

Core Components for Infection Prevention and Control
Julie Storr, WHO Global IPC Unit
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Core Components for IPC

Julie Storr

On behalf of the WHO Global IPC Unit

Hosted by Dr. Benedetta Allegranzi
WHO Global IPC Unit



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Infection
Prevention
and Control
Global Unit

www.who.int/gpsc/en

April 20, 2016

Today's objectives

- Summarise the background and rationale for the work;
- Outline the two-pronged approach;
- Explore how the core components will contribute to the global knowledge pool on what constitutes a "model" IPC programme (effective, efficient, safe, sustainable and cost-effective);
- Describe next steps and highlight how this work will:
 - strengthen approaches to IPC improvement and implementation across all countries;
 - contribute to the current AMR agenda and the implementation of the international health regulations;
 - Contribute to the achievement of the sustainable development goals with an emphasis on quality universal health coverage and quality, integrated, people centered care.

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Disclaimer

- I have made two assumptions:
 - that you are aware of (and stimulated to take action by) the monumental burden of harm and devastation that HAI causes to people across the world;
 - That you are interested to know what WHO is doing to help address this across nations and healthcare facilities;
- I will not be starting with any facts and figures. These can be found in the references section at the end of the slides.

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In simple words

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WHO's new IPC Global Unit

We're working with:

- Countries & technical experts,
- To **rethink** what governments and health facility managers should put in place,
- To make sure health service delivery is **safe and of high quality from an HAI prevention perspective**
- Based on the best available evidence & expert consensus



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Here's **what** we're doing

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Background & rationale



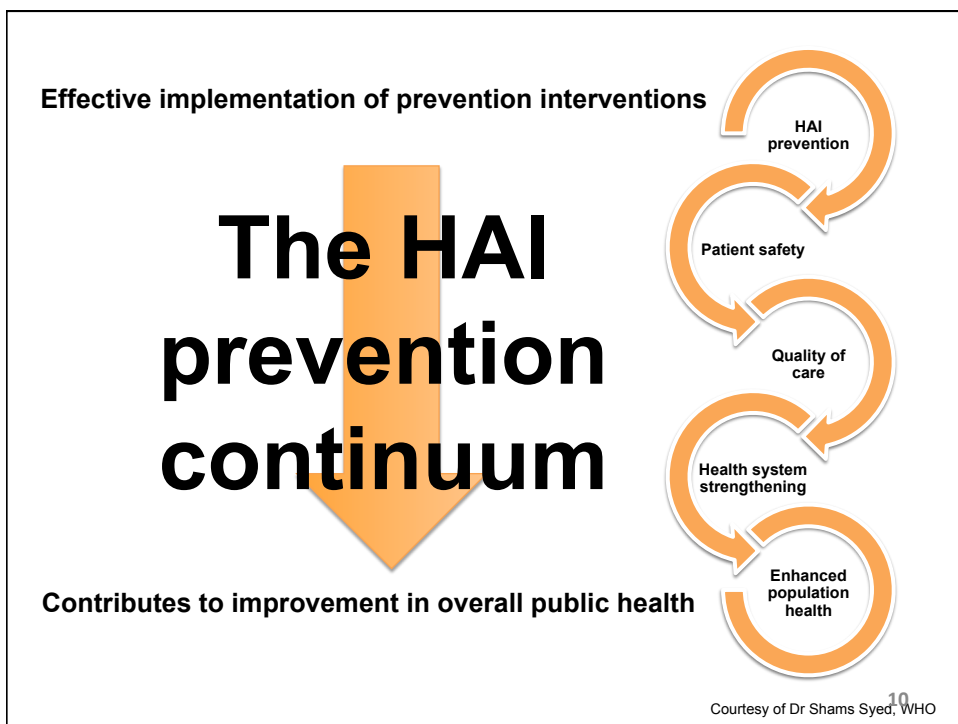
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The HAI prevention continuum

