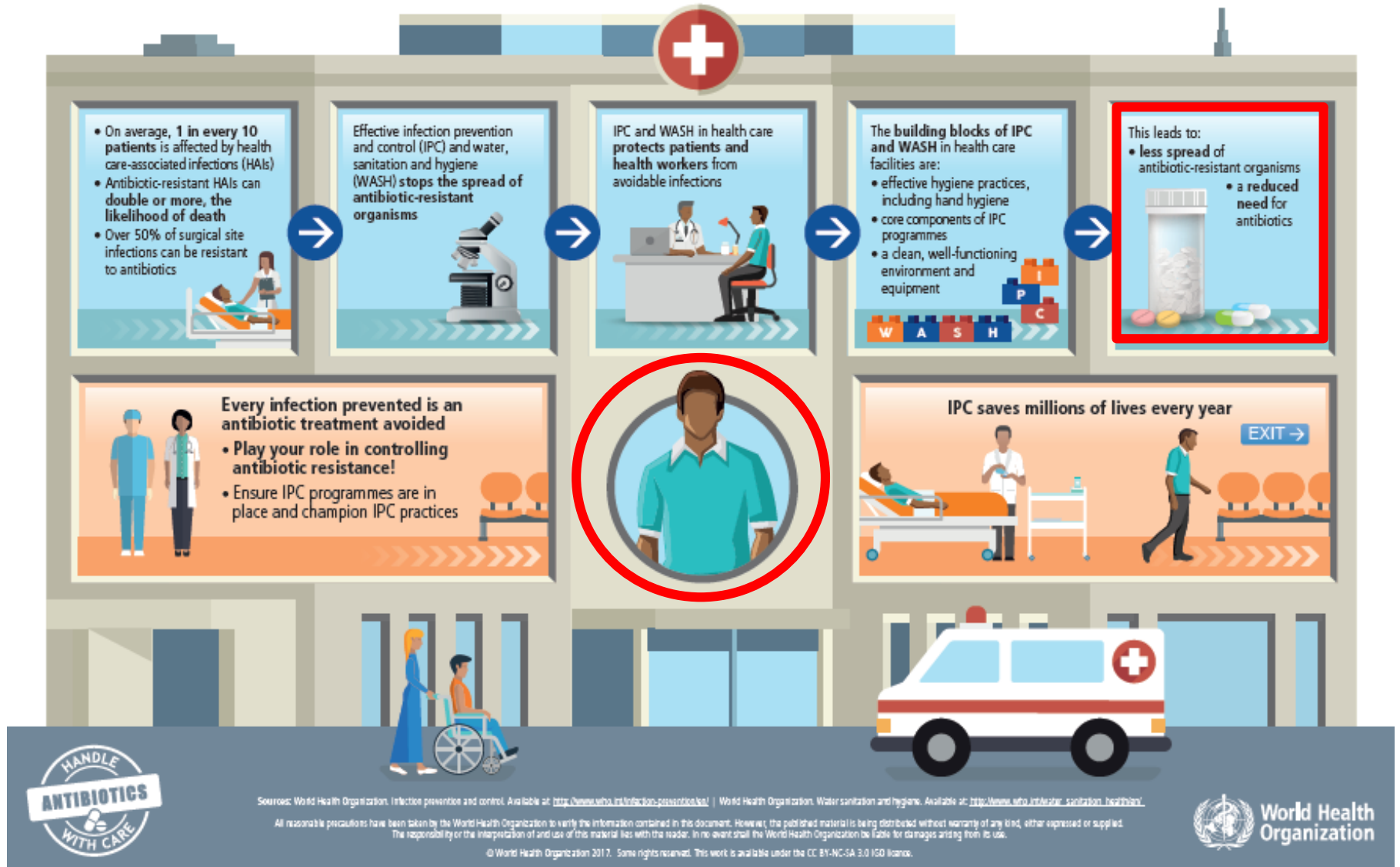
WHO practical toolkit: AMS in health-care facilities in LMICs (2019)



