

Implementation of an infection control program How to get started?

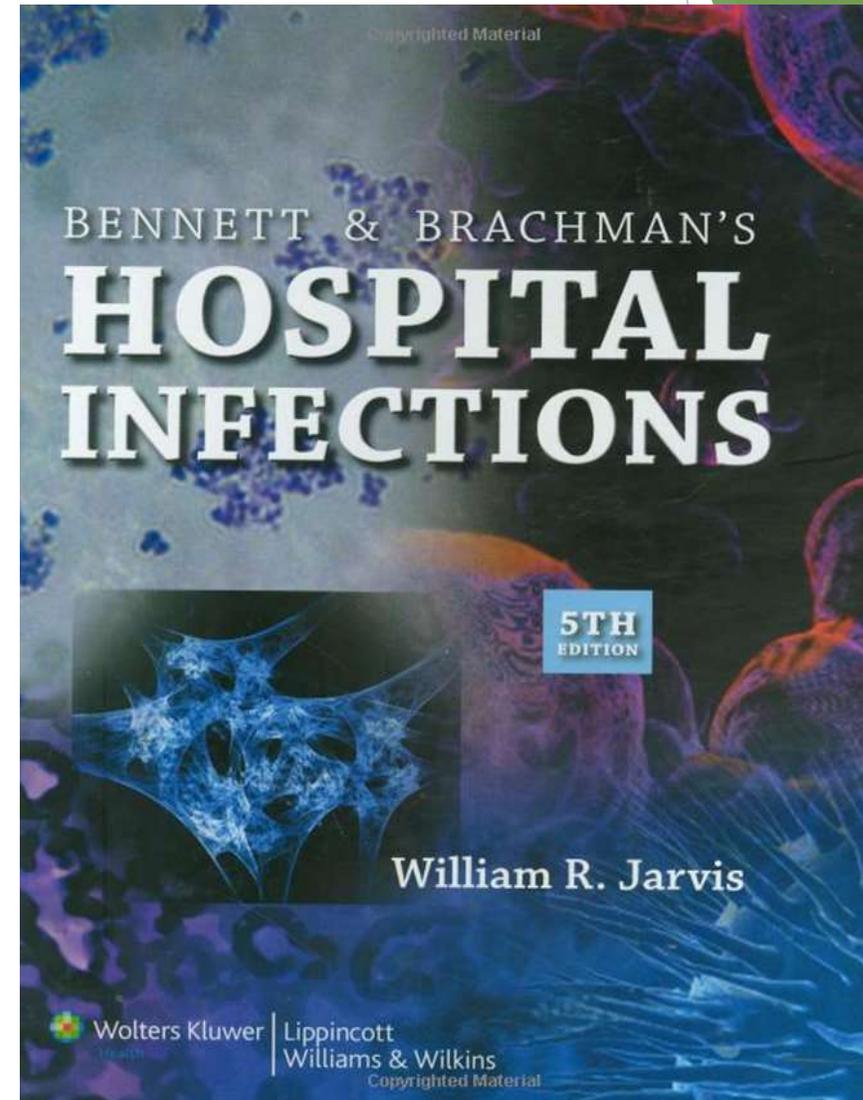
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*Advanced Training for Infection Control Nurses (ICNs)
Hospital Authority
Centre for Health Protection, Kowloon, Hong Kong Special Administrative Region
1 - 3 November 2017*

(Organizers: Infectious Disease Control Training Centre, Hospital Authority/Infection Control Branch, Centre for Health Protection and Chief Infection Control Officer's Office)

Critical functions of infection control

- ▶ The critical function of infection control focus is on the identification, prevention and control of infections for patients/residents (clients, employees, visitors and when necessary the community)
- ▶ Key to this is:
 - ▶ The use of evidence based methods to identify, prevent and control infection
 - ▶ Determining what roles and functions are not essential to the practice of infection control
 - ▶ Work smarter not harder
 - ▶ Role conflict/ambiguity
 - ▶ ↑ Workload
 - ▶ ↑ Stress
 - ▶ ↓ Job satisfaction
 - ▶ Evaluating if your work solves problems and results in improvements



*Prevention and Control of Nosocomial Infections, 4th Edition Edited by Richard P. Wenzel
Philadelphia: Lippincott, Williams, and Wilkins, 2003*

Establish an infection control team

- ▶ Infection Control Nurses
 - ▶ Clinical Nurse Consultant (CNS)
 - ▶ Infection Preventionist
 - ▶ Infection Control Practitioner (ICPs)
- ▶ Competencies
 - ▶ Expert, proficient, novice
- ▶ Infectious Diseases
 - ▶ Physicians
 - ▶ Registrars
 - ▶ Residents
- ▶ Microbiologist/s
- ▶ Epidemiologist/Data Managers
- ▶ Research/Project staff
- ▶ Secretarial/clerical support staff

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Crack team trails killer bug

April 25, 2004



On the hunt: (left to right) Despina Kotsanas, infection control scientist; Dr Deborah Friedman, Southern Health's medical co-ordinator of infection control; Janet Courtot, consultant nurse; Professor Richard Doherty, head of pediatric infectious diseases; Elizabeth Cooper, nursing co-ordinator; Dr Andrew Ramsden, director of newborn intensive care unit; Stephen Blamey, surgeon and chairman of infectious control committee.
Picture: Wayne Taylor

Hospital infection control experts are like detectives in white coats, writes Lucy Beaumont.

It was much like the perfect crime. The villain sneaked in silently and took advantage of the weak. Before staff at Monash Medical Centre knew they had an outbreak of serratia bacteria, it had taken the life of one child and left its mark on three others.

