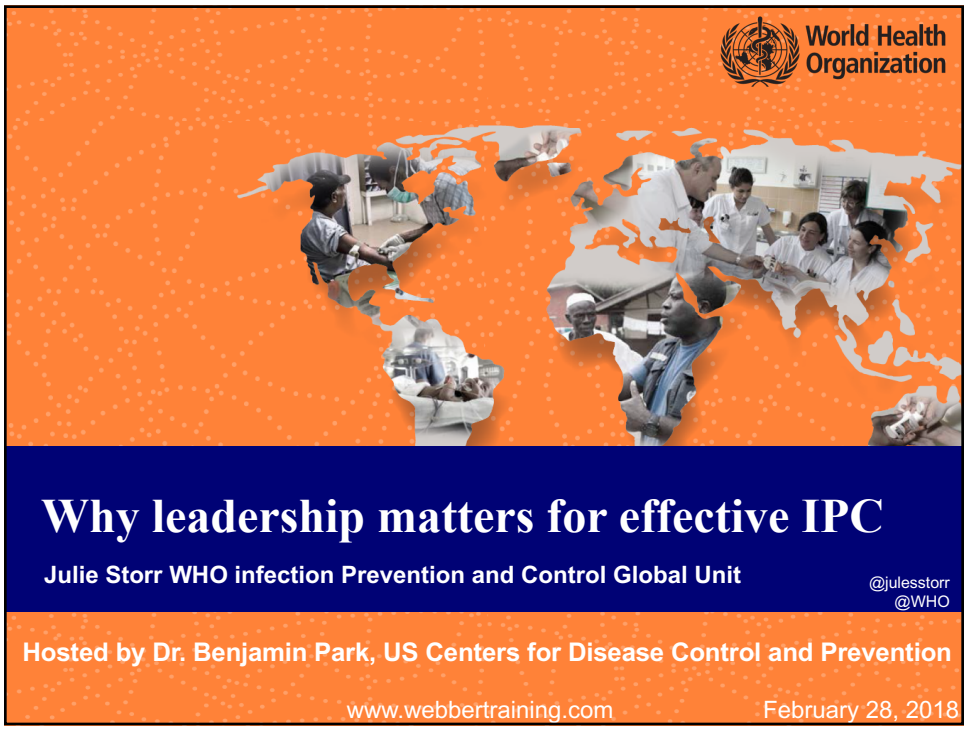
Why Leadership Matters for Effective IPC
Julie Storr, World Health Organization
Sponsored by the WHO Infection Prevention and Control Global Unit



Focus of todays class

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- The relevance of leadership to IPC
- What makes an effective IPC leader
- Leadership challenges and opportunities in IPC
- Leadership implementation

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Hosted by Dr. Benjamin Park, US Centers for Disease Control and Prevention, Atlanta
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World Health Organization
The big picture
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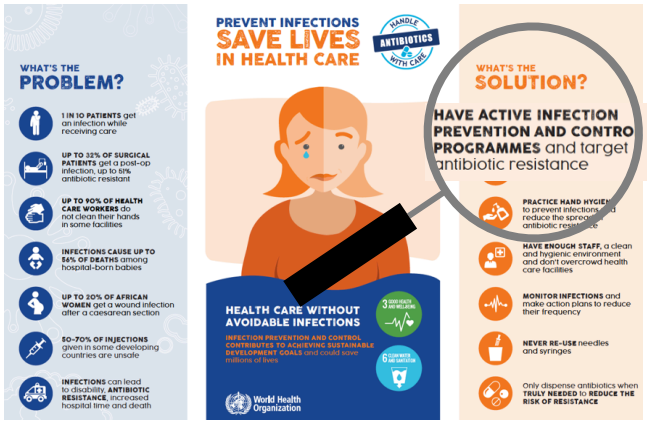
IPC and global health
World Health Organization
World Health Organization
Promote health
Keep the world safe
Serve the vulnerable
Dr Tedros, Director General WHO
28/02/2018 | Why leadership matters for effective IPC
Programme of Work (draft) http://apps.who.int/gb/ebwha/pdf_files/EB142/B142_3-en.pdf#page=

Keep the world safe

World Health Organization

Active and effective IPC programmes



http://www.who.int/infection-prevention/tools/core-components/HAI-Infographic.pdf?ua=1

What role does leadership play?

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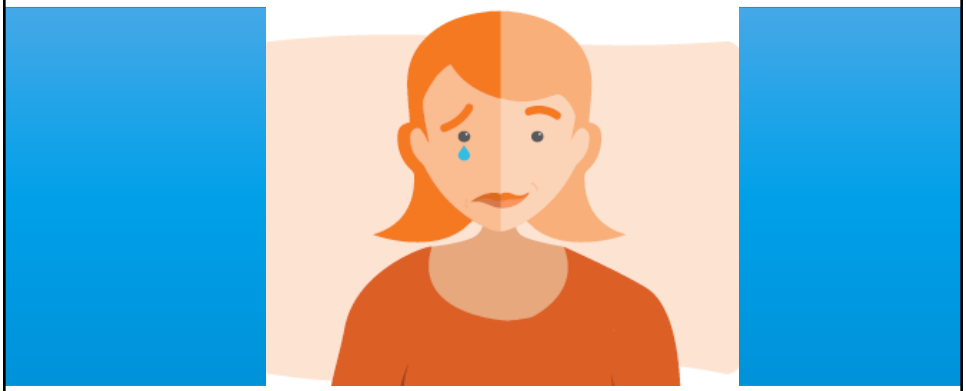
Peoples lives depend on it



A negative or positive health outcome is influenced by the effectiveness of an IPC programme – but how do we get our messages across the multiple levels of health care?

Watch WHO IPC animation video here: https://www.youtube.com/watch?v=K-2XWtEjfI8&app=desktop

Convince decision makers and stakeholders that effective IPC strengthens health systems

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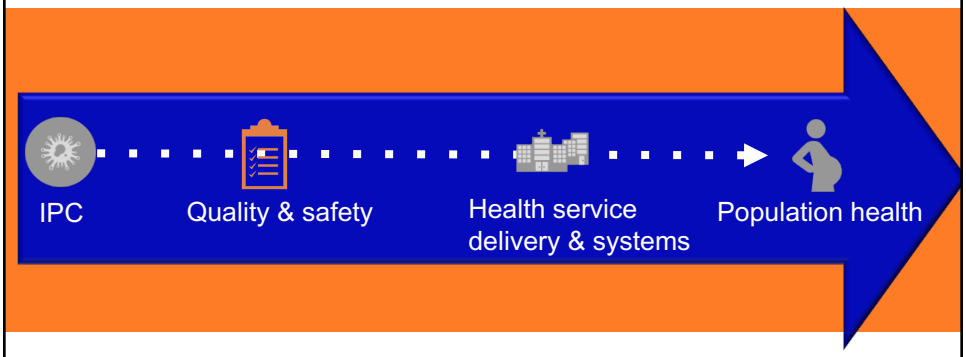
The IPC – population health continuum



Based on an idea by Shams Syed, WHO

Building a strong message

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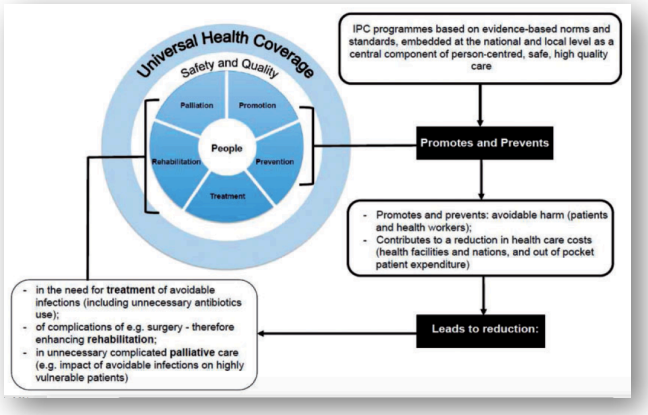
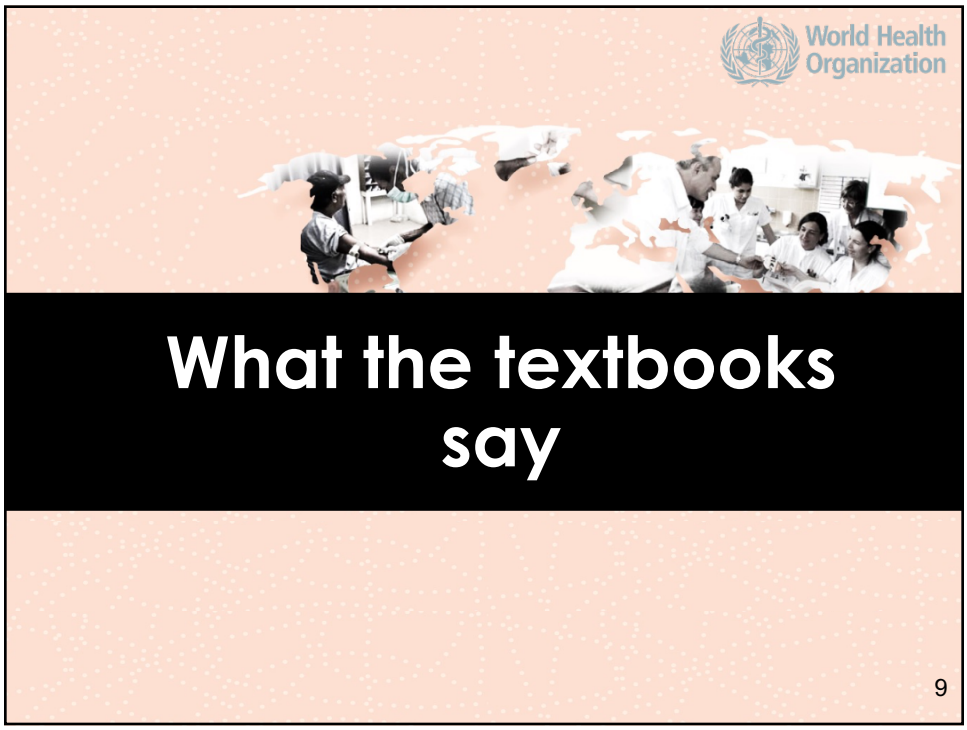
IPC is relevant to population health – how do we influence, motivate and enable the right people at the right time to do the right thing?