ANTIMICROBIAL STEWARDSHIP PROGRAMMES IN HEALTH-CARE FACILITIES IN LOW- AND MIDDLE-INCOME COUNTRIES A WHO PRACTICAL TOOLKIT

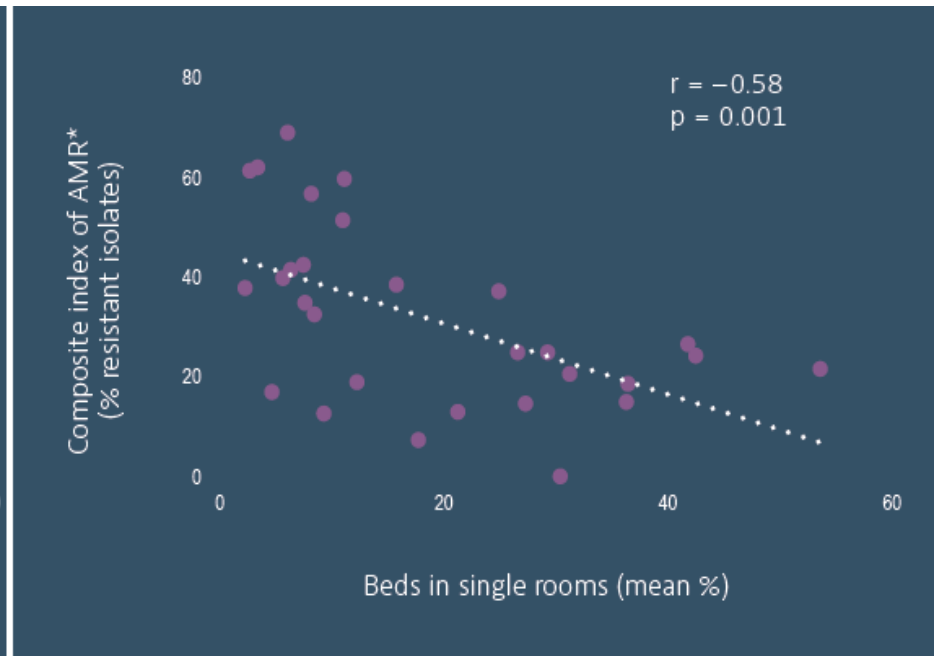
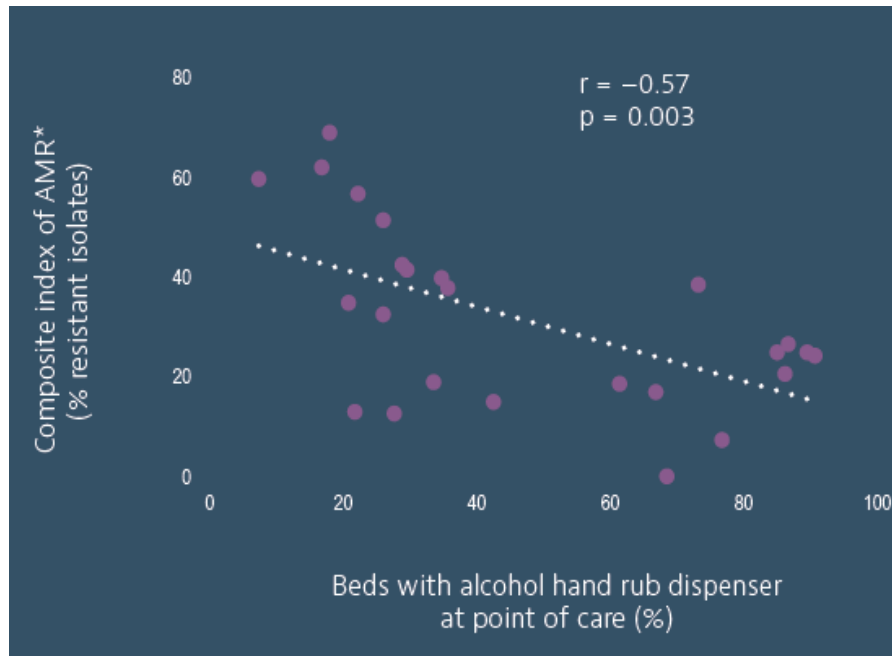