ICT planning - planning, planning, planning!

- ▶ **Establish your programs core infection control business components:**
 - ▶ Develop the hospital action plan to reduce HAIs
 - ▶ Developing a surveillance program
 - ▶ Participating in performance improvement teams
 - ▶ Managing outbreaks, adverse events and critical incidents
 - ▶ Policies/procedure development and maintenance
 - ▶ Compliance with standards, regulatory requirement, and guidelines
 - ▶ Education and training programs
 - ▶ Accreditation - measuring and reporting
 - ▶ Keeping up-to-date with the literature

ICT planning - planning, planning, planning!

- ▶ Work out early what is achievable with resources you have ?
 - ▶ ICPs
 - ▶ Who has the experience to carry a portfolio?
 - ▶ Surveillance Preceptorship Program
 - ▶ Surveillance portfolio - 6-12mths
 - ▶ Novice ICP paired with experienced ICP
 - ▶ Buddy system - 3mths
 - ▶ Aseptic technique training and compliance program
 - ▶ HH compliance program
 - ▶ What ongoing support will expert, proficient & novice ICPs need?
 - ▶ Preceptorship training program
 - ▶ Mentoring
 - ▶ Performance improvement plans and assessments

ICT planning - planning, planning, planning!

- ▶ Working with other areas/disciplines
 - ▶ Environmental Services
 - ▶ Cleaning & disinfection
 - ▶ Construction & renovation
 - ▶ Engineering
 - ▶ Engineering down the risk
 - ▶ Ventilation systems/warm water systems/cooling towers
 - ▶ Construction and renovation
 - ▶ Staff Health
 - ▶ HCW immunisation and vaccination programs
 - ▶ Operating Suite Services/CSSD/Endoscopy
 - ▶ Reprocessing of reusable medical and surgical instruments and equipment



ICT planning - planning, planning, planning!

- ▶ **Limit the number of meetings your team members attend!**
 - ▶ **Infection Control Team meeting**
 - ▶ Fortnightly
 - ▶ **Infection Control Committee meeting**
 - ▶ Bi-monthly
 - ▶ **Product Evaluation Committee meeting**
 - ▶ Bi-monthly
- ▶ **Map your program on a 12mth planner**
 - ▶ When you will do what
 - ▶ How long targeted strategies will run
 - ▶ When staff will be on leave

Develop an infection control plan

- ▶ **Ensure executive management support**
 - ▶ Endorsed by the CEO and the Board of Management
 - ▶ Very powerful
 - ▶ Focus at the highest level in the organisation
 - ▶ Enhances participation and improves accountability
 - ▶ Improves the timeliness of the implementation of interventions
 - ▶ Sets the goals and targets for the organisation
 - ▶ **“Our aim is to try to prevent all preventable HAIs”**
- ▶ **Endorsed by the hospital Infection Control Committee**
- ▶ **Supported by key clinician/stakeholder champions:**
 - ▶ Physicians
 - ▶ Heads of Units
 - ▶ Department Heads
 - ▶ Director of Nursing
 - ▶ Nurse managers

Develop an infection control plan

▶ Suggested annual goals

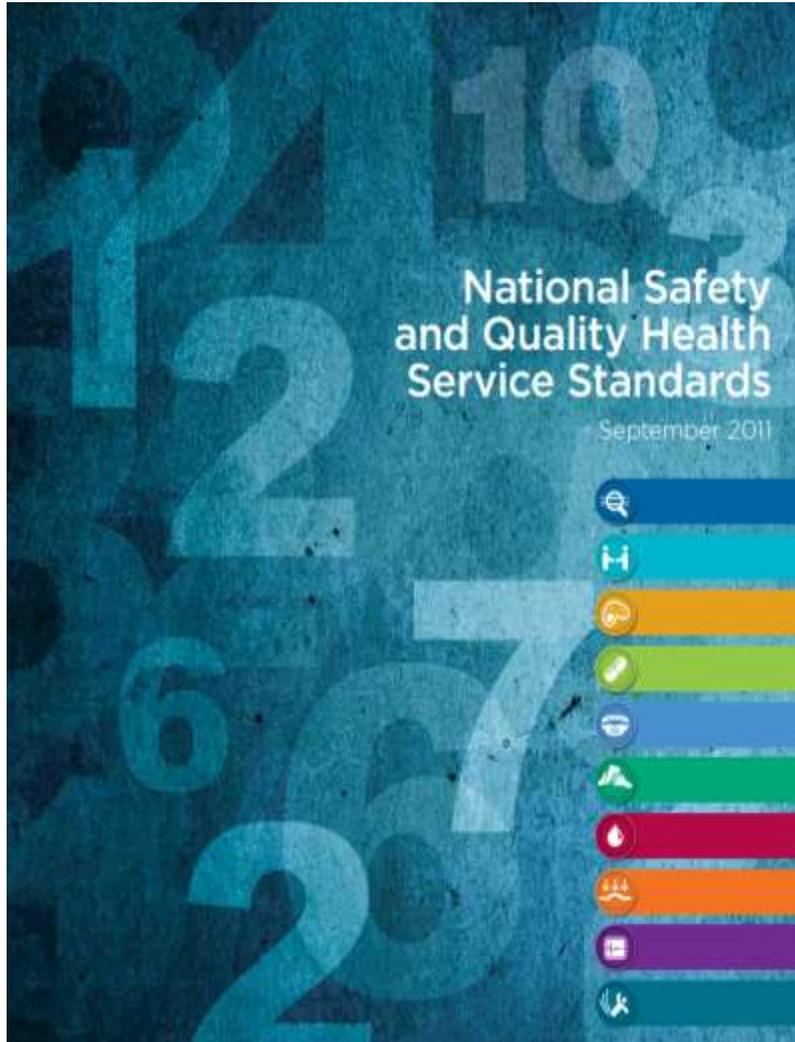
- ▶ To educate frontline staff to ensure there is a belief that reducing HAIs is possible
- ▶ To monitor consistent implementation of proven infection prevention and control measures
- ▶ To use infection control surveillance data to drive the implementation of evidence based interventions
- ▶ **To engage clinical stakeholders in optimising adherence and discourage “everyone from doing their own thing”**
- ▶ To prioritise the implementation of evidence based:
 - ▶ Bundles
 - ▶ Horizontal/vertical infection control strategies
 - ▶ New technologies

