Improving the Patient Safety Culture as a Successful Component of Infection Control Strategies
Dr. Benedetta Allegranzi, WHO Patient Safety
Sponsored by the World Health Organisation

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A World Alliance for Safer Health Care

Improving the patient safety culture
as a successful component of
infection control strategies

Dr Benedetta Allegranzi
WHO Patient Safety

Hosted by Dr A. Leotsakos
WHO Patient Safety

www.webbertraining.com   February 6, 2013

Outline

- Key definitions and concepts of patient safety?
- What does patient safety culture mean?
- Balancing "No Blame" with Accountability in Patient Safety
- WHO's role in patient safety culture
- Patient Safety Culture in Hand Hygiene Improvement
- Changes in outcomes and safety attitudes due to the Safe Surgery Checklist
- The CUSP approach applied to CLA-BSI and SSI reduction measures

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Definitions (1)

- **Error**

The failure of a planned action to be completed as intended or use of a wrong inappropriate, or incorrect plan to achieve an aim.

- **Adverse event**

An injury that was caused by medical management or complication instead of the underlying disease and that resulted in prolonged hospitalization or disability at the time of discharge from medical care, or both

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Definitions (2)

- **Near miss**

An event that almost happened or an event that did happen but no one knows about. If the person involved in the near miss does not come forward, no one may ever know it occurred.

- **Patient safety**

The avoidance, prevention, and amelioration of adverse outcomes or injuries stemming from the processes of health care.

These events include "errors," "deviations," and "accidents." Safety emerges from the interaction of the components of the system; it does not reside in a person, device, or department. Improving safety depends on learning how safety emerges from the interactions of the components.

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Adverse events/errors related to unsafe medical care

1. **Unsafe medications/treatment ***
2. **Injuries due to medical devices**
3. **Surgical and anaesthesia errors ***
4. **Health care-associated infection ***
5. **Unsafe injections ***
6. **Unsafe blood products ***
7. **Pregnant women & newborns ***
8. **Injuries from patient falls**
9. **Poor care for elderly ***
   * Areas addressed with WHO interventions (solutions)

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Main messages

- Unsafe care and harm to patients is a significant concern everywhere in the world
- Errors happen mainly because of complexity of health systems
- When so many varied types of hc providers are involved its difficult to ensure safe care
- Many adverse events are preventable:
    - 2/3 of the adverse events are preventable
    - 28% due to negligence of HC providers
    - 42% caused by other factors
- In developing countries the probability of adverse events is much higher than in developed countries

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IBEAS* study – WHO report

1. Pneumonia	7. Health impacts due to delayed diagnosis or misdiagnosis
2. Surgical wound infection	8. Lesion of an organ due to a medical intervention or procedure
3. Pressure ulcers (owing to immobility)	9. Haemorrhage or haematoma due to a medical intervention or procedure
4. Sepsis and septic shock	10. Bacterial infection of the blood due to a device such as a catheter.
5. Injury requiring treatment in the intensive care unit	
6. Phlebitis	

Ibero-american study of adverse events (IBEAS)[*]: **AD incidence 20%**

*Argentina, Colombia, Costa Rica, Mexico and Peru. Aranaz-Andres JM, et al. *BMJ Qual Saf* 2011 *& WHO Report*

http://www.who.int/patientsafety/research/country_studies/en/index.html

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"No blame model"

Dr Lucian Leape,
testifying to the President's Commission
on Consumer Protection and Quality in Health

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- Everyone makes errors everyday
- No one makes an error on purpose
- An error is not misconduct
- We work in high risk situations that increase the chance that we will make an error
- Most near-misses and significant events are due to system or process problems

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"No blame model": most errors are committed by good, hardworking people trying to do the right thing. Therefore, the traditional focus on identifying who is at fault is a distraction. It is far more productive to identify error-prone situations and settings and to implement systems that prevent caregivers from committing errors, catch errors before they cause harm, or mitigate harm from errors that do reach patients

Leape LL. Error in medicine. JAMA 1994;272:1851-7.