THE ROLE OF INFECTION PREVENTION AND CONTROL IN PREVENTING ANTIBIOTIC RESISTANCE IN HEALTH CARE



<https://www.who.int/teams/integrated-health-services/infection-prevention-control/ipc-and-antimicrobial-resistance>

Correlations between IPC and composite index of AMR



Source: OECD (2018), Stemming the Superbug Tide: Just a Few Dollars More. Available at oe.cd/amr-2018.

IPC is cost-saving: proper IPC saves lives and allows facilities to MAKE money



When IPC and hand hygiene are implemented in combination with antibiotic stewardship programmes:

2/3
Reduction
IN FREQUENCY OF AMR
INFECTIONS

27,000
Deaths avoided
IN EUROPE

85%
Reduction
IN HEALTH BURDEN

3€
Per capita
SAVED EVERY YEAR

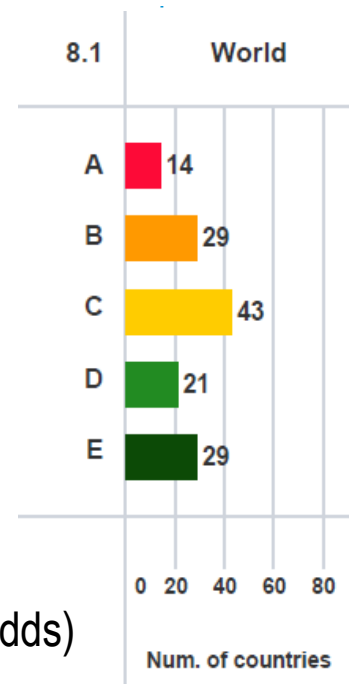
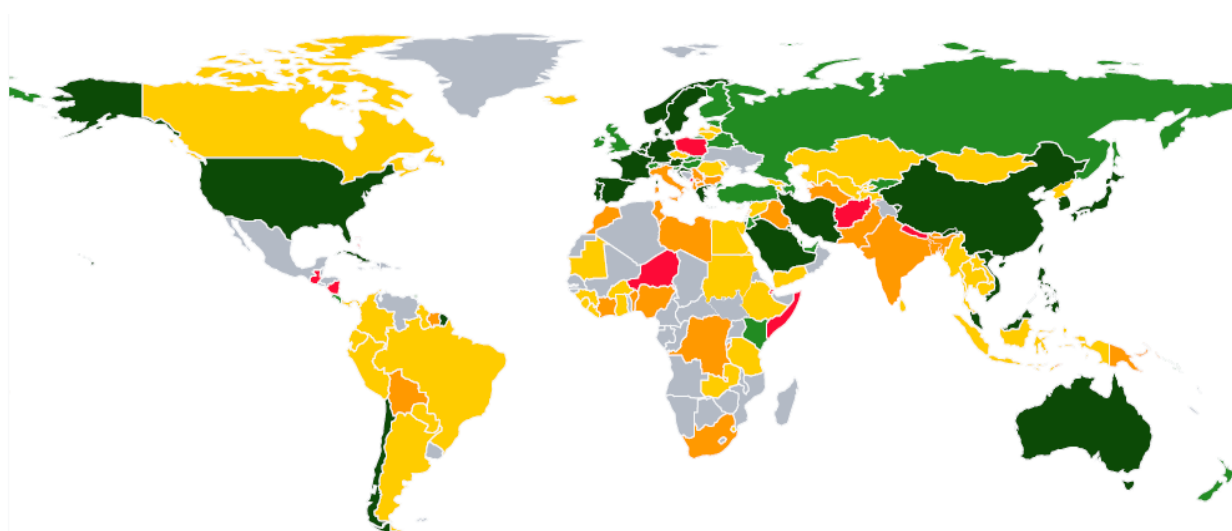
Ensure the core components recommended by the WHO for effective IPC are in place!!