Develop an infection control plan

- ▶ Make sure it is achievable with existing resources
- ▶ **Estimate the infection control resources implications**
 - ▶ Per annum
 - ▶ 1 major project
 - ▶ 2 minor objectives
- ▶ Network with others at your organisation to help/assist
- ▶ Network and collaborate with other hospitals



Link your plan to specific outcomes - accreditation requirements, National and/or state performance indicators



Infection Control – A mandatory standard

	Standard 1 - Governance for Safety and Quality in Health Service Organisations	14
	Standard 2 - Partnering with Consumers	22
	Standard 3 - Preventing and Controlling Healthcare Associated Infections	26
	Standard 4 - Medication Safety	34
	Standard 5 - Patient Identification and Procedure Matching	40
	Standard 6 - Clinical Handover	44
	Standard 7 - Blood and Blood Products	48
	Standard 8 - Preventing and Managing Pressure Injuries	54
	Standard 9 - Recognising and Responding to Clinical Deterioration in Acute Health Care	60
	Standard 10 - Preventing Falls and Harm from Falls	66

Develop an infection control plan

- ▶ **Australia Standards & Victorian Surveillance Coordinating Centre (VICNISS) requirements:**
 - ▶ **Training and compliance in aseptic technique**
 - ▶ Accreditation requirement - 100% compliance
 - ▶ **HH compliance**
 - ▶ National benchmark 80%
 - ▶ **Reducing catheter related bloodstream infections**
 - ▶ **ICU**
 - ▶ State surveillance requirement
 - ▶ **NICU**
 - ▶ State surveillance requirement
 - ▶ **Reduce Staphylococcus aureus bacteraemia (SAB)**
 - ▶ Investigate all hospital associated SAB infections
 - ▶ **Monitor clostridium difficile Infection (CDI)**

Develop an infection control plan

- ▶ **Australia Standards & Victorian Surveillance Coordinating Centre (VICNISS) requirements:**
 - ▶ **Improving antibiotic prescribing practices**
 - ▶ Accreditation requirement
 - ▶ Antibiotic stewardship program in place
 - ▶ **Reducing surgical site infections (SSIs)**
 - ▶ State benchmark
 - ▶ Procedure specific - < than the state aggregate/100 procedures
 - ▶ **HCW Influenza vaccination rates**
 - ▶ State target 80%
 - ▶ **Healthcare-associated *S. aureus* bloodstream infections**
 - ▶ National benchmark
 - ▶ < 2.0 per 10,000 patient bed days
 - ▶ **Improving compliance with transmission based precautions**
 - ▶ Accreditation requirement - monitoring program
 - ▶ Contact
 - ▶ Droplet
 - ▶ Airborne
- ▶ **Do the things that will give you the most “bang” with the resources you have!**

Developing a surveillance program

- Surveillance

“There may be infection control without surveillance, but those who practice without measurement.....will be like the crew of an orbiting ship travelling through space without instruments, unable to identify their current bearings, the probability of hazards, their direction or their rate of travel”

Wenzel R P.

Infection Control Without Measurement



Develop a surveillance program

- ▶ **Laboratory based ward liaison surveillance**
 - ▶ Review microbiology data on a routine and regularly basis
 - ▶ Identify clusters and outbreaks
 - ▶ Identify unusual pathogens
 - ▶ Identify greater than usual incidence of certain species
 - ▶ Infection control staff should conducts regular ward rounds
 - ▶ Keep a running sheet of results by ward



Develop a surveillance program

- ▶ **Laboratory based ward liaison surveillance.....**
 - ▶ **Ward rounds**
 - ▶ i.e. Monday, Wednesday, Friday
 - ▶ Discuss microbiology results with ward/unit staff:
 - ▶ Likely mode/s of transmission
 - ▶ Advise on infection control precautions to minimize transmission
 - ▶ Patient placement
 - ▶ Patient risk factors
 - ▶ Device use
 - ▶ **Intensive “shoe leather” infection control**
 - ▶ Opportunity to observe what is actually happening



Develop a surveillance program

- ▶ **Targeted surveillance - Surveillance of definable events**
 - ▶ High risk, high volume, high cost procedures/areas
 - ▶ Device related
 - ▶ Surgical site infections in specific population
- ▶ **Surveillance method**
 - ▶ **Simplicity**
 - ▶ Simple data collection management analysis, dissemination and maintenance systems
 - ▶ Easily applicable and understandable definitions
 - ▶ **Flexibility**
 - ▶ Able to respond to new problems, technologies and case definitions



