



**World Health
Organization**

How to measure the degree of implementation?

**Establishment of surveillance
systems, external assessments
versus self-assessment**

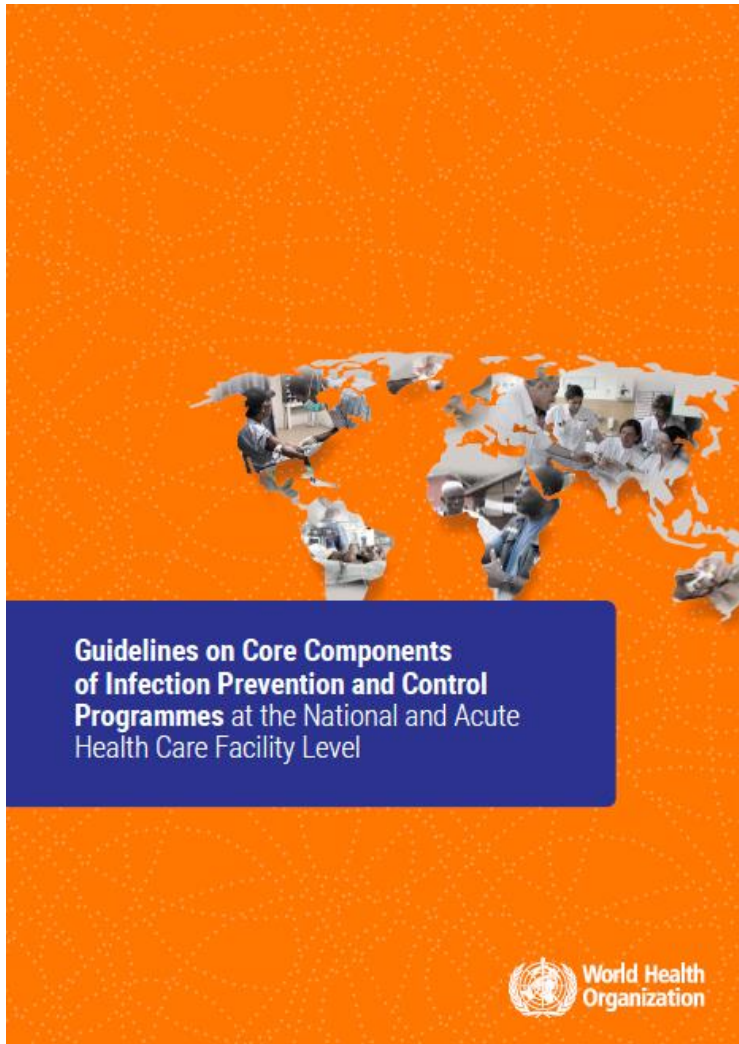
Julie Storr, WHO Infection Prevention & Control
Global Unit

Two of eight recommendations address measurement (strong recommendations)



- **Facility-based HAI surveillance** should be performed to **guide IPC interventions & detect outbreaks**, including **AMR** surveillance with timely **feedback** of results to health care workers and stakeholders and through national networks.
- **National HAI surveillance** programmes & networks that include mechanisms for timely data feedback and with the potential to be used for **benchmarking** purposes should be established to **reduce HAI** and **AMR**.

Two of eight recommendations address measurement (strong recommendations)



- A **national IPC M&E programme** should be established to assess the extent to which standards are being met and activities performed according to the programme's goals and objectives. Hand hygiene monitoring with feedback should be considered as a key performance indicator at the national level.
- Regular **facility-level monitoring/audit and timely feedback** of health care practices should be performed to prevent and control HAI and AMR. Feedback should be provided to all audited persons and relevant staff

Examples of current IPC measurement & impact across the globe

1. Surgical Site Infection Surveillance

GLOBAL GUIDELINES FOR THE PREVENTION OF SURGICAL SITE INFECTION



Reduction of surgical site infections after Caesarean delivery using surveillance