Source: OECD (2018), Stemming the Superbug Tide: Just a Few Dollars More.

Available at oe.cd/amr-2018.

<https://www.who.int/teams/integrated-health-services/infection-prevention-control/ipc-and-antimicrobial-resistance>

Global Database for the Tripartite Antimicrobial Resistance (AMR) Country Self-assessment Survey (TrACSS)



31%: no national IPC programme or not implemented (LIC had 8.3 times higher odds)

37%: IPC programmes properly implemented in HCFs nationwide

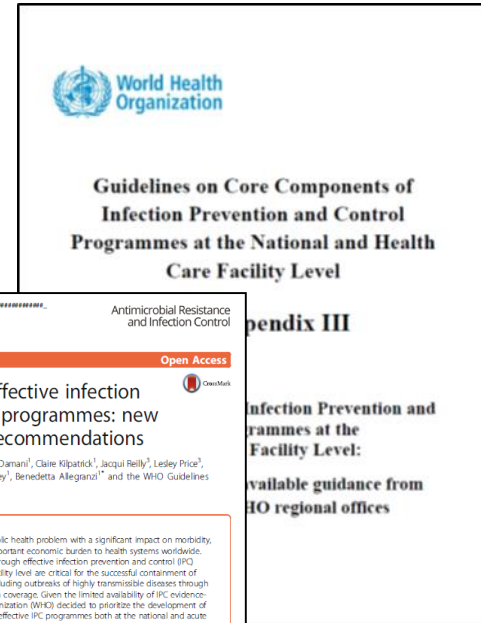
8.1 Infection Prevention and Control (IPC) in human health care

- A - No national IPC programme or operational plan is available.
- B - A national IPC programme or operational plan is available. National IPC and water, sanitation and hygiene (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 - National IPC programme available according to the WHO IPC core components guidelines¹³ 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.

WHO Guidelines on Core Components of IPC Programmes at the National and Acute Health Care Facility Level



Focus on
preventing
HAIs and
combating
AMR



• <https://www.who.int/teams/integrated-health-services/infection-prevention-control/core-components>