Develop a surveillance program

- ▶ **High-quality data**
 - ▶ Complete and valid
 - ▶ Staff training
 - ▶ Quality check on data entry
 - ▶ Interfacing and extracting data from existing computer systems - demographics/microbiology
- ▶ **High Acceptability**
 - ▶ Not overly burdensome
 - ▶ As data requirement increases data completeness **decreases**
 - ▶ Leads to problems with validity
- ▶ **High sensitivity and specificity**
 - ▶ **Sensitivity** - captures a high percentage of cases that meet the definition
- ▶ **Specificity**
 - ▶ Has a low rate of false-positive misclassification of non-cases as cases
- ▶ **High timeliness**
 - ▶ Timely feedback of data so appropriate interventions can be devised and implemented
- ▶ **High external validity**
 - ▶ Data should be generalizable to similar populations
- ▶ **Reliability**
 - ▶ Consistent collection management and analysis of data without lapses

Develop a surveillance program

- ▶ **Case definitions**

- ▶ Standardized and straight forward case definitions
- ▶ Strict application of the definitions

- ▶ **Remember!**

“Surveillance definitions are for surveillance purposes not clinical purposes”

- ▶ **Risk adjustment - “compare apples with apples”**

- ▶ Stratification by cofounders
 - ▶ Hospital unit
 - ▶ Device use

- ▶ Be aware of possible co-founding by the sensitivity of the local surveillance effort

- ▶ Better surveillance systems will appear to have the higher rate of infection

RISK ADJUSTMENT

“COMPARE APPLES WITH APPLES”



Develop a surveillance program

- ▶ Compare your infection rate with your own rates (or zero) overtime
- ▶ Provide surveillance data for state/national clinical performance indicator and accreditation systems
 - ▶ Understand the limitations of inter-hospital comparisons and benchmarking
- ▶ **HK hospital Authority surveillance KPIs**
 - ▶ Multidrug resistant organisms
 - ▶ Surgical site infections
 - ▶ Catheter associated bloodstream infections in Adult ICU

RISK ADJUSTMENT

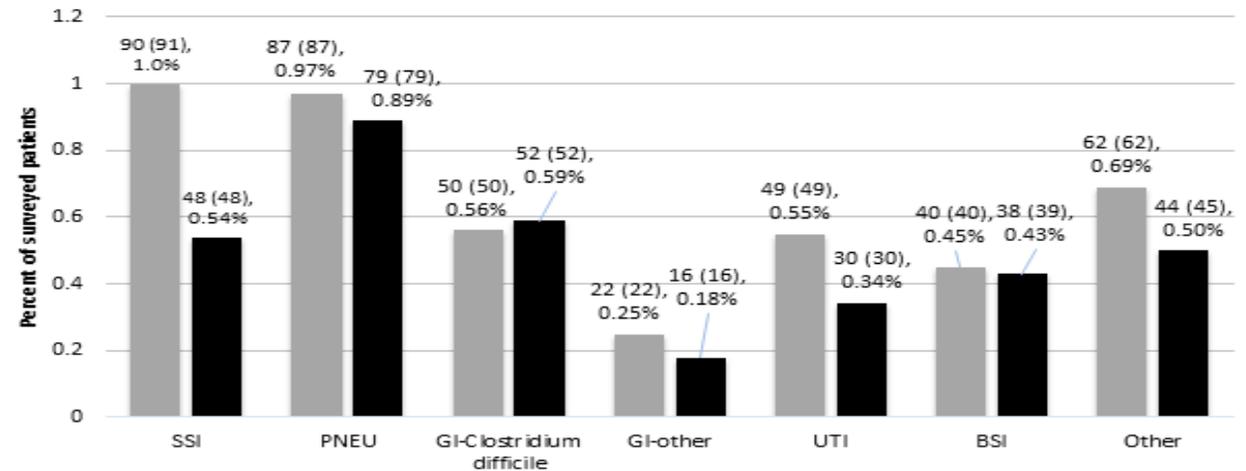
“COMPARE APPLES WITH APPLES”



USA - CDC Comparing the prevalence of healthcare associated infections over time



Figure: Prevalence and Distribution of HAIs, 2011 vs. 2015



- 2011 versus 2015
 - 143 hospitals
 - Findings:
 - Less urinary catheter and central line use
 - HAI prevalence fell from 4.0% to 3.2% (a 22% decrease)
 - Central line and urinary catheter use were both significantly lower
 - Healthcare-associated UTIs and SSIs significantly decreased

Magill SS et al. Reduction in the Prevalence of Healthcare-Associated Infections in U.S. Acute Care Hospitals, 2015 vs 2011. *Open Forum Infectious Diseases*, Volume 4, Issue suppl_1, 1 October 2017, Pages S49.

Victoria, Australia

Victorian Healthcare Associated Infection Surveillance System

► Mandatory For All Public Health Services

- *Staphylococcus aureus* Bacteraemia (SAB)
- *Clostridium difficile* Infection (CDI)
- Healthcare worker seasonal influenza vaccination
- Central line-associated bloodstream infections in intensive care
- Central line and peripheral line associated bloodstream infections in neonatal intensive care
- Surgical site surveillance (SSI)

► Optional Modules

- Outpatient Haemodialysis events
- Ventilator Associated Events
- Central line insertion practices
- Colorectal process adherence monitoring

The image shows two overlapping screenshots. The left screenshot is the VICNISS website homepage, featuring the logo and navigation links for 'HEALTHCARE WORKERS', 'ABOUT', and 'PUBLICATIONS'. A main banner states: 'The primary aim of VICNISS is to minimise the associated with healthcare in Victoria. Established in 2002, the program is coordinated by the VICNISS Coordinating Centre, which is concerned with preventing infections in hospital settings, however includes such as dialysis facilities or hospital in the home. Surveillance activities associated infections.' Below this, there are sections for 'News & Updates For Healthcare Professionals', including 'CPE REPORTING SURVEY' and 'VICNISS REPORTS Q4 2016/17'. The right screenshot is a journal article page from 'INFECTION, DISEASE & HEALTH'. The article title is 'Using enhanced surveillance to characterise the epidemiology of Clostridium difficile infections in Australia: Time trends and severity of illness in Victoria, 2010–2014'. The author is 'Leon Worth (A/Prof)'. The article is from November 2016, Volume 21, Issue 1, Page 144. The page includes an abstract, a PDF download link, and various article tools like 'Email Article', 'Add to My Reading List', and 'Export Citation'.