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Antimicrobial
Resistance (AMR)

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SIXTY-EIGHTH WORLD HEALTH ASSEMBLY
Provisional agenda item 15.1

A68/20
27 March 2015

Antimicrobial resistance

Draft global action plan on antimicrobial resistance

Report by the Secretariat

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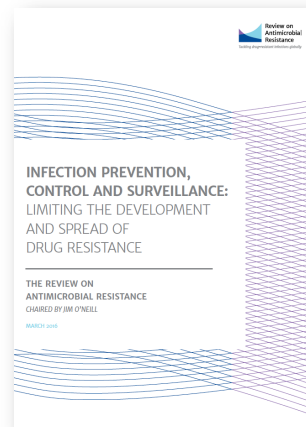
2017

- Deadline for all countries to have in place **a national action plan** to tackle AMR
- IPC one of the **five action areas** to be addressed

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Antimicrobial resistance

- **2015:** WHO AMR survey looked at national policies and activities in the area of AMR (133 countries)
- **Aim:** To determine the existence of effective practices and structures & highlight gaps.
- **Results:** Revealed major weaknesses in IPC capacity.
- Relatively few countries had in place a national IPC programme;
- **2016:** Jim O’Neills report reaffirms IPC as critical part of AMR agenda



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The International Health Regulations

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International Health Regulations

- IHR gives further weight to IPC as a central strategy for dealing with public health threats of international concern;
- The only international “law” that addresses IPC.
- IPC is an IHR Core Capacity!



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2015
Global Reference List of
100 Core Health Indicators

Health systems

Quality and safety of care

- Perioperative mortality rate
- Obstetric and gynaecological admissions owing to abortion
- Institutional maternal mortality ratio
- Maternal death reviews
- ART retention rate
- TB treatment success rate
- Service-specific availability and readiness

Health security

- International Health Regulations (IHR) core capacity index

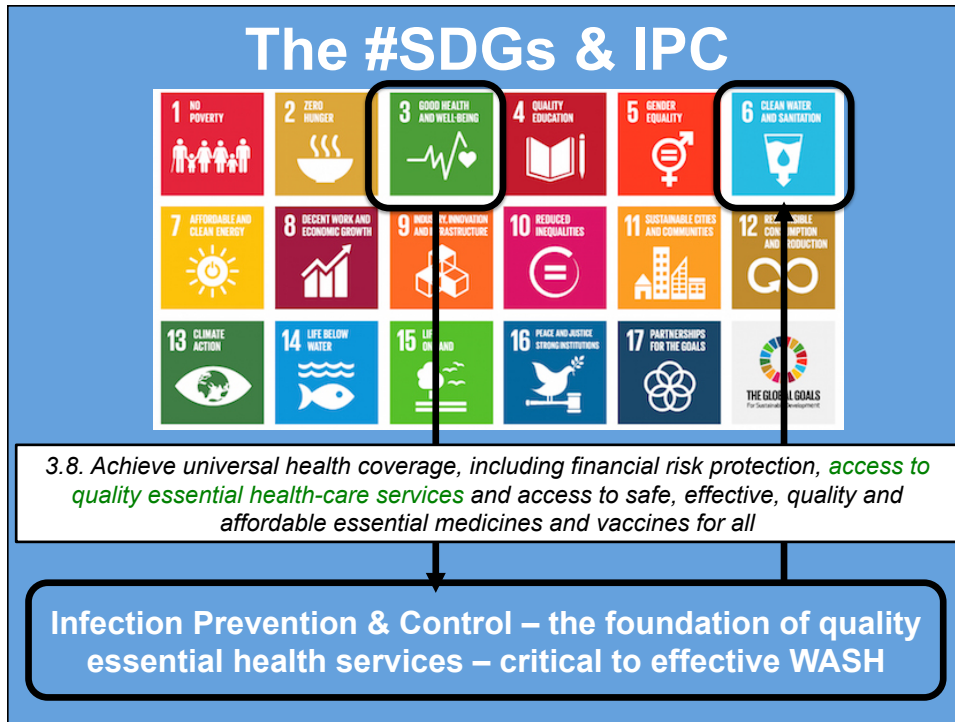
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The Sustainable
Development Goals
(SDGs)