S. Bärwolff^{a,d,*}, D. Sohr^{a,d}, C. Geffers^{a,d}, C. Brandt^{a,d},
R.-P. Vonberg^{b,d}, H. Halle^c, H. Rüden^{a,d}, P. Gastmeier^{b,d}

International Journal for Quality in Health Care 2006; Volume 18, Number 2: pp. 127-133
Advance Access Publication: 16 February 2006

10.1093/inf

Reduced risk of surgical site infections through surveillance in a network

EVELINE L. P. E. GEUBBELS¹, NICO J. D. NAGELKERKE², A. JOKE MINTJES-DE GROOT³, CHRISTINA
M. J. E. VANDENBROUCKE-GRAULS⁴, DIEDERICK E. GROBBEE⁵ AND ANNETTE S. DE BOER¹

Reduction of Surgical Site Infection Rates Associated With Active Surveillance

C. Brandt, MD; D. Sohr, PhD; M. Behnke; F. Daschner, MD; H. Rüden, MD; P. Gastmeier, MD

Impact of a six-year control programme on surgical site infections in France: results of the INCISO surveillance

C. Rioux^a, B. Grandbastien^{a,b}, P. Astagneau^{a,c,*}

Impact of surgical site infection surveillance on outcome

Country (name of network)	Duration of surveillance (years)	Procedures	Change in SSI rate
England (SSISS)	5	Orthopaedic	-64 to -69%
France (ISO-RAISIN)	8	Various	-30%
Germany (KISS)	4	Various	-25%
Netherlands (PREZIES)	5	Various	-57%
Switzerland (regional network)	13	Various	3% to 22%
USA (SENIC)	5	Various	-35%

2. Monitoring hand hygiene compliance



Patient Safety
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WHO Guidelines
on Hand Hygiene in Health Care

First Global Patient Safety Challenge
Clean Care is Safer Care



Journal of Hospital Infection (2010) 74, 204–211



Available online at www.sciencedirect.com

ScienceDirect



www.elsevierhealth.com/journals/jhin

REVIEW

Impact of alcohol hand-rub use on meticillin-resistant *Staphylococcus aureus*: an analysis of the literature

S. Sroka^{a,b,*}, P. Gastmeier^{a,b}, E. Meyer^{a,b}

^a Institute of Hygiene and Environmental Medicine, Charité University Medicine Berlin, Germany

^b National Reference Centre for Surveillance of Nosocomial Infections, Berlin, Germany

Available online 12 January 2010

REVIEW

Provision and consumption of alcohol-based hand rubs in European hospitals

S. Hansen, F. Schwab and P. Gastmeier, on behalf of the PROHIBIT study group, D. Pittet, W. Zingg, H. Sax, P. Gastmeier, S. Hansen, H. Grundmann, B. van Benthem, T. van der Kooi, M. Dettenkofer, M. Martin, H. Richet, E. Szilágyi, O. E. Központ, P. B. Heczko, A. Holmes, Y. Kyrsitsis, R. Ahmad, B. Allegranzi, A. Magiorakos, B. Cookson and A. W. Wu
Charité – University Medicine Berlin, Institute for Hygiene, Berlin, Germany

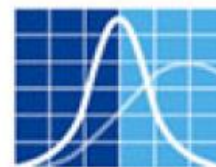
Abstract

Hand hygiene is considered to be the most effective way of preventing microbial transmission and healthcare-associated infections. The use of alcohol-based hand rubs (AHRs) is the reference standard for effective hand hygiene. AHR consumption is a valuable surrogate parameter for hand hygiene performance, and it can be easily tracked in the healthcare setting. AHR availability at the point of care ensures access to optimal agents, and makes hand hygiene easier by overcoming barriers such as lack of AHRs or inconvenient dispenser locations. Data on AHR consumption and availability at the point of care in European hospitals were obtained as part of the Prevention of Hospital Infections by Intervention and Training (PROHIBIT) study, a framework 7 project funded by the European Commission. Data on AHR consumption were provided by 232 hospitals, and showed median usage of 21 mL (interquartile range (IQR) 9–37 mL) per patient-day (PD) at the