Storr et al, Redefining infection prevention and control in the new era of quality universal health coverage Journal of Research in Nursing 2016, Vol. 21(1) 39–52 http://journals.sagepub.com/doi/abs/10.1177/1744987116628328



What is leadership

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Leadership describes the ability to:

- **influence,**
- **motivate and**
- **enable**

members of an organization to contribute to the effectiveness and success of the organization

House, R.J., Javidan, M., Hanges, P. et al. (2002). Understanding cultures and implicit leadership theories across the globe: an introduction to project GLOBE. *Journal of World Business*, 37 (1), 3-10.

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Characteristics of a leader

World Health Organization

Opinions are personal on what makes a good leader

- What are the **traits/**features of a **leader that you know (in real life or a celebrity, politician, sports person)?**
- Which of these do you have as well?

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www.pexels.com (CC0 License, Free for personal and commercial use, No attribution required)

Five fundamental principles for leadership

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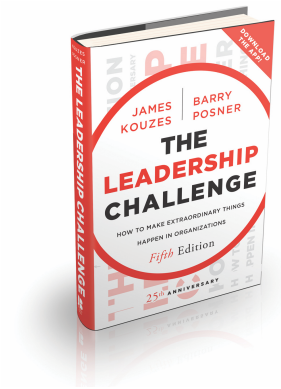
1. Set an example
2. Inspire a shared vision
3. Challenge the process
4. Enable others to act
5. Encourage the heart



Kouzes J, Posner B (2009) The leadership challenge. Weinheim: Wiley-VCH Verlag, GmbH & Co

Situational Leadership

World Health Organization

Adaptable leaders

- Situational leaders **adapt** their **leadership style** to situations
- Leadership 'based on a **relationship between the leader**'s supportive and directive behaviour, **and** between the **follower**'s level of development' (Grimm, 2010)
- Leader's support requires personal involvement, sustained communication and emotional support
- Leader's direction refers to the steering provided by the leader as well as the allocation of follower roles

Grimm JW (2010) Effective leadership: making the difference. Journal of Emergency Nursing. 36, 1, 74-77

Transformational leadership

World Health Organization

Visionary leaders

- They have and **share a vision** for what organisation should be (Sims, 2009)
- They develop others to **exceed** their **own self-interests** for a higher purpose (Vinkenburg et al, 2011)
- Leader-follower relationships are based on interactions or exchanges (Rolfe, 2011)

Vinkenburg CJ, van Engen ML, Eagly AH, Johannesen-Schmidt MC (2011). An exploration of stereotypical beliefs about leadership styles: is transformational leadership a route to women's promotion? The Leadership Quarterly. 22, 1, 10-21.
Rolfe P (2011) Transformational leadership theory: what every leader needs to know. Nurse Leader. 9, 2, 54-57.

Transactional leadership

World Health Organization

Performance-oriented leaders

- Empowered to **evaluate**, **correct**, and train **subordinates**
- Performance shaped by punishment or **rewards**
- Highly visible leader, top of **'chain of command'**
- Motivation to be effective and **efficient**

World Health Organization

What the IPC papers say

What is the relation between leadership and effective IPC?

World Health Organization

- **Leaders** in close and regular contact with clinical teams in wards and units **positively influence quality** of care
- Leaders support others to develop, implement and evaluate their own solutions to problems
  - Leadership associated with **hand hygiene**, gowning and gloving
  - **Staff engagement** and Hospital Leadership significantly associated with knowledge related to IPC (Sinkowitz-Cochran et al, 2011)
- Positive leadership behaviours associated with **reduced** incidence of pneumonia and urinary tract **infections** (Houser, 2003)

Sinkowitz-Cochran, Ronda L. et al. The associations between organizational culture and knowledge, attitudes, and practices in a multicenter Veterans Affairs quality improvement initiative to prevent methicillin-resistant Staphylococcus aureus. Am J Infect Control;40(2):138 – 143
Houser J. A model for evaluating the context of nursing care delivery. J Nurs Adm 2003;33(1):39e47

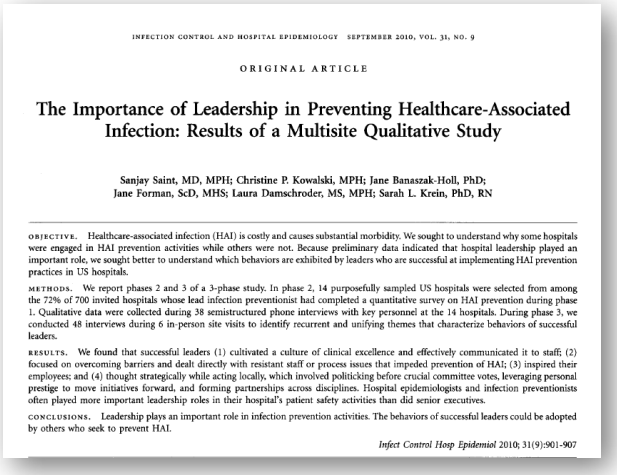
Characteristics of an IPC leader

World Health Organization

- Leaders **foster** a culture of **excellence**
- Leaders **develop** an organisational **vision**
- Leaders focus on **previewing** and **resolving** challenges which could be opportunities to improve
- Leaders **inspire**, **encourage**, and **motivate** others to lead

The behaviours of successful IPC leaders

World Health Organization



INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY SEPTEMBER 2010, VOL. 31, NO. 9

ORIGINAL ARTICLE

The Importance of Leadership in Preventing Healthcare-Associated Infection: Results of a Multisite Qualitative Study

Sanjay Saint, MD, MPH; Christine P. Kowalski, MPH; Jane Banaszak-Holl, PhD; Jane Forman, ScD, MHS; Laura Damschroder, MS, MPH; Sarah L. Krein, PhD, RN

OBJECTIVE. Healthcare-associated infection (HAI) is costly and causes substantial morbidity. We sought to understand why some hospitals were engaged in HAI prevention activities while others were not. Because preliminary data indicated that hospital leadership played an important role, we sought better to understand which behaviors are exhibited by leaders who are successful at implementing HAI prevention practices in US hospitals.

METHODS. We report phases 2 and 3 of a 3-phase study. In phase 2, 14 purposefully sampled US hospitals were selected from among the 72% of 700 invited hospitals whose lead infection preventionist had completed a quantitative survey on HAI prevention during phase 1. Qualitative data were collected during 38 semistructured phone interviews with key personnel at the 14 hospitals. During phase 3, we conducted 48 interviews during 6 in-person site visits to identify recurrent and unifying themes that characterize behaviors of successful leaders.

RESULTS. We found that successful leaders (1) cultivated a culture of clinical excellence and effectively communicated it to staff; (2) focused on overcoming barriers and dealt directly with resistant staff or process issues that impeded prevention of HAI; (3) inspired their employees; and (4) thought strategically while acting locally, which involved politicking before crucial committee votes, leveraging personal prestige to move initiatives forward, and forming partnerships across disciplines. Hospital epidemiologists and infection preventionists often played more important leadership roles in their hospital's patient safety activities than did senior executives.

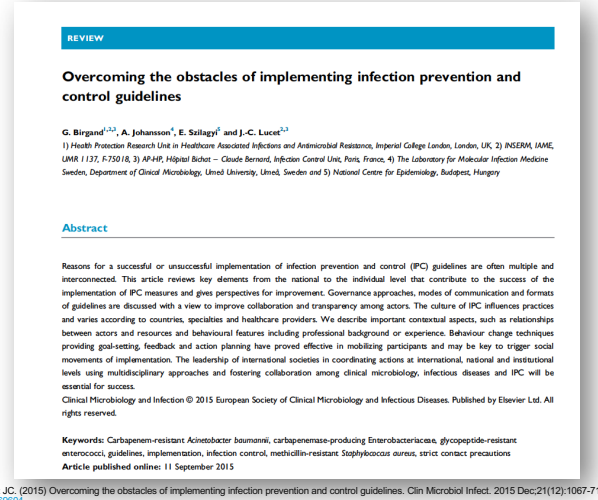
CONCLUSIONS. Leadership plays an important role in infection prevention activities. The behaviors of successful leaders could be adopted by others who seek to prevent HAI.