<https://www.vicniss.org.au/>
J Hosp Infect. 2016 Jul;**93**(3):280-5

Victoria, Australia

Victorian Healthcare Associated Infection Surveillance System

- ▶ **MODULES FOR SMALLER HOSPITALS**
 - ▶ Surgical antibiotic prophylaxis
 - ▶ Occupational exposures
 - ▶ Peripheral venous catheter use
 - ▶ Multi-resistant organisms
 - ▶ Surgical infection report
 - ▶ Healthcare worker measles/hepatitis B vaccination
- ▶ **Annual surveillance plan**
- ▶ **Executive sponsor - approval of plan**
- ▶ **Web based data entry with quarterly reporting**
- ▶ **Online surveillance report as needed**



<https://www.vicniss.org.au/>

A. Bull et al. / Journal of Hospital Infection 78 (2011)

HK Hospital Authority surgical site infection surveillance

Protocol for Hospital Authority (HA) Surgical Site Infection (SSI) Surveillance

Version	Date
1	August 2009
2	November 2010
3	December 2011
4	January 2016

Period of the SSI Data	Q1 (Jan-Mar)	Q2 (Apr-Jun)	Q3 (Jul-Sep)	Q4 (Oct-Dec)
Frozen date	30 June	30 September	30 December	30 March
Reminder from the SSI program: counting down 15 days before	15 June	15 September	15 December	15 March

Web based data entry with quarterly reports provided to hospitals

HK Hospital Authority surgical site infection surveillance

- ▶ **HK mandatory reporting of surgical site infections**
 - ▶ Appendix surgery
 - ▶ Open & laparoscopic
 - ▶ Gallbladder surgery
 - ▶ Open & laparoscopic
 - ▶ Colon surgery
 - ▶ Open & laparoscopic
 - ▶ Breast surgery
 - ▶ Rectal surgery
 - ▶ Hip/Knee surgery
 - ▶ Dynamic Hip Screw
 - ▶ Hip prosthesis
 - ▶ Total & partial
 - ▶ Knee prosthesis



Preceptorship training

▶ Training

▶ Surveillance Preceptorship Program

- ▶ Surveillance portfolio
 - ▶ 6-12mths
 - ▶ Novice ICP paired with experienced ICP
 - ▶ Buddy system - 3mths
- ▶ Experienced ICPs
 - ▶ Role model
 - ▶ Educator
 - ▶ Preceptor
- ▶ Clinical rounds with an Infectious Diseases physician