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Balancing "No Blame" with Accountability in Patient Safety

"Many health care organizations have recognized that a uni-dimensional focus on creating a blame-free culture carries its own safety risks… Therefore the **need to create accountability for failure to follow gold-standard practices** has been identified…**achieve safe and high-quality care for which we will, quite appropriately, be held accountable…**

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Robert M. Wachter & Peter J. Pronovost.
NEJM 2009

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The balance between…

"no blame"   Accountability

Culture

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Situations associated with an increased risk of error

- unfamiliarity with the task*
- inexperience*
- shortage of time
- inadequate checking
- poor procedures
- poor human equipment interface

Charles Vincent

* Especially if combined with lack of supervision

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A Systemic Problem that Harms Patients

DEFENCES

Procedures

Physical barriers

Training

Culture

THE GAPS
High workload
Understaffing

Management protocols missing or not actioned

Patient harmed

Poor compliance, poor supplies

Inadequate knowledge, lack of training opportunities

No clear leadership, no cohesive team structure

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Vincent Framework for Risk Analysis

Factors that Influence Clinical Practice	Team Factors and Their Components
•Institutional context	•Verbal communication
•Organizational and management factors	•Written communication
•Work environment	•Supervision and seeking help
•**Team factors**	•Structure of team
•Individual (staff) factors	
•Task factors	
•Patient characteristics	

Vincent C, BMJ, 1998

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What is *patient safety culture*?

- Safety culture

  A culture that exhibits the following five high-level attributes that health care professionals strive to operationalize through the implementation of strong safety management systems.

  (1) A culture where all workers (including front-line staff, physicians, and administrators) accept responsibility or the safety of themselves, their coworkers, patients, and visitors.

  (2) [A culture that] prioritizes safety above financial and operational goals.

  (3) [A culture that] encourages and rewards the identification, communication, and resolution of safety issues.

  (4) [A culture that] provides for organizational learning from accidents.

  (5) [A culture that] provides appropriate resources, structure, and accountability to maintain effective safety systems.

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What is *patient safety culture*?

- Includes *shared beliefs, attitudes, values, norms and behavioural characteristics* of employees and influences staff member *attitudes and behaviours* in relation to their organisation's ongoing patient safety performance*

- Difficult to define measurable components of cultures…

* Morello et al. BMJ Qual & Safety 2012

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Which role has been played by WHO to achieve a patient safety culture?
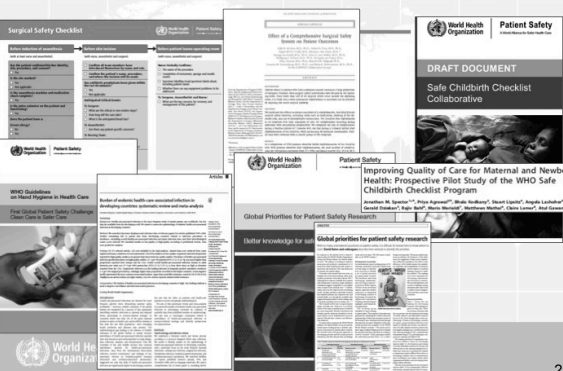
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WHO's role:
Engage and encourage politically

1st WHO Global Patient Safety Challenge:
129 countries committed to reduce HAI

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WHO's role: Lead scientifically

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WHO's role: catalyze research in patient safety

ERROR MANAGEMENT

Core competencies for patient safety research: a cornerstone for global capacity strengthening

Anne Andermann,[1] Liane Ginsburg,[2] Peter Norton,[3] Narendra Arora,[4] David Bates,[5] Albert Wu,[6] Itziar Larizgoitia,[7] On behalf of the Patient Safety Research Training and Education Expert Working Group of WHO Patient Safety

http://www.who.int/patientsafety/research/en/

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WHO's role:
Catalyse change through patients

A Global Network

http://www.who.int/patientsafety/patients_for_patient/en/

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WHO's Role:
Building future quality and safety leaders

The problem:
No training and education for health workers before they join the workforce

The solution:
WHO Patient Safety Multiprofessional Curriculum Guide
- Developed in partnership with international associations of nursing, midwifery, pharmacy, dentistry, medical and medical students

FINALIST 2011

Excellence in Healthcare Education

http://www.who.int/patientsafety/education/en/

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WHO's role: combining all these elements through Global Challenges