Infect Control Hosp Epidemiol 2010; 31(9):901-907

Saint S, Kowalski CP, Banaszak-Holl J, Forman J, Damschroder L, Krein SL (2010) The importance of leadership in preventing healthcare-associated infection: results of a multisite qualitative study. Infect Control Hosp Epidemiol. 2010 Sep;31(9):901-7 https://www.ncbi.nlm.nih.gov/pubmed/20658939

Leadership and IPC implementation

World Health Organization



REVIEW

Overcoming the obstacles of implementing infection prevention and control guidelines

G. Birgand[1,2,3], A. Johansson[4], E. Szilagyi[5] and J.-C. Lucet[2,3]

1) *Health Protection Research Unit in Healthcare Associated Infections and Antimicrobial Resistance, Imperial College London, London, UK, 2) INSERM, IAME, UMR 1137, F-75018, 3) AP-HP, Hôpital Bichat – Claude Bernard, Infection Control Unit, Paris, France, 4) The Laboratory for Molecular Infection Medicine Sweden, Department of Clinical Microbiology, Umeå University, Umeå, Sweden and 5) National Centre for Epidemiology, Budapest, Hungary*

Abstract

Reasons for a successful or unsuccessful implementation of infection prevention and control (IPC) guidelines are often multiple and interconnected. This article reviews key elements from the national to the individual level that contribute to the success of the implementation of IPC measures and gives perspectives for improvement. Governance approaches, modes of communication and formats of guidelines are discussed with a view to improve collaboration and transparency among actors. The culture of IPC influences practices and varies according to countries, specialties and healthcare providers. We describe important contextual aspects, such as relationships between actors and resources and behavioural features including professional background or experience. Behaviour change techniques providing goal-setting, feedback and action planning have proved effective in mobilizing participants and may be key to trigger social movements of implementation. The leadership of international societies in coordinating actions at international, national and institutional levels using multidisciplinary approaches and fostering collaboration among clinical microbiology, infectious diseases and IPC will be essential for success.

Keywords: Carbapenem-resistant *Acinetobacter baumannii*, carbapenemase-producing Enterobacteriaceae, glycopeptide-resistant enterococci, guidelines, implementation, infection control, methicillin-resistant *Staphylococcus aureus*, strict contact precautions
Article published online: 11 September 2015

Birgand G, Johansson A, Szilagyi E, Lucet JC. (2015) Overcoming the obstacles of implementing infection prevention and control guidelines. Clin Microbiol Infect. 2015 Dec;21(12):1067-71. https://www.ncbi.nlm.nih.gov/pubmed/26369604

Context, innovation & recipients

World Health Organization

Social cultural and organizational factors matter

Context

- Inner context
- Local and organizational
  - leadership support
  - culture
  - organizational priorities
- Outer context
  - policy drivers and priorities
  - incentives and mandates
  - networks

Innovation

- Added benefit of the intervention
- Ease of use
- Evidence
  - research
  - clinical
  - experiential

Recipients

- Motivation
- Values/beliefs
- Goals
- Skills
- Knowledge
- Time
- Resources
- Support
- Opinion leaders
- Power
- Authority

Multimodal improvement strategy

World Health Organization

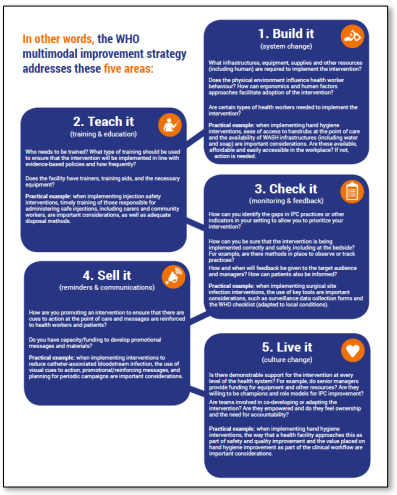
ONE System change
Alcohol-based handrubs at point of care
and access to safe continuous water supply, soap and towels

TWO Training and education
Providing regular training to all health-care workers

THREE Evaluation and feedback
Monitoring hand hygiene practices, infrastructure, perceptions, & knowledge, while providing results feedback to health-care workers

FOUR Reminders in the workplace
Prompting and reminding health-care workers

FIVE Institutional safety climate
Individual active participation, institutional support, patient participation



WHO multimodal strategy http://www.who.int/infection-prevention/publications/ipc-cc-mis.pdf?ua=1

Leadership and the multimodal approach


Articles

Global implementation of WHO's multimodal strategy for improvement of hand hygiene: a quasi-experimental study

Summary

Background Health-care-associated infections are a major threat to patient safety worldwide. Transmission is mainly via the hands of health-care workers, but compliance with recommendations is usually low and effective improvement strategies are needed. We assessed the effect of WHO's strategy for improvement of hand hygiene in five countries.

Methods We did a quasi-experimental study between December, 2006, and December, 2008, at six pilot sites (35 departments in 43 hospitals) in Costa Rica, Italy, Mali, Pakistan, and Saudi Arabia. A step-wise approach in four 3–6 month phases was used to implement WHO's strategy and we assessed the hand-hygiene compliance of health-care workers and their knowledge, by questionnaire, of microbial transmission and hand-hygiene principles. We expressed compliance as the proportion of predefined opportunities met by hand-hygiene actions (ie, handwashing or hand rubbing). We assessed long-term sustainability of core-strategy activities in April, 2010.

Findings We noted 21 884 hand-hygiene opportunities during 1423 sessions before the intervention and 23 746 opportunities during 1794 sessions after. Overall compliance increased from 51·0% before the intervention (95% CI 43·1–56·9) to 67·2% after (61·8–72·2). Compliance was independently associated with gross national income per head, with a greater effect of the intervention in low-income and middle-income countries (odds ratio [OR] 4·47, 95% CI 3·16–6·59; p<0·0001) than in high-income countries (2·19, 2·03–2·37; p<0·0001). Implementation had a major effect on compliance of health-care workers across all sites after adjustment for main confounders (OR 2·15, 1·99–2·32). Health-care-workers' knowledge improved at all sites with an increase in the average score from 18·7 (95% CI 17·8–19·7) to 24·7 (23·7–25·8) after educational sessions. 2 years after the intervention, all sites reported ongoing hand-hygiene activities with sustained or further improvement, including national scale-up.

Interpretation Implementation of WHO's hand-hygiene strategy is feasible and sustainable across a range of settings in different countries and leads to significant compliance and knowledge improvement in health-care workers, supporting recommendation for use worldwide.

Funding WHO, University of Geneva Hospitals, the Swiss National Science Foundation, Swiss Society of Public Health Administration and Hospital Pharmacists.

Introduction

Health-care-associated infection is one of the most frequent issues of patient safety worldwide. According to WHO estimates, hundreds of millions of patients are affected each year, leading to substantial morbidity, mortality, and financial losses for health systems.[1–3] On average, health-care-associated infection affects at least 7% of patients admitted to hospital in high-income countries[4] and about 15% of those in low-income and middle-income countries.[5] More than 4 million patients are affected every year in Europe, and 37 000 deaths occur because of this infection.[6] According to the US Centers for Disease Control and Prevention, in 2002, at least 1·7 million episodes of health-care-associated infection arose in patients admitted to hospital in the USA, leading to almost 100 000 deaths.[7] Annual costs were estimated to be as high as €7 billion in Europe and US$6·8 billion in the USA.[7]

Hand hygiene is the most effective measure to prevent pathogen transmission during health-care delivery.[8–10] Compliance of health-care workers with best practices varies between settings and countries, but is usually low and insufficient to ensure patient safety.[11] WHO issued draft guidelines in 2006 to provide evidence and recommendations for improvement of hand hygiene.[12] These guidelines were based on successful experiences showing a consequent reduction in health-care-associated infection at institutional and regional levels.[13–15] Because dissemination of guidelines alone is not enough to change practices,[16] WHO developed a multimodal implementation strategy and accompanying methods for hand hygiene,[17] which were pilot tested in hospitals worldwide. We assessed the effect of implementation of WHO's hand-hygiene strategy on a range of indicators, including strategy feasibility and adaptability to the local context and available resources.

Methods

Study design

We did a quasi-experimental study between December, 2006, and December, 2008, at six pilot sites (35 departments in 43 hospitals) in Costa Rica, Italy, Mali, Pakistan, and Saudi Arabia (table 1). We implemented WHO's strategy

Context

- Dec 2006-08, 55 departments in 43 hospitals, Costa Rica, Italy, Mali, Pakistan, Saudi Arabia
- Strong leaders in each setting

Innovation

- WHO hand hygiene multimodal strategy

Recipients

- Intervention launch endorsed by Minister of Health
- Increased dispensers at point of care

Allegranzi B, Gayet-Ageron A, Damani N, Bengaly L, McLaws ML, Moro ML, Memish Z, Urroz O, Richet H, Storr J, Donaldson L, Pittet D (2013) Global implementation of WHO's multimodal strategy for improvement of hand hygiene: a quasi-experimental study. Lancet Infect Dis. 2013 Oct;13(10):843-51.