- Zingg W et al. TLID 2015
- Storr J et al. ARIC 2017
- Price L et al. TLID 2017



A stepwise approach for implementation

World Health Organization



MINIMUM
REQUIREMENTS

FULL
REQUIREMENTS



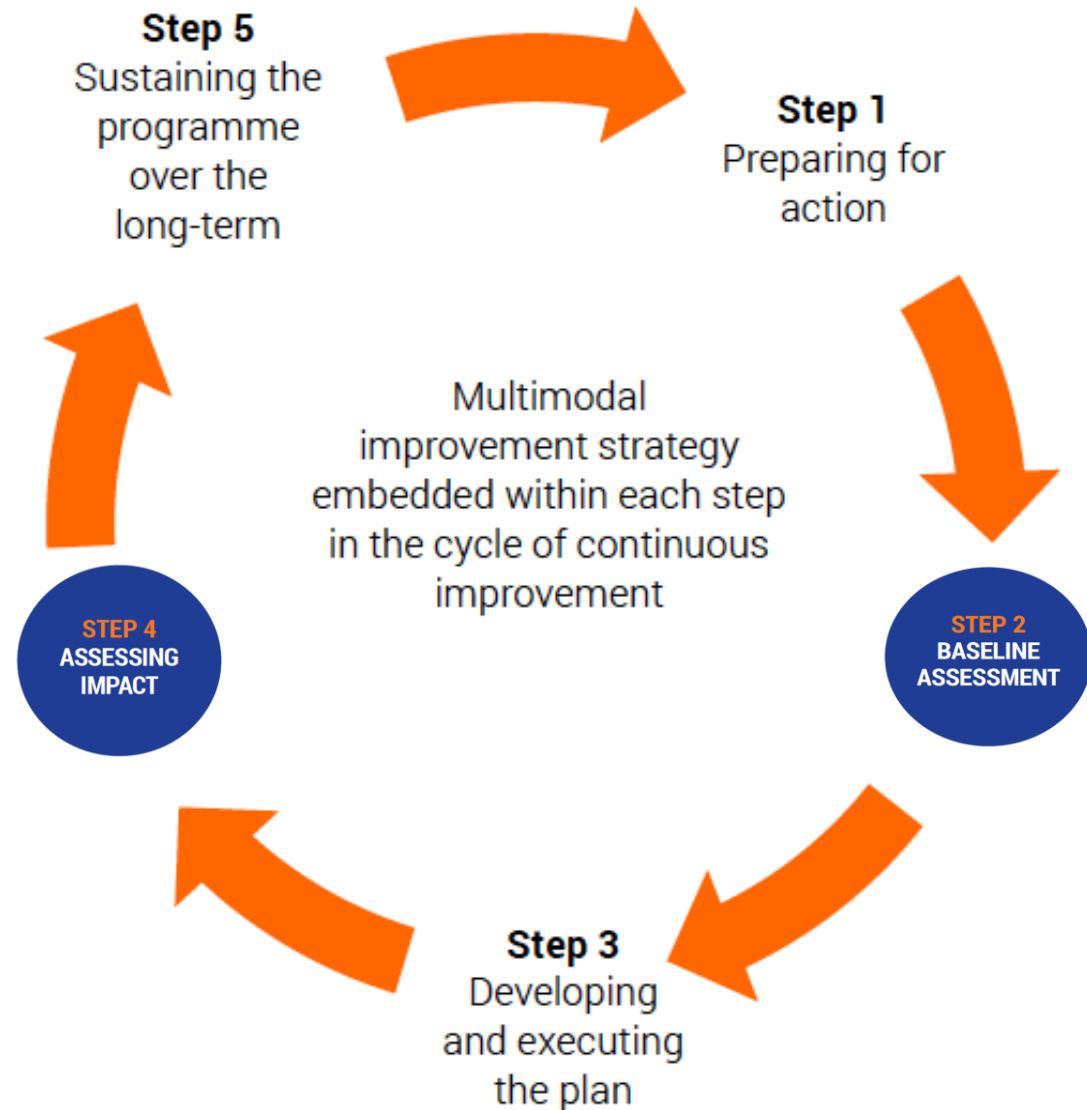
MINIMUM ▲

FULL ▲



Stepwise approach

Assessments in a spirit of improvement



IPC national level assessment tools



IPCAT-2

World Health Organization

Core components for infection prevention and control programmes
National level assessment tool*

For instruction on how to use this assessment tool, refer to the **Updated instructions for the national infection prevention and control assessment tool 2 (IPCAT2)**

Country: _____
National health authority: _____

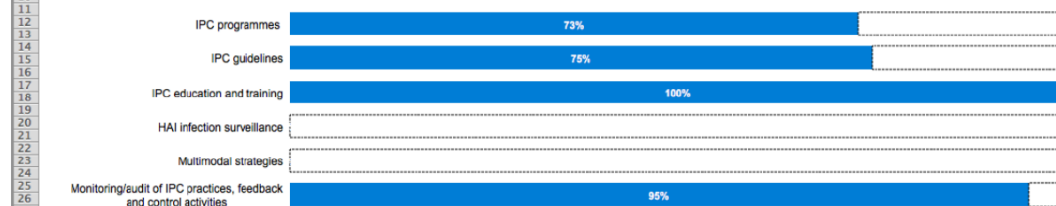
Details of person responsible for the questionnaire:
Name: _____
Title(position): _____
Institution: _____
E-mail: _____
Dates of assessment: DOMMY
Date(s) of previous assessment: DOMMY