Clean Care is Safer Care

WORLD ALLIANCE *for* PATIENT SAFETY

Safe Surgery Saves Lives

1st Global Patient Safety Challenge

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http://www.who.int/patientsafety/campaigns/en/

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WHO's role: Partner for sustainable improvement

African Partnerships for Patient Safety

Aims
- Measureable improvements in safety
- Partnership strength
- Spreading innovation

14 first and second wave countries

African Partnerships for Patient Safety
Working for safer health care... together

http://www.who.int/patientsafety/implementation/apps/resources/framework/en/

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Strategies for improving patient safety culture in hospitals: a systematic review

BMJ Quality & Safety Online First, published on 31 July 2012

Renata Teresa Morello,[1] Judy A Lowthian,[1] Anna Lucia Barker,[1] Rosemary McGinnes,[1] David Dunt,[2] Caroline Brand[1]

- **Objective:** to critically assess the evidence for the effectiveness of patient safety culture strategies for improving patient safety climate in hospitals
- Jan 1996-Apr 2011
- **Results:**
- 21 studies (1 RTC, 7 controlled bef/aft, 13 historically contr)
- Limited evidence to support the effectiveness of a variety of in-hospital patient safety culture strategies (assessed using patient safety climate scores)
- Stronger evidence: **leadership walk rounds** and **multi-faceted unit-based strategies**

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Evidence-based guidance on the organization of hospital infection control programmes: a systematic review

- **Objective:** to identify the most effective elements of infection prevention programmes in hospitals
- 1996-2010
- **Results:**
- Search output: 31,310   Included: 403
- 73 studies included in final analysis
- **10 components** with high quality evidence: 1) organisation of infection control on a hospital level; 2) bed occupancy, staffing, workload, and pool/agency nurses; 3) aspects of ergonomics; 4) appropriate use of guidelines; 5) education and training; 6) auditing; 7) surveillance and feedback; 8) multimodal and multidisciplinary prevention programmes taking into account principles of behavioural change; 9) engaging champions in prevention programmes; and **10) the role of a positive organisational culture**

Zingg W et al. based on SIGHT project & submitted to *The Lancet*

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January 2013 update

Countries with health-care facilities registered for SAVE LIVES: Clean Your Hands global campaign

Number of registered health-care facilities per 10,000,000 population *
- < 3
- 3 to 12
- 13 to 54
- >= 55
- No registration
- Not applicable

*The number of health-care facilities registered for SAVE LIVES is adjusted to population per country. Fully adjusted estimates based on total number of health care facilities per country are not available and the estimates here may not fully represent the actual health-care facility coverage in each country

0   1,250 2,500   5,000 Kilometers

15 304 facilities from **161 countries, > 3.8 mio beds and 13 mio health-care workers**

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WHO Multimodal Hand Hygiene Improvement Strategy

Based on the evidence and recommendations from the WHO Guidelines on Hand Hygiene in Health Care (2009),

made up of

5 core components, to improve hand hygiene in health-care settings

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

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Global survey 2011

English French Spanish Italian Portuguese Arabic Vietnamese

http://www.who.int/gpsc/5may/hhsa_framework/en/

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Overall HHSAF score and level in participating facilities

	Values
Overall score, mean+SD (range)	292.5±100.6 (0-500)
Hand hygiene level, n (%) Inadequate Basic Intermediate (or consolidation) Advanced (or embedding)	111 (5) 631 (30) 864 (41) 488 (24)
Proportion of centres among leadership hospitals with a score >12 (%)	393/471 (83)

SD= standard deviation

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Assessment of hand hygiene implementation in 2119 facilities worldwide

	Values
Scores by section, mean (±SD), median (IQR)	
System change	78.1 (±24.2), 85 (60-100)
Training and education	61.4 (±26.4), 65 (40-85)
Evaluation and feedback	**45.3** (±27.9), 45 (20-70)
Reminders in the workplace	63.9 (±23.8), 65 (50-82.5)
Institutional safety climate for HH	**43.9** (±24.8), 45 (25-60)

SD= standard deviation
IQR= inter-quartile score

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How can you achieve a patient safety culture?