Distributed leadership in IPC

http://www.health.org.uk/sites/health/files/InfectionPreventionAndControlLessonsFromAcuteCareInEngland.pdf

Leadership at the front line

Journal of Hospital Infection 94 (2016) 165–168

Available online at www.sciencedirect.com

Journal of Hospital Infection

journal homepage: www.elsevierhealth.com/journals/jhin

Opinion

Leadership and management for infection prevention and control: what do we have and what do we need?

Introduction

Leadership is widely considered to be vital for infection prevention and control (IPC).[1] Its purpose is to maintain progress in the reduction of risks of healthcare-associated infections, especially those caused by antimicrobial-resistant organisms, and to achieve continuous quality improvement.[2] However, given its importance, there is little rigorous research on effective leadership for IPC. While there is indirect evidence that IPC experts and clinicians working at the frontline of patient care can assume leadership, almost nothing has been written about IPC leadership at senior level. This situation is all the more surprising given international interest in the senior managerial model of IPC adopted throughout the National Health Service (NHS) in England, and claims that 'top down' intervention for IPC is effective.[3,4] The terms 'management' and 'leadership' are often used interchangeably in relation to the organization and delivery of health care. Greater conceptual clarity could prompt consideration of what is needed for IPC.

Leadership and management

The literature is replete with definitions of leadership.[5] Some are highly inspirational, reflecting the charismatic qual-

leadership roles can or should be assumed solely by those at the organizational helm. Rather, leadership and the 'followership' that it implies can be found at all layers throughout organizations, and can delivered by different people within the same establishment.

Just as there are many definitions of leadership, theories of successful leadership also abound. Early writers believed that leadership depended on individual qualities, and that leaders were born, not created.[6] Different types of leadership were later recognized,[7] and judging by the number of self-help manuals and courses now available to those in the health professions and commercial sector, there is a widely held view that leadership qualities can be acquired or at least enhanced. While the literature on leadership is complex and contested, it is clear that leadership is not synonymous with management, for which quite a different definition is offered:

> 'Management is the process of dealing with or controlling things or people.'[7]

Management, it seems, is about one individual being formally in charge of others and directing their work through organizational structures that are hierarchical. This is in contrast to leadership, which can be achieved through other strategies of influence that can be either formal or informal, and depend on the ability of the individual to inspire, demonstrate charisma and provide a strong role model.

Recently, opinion leaders have suggested that over-reliance on hierarchical management stifles innovation by failing to capitalize on the expertise of health workers at the forefront of patient care by ignoring the important contribution that arises through application of their local knowledge, and impeding the ability of organizations and employees to work flexibly in

Gould DJ, Gallagher R, Allen D. (2016) Leadership and management for infection prevention and control: what do we have and what do we need? J Hosp Infect. Oct;94(2):165-8.

Leadership and a vision

Lessons from the field

Improving water, sanitation and hygiene in health-care facilities, Liberia

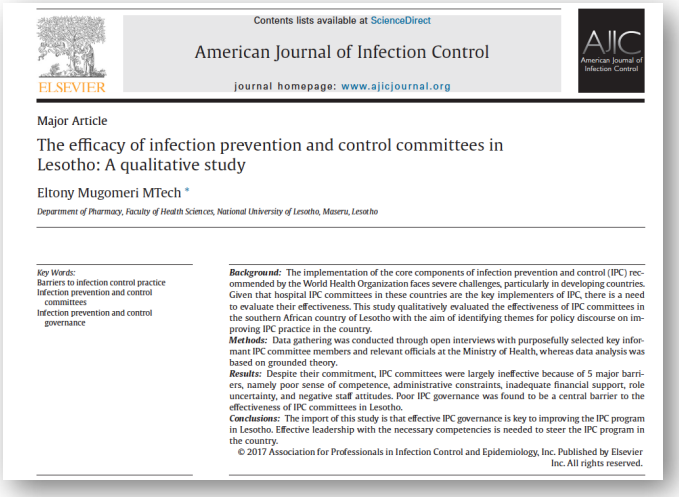
Nana Mensah Abrampah,[a] Maggie Montgomery,[b] April Baller,[c] Francis Ndivo,[c] Alex Gasasira,[c] Catherine Cooper,[d] Ruben Frescas,[a] Bruce Gordon[b] & Shamsuzzoha Babar Syed[a]

Problem The lack of proper water and sanitation infrastructures and poor hygiene practices in health-care facilities reduces facilities' preparedness and response to disease outbreaks and decreases the communities' trust in the health services provided.
Approach To improve water and sanitation infrastructures and hygiene practices, the Liberian health ministry held multistakeholder meetings to develop a national water, sanitation and hygiene and environmental health package. A national train-the-trainer course was held for county environmental health technicians, which included infection prevention and control focal persons; the focal persons acted as change agents.
Local setting In Liberia, only 45% of 701 surveyed health-care facilities had an improved water source in 2015, and only 27% of these health-care facilities had proper disposal for infectious waste.
Relevant changes Local ownership, through engagement of local health workers, was introduced to ensure development and refinement of the package. In-county collaborations between health-care facilities, along with multisectoral collaboration, informed national level direction, which led to increased focus on water and sanitation infrastructures and uptake of hygiene practices to improve the overall quality of service delivery.
Lessons learnt National level leadership was important to identify a vision and create an enabling environment for changing the perception of water, sanitation and hygiene in health-care provision. The involvement of health workers was central to address basic infrastructure and hygiene practices in health-care facilities and they also worked as stimulators for sustainable change. Further, developing a long-term implementation plan for national level initiatives is important to ensure sustainability.

Abstracts in عربي, 中文, Français, Русский and Español at the end of each article.

Abrampah NM, Montgomery M, Baller A, Ndivo F, Gasasira A, Cooper C, Frescas R, Gordon B, Syed SB (2017) Improving water, sanitation and hygiene in health-care facilities, Liberia. Bull World Health Organ. 2017 Jul 1;95(7):526-530. https://www.ncbi.nlm.nih.gov/pubmed/28670017

Strong leadership and good governance



Contents lists available at ScienceDirect

American Journal of Infection Control

journal homepage: www.ajicjournal.org

Major Article

The efficacy of infection prevention and control committees in Lesotho: A qualitative study

Eltony Mugomeri MTech *

Department of Pharmacy, Faculty of Health Sciences, National University of Lesotho, Maseru, Lesotho

Key Words:
Barriers to infection control practice
Infection prevention and control committees
Infection prevention and control governance

Background: The implementation of the core components of infection prevention and control (IPC) recommended by the World Health Organization faces severe challenges, particularly in developing countries. Given that hospital IPC committees in these countries are the key implementers of IPC, there is a need to evaluate their effectiveness. This study qualitatively evaluated the effectiveness of IPC committees in the southern African country of Lesotho with the aim of identifying themes for policy discourse on improving IPC practice in the country.
Methods: Data gathering was conducted through open interviews with purposefully selected key informant IPC committee members and relevant officials at the Ministry of Health, whereas data analysis was based on grounded theory.
Results: Despite their commitment, IPC committees were largely ineffective because of 5 major barriers, namely poor sense of competence, administrative constraints, inadequate financial support, role uncertainty, and negative staff attitudes. Poor IPC governance was found to be a central barrier to the effectiveness of IPC committees in Lesotho.
Conclusions: The import of this study is that effective IPC governance is key to improving the IPC program in Lesotho. Effective leadership with the necessary competencies is needed to steer the IPC program in the country.

Mugomeri E (2018) The efficacy of infection prevention and control committees in Lesotho: A qualitative study. Am J Infect Control. 2018 Jan 9 [Epub ahead of print] https://www.ncbi.nlm.nih.gov/pubmed/29326003

IPC leadership challenges and solutions

Leadership and multimodal thinking

SAMJ IN PRACTICE

CLINICAL UPDATE

A framework for preventing healthcare-associated infection in neonates and children in South Africa

Multimodal strategy element	Trigger questions
System change	1. What resources, infrastructures or supplies are required to make an improvement in this priority area?
Education and training	2. Who needs to be trained/educated to address the identified gap – how will this happen and who will undertake the training/education?
Monitoring and feedback	3. How will you know that an improvement has taken place?
Communications and reminders	4. How will you publicise action on specific core components and promote improvement and best practice in this area?
Safety climate and culture change	5. How will you make and maintain this as a hospital priority and engage senior leaders/managers/champions and opinion leaders over time?