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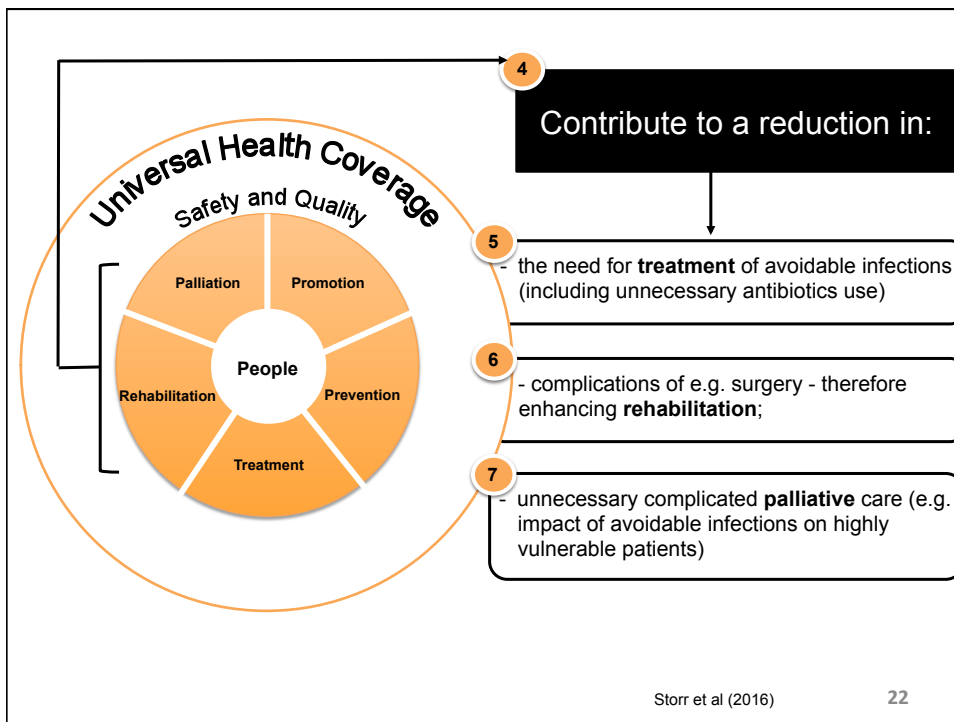
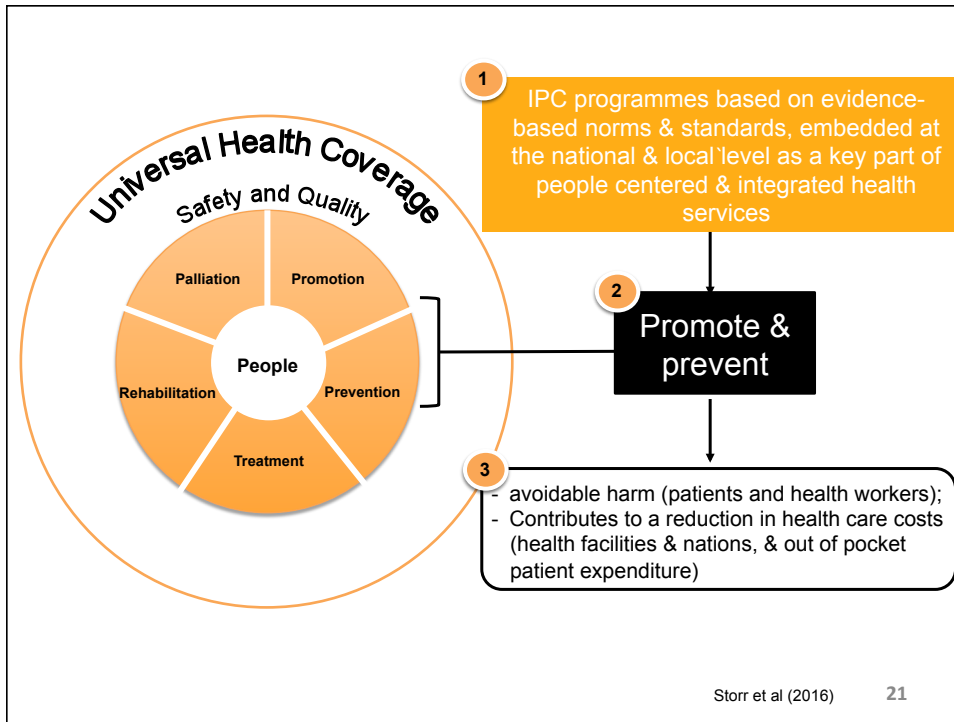
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In summary