Considering local barriers and cultural issues

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Handwashing ...
an action of the past
(except when hands are visibly soiled)

System change

Alcohol-based hand rub is standard of care

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WHO Guidelines on Hand Hygiene in Health Care. Part I.17

Allegranzi B et al. Am J Infect Control 2009;37:28-34
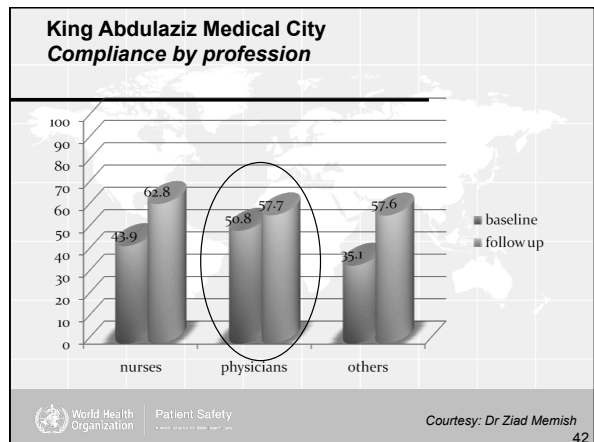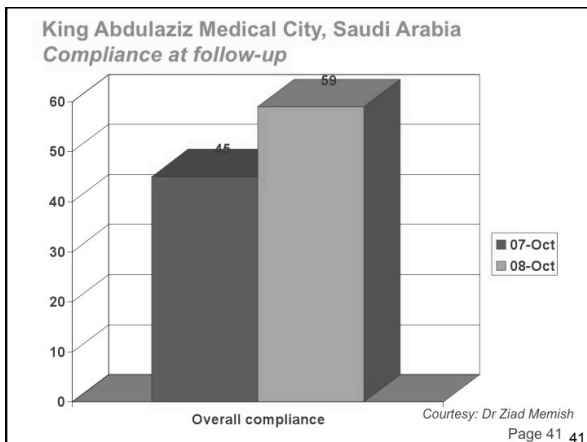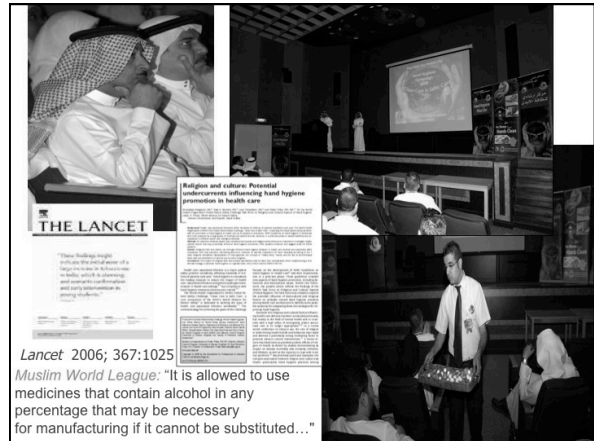
Lancet 2006; 367:1025

Muslim World League: "It is allowed to use medicines that contain alcohol in any percentage that may be necessary for manufacturing if it cannot be substituted…"

King Abdulaziz Medical City, Saudi Arabia
Compliance at follow-up

Courtesy: Dr Ziad Memish

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King Abdulaziz Medical City
Compliance by profession

Courtesy: Dr Ziad Memish

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How to overcome barriers and to further improve