Details of person completing the questionnaire (leave blank if self-assessment):
Name: _____
Title(position): _____
Institution: _____
E-mail: _____
Assessment mode: (Choose from dropdown list)
Self-assessment: (checkbox)

*This tool is based on the 2016 WHO Guidelines on core components for infection prevention and control programmes at the national and acute healthcare facility level (<http://www.who.int/infection-prevention/publications/ipc-components-guidelines/>)

The tool supports steps two and four of the five implementation steps (baseline assessment and evaluation) contained within the Internet practical manual supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes (<http://www.who.int/infection-prevention/campaign/technical-manual-implementation-guidelines.pdf?sfvrsn=1>)

	A	B	C	D	E	F	G	H	I	J	K
1	Assessment of IPC core components at the national level - summary results										
2											
3	IPC programmes										73%
4	IPC guidelines										75%
5	IPC education and training										100%
6	HAI infection surveillance										0%
7	Multimodal strategies										0%
8	Monitoring/audit of IPC practices, feedback and control activities										95%



1 IPC programme

Elements	Score
Organization and leadership of the programme	63%
Defined scope of responsibilities	57%
Linkages with other programmes and professional organizations	100%



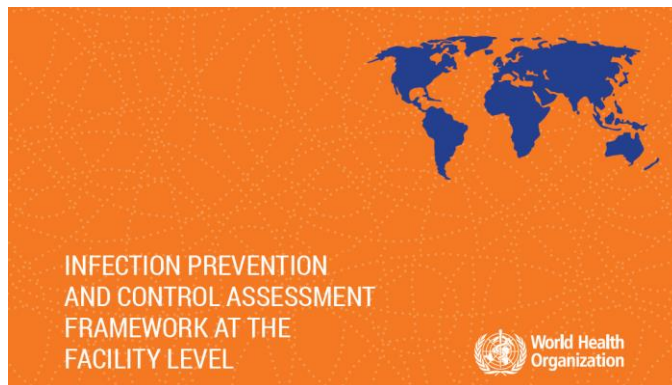
 **World Health Organization**

Assessment tool of the
Minimum requirements for infection prevention and control programmes
at the National level

IPC facility-level assessment tools



IPCAF



Core component 8: Built environment, materials and equipment for IPC at the facility level ²⁷		
Question	Answer	Score
Water		
1. Are water services available at all times and of sufficient quantity for all uses (for example, hand washing, drinking, personal hygiene, medical activities, sterilization, decontamination, cleaning and laundry)? Choose one answer	<input type="checkbox"/> No, available on average < 5 days per week	0
	<input type="checkbox"/> Yes, available on average ≥ 5 days per week or every day but not of sufficient quantity	2.5
	<input type="checkbox"/> Yes, every day and of sufficient quantity	7.5
2. Is a reliable safe drinking water station present and accessible for staff, patients and families at all times and in all locations/wards? Choose one answer	<input type="checkbox"/> No, not available	0
	<input type="checkbox"/> Sometimes, or only in some places or not available for all users	2.5
	<input type="checkbox"/> Yes, accessible at all times and for all wards/groups	7.5
Hand hygiene and sanitation facilities		
3. Are functioning hand hygiene stations (that is, alcohol-based handrub solution or soap and water and clean single-use towels) available at all points of care? Choose one answer	<input type="checkbox"/> No, not present	0
	<input type="checkbox"/> Yes, stations present, but supplies are not reliably available	2.5
	<input type="checkbox"/> Yes, with reliably available supplies	7.5
4. In your facility, are ≥ 4 toilets or improved latrines ²⁸ available for outpatient settings or ≤ 1 per 20 users for inpatient settings? Choose one answer	<input type="checkbox"/> Less than required number of toilets or latrines available and functioning	0
	<input type="checkbox"/> Sufficient number present but not all functioning	2.5
	<input type="checkbox"/> Sufficient number present and functioning	7.5