Effective IPC is important for global health security

Effective IPC is dependent upon strong health systems

It requires action at the political level

It also requires action at the health facility level

Defective IPC is a threat to patient & healthworker
outcome & overall public health

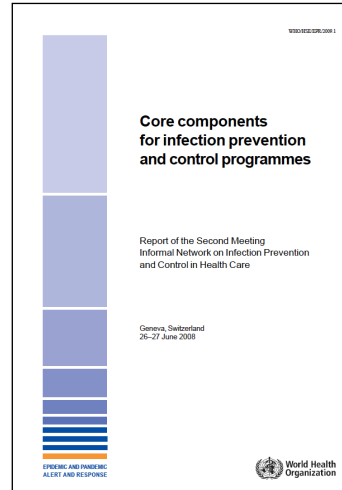
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Two-pronged approach

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The starting point - 1

Category	Components
Organization of IPC programmes	A structure responsible for policies, goals, strategies, legal, technical framework and monitoring. Existence of qualified dedicated technical staff with defined responsibilities, scope and functions. A budget adequate to meet programmed activities
Technical guidelines	Development, dissemination and implementation of technical evidence-based guidelines for prevention of the relevant risks and/or infections, adapted to local conditions.
Human resources	Training for all health-care personnel in IPC and specialized training of infection-control professionals. Adequate staff responsible for IPC activities. Address biological risks and implement preventive measures.
Surveillance of infections and assessment of compliance with IPC practices	Established priorities for surveillance of infections and pathogens, standardized case definitions and active methods of surveillance. Systematic assessment of compliance with IPC practices. Detection of outbreaks and prompt response. Documentation of the situation of HAI and IPC practices.
Microbiology laboratory	Standardization of microbiology laboratory techniques. Promotion of the interaction between IPC activities and the microbiology laboratory. Use microbiology data for surveillance and IPC activities. Establish laboratory biosafety standards.
Environment	Minimum requirements for IPC: clean water, ventilation, hand-washing facilities, patient placement and isolation facilities, storage of sterile supply, conditions for building and/or renovation.
Monitor and evaluation of programmes	Regular monitoring, evaluation and reporting of IPC outcomes, processes and strategies at national level and in health-care facilities. Promotes of evaluation as a non-punitive culture.
Links with public health or other services	Links between public health services and the facilities for events of mandatory reporting. Permanent coordination with activities related to waste management and sanitation, biosafety, antimicrobial pharmacy, occupational health, patients and consumers and quality of health care.