- Changing **Challenges** into **unit-based projects**
- **Ultimate goal:** To get to above and <u>maintain</u> 90% compliance rate with Hand Hygiene practices
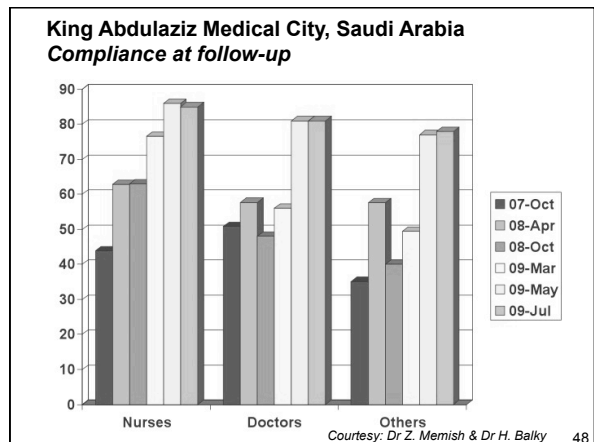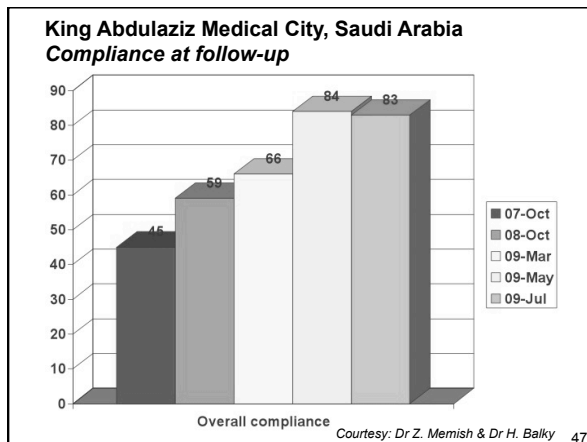
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Hand hygiene champions

Poster competition and "bug busters"

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King Abdulaziz Medical City, Saudi Arabia
Compliance at follow-up

07-Oct
08-Oct
09-Mar
09-May
09-Jul

Overall compliance

Courtesy: Dr Z. Memish & Dr H. Balky

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King Abdulaziz Medical City, Saudi Arabia
Compliance at follow-up

07-Oct
08-Apr
08-Oct
09-Mar
09-May
09-Jul

Nurses   Doctors   Others

Courtesy: Dr Z. Memish & Dr H. Balky

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5 May 2013 call to action:

1. *Continue to focus on hand hygiene monitoring and feedback!*

2. *Patients have a voice too!*

➤ Identify the best way to gather *patient participation* in hand hygiene promotion and improvement, according to the local culture and your facility's approach

• Based on the HHSAF Global Survey, the two components of the WHO Hand Hygiene Improvement Strategy the least effectively implemented

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Clean Care is Safer Care

Patients have a voice too!

The WHO Guidelines on Hand Hygiene in Health Care (2009) encourage partnership between patients, their families, and health-care workers to promote hand hygiene in health-care settings.
Patient participation/engagement/empowerment in hand hygiene promotion refers to the involvement of patients in the fostering of hand hygiene best practices by both patients and health-care workers in health-care settings.

The goals are:

• To implement a true safety culture in which both patients, (and their relatives and visitors) and health-care workers work together towards strengthening infection prevention and control and promoting hand hygiene best practices.
• While the responsibility for hand hygiene rests firmly with the health-care worker, to encourage patients to support health-care workers in improving hand hygiene in various ways, such as learning about hand hygiene best practices and reminding or evaluating hand hygiene.
• The ultimate goal is to improve hand hygiene and prevent health care-associated infections.

Patient participation/engagement/empowerment is part of the WHO call to action on 5 May 2013!

http://www.who.int/gpsc/5may/5may2013_patient-participation/en/

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▪ Key definitions and concepts of patient safety?

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▪ Balancing "No Blame" with Accountability in Patient Safety

▪ WHO's role in patient safety culture

▪ Patient Safety Culture in Hand Hygiene Improvement

▪ **Changes in outcomes and safety attitudes due to the Safe Surgery Checklist**

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WORLD ALLIANCE for PATIENT SAFETY
Safe Surgery Saves Lives

http://www.who.int/patientsafety/safesurgery/en/index.html

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Surgical Safety Checklist:
a tool that addresses 10 key objectives

SURGICAL SAFETY CHECKLIST (First Edition)

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The Checklist was piloted in 8 cities…

PAHO I — Toronto, Canada
EURO — London, UK
EMRO — Amman, Jordan
PAHO II — Seattle, USA
WPRO I — Manila, Philippines
WPRO II — Auckland, NZ
AFRO — Ifakara, Tanzania
SEARO — New Delhi, India

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Results – All Sites

	Baseline	Checklist	P value
Cases	3733	3955	-
Death*	1.5%	0.8%	0.003
Any Complication**	11.0%	7.0%	<0.001
SSI	6.2%	3.4%	<0.001
Unplanned Reoperation	2.4%	1.8%	0.047

*Significant death rate reduction only in low/middle-income countries (p=0.006)
**Significant complication rate reduction in both high-income and low/middle-income countries

Haynes et al. New England Journal of Medicine 2009; 360:491-9.