Dramowski A1, Cotton MF, Whitelaw A (2017) A framework for preventing healthcare-associated infection in neonates and children in South Africa. S Afr Med J. 2017 Feb 27;107(3):192-195. doi: 10.7196/SAMJ.2017.v107i3.12035. https://www.ncbi.nlm.nih.gov/pubmed/28281421

Key summary points

World Health Organization

- **Robust leadership** in infection prevention and control is **essential** for effective decision-making, efficient use of resources and the provision of **high quality, safe, effective, person-centered care**
- Strong leadership supports activities to prevent and control infection within the organization, in particular by **catalyzing participation** and **motivation** among local teams, and is essential to achieve reduction of patient harm due to HAIs and AMR
- **Leadership** must be aligned, **from** the **hospital management team**, **to** the executive and specialist infection control team, to **clinical and non-clinical staff**

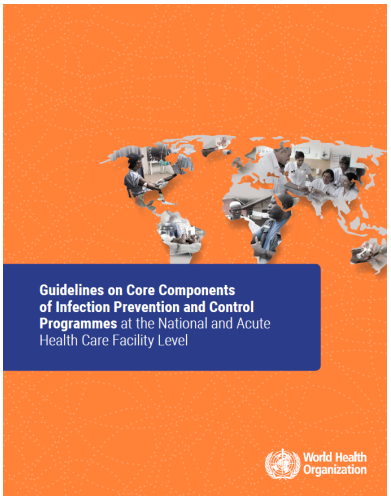
World Health Organization

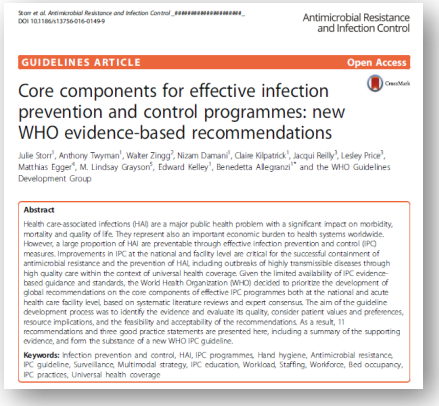
What the guidelines say

WHO Core Component Guidelines 2016

World Health Organization

The ultimate accountability for IPC programmes lies with facility leadership




Antimicrobial Resistance and Infection Control

GUIDELINES ARTICLE Open Access

Core components for effective infection prevention and control programmes: new WHO evidence-based recommendations

Julie Storr[1], Anthony Twyman[1], Walter Zingg[2], Nizam Damani[3], Claire Kilpatrick[1], Jacqui Reilly[3], Lesley Price[3], Matthias Egger[4], M. Lindsay Grayson[5], Edward Kelley[1], Benedetta Allegranzi[1*] and the WHO Guidelines Development Group

Abstract

Health care-associated infections (HAI) are a major public health problem with a significant impact on morbidity, mortality and quality of life. They represent also an important economic burden to health systems worldwide. However, a large proportion of HAI are preventable through effective infection prevention and control (IPC) measures. Improvements in IPC at the national and facility level are critical for the successful containment of antimicrobial resistance and the prevention of HAI, including outbreaks of highly transmissible diseases through high quality care within the context of universal health coverage. Given the limited availability of IPC evidence-based guidance and standards, the World Health Organization (WHO) decided to prioritize the development of global recommendations on the core components of effective IPC programmes both at the national and acute health care facility level, based on systematic literature reviews and expert consensus. The aim of the guideline development process was to identify the evidence and evaluate its quality, consider patient values and preferences, resource implications, and the feasibility and acceptability of the recommendations. As a result, 11 recommendations and three good practice statements are presented here, including a summary of the supporting evidence, and form the substance of a new WHO IPC guideline.

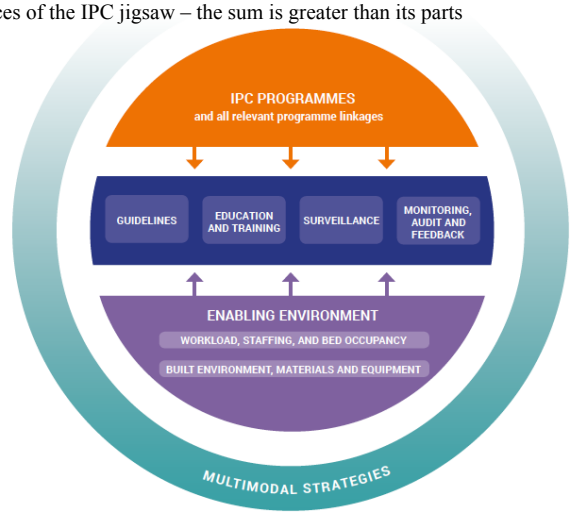
Keywords: Infection prevention and control, HAI, IPC programmes, Hand hygiene, Antimicrobial resistance, IPC guideline, Surveillance, Multimodal strategy, IPC education, Workload, Staffing, Workforce, Bed occupancy, IPC practices, Universal health coverage

The Guidelines: http://www.who.int/gpsc/ipc-components/en/index.html
ARIC paper: https://aricjournal.biomedcentral.com/articles/10.1186/s13756-016-0149-9

Summary of the Core Components of IPC Programmes

World Health Organization

Interconnected pieces of the IPC jigsaw – the sum is greater than its parts



WHO (2016) Core components of IPC programmes at the national and acute health care facility level

Summary of the Core Components of IPC Programmes

World Health Organization

Technical expertise is important

WHO (2016) Core components of IPC programmes at the national and acute health care facility level

Summary of the Core Components of IPC Programmes

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But so are the "softer" skills – the "adaptive" i.e. effective leadership

WHO (2016) Core components of IPC programmes at the national and acute health care facility level

Core component 1 (IPC programmes)

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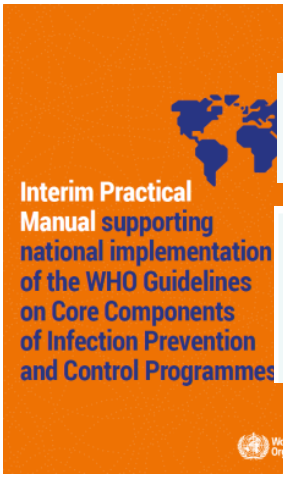
Extracted from the Interim Practical Manual supporting national implementation of the WHO Guidelines on Core Components of Infection Prevention and Control Program



"Legislation has been a critical part to building recognition as many won't consider IPC and its value until there is a norm or requirement for an IPC programme."
IPC Professional from Africa

"After trying other approaches to build political will for IPC, we started to regularly attend the ministerial advisory committee for AMR where we continuously advocated for IPC among programme managers. This is how we were able to get official recognition of IPC and a national mandate."
Regional IPC Focal Person from the Americas

"We had success in our IPC programme using a multimodal strategy and strong leadership from the highest levels of the health authority. Acting upon local data with evidence-based interventions and documenting results has been key to obtain local acceptance and integration to routine hospital health care."
IPC National Lead from Chile

"We had success integrating IPC into the quality management programme, but it was important to be clear and advocate for dedicated staff and time to IPC within this programme."
Assistant Minister of Health, Liberia

http://www.who.int/infection-prevention/tools/core-components/cc-implementation-guideline.pdf?ua=1

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Key points

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Leadership and the WHO Core Component Guidelines

- The WHO Core Components are a **road map** for how IPC can prevent harm due to health care-associated infection (HAI) and antimicrobial resistance (AMR)
- The **IPC focal person** should oversee **development**, **implementation**, **coordination** and **evaluation** of the IPC programme and all its activities
- The development of leadership and programme management skills supports success
- **IPC focal persons** must be aware of their important role in advocating for a multimodal approach to improvement as one part of their leadership role

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WHO Leadership advocacy video

In less time than it takes to listen to Purple Rain

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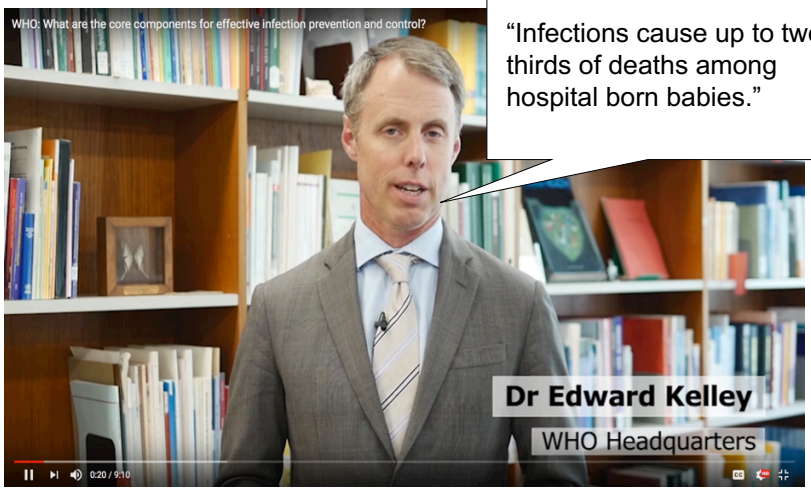
IPC Leaders describe the Core Components

WHO advocacy video – building a compelling case…



https://www.youtube.com/watch?v=LZapz2L6J1Q&feature=youtu.be

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IPC Leaders describe the Core Components

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WHO advocacy video

https://www.youtube.com/watch?v=LZapz2L6J1Q&feature=youtu.be

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IPC Leaders describe the Core Components

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WHO advocacy video

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IPC Leaders describe the Core Components