National consumption surveillance



CHICAGO JOURNALS



SHEA
The Society for Healthcare
Epidemiology of America

Establishment of a National Surveillance System for Alcohol-Based Hand Rub Consumption and Change in Consumption over 4 Years

Author(s): Michael Behnke, PhD; Petra Gastmeier, MD; Christine Geffers, MD; Nadine Mönch, MD; Christiane Reichardt, MD

Source: *Infection Control and Hospital Epidemiology*, Vol. 33, No. 6 (June 2012), pp. 618-620

Published by: [The University of Chicago Press](#) on behalf of [The Society for Healthcare Epidemiology of America](#)

Stable URL: <http://www.jstor.org/stable/10.1086/665729>

Accessed: 10/04/2013 07:52

3. Monitoring hand hygiene strategies: WHO self assessment framework



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SAVE LIVES

Clean Your Hands

Hand Hygiene Self-Assessment Framework 2010

Introduction and user instructions

The **Hand Hygiene Self-Assessment Framework** is a systematic tool with which to obtain a situation analysis of hand hygiene promotion and practices within an individual health-care facility.

What is its purpose?

While providing an opportunity to reflect on existing resources and achievements, the **Hand Hygiene Self-Assessment Framework** also helps to focus on future plans and challenges. In particular, it acts as a diagnostic tool, identifying key issues requiring attention and improvement. The results can be used to facilitate development of an action plan for the facility's hand hygiene promotion programme. Repeated use of the **Hand Hygiene Self-Assessment Framework** will also allow documentation of progress with time.

Overall, this tool should be a catalyst for implementing and sustaining a comprehensive hand hygiene programme within a health-care facility.

Who should use the Hand Hygiene Self-Assessment Framework?

Intermediate: an appropriate hand hygiene promotion strategy is in place and hand hygiene practices have improved. It is now crucial to develop long-term plans to ensure that improvement is sustained and progresses.

Advanced: hand hygiene promotion and optimal hand hygiene practices have been sustained and/or improved, helping to embed a culture of safety in the health-care setting.

Leadership criteria have also been identified to recognise facilities that are considered a reference centre and contribute to the promotion of hand hygiene through research, innovation and information sharing. The assessment according to leadership criteria should only be undertaken by facilities having reached the Advanced level.

How does it work?

While completing each component of the **Hand Hygiene Self-Assessment Framework**, you should circle or highlight the answer appropriate to your facility for each question. Each answer is


HHSAF data presentation

Interpretation: A Four Step Process

1.
Add up your
points.

Score	
Component	Subtotal
1. System Change	
2. Education and Training	
3. Evaluation and Feedback	
4. Reminders in the Workplace	
5. Institutional Safety Climate	
Total	

2.
Determine the
assigned
'Hand Hygiene Level'
for your facility.



Total Score (range)	Hand Hygiene Level
0 - 125	Inadequate
126 - 250	Basic
251 - 375	Intermediate (or Consolidation)
376 - 500	Advanced (or Embedding)

Explaining the HHSAF scoring

- The maximum overall score is 500 points
- **Inadequate** (overall score 0-125): Significant improvement required
- **Basic** (overall score 126-250): Further improvement is required
- **Intermediate** (overall score 251-375): Crucial to develop long-term plans to ensure sustained improvement and progress
- **Advanced** (overall score 376-500): hand hygiene promotion and optimal hand hygiene practices have been sustained and/or improved, thus helping to embed a culture of quality and safety around hand hygiene promotion in the health care setting