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The starting point - 2

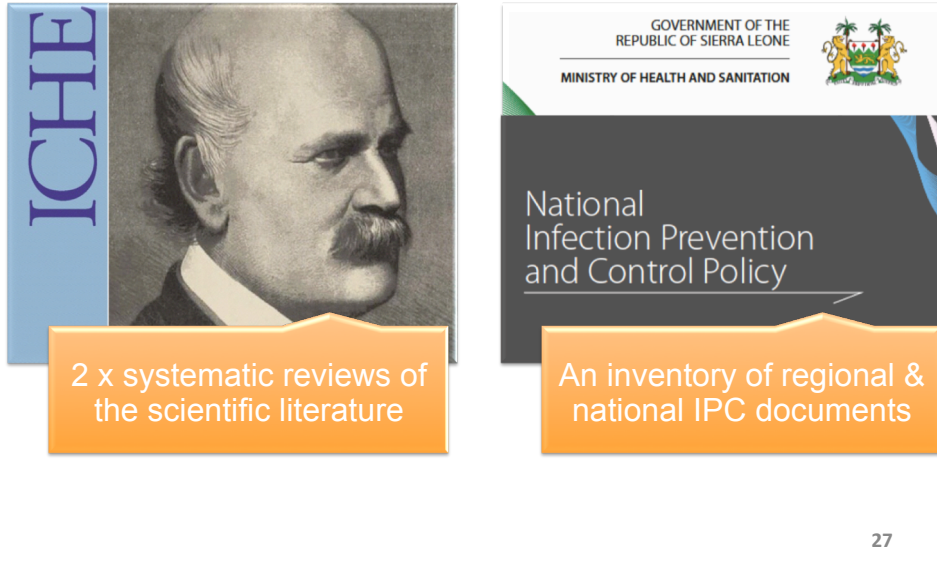


To identify the most effective and generally applicable elements of hospital infection prevention and control programmes and define structure and process indicators

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Summary of our approach



The diagram illustrates the approach to the systematic review. On the left, a vertical blue bar contains the acronym 'ICHE' in white. To its right is a portrait of a man with a mustache. Below the portrait is an orange box with the text '2 x systematic reviews of the scientific literature'. To the right of the portrait is a document cover for the 'National Infection Prevention and Control Policy' from the 'MINISTRY OF HEALTH AND SANITATION' of the 'GOVERNMENT OF THE REPUBLIC OF SIERRA LEONE'. Below the document cover is an orange box with the text 'An inventory of regional & national IPC documents'. The number '27' is in the bottom right corner.