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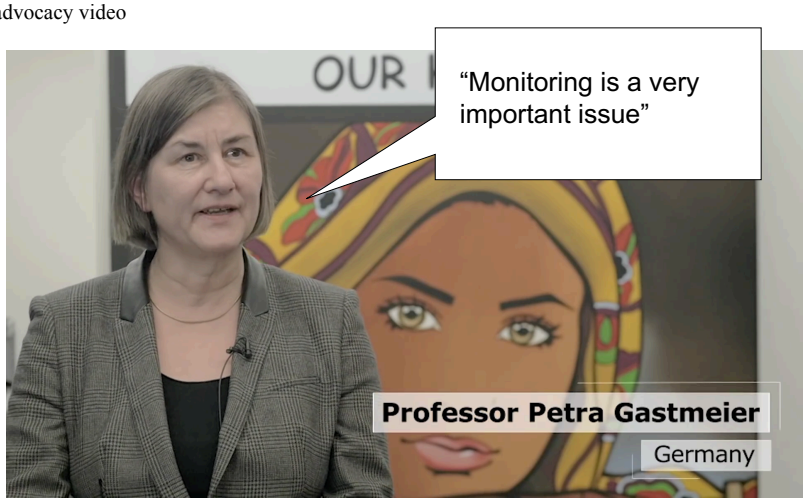
WHO advocacy video



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IPC Leaders describe the Core Components

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WHO advocacy video

https://www.youtube.com/watch?v=LZapz2L6J1Q&feature=youtu.be

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IPC Leaders describe the Core Components

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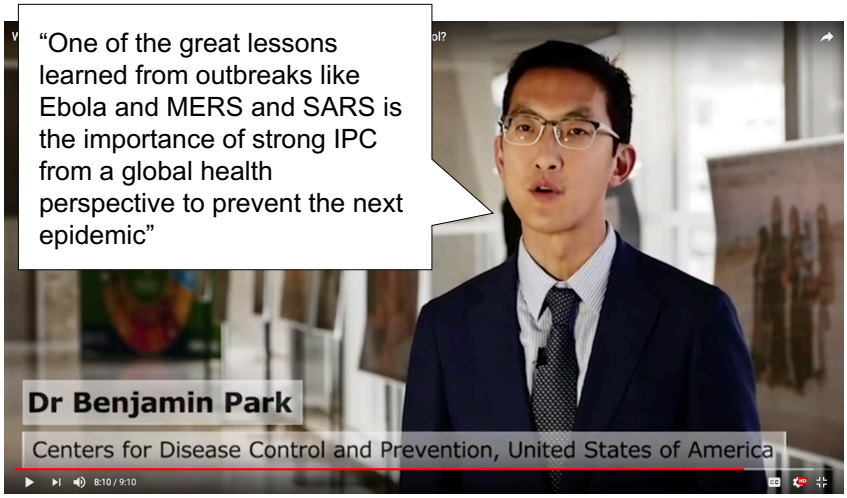
WHO advocacy video



https://www.youtube.com/watch?v=LZapz2L6J1Q&feature=youtu.be

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What would a great IPC leader look like?

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What do you think are the top three things that a **great** IPC leader does to demonstrate their leadership?

Helen Bevan

World Health Organization

@helenbevan

Helen Bevan (2017) New and revised: 10 things fab leaders do https://twitter.com/helenbevan/status/850038936361738244?lang=en

Role model

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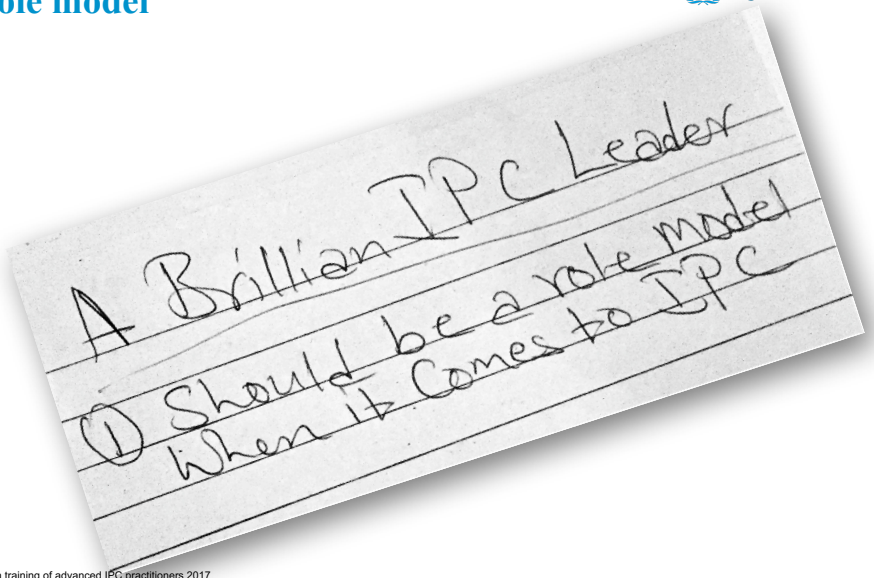

Liberia training of advanced IPC practitioners 2017

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Good communicator

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Inspirational and motivational

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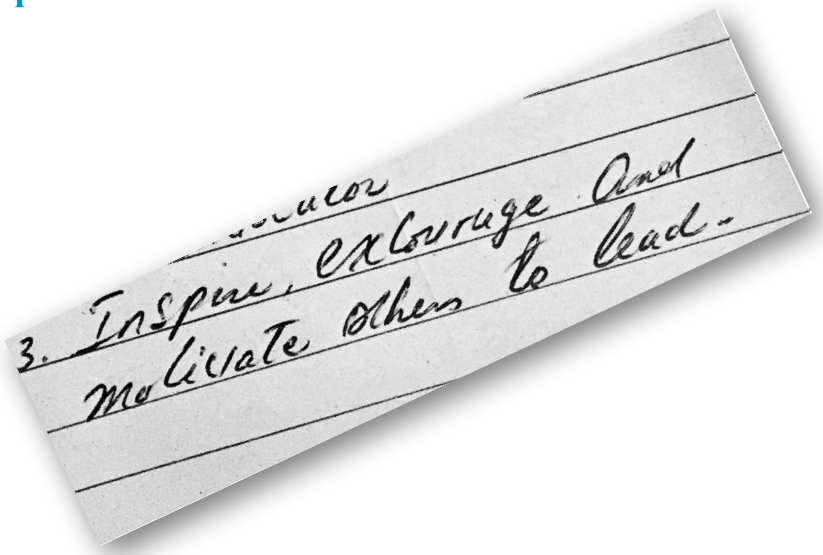

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Change agent

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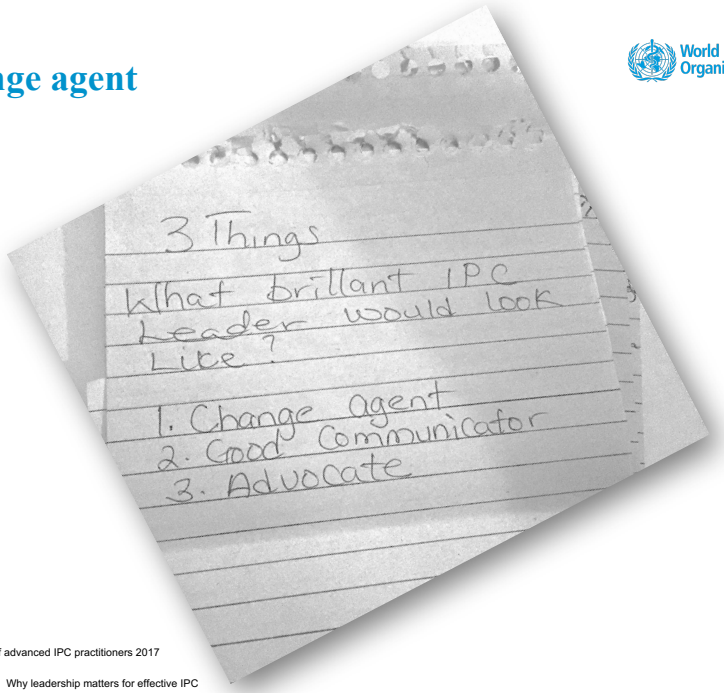

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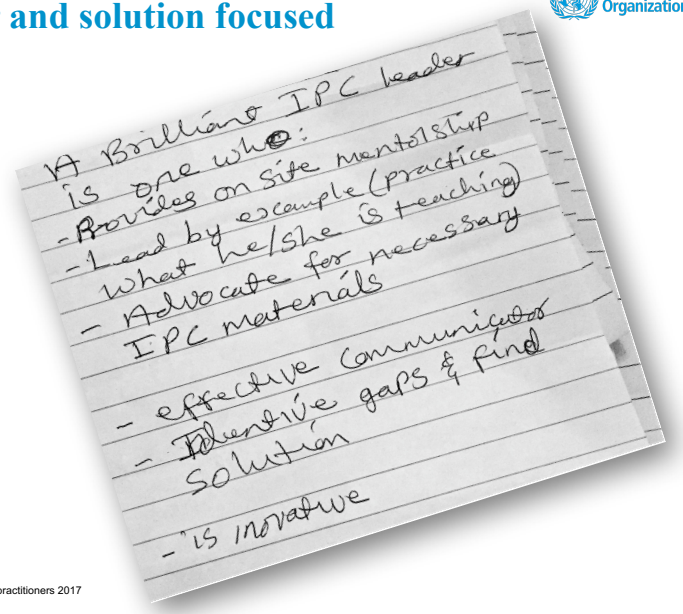
Innovator and solution focused