WHO HHSAF survey 2015

Summary Report: Hand Hygiene Self-Assessment Framework Survey 2015/2016

A report from the WHO Infection Prevention and
Control Global Unit



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WHO/HIS/SDS/2016.7

- From June 2015 – January 2016 health care facilities were invited to participate in WHO's second survey based on completion of the HHSAF survey
- A dedicated, protected online site was used (with direct submission via email also possible)
- WHO undertook data entry and quality checks

HHSAF global survey 2015 - results

- Overall mean score: ***intermediate***
- Majority of facilities were ***intermediate*** or ***advanced***
- High proportion qualified for leadership level (79%)
- Lowest scores concerned evaluation and feedback and institutional safety climate
- Lowest mean score: African region (280.9 ± 127.3) from 60 facilities
- Highest mean score: South East Asian region (420.6 ± 77.6) from 231 facilities
- Full report at http://www.who.int/gpsc/5may/EN_PSP_GPSC1_5May_2016/en/

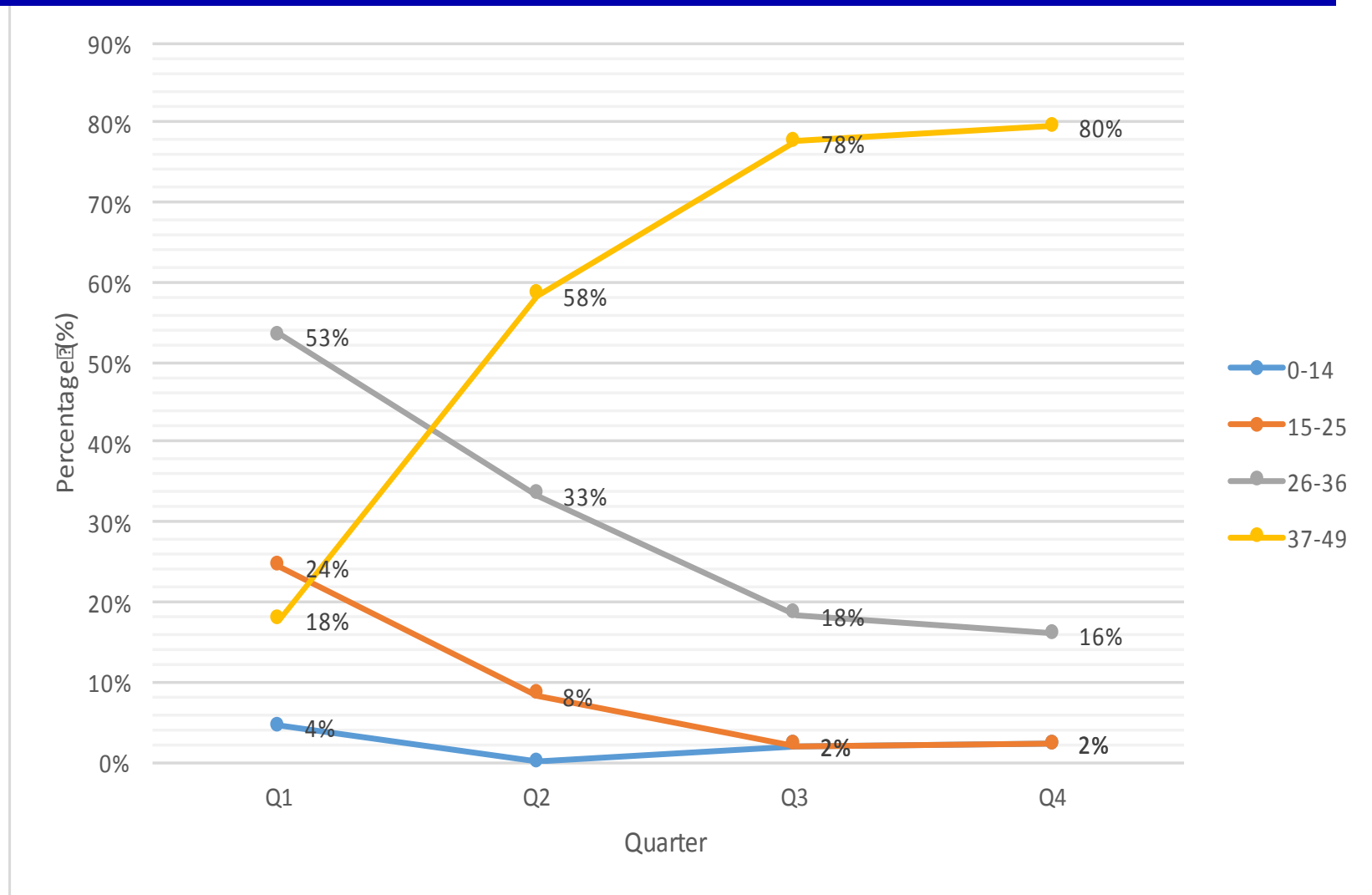
National IPC indicators (inter-country collaboration)