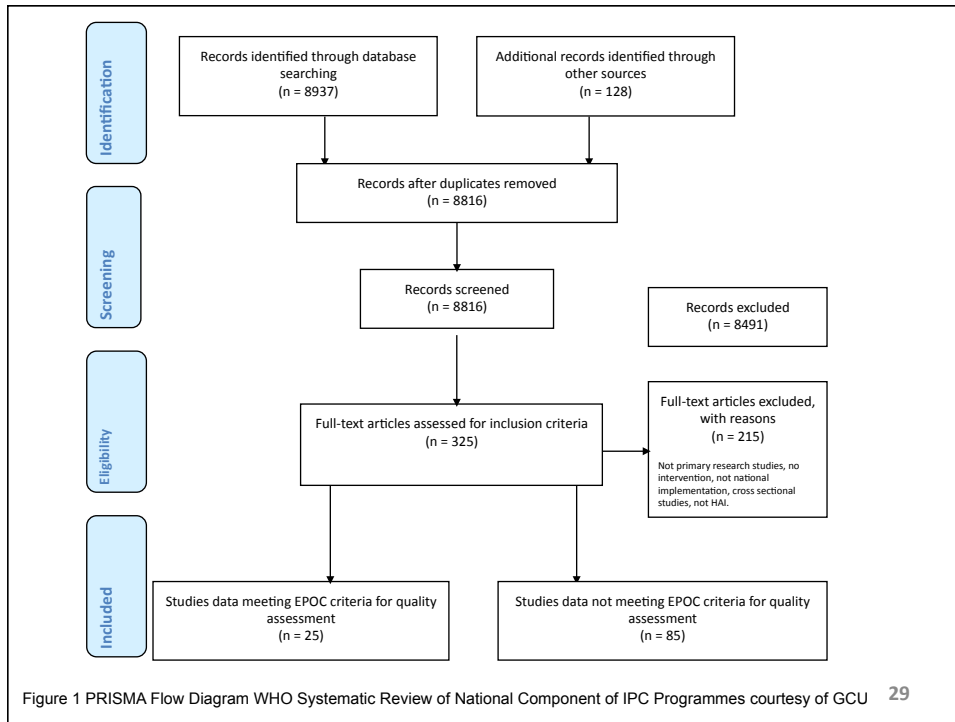
Systematic Review 1 - National

- Systematic literature review on core components of effective IPC programmes at the national level, including evaluation of quality of the evidence according to WHO GRADE;



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Systematic Review 2 - Facility

- Systematic literature review of the core components of effective IPC programmes at the facility-level.
- An update of a 2015 systematic review and expert consensus publication by Zingg et al that reviewed available literature in this regard until 2012.

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Methodology

- **Question:**
 - What are the core elements of an effective IPC programme aimed at reducing HAIs, including those due to antimicrobial resistant pathogens and improving practices in acute care health facilities?
- **Outcomes:**
 - Primary outcomes: HAIs; hand hygiene compliance
 - other secondary outcomes (e.g. bundle compliance, healthcare workers' knowledge)
- **Time Period:**
 - 01-Jan-2013 to 23-Nov-2015

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9 Dimensions

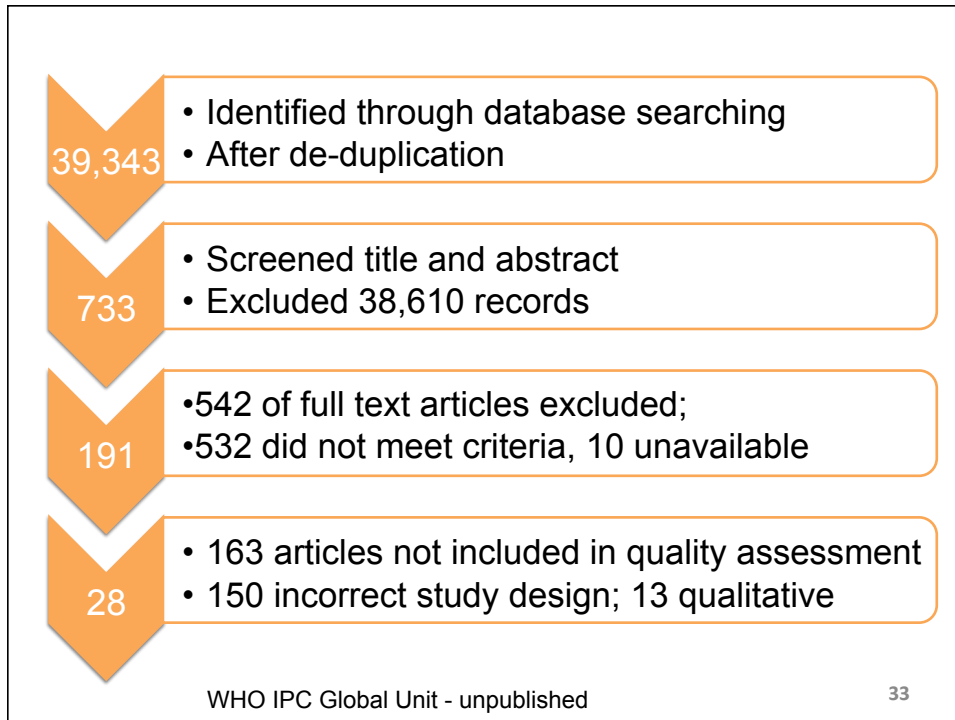
#	Thematic Area	Description
1	Organization & Structure	Organizational and structural arrangements Access to IPC professionals and role of mgmt
2	Surveillance	Targets and methods of HAI surveillance, outbreak management and role of feedback
3	Education and training	Methods and effectiveness of educating and training HCWs
4	Behaviour change strategies	Multimodal/bundle strategies
5	Standard and transmission based precautions	Effectiveness of local policies and resources for standard and transmission based isolation strategies
6	Auditing	Process of auditing
7	Patient participation	Patient empowerment and involvement
8	Target setting	Setting targets or goals
9	Knowledge management	Range of strategies to identify, create and distribute information and data within and out of an institution