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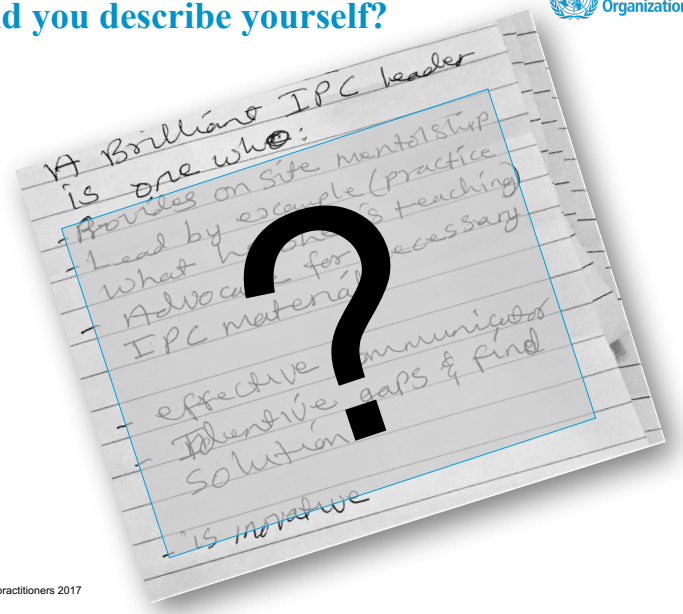
How would you describe yourself?



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How WHO is supporting countries
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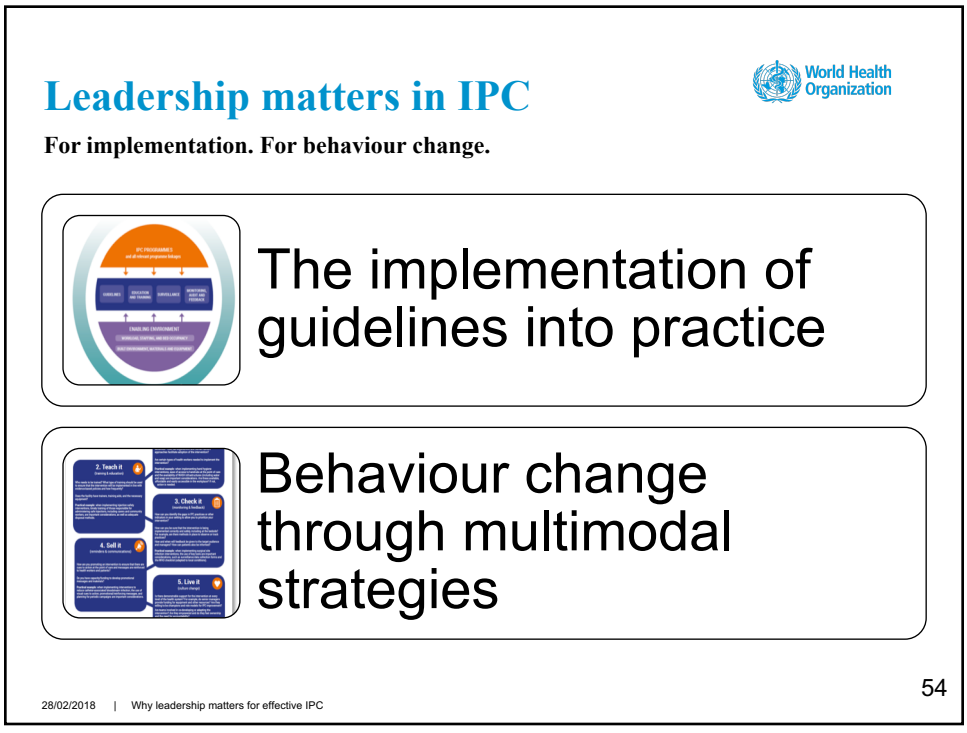
Leadership matters in IPC
World Health Organization
For implementation. For behaviour change.
The implementation of guidelines into practice
Behaviour change through multimodal strategies
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Multimodal thinking

Build it. Teach it. Check it. Sell it. Live it.

The Five Components of the WHO multimodal hand hygiene improvement strategy

- 1a. System change – alcohol-based handrub at point of care
- 1b. System change – access to safe, continuous water supply, soap and towels
- 2. Training and education
- 3. Evaluation and feedback
- 4. Reminders in the workplace
- 5. Institutional safety climate

World Health Organization

In other words, the WHO multimodal improvement strategy addresses these five areas:

1. Build it (system change)

What infrastructures, equipment, supplies and other resources (including human) are required to implement the intervention?

Does the physical environment influence health worker behaviour? How can ergonomics and human factors approaches facilitate adoption of the intervention?

Are certain types of health workers needed to implement the intervention?

Practical example: when implementing hand hygiene interventions, ease of access to handrubs at the point of care and the availability of WASH infrastructures (including water and soap) are important considerations. Are these available, affordable and easily accessible in the workplace? If not, action is needed.

2. Teach it (training & education)

Who needs to be trained? What type of training should be used to ensure that the intervention will be implemented in line with evidence-based policies and how frequently?

Does the facility have trainers, training aids, and the necessary equipment?

Practical example: when implementing injection safety interventions, timely training of those responsible for administering safe injections, including carers and community workers, are important considerations, as well as adequate disposal methods.

3. Check it (monitoring & feedback)

How can you identify the gaps in IPC practices or other indicators in your setting to allow you to prioritize your intervention?

How can you be sure that the intervention is being implemented correctly and safely, including at the bedside? For example, are there methods in place to observe or track practices?

How and when will feedback be given to the target audience and managers? How can patients also be informed?

Practical example: when implementing surgical site infection interventions, the use of key tools are important considerations, such as surveillance data collection forms and the WHO checklist (adapted to local conditions).

4. Sell it (reminders & communications)

How are you promoting an intervention to ensure that there are cues to action at the point of care and messages are reinforced to health workers and patients?

Do you have capacity/funding to develop promotional messages and materials?

Practical example: when implementing interventions to reduce catheter-associated bloodstream infection, the use of visual cues to action, promotional/reinforcing messages, and planning for periodic campaigns are important considerations.

5. Live it (culture change)

Is there demonstrable support for the intervention at every level of the health system? For example, do senior managers provide funding for equipment and other resources? Are they willing to be champions and role models for IPC improvement?

Are teams involved in co-developing or adapting the intervention? Are they empowered and do they feel ownership and the need for accountability?

Practical example: when implementing hand hygiene interventions, the way that a health facility approaches this as part of safety and quality improvement and the value placed on hand hygiene improvement as part of the clinical workflow are important considerations.

@julesstorr

WHO Leadership modules

Session 1

Introduction to leadership in the context of:
The Core Components;
The multimodal strategy;
Implementation resources;
Project management;
IPC interlinkages;
Principles of adult learning.

Session 2

Drill-down on IPC leadership:
What makes a good leader?;
The relevance of leadership to IPC;
Leadership characteristics;
Types of leaders;
Leadership challenges and opportunities.

Session 3

Exploration of implementation and behaviour change:
Implementation success factors;
Behaviour change and implementation;
Quality improvement cycles and implementation;
Leadership challenges and solutions.

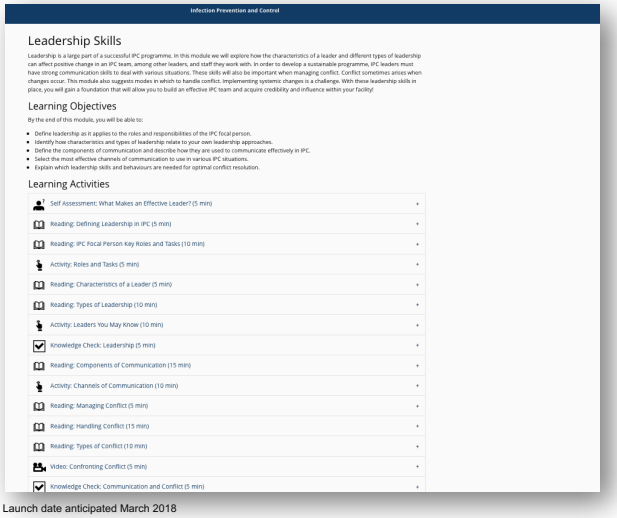
Session 4

Focus on communication and advocacy:
Communication skills in IPC;
Choosing the right communication channels;
Leadership and conflict resolution.