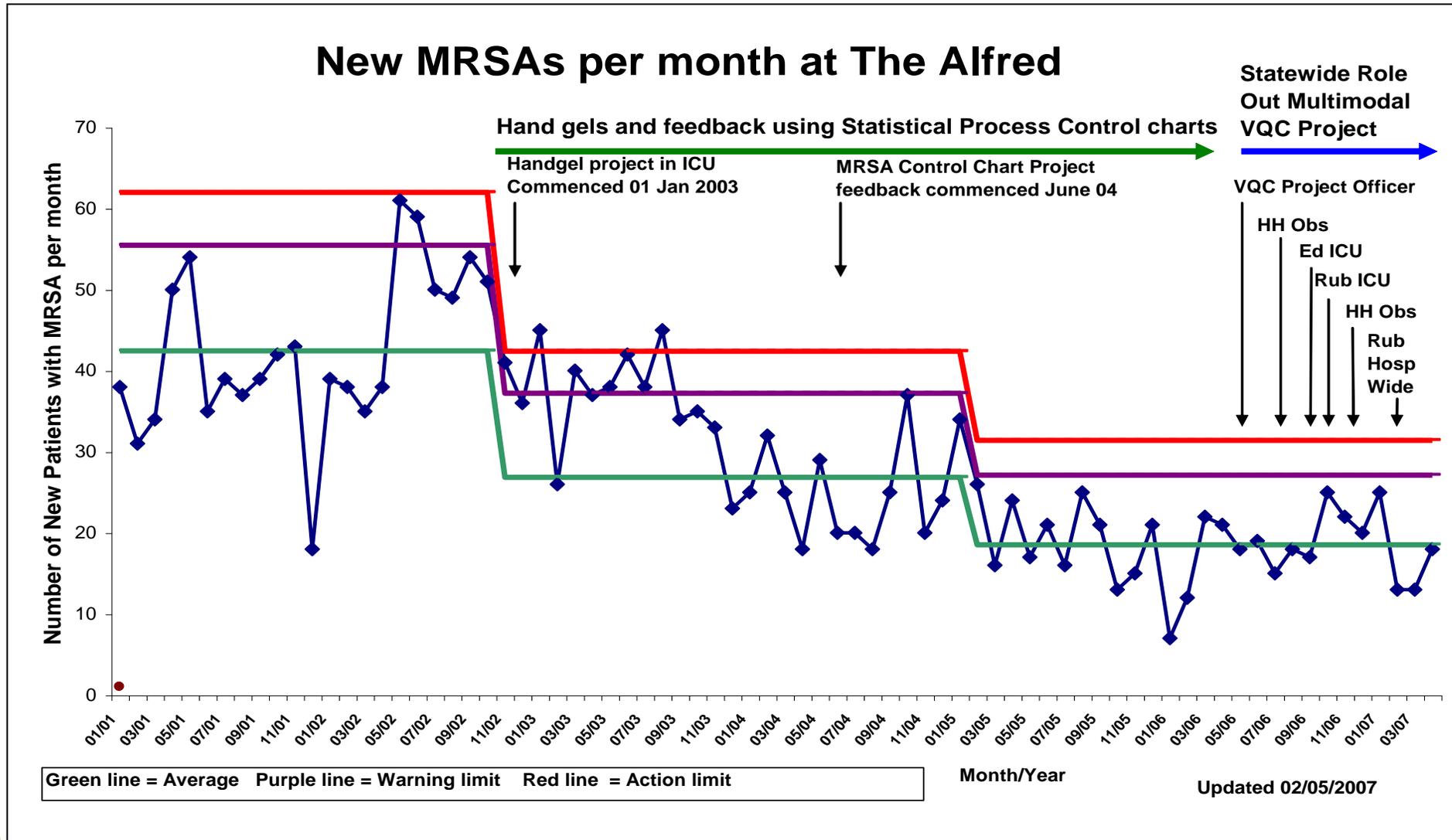
Preceptorship training

► Advantages:

- 1:1 supervision on the job
- Standardization in:
 - Data collection methods
 - Interpretation and applications of definitions
 - Supportive working environment
 - Strong sense of accountability and ownership

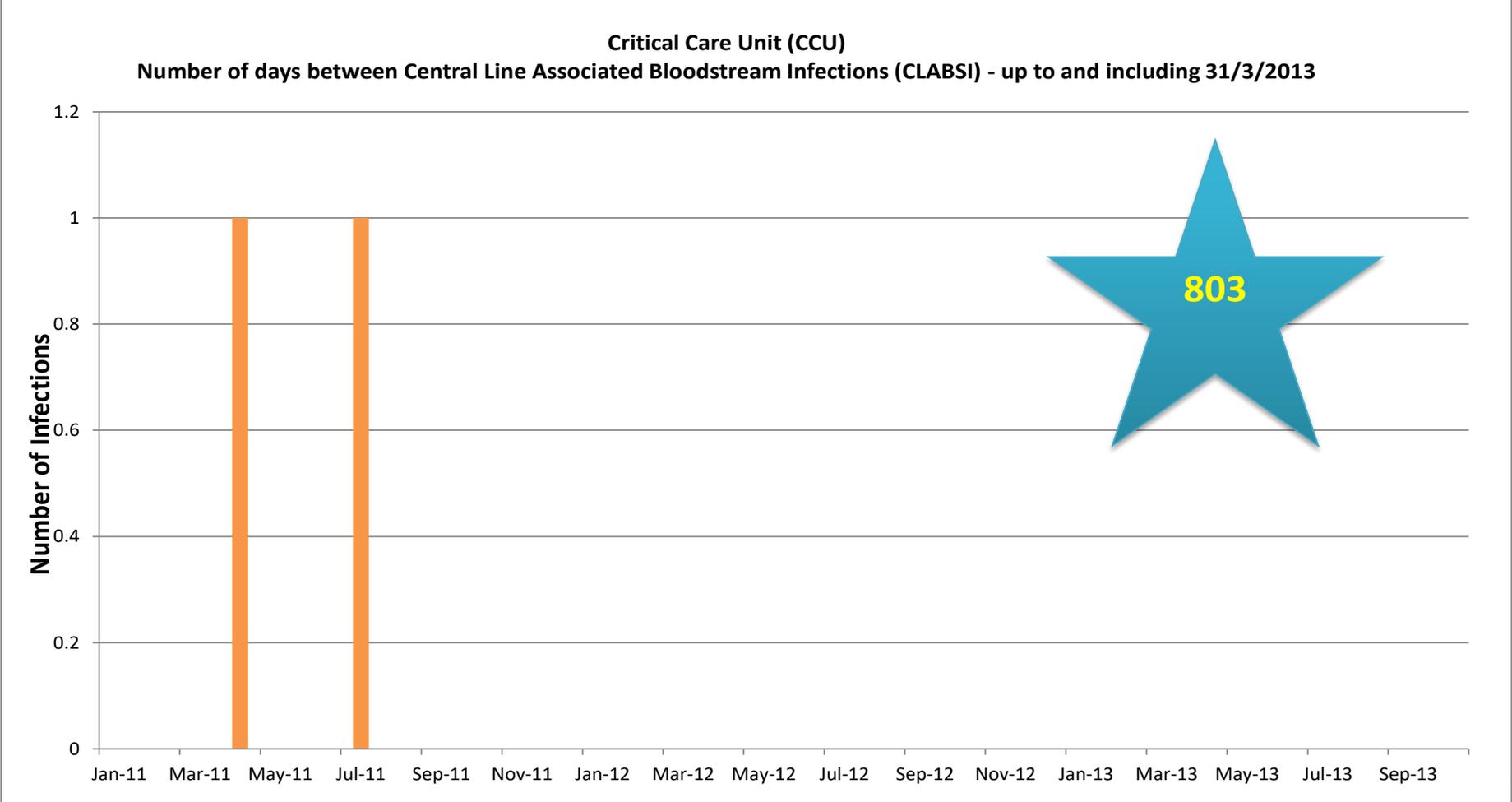


Feedback and reporting - Control Charts



Harrington et al. Reduction in Hospitalwide Incidence of Infection or Colonization with Methicillin-Resistant *Staphylococcus aureus* With Use of Antimicrobial Hand-Hygiene Gel and Statistical Process Control Charts. *Infect Control Hosp Epidemiol* 2007; 28:837-844.