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Inventory

- To gather together, analyse and synthesise national and regional IPC action plans and strategic documents;
- To complement the systematic reviews and country experiences;
- To inform the overall direction of work and provide insights into what could be considered the core elements of IPC programmes right now in the field;
- To ultimately feed into the development of a final set **recommendations** for IPC Programmes at the national and facility level.

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Results

- All sources:
 - In total, 65 documents were collected from across all information sources
- 57 documents were national, 8 regional;
- One document was pan-regional (developed by the South East Asian and Western Pacific Regions collaboratively)
- Thirty-four documents in English, 31 in other languages (Arabic, French, Greek, Portuguese and Spanish).
- Documents were received from 41 Member States

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Example results

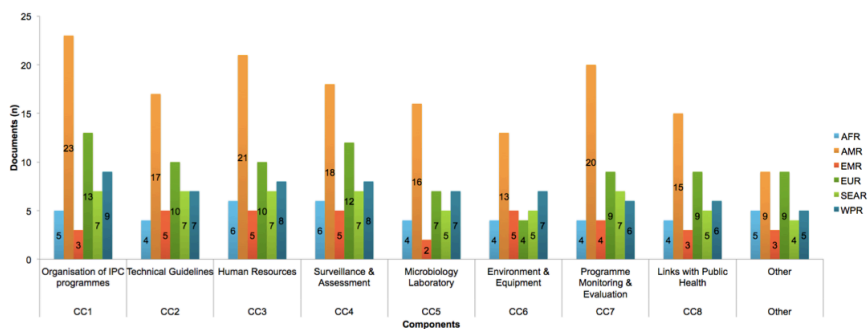


Figure 1: Number of documents addressing each component, by region

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Next steps

1. Systematic reviews & inventory will form the basis of a new WHO recommendations report on the Core Components of national and facility level IPC programmes
2. The new Core Components recommendations will be issued in 2016

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Target audience for the final recommendations

- Policy makers within ministries of health responsible for the establishment and monitoring of national IPC programs;
- Facility-level administrators tasked with the same remit (e.g. chief executive officers (CEOs));
- In addition:
 - The Core Components will support the operationalization of IPC programs nationally and locally and will therefore be of relevance to national IPC leaders, national safety and quality leaders and managers, facility-level IPC officers and safety and quality leads and teams, and regulatory bodies.
 - Allied organisations including academia, national IPC professional bodies and civil society groups will also have an interest in the core components.

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- Matthias Egger, methodologist
- WHO Guideline Review Committee
- WHO Core Components Guideline Development Group

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The next WHO teleclass

May 4, 2016

SPECIAL LECTURE FOR 5 MAY



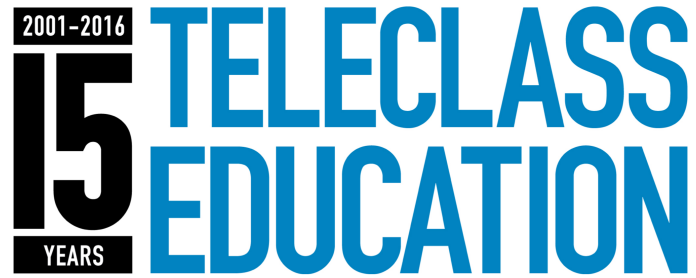
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