Leadership modules will be available at: http://www.who.int/infection-prevention/tools/core-components/en/

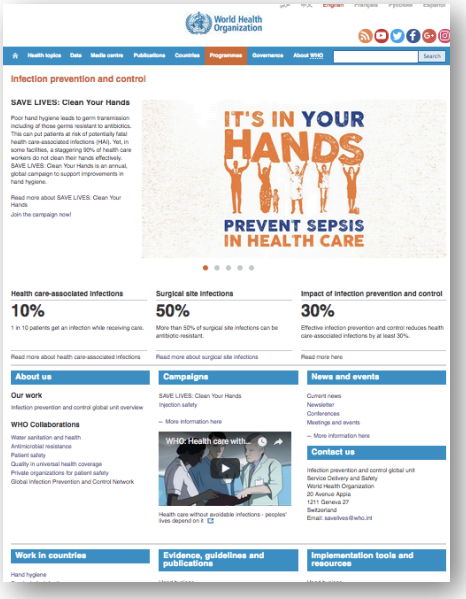
WHO e-Learning modules

Stand-alone module on Leadership



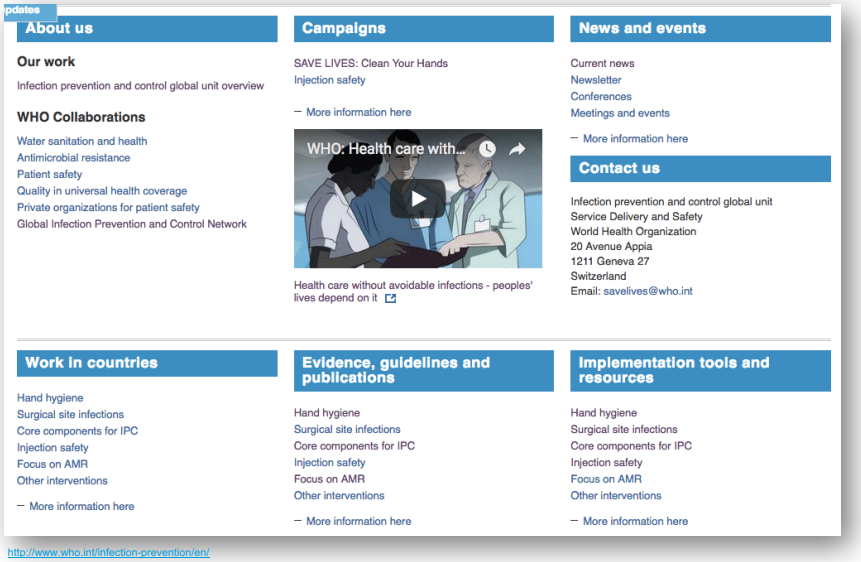
Launch date anticipated March 2018

Easy to navigate web pages to access all WHO IPC materials



http://www.who.int/infection-prevention/en/

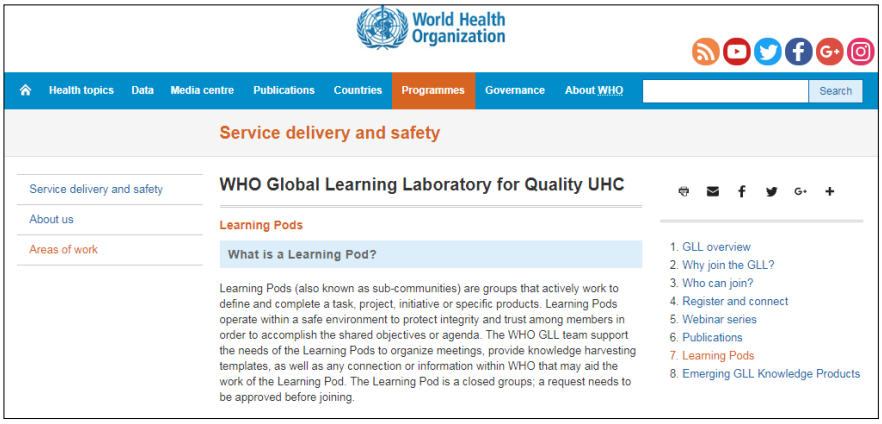
Worth a look



http://www.who.int/infection-prevention/en/

Also worth a look for IPC leadership and solidarity

IPC and WASH Learning Pod



http://www.who.int/servicedeliverysafety/areas/qhc/gll/en/

Leadership saves lives!

World Health Organization

Effective leadership and influence in IPC saves lives

You play a critical role in supporting and stimulating the **right action** at the **right time** to:

- Support the development of an effective IPC programme;
- Support the implementation of the core components of IPC programmes in your facility;
- Contribute to a reduction in HAI & AMR
- Run effective projects
- Link with other relevant programmes
- Train the health workforce effectively

We need to influence doctors, nurses, managers and leaders and all disciplines in health care!

WHO training modules (due for launch March 2018)

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And finally, a call to action…

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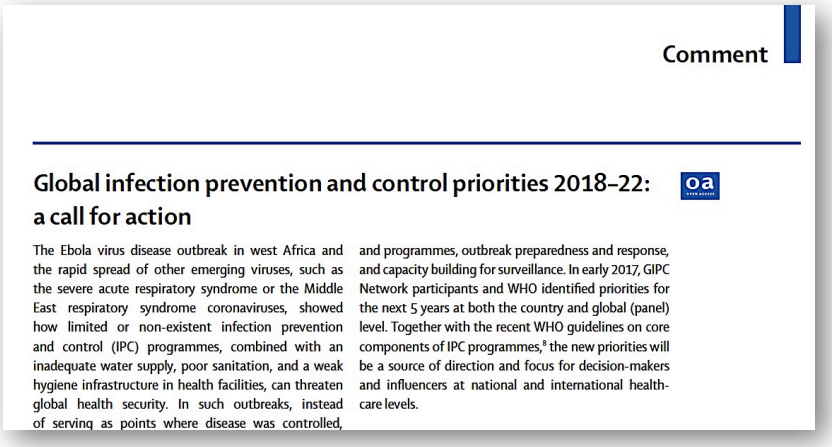
Global Infection Prevention and Control Priorities 2018-2022

World Health Organization

Published December 2017: Lancet Global Health



Comment

Global infection prevention and control priorities 2018–22: a call for action

The Ebola virus disease outbreak in west Africa and the rapid spread of other emerging viruses, such as the severe acute respiratory syndrome or the Middle East respiratory syndrome coronaviruses, showed how limited or non-existent infection prevention and control (IPC) programmes, combined with an inadequate water supply, poor sanitation, and a weak hygiene infrastructure in health facilities, can threaten global health security. In such outbreaks, instead of serving as points where disease was controlled, and programmes, outbreak preparedness and response, and capacity building for surveillance. In early 2017, GIPC Network participants and WHO identified priorities for the next 5 years at both the country and global (panel) level. Together with the recent WHO guidelines on core components of IPC programmes,[8] the new priorities will be a source of direction and focus for decision-makers and influencers at national and international health-care levels.

http://www.thelancet.com/pdfs/journals/langlo/PIIS2214-109X(17)30427-8.pdf

Leadership matters if the call to action is to be fulfilled in all countries

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Countries with immature IPC programmes

- Visible political commitment
- Policy development and enforcement
- Availability of human and financial resources
- Establishment and execution of IPC programmes at the national and facility level
- Action to ensure in country knowledge and expertise

Countries with advanced IPC programmes

- Increased accountability with IPC as a quality indicator
- Development of advanced information technology tools to support IPC monitoring and implementation
- Enhanced communication to sustain awareness and engagement
- Credible, context specific incentives to increase compliance
- Enhanced education and training to embed IPC knowledge in all disciplines

http://www.thelancet.com/pdfs/journals/langlo/PIIS2214-109X(17)30427-8.pdf

Expanding the narrative on AMR and IPC

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Visualising how IPC programmes support AMR risk reduction

"The spread of AMR is just like a bushfire - yes we need new firetraps & new helicoptors i.e. new ABX, but they're 5 or 10 years away. In the meantime we need a **firebreak** & that firebreak is **good infection prevention and control"**

https://www.youtube.com/watch?v=LZapz2L6J1Q&feature=youtu.be

Thank you

WHO Infection Prevention and Control Global Unit

World Health Organization

HEALTH CARE WITHOUT AVOIDABLE INFECTIONS

Learn more at:
http://www.who.int/infection-prevention/en/

www.webbertraining.com/schedulep1.php

March 8, 2018	INFECTION PREVENTION IN NURSING HOMES AND PALLIATIVE CARE Speaker: **Prof. Patricia Stone**, Columbia University, New York
March 14, 2018	*(South Pacific Teleclass)* CLIMATE CHANGE AND THE IMPACT ON INFECTIOUS DISEASES Speaker: **Prof. Mark Birch**, University of Otago, New Zealand
March 15, 2018	*CLOSTRIDIUM DIFFICILE* ASYMPTOMATIC CARRIERS – THE HIDDEN PART OF THE ICEBERG Speaker: **Dr. Yves Longtin**, McGill University, Montreal
March 22, 2018	CHALLENGES AND FACILITATORS TO NURSE-DRIVEN ANTIBIOTIC STEWARDSHIP: RESULTS FROM A MULTISITE QUALITATIVE STUDY Speaker: **Prof. Eileen J. Carter**, Columbia University School of Nursing
April 10, 2018	*(FREE European Teleclass … Denver Russell Memorial Teleclass Lecture)* HOPES, HYPES, AND MULTIVALLATE DEFENCES AGAINST ANTIMICROBIAL RESISTANCE Speaker: **Prof. Neil Woodford**, Imperial College London and Public Health England ***Broadcast annually in memory of our very good friend and tireless Teleclass Education supporter, Prof. A. Denver Russell.***
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