IPC Minimum Requirements assessment tool



World Health Organization

Assessment tool of the
Minimum requirements for infection
prevention and control programmes
at the facility level

<https://www.who.int/teams/integrated-health-services/infection-prevention-control/core-components>

<https://youtu.be/yMJPVtma9l0>

<https://youtu.be/PDz8kxrPaMk>

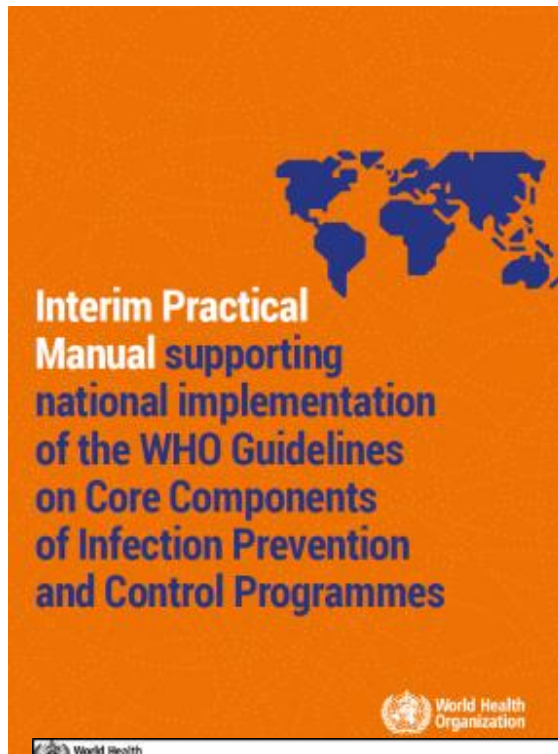
Tracking progress over time

Place “x” in the table columns to track progress (“x” inserted for illustration purposes)

Score	Interpretation	[Month/year]	[Month/year]	[Month/year]
0-200	Inadequate	X		
201-400	Basic		X	X
401-600	Intermediate			
601-800	Advanced			

STEP 4
ASSESSING
IMPACT

Implementation manuals and assessment tools for national and facility level



Core components for infection prevention and control programmes
National level assessment tool*

For instruction on how to use this assessment tool, refer to the **Updated instructions for the national infection prevention and control assessment tool 2 (IPCAT2)**

Country: _____
National health authority: _____

Details of person completing the questionnaire:

Name: _____
Title/position: _____
Institution: _____
E-mail: _____

Details of person completing the questionnaire (leave blank if self-assessment):

Name: _____
Title/position: _____
Institution: _____
E-mail: _____

Date(s) of assessment: **DOMMEYY**
Date(s) of previous assessment: **DOMMEYY**

Assessment mode:
(Choose from dropdown list)

Self-assessment: **True/False**

*This tool is based on the 2015 WHO **Guidelines on core components for infection prevention and control programmes of the national and acute healthcare facility level** (<http://www.who.int/infection-prevention/publications/ipc-components-guidelines/>)

The tool supports steps two and four of the five implementation steps (baseline assessment and evaluation) contained within the **Interim practical manual supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes** (<http://www.who.int/infection-prevention/campaigns/interim-handbook-implementation-guidelines.pdf?ua=1>)