- 28 IPC & WASH common indicators
- IPC and WASH priority indicators

- *Organization & management*
- *Training*
- *Infrastructure*
- *Practices*
- *Supplies*
- *Patient placement*
- *Occupational health & safety*

DOMAIN: Organization and management (Administrative)					
Sub-domain: human resources, governance & technical guidelines					
Priority indicator(s)	No.	%	Basis/Data source	Criteria	Score
1a. Number and % of HCFs with a dedicated IPC focal person in place			Data source: Existing IPC HCF audits; Basis: IPC Core Components 2008 (under revision) Essential environmental health standards in health care	All indicators achieve a score >85%	
1b. Number and % of HCFs with a dedicated WASH focal person in place				At least 1 indicator achieves a score of ≥70% but ≤85%	
				All indicators achieve a score <70%	
DOMAIN: Training					
Priority indicator(s)	No.	%	Basis/Data source	Criteria	Score
4. Proportion of existing health care personnel trained on IPC/WASH within the previous year			Data source: WCO IPC/MoH Team training database Basis: IPC Core Components 2008 (under revision)	Indicator achieves a score >85%	
				Indicator achieves a score of ≥70% but ≤85%	
				Indicator achieves a score <70%	

Minimum Standards Tool, Liberia: 2329 Assessments in 2015

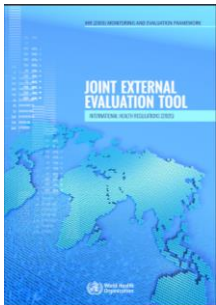


The current global measurement context for IPC

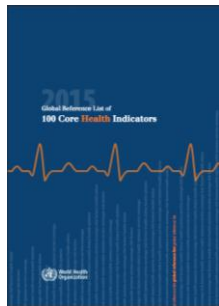
IHR, JEE & 100 core (& other) indicators