Feedback and reporting - days between infection



Since the infection in July 2011 there has been no hospital associated CLABSI infection/s for 803 consecutive days in CCU

Feedback and reporting - tables and % compliance

TOTAL NUMBER OF CENTRAL LINES INSERTED IN CCU IN VICNISS Q3	25		
BUNDLE EVIDENCE BASED PREVENTION STRATEGIES		PERCENTAGE ADHERENCE/COMPLIANCE	VICNISS ICU AGGREGATE
Hand hygiene performed	25/25	100%	99.2%
Appropriate skin antiseptis	25/25	100%	96.3%
Skin allowed to completely dry following antiseptic application	24/25	96%	96%
Operator wore a mask	25/25	100%	98.3
Operator wore a sterile gown	25/25	100%	99.3
Operator wore a cap	24/25	96%	86
Operator used sterile gloves	25/25	100%	99.3
A large (full length) sterile drape was used	24/25	96%	91.9
COMPLETE BUNDLE IN PLACE DURING CENTRAL LINE INSERTION	22/25	88%	91.9

The compliance with all evidence based interventions strategies in ICU is 88% compared to Quarter 2, which was 83.3%.

VICNISS compliance state-wide in ICU's is 74.7%

In this quarter in ICU:

- Skin antiseptic was not completely dry before commencing the procedure & a mask, cap and a large full length drape was not always used

Feedback and reporting - days between infection



Since the infection in November 2012 there have been 139 consecutive days without an infection

Feedback and reporting - “Stop” lights

Hospital ICU central line associated blood stream infections (CLABIs) Rates with 95% Confidence Intervals - (2009/2010 - 2013/2014)

Year	Central line days	No. of CLABSI	Rate	95% CI
2009/2010	910	1	1.1	0.0 - 6.1
2010/2011	1187	1	0.8	0.0 - 4.7
2011/2012	1091	1	0.9	0.0 - 5.1
2012/2013	1082	0	0.0	0.0 - 3.4
2013/2014	455	0	0.0	0.0 - 8.1
VICNISS Aggregate(n=18)	108769	109	1.0	0.8 - 1.2

Explanatory note: A central line is a narrow tube inserted by a doctor into a large vein of a patient's neck or chest to give important medical treatment. When not put in correctly or kept clean, central lines can become an easy way for germs to enter the body and cause serious infections in the blood. These infections are called central line associated blood stream infections (CLABIs), and they can be deadly.

CLABSIs are mostly preventable when healthcare providers use infection control steps to minimise and prevent infections related to these lines during insertion and during ongoing care of the lines.

This measure compares the number of central line infections in the intensive care unit to a state benchmark (VICNISS aggregate).

Lower numbers are better. A score of zero (0) - meaning no CLABSI – is best.

Results:

1. The hospital ICU central line associated blood stream infection (CLABIs) rates has been zero (0) for 2012/2013 and 2013/2014 (financial year) year to date
2. This compares to the VICNISS aggregate (18 hospitals) in these years of zero - 1.0 for 2012/2013 and 2013/2014 (financial year) year to date.

This is an excellent result for the hospital Intensive Care Unit



The Intensive Care Unit has zero infections and rates are below the state aggregate

Feedback and reporting - keep it simple

CDC Vital Signs™
March 2011

Making Health Care Safer
Reducing bloodstream infections

1 in 20
About 1 in 20 patients get bloodstream infections each year while receiving central line care.

41,000
About 41,000 bloodstream infections in hospital patients with central lines each year.

37,000
About 37,000 bloodstream infections in hemodialysis* outpatients with central lines.

A central line is a tube that a doctor usually places in a large vein in a patient's neck or chest to give important medical treatment. When not put in correctly or kept clean, central lines can become a freeway for germs to enter the body and cause serious bloodstream infections. These infections can be deadly. Of patients who get a bloodstream infection from having a central line, up to 1 in 4 die. Bloodstream infections in patients with central lines are largely preventable when healthcare providers use CDC-recommended infection control steps. Medical professionals have reduced these infections in hospital intensive care unit (ICU) patients by 58% since 2001. Even so, many still occur in ICUs, in other parts of hospitals, and in outpatient care locations. In 2008, about 37,000 bloodstream infections occurred in hemodialysis* outpatients with central lines.