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SPECIAL ARTICLE

N Engl J Med 2010;363:1928-37.
Effect of a Comprehensive Surgical Safety
System on Patient Outcomes

- Implementation of the Surgical Patient Safety System (SURPASS) checklist in 6 hospitals in the Netherlands
- Randomized controlled study with 9-month follow-up
- 3760 and 3820 patients observed before and after implementation
- Complications reduction from **27.3%** (95% CI, 25.9-28.7) **to 16.7** (95% CI, 15.6-17.9), for an absolute risk reduction of 10.6 (95% CI, 8.7-12.4)
- **SSI reduction** in intervention hospitals **from 3.8% to 2.7% (p=.006)** (vs no change in control hospitals)

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Practical challenges of introducing WHO surgical checklist: UK pilot experience

Box 2 | Factors for successful implementation

- Provide training and learning materials
- Organisational leadership—senior clinicians and managers should be seen to be enthusiastically backing the checklist. Make the checklist a clinical governance goal
- Cultivate local champions
- Clarify the role of each professional group—Decide who should initiate the checklist but maintain shared professional responsibility for completion
- Regular audits—Provide feedback to theatre teams on compliance with the checklist
- Encourage and support local measurement of effectiveness
- Support essential local adaptations but discourage oversimplification and modification for the sake of it

Vats A et al. BMJ 2010

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Changes in safety attitudes following the checklist implementation

Before/after survey

Modified Safety Attitudes Questionnaire

7 sites

Table 3 Clinician opinion of the checklist (N=257)

	Agree		Disagree, neutral or no answer	
Opinion	n	%	n	%
The checklist was easy to use	206	80.2	51	19.8
The checklist took a long time to complete	51	19.8	206	80.2
The checklist improved operating room safety	206	80.2	51	19.8
Communication was improved through use of the checklist	218	84.8	39	15.2
The checklist helped prevent errors in the operating room	202	78.6	55	21.4
If I were having an operation, I would want the checklist to be used	240	93.4	17	6.6

Degree of improvement of mean SAQ score correlated with a reduction in postoperative complication rates ((R=0.7143, p=0.0381)

Haynes et al. BMJ Qual Saf 2011;20:102e107

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CHECKLIST DISSEMINATION AND ADVOCACY

- 313 endorsing organizations
- >3000 registered hospitals
- Focus teams for distribution in several developing countries

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Infection control measures

5 evidence-based recommendations to reduce CLA-BSI (CDC):

1. hand hygiene
2. using full barrier precautions
3. cleaning the skin with chlorhexidine
4. avoiding the femoral site when possible
5. removing unnecessary catheters

Berenholtz SM et al, CCM 2004
Pronovost P et al, NEJM 2006
Pronovost P et al, BMJ 2010

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Patient safety culture approach

CUSP	Translating Evidence Into Practice (TRiP)
1. Educate staff on science of safety	1. Summarize the evidence in a checklist. • Wash your hand, clean skin with chlorhexadine, avoid femoral site, use barrier precautions, ask daily if you need the catheter
2. Identify defects	2. Identify local barriers to implementation
3. Assign executive to adopt unit	3. Measure performance
4. Learn from one defect per quarter	4. Ensure all patients get the evidence • Engage • Educate • Execute • Evaluate
5. Implement teamwork tools	

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www.hopkinsmedicine.org/armstronginstitute

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Infection control measures

5 evidence-based recommendations to reduce CLA-BSI (CDC):

1. hand hygiene
2. using full barrier precautions
3. cleaning the skin with chlorhexidine
4. avoiding the femoral site when possible
5. removing unnecessary catheters

- Clinicians education
- CL cart
- Checklist for adherence to measures
- Professionals stopped if not adhering
- CL removal discussed in daily rounds
- Feedback on CLA-BSI

Berenholtz SM et al, CCM 2004
Pronovost P et al, NEJM 2006
Pronovost P et al, BMJ 2010

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Michigan ICU Safety Climate Improvement

Effect of CUSP on Safety Climate

87 — Pre-CUSP (2004)
47 — Post-CUSP (2006)

% "Needs Improvement" *
Pre vs. Post Intervention

* "Needs Improvement" - Safety Climate Score <60%

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Sexton BJ et al. CCM 2011; 39:934-39

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Michigan Keystone ICU

Median and Mean CRBSI Rate

Time (months)

— Median CRBSI Rate — Mean CRBSI Rate

N Engl J Med. 2006;355:2725-32;
BMJ. 2010;340:c309.