IHR Core Capacity – annual self assessment



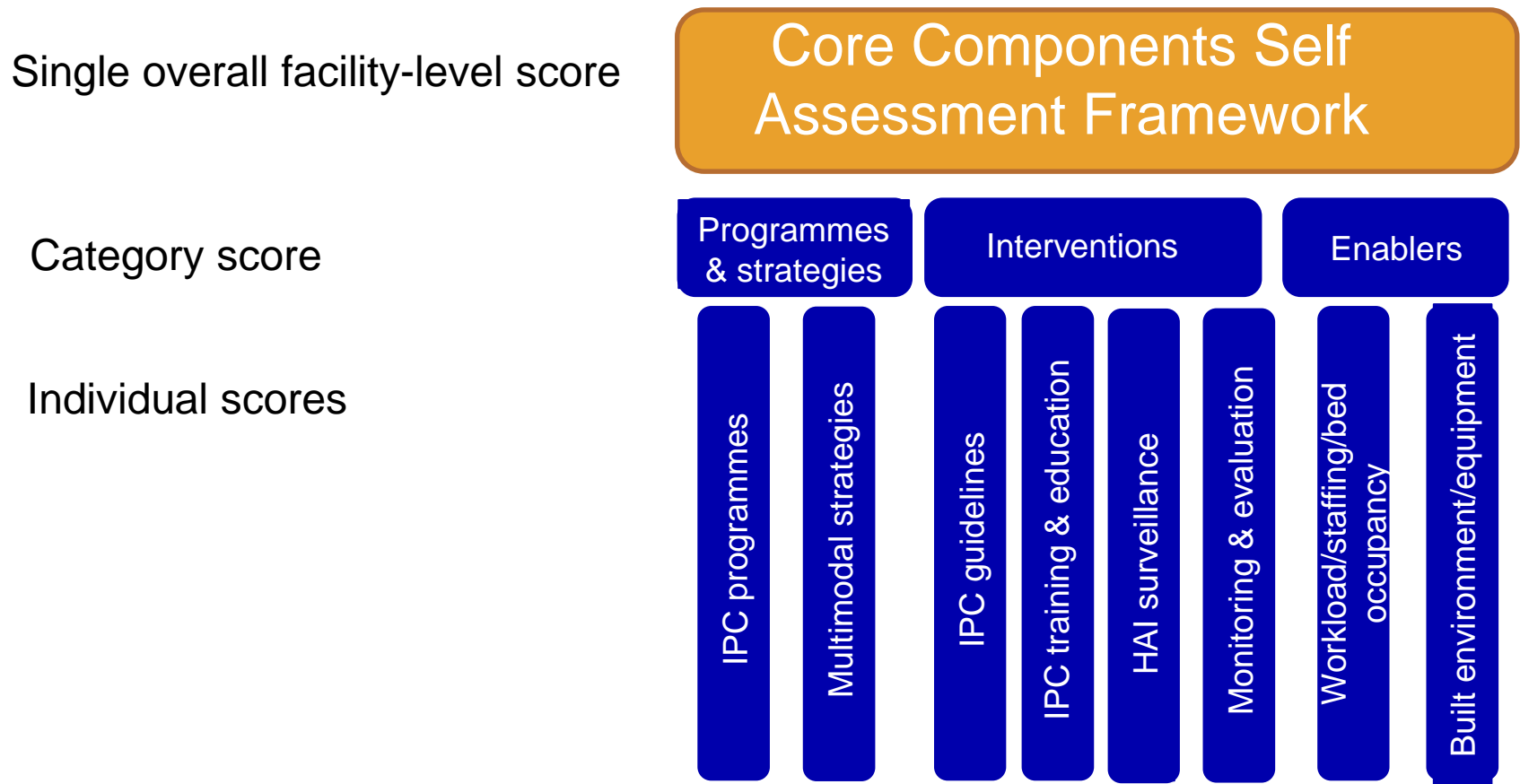
Joint External Evaluation – 4-yearly external evaluation



WHO 100 Core Indicators – IHR core capacity (a health system indicator)

Next steps for global IPC measurement

Core component guidelines self-assessment framework (under development)



Advantages of undertaking core component-related self-assessment

- Opportunity to collect streamlined, global IPC measurement – all countries using same/similar indicators;
- Assessment can be embedded in national systems;
- Strong focus on self-assessment (external assessment not an option in many countries)
- Self-assessment, if undertaken correctly with a standardized, validated instrument enables:
 - Global comparisons
 - Local benchmarking
 - Global and national (and local) advocacy
 - Development of donor funding proposals

Self versus external assessment

Self

- Opportunity for learning - benchmarking
- Opportunity for cross-discipline team building
- Requires big time commitment
- Less costly

External

- Efficient – less time drain on staff
- External expert lens to provide strategic & technical advice
- Higher cost

The value of IPC/HAI data

Advocacy and awareness – creating the burning imperative for improvement action
(data + a good story has political leverage)

Driving & sustaining improvement
(data for action)

Impacting on infection rates
(health related quality of life)

Thank you



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