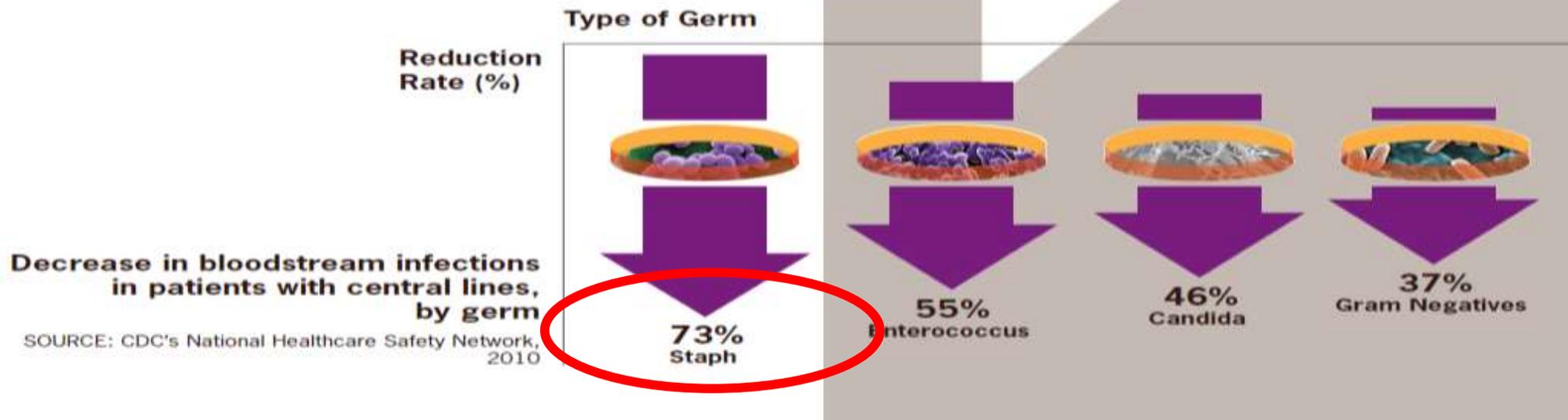
Learn what you can do to reduce central line infections.

▶ **Decrease 2001 - 2009**

- ▶ Since 2001 CLABSI in ICU patients has been reduced by 58%
- ▶ Saved up to **27,000 lives** and is associated with **\$1.8B in excess medical costs**

▶ **In 2009 alone**

- ▶ Reducing infections saved about **3,000-6,000 lives**
- ▶ **\$414 million in extra medical costs** compared with 2001



Feedback and reporting

What we did, what we accomplished, what we learned

Public Health Practice Stories from the Field

Illinois Hospitals Collaborate to Reduce *Clostridium difficile* Infections



2x increase
in *C. difficile* rates was seen in Illinois hospitals

20 acute care hospitals
participated in statewide collaborative to reduce *C. difficile* infections

15%+
Decrease in incidence of *C. difficile* infections in participating hospitals

Statewide education campaign
aims to strengthen ability of acute care hospitals, long-term acute care hospitals, and long-term care facilities to prevent *C. difficile* infections

Clostridium difficile infections (CDI) are commonly associated with bacterial diarrhea in hospitalized patients. Infection can result in life-threatening colitis (inflammation of the colon) and lead to excess medical costs. The incidence of CDI in Illinois hospitals more than doubled over a 10-year period, from 4.5 cases per 1,000 discharges in 1999 to 9.2 cases per 1,000 discharges in 2009.

In response to the increasing CDI rates, the Illinois Department of Public Health (IDPH) partnered with the state's quality improvement organization, IFMC-IL, to lead a CDI prevention collaborative. Hospitals were invited to join the collaborative based on their CDI discharge rates and their interest in participating. Hospitals wanting to join the collaborative established multidisciplinary teams (staff from infection prevention, quality management, environmental services and housekeeping, nursing, microbiology, and others) with a designated project lead, and returned participation agreement forms signed by the hospital executive.

The collaborative kicked off in March 2010 with 11 acute care hospitals from metro Chicago. A second cohort of 9 acute care hospitals from central and southern Illinois was added in October 2010. The collaborative period ended in September 2011.

A statewide education campaign, the Illinois Campaign to Eliminate *Clostridium difficile* (ICE *C. difficile*), will launch in March 2012 to further disseminate evidence-based practices for CDI prevention; help strengthen the ability of acute care hospitals, long-term acute care hospitals, and long-term care facilities to prevent CDI; and engage leadership in these facilities in prioritizing CDI prevention.

The information in *Public Health Practice Stories from the Field* was provided by organizations external to CDC. Provision of this information by CDC is for informational purposes only and does not constitute an endorsement or recommendation by the U.S. government or CDC.



Public Health Practice Stories from the Field

What We Did

Based on CDC recommendations, IDPH and IFMC-IL chose several prevention strategies to constitute a *C. difficile* prevention bundle that included hand hygiene, contact precautions, environmental cleaning, lab alerts, and staff and patient education. Hospitals had the option of adding other strategies based on individual needs identified. Each team performed a gap analysis to identify specific goals and action steps. IDPH and IFMC-IL supported hospital efforts through site visits, webinars, phone calls, and in-person meetings. Most of these learning activities were held separately for each cohort.

What We Accomplished

Hospital-onset (HO) CDI rates decreased in both cohorts. Hospitals reported *C. difficile* laboratory data to CDC's National Healthcare Safety Network (NHSN). For cohort 1 (metro Chicago), the model-predicted HO CDI incidence decreased from 11.7 to 9.8 cases per 10,000 patient days during the 19-month participation period, a 15% decrease that was marginally significant. For cohort 2 (central and southern Illinois), the model-predicted HO CDI incidence decreased from 9.1 to 6.8 cases per 10,000 patient days during the 12-month participation period, a 26% decrease. Two months after the collaborative ended, the model-predicted decrease in HO CDI rates has been sustained; the model-predicted decrease was 18% (p=0.02) for cohort 1 and 22% (p=0.19) for cohort 2.

Hospitals completed an adapted version of the CDC Prevention Practices Assessment Tool at the beginning and end of participation, and provided monthly hand hygiene, gown and glove, and environmental cleaning adherence rates via NHSN. Monitoring of these prevention practices was higher at the end of the participation period compared to the beginning. Adherence rates also increased by the end of the participation period in both cohorts. Adherence rates were highest for hand hygiene (93% in cohort 2) and lowest for environmental cleaning (78% in cohort 2). IDPH presented