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Getting to 0 in a Hospital

- CEO commits to 0
- ICU leaders accountable, know rates, commit to 0
- ICU makes it easy to comply with checklist
- ICU empowers nurses to ensure compliance
- ICU reviews every infection as a defect
- ICU standardizes, audits, and improves catheter maintenance
- ICU posts and discuss infection rates weeks without an infection

http://www.modernhealthcare.com/article/20110725/SUPPLEMENT/307259972/-1

Courtesy: P. Pronovost

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Explaining Michigan: how the program achieved its effects

Identified determinants:

1. Generating isomorphic **pressures for ICUs to join** the program and conform to its requirements
2. Creating a densely networked **clinical community**
3. Reframing **CVC-BSIs as a social problem** that could be resolved
4. Several interventions generating a **culture of commitment** to doing better in practice
5. Harnessing **data on infection rates** as a disciplinary force
6. Using **"hard edges"** (checklist, ICU withdrawn, nurse empowerment, CLA-BSI data)

   Best understood as a culture change intervention

Dixon-Woods et al. Milbank Quarterly 2011   67

Application of CUSP to SSI prevention

Table 1. Comprehensive Unit-Based Safety Program for Surgery Applied to Surgical Site Infection Prevention

Component	Method
1. Science of safety education	Introductory talk to explain the approach to addressing safety at a local level
2. Staff safety assessment	Two question survey to team members asking: How will and SSI develop in the next patient? What can we do to prevent an SSI?
3. Senior executive partnership	Senior executive attends CUSP meetings, making resources available to address safety concerns and assist with system-wide barriers
4. Learning from defects	Teams are trained to use a structured tool to learn from defects
5. Implement teamwork and communication tools	Review unit-level safety data (eg, SSI) monthly and develop local quality improvement initiatives to improve teamwork, communication and address identified hazards

CUSP, Comprehensive Unit-Based Safety Program; SSI, surgical site infection.

Wick EC, et al. J Am Coll Surg 2012

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Strategies for Educating on the Science of Safety

- Unit level staff meetings
- Medical staff grand rounds
- Hospital/unit orientation
- Continuous access via in-house TV / training
- Posting on intranets or other training sites

https://armstrongresearch.hopkinsmedicine.org/susp.aspx

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Identify Defects

2 Question Staff Safety Assessment:

1. How is the next patient likely to be harmed on our unit?
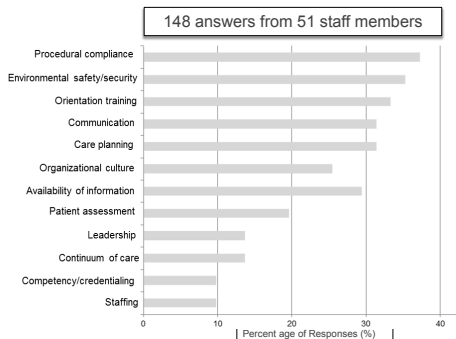2. What do you think we could do to prevent that harm?

Review error reports, liability claims, sentinel events or M and M conference

https://armstrongresearch.hopkinsmedicine.org/susp.aspx

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How will the next patient be harmed?

148 answers from 51 staff members

Procedural compliance / Environmental safety/security / Orientation training / Communication / Care planning / Organizational culture / Availability of information / Patient assessment / Leadership / Continuum of care / Competency/credentialing / Staffing

Percent age of Responses (%)

Schwengel, et al. 2011

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How will the next patient be harmed? (SSI Specific)
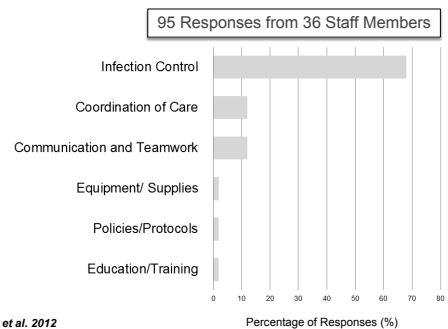
95 Responses from 36 Staff Members

Infection Control / Coordination of Care / Communication and Teamwork / Equipment/ Supplies / Policies/Protocols / Education/Training

Percentage of Responses (%)

Wick, et al. 2012

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Recruit Executive as Active Team Member

Executive meets at least monthly with team
- Review defects identified on staff safety assessment
- Work with team and develop plan to reduce risks
- Ensure team has resources to implement plan

Shared accountability during monthly review of:
- Action plans; infection data; resource allocations
- HSOPS (culture) data
- Staff Safety Assessment data

https://armstrongresearch.hopkinsmedicine.org/susp.aspx

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Learning from Defects

Select a specific defect and use tools to explore:
- What happened?
- Why did it happen? (Use system lenses from science of safety.)
- What could you do to reduce risk?
- How do you know risk was reduced?

Create early wins for the project

Berenholtz, et al. 2009
Pronovost, et al. 2006

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Implement Teamwork Tools

- Briefing and Debriefings
- Specific TeamSTEPPS® Teamwork Tools
- Morning Briefing / Huddle
- Handoff Tools
- Barrier Identification and Mitigation (BIM) Tool
- Learning from Defects
- Shadowing
- Safety Culture Debriefing

https://armstrongresearch.hopkinsmedicine.org/susp.aspx

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Preliminary results – pilot study

- **Intervention:** CUSP + standardization of skin preparation; administration of preoperative chlorhexidine showers; selective elimination of mechanical bowel preparation; warming of patients in the preanesthesia area; adoption of enhanced sterile techniques for skin and fascial closure; addressing previously unrecognized lapses in antibiotic prophylaxis.
- Before/after study in colorectal surgery
- **Results:** mean SSI rate decrease (from 27.3% to 18.2%), 33.3% decrease (95% CI, 9–58%; p=0.05)

Wick EC, et al. J Am Coll Surg 2012

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Conclusions – Importance of:

- Targeting practice change through PS climate - key effective strategy for improving patient outcomes
- Leadership in creating the PS culture
- Individual involvement and accountability
- Collective processes of critical reflection and discussion
- Team work and communications
- Monitoring and feedback
- Patients' voices and contribution
- Understanding how programs work – helps transferability

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Thank you for your attention and to Webber Training for hosting us!

For more information

- **Contact information**

  WHO PATIENT SAFETY PROGRAMME

  patient.safety@who.int

  savelives@who.int

- **Web site**

  http://www.who.int/patientsafety/en/

  http://www.who.int/gpsc/5may/EN_PSP_GPSC1_5May_2013/en/

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2013
WHO Teleclass Schedule

Clean Care is Safer Care

February 6
Improving the Patient Safety Culture as a Successful Component of Infection Control Strategies, Dr. B. Allegranzi

March 6
Patient Participation in Hand Hygiene Promotion and Improvement, Dr. Y. Longtin

April 9
Innovation and New Indicators in Hand Hygiene Monitoring, Prof. J. Boyce

May 6
Special Lecture for 5 May, Prof. D. Pittet

July 3
Risk Assessment and Priority Setting in Infection Control in Low to Middle Income Countries, Prof. N. Damani,

August 7
Decontamination of High-Touch Environmental Surfaces in Healthcare: A Critical Look at Current Practices and Newer Approaches, Prof. S. Sattar

September 3
Preventing Central Line-Associated Bloodstream Infections: The Matching Michigan Approach Applied in the USA and Other Countries, Prof. P. Pronovost

October 9
Implementing Infection Control Through a Patient Safety Partnership Approach in Africa, J. Storr

November 11
Antimicrobial Resistance Issues Worldwide and the WHO Approach to Combat it, Dr. C. Pessoa da Silva

December 4
Control of Multi-Drug Resistant Organisms in the Nursing Home Setting, Prof. A. Voss