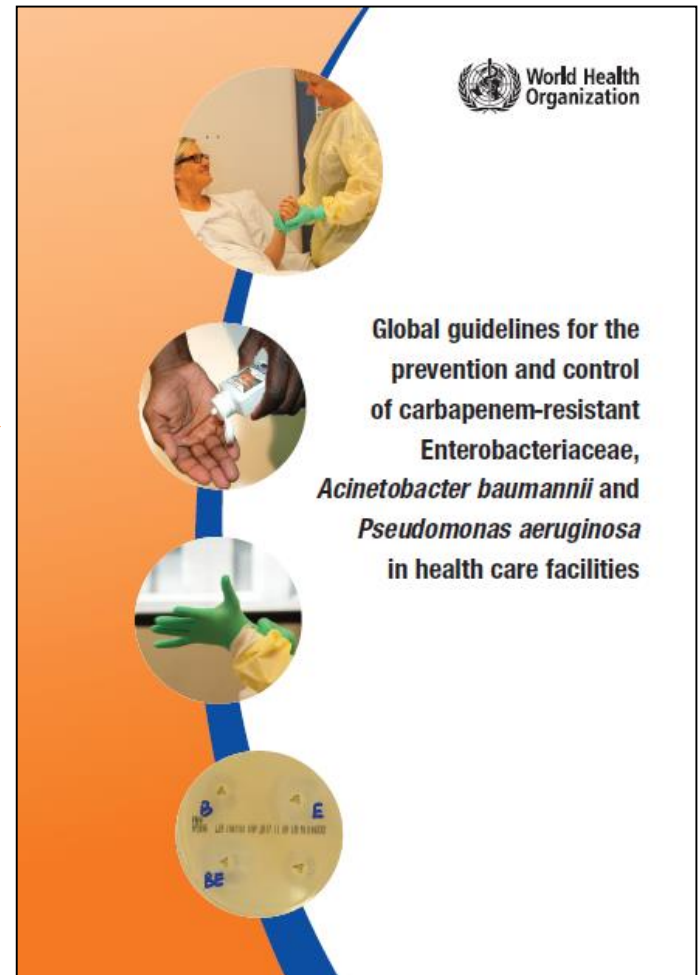
HEALTH CARE WITHOUT AVOIDABLE INFECTIONS



<http://www.who.int/infection-prevention/tools/core-components/en/>

IPC Implementation in Low-Resource Settings: A Qualitative Analysis. Antimicrob Resist Infect Control, *in press*

WHO global guidelines to prevent the spread of CROs



Tomczyk S et al *Clin Infect Dis* 2019;68(5):873–84

<https://www.who.int/teams/integrated-health-services/infection-prevention-control/ipc-and-antimicrobial-resistance>

Implementation Manual & Strategy



Implementation manual to prevent and control the spread of carbapenem-resistant organisms at the national and health care facility level

Interim practical manual supporting implementation of the Guidelines for the prevention and control of carbapenem-resistant Enterobacteriaceae, *Acinetobacter baumannii* and *Pseudomonas aeruginosa* in health care facilities



Chapter 1: National strategy
Chapter 2: Key principles for implementation at facility level

Table 1. Chapters 3-5 at-a-glance

	Chapter 3	Chapter 4	Chapter 5
Title	Surveillance	Contact precautions, including hand hygiene and isolation	Environmental cleaning, including surveillance cultures of the environment
Guideline recommendation(s) addressed	<ul style="list-style-type: none">• Recommendations 1, 3, 7, 8.• Recommendation 8 is addressed within the section on multimodal strategies.	<ul style="list-style-type: none">• Recommendations 1, 2, 4, 5, 8.• Recommendation 8 is addressed within the section on multimodal strategies.	<ul style="list-style-type: none">• Recommendations 1, 6, 7, 8.• Recommendation 8 is addressed within the section on multimodal strategies.



World Health Organization

**Assessment tool of the
Minimum requirements for infection
prevention and control programmes
at the National level**

WHO 2021 IPC Global Survey

IPC **Minimum Requirements** at the **National Level**

28 July – 15 October 2021

Prepare:
read the
tools and
documents

Take part in WHO
webinars, hear
more about using
the tools and how
to take part in the
global survey

Aug-Oct - complete
IPCAT-MR tool and
submit your results
to WHO online

Oct onwards -
act on your
results and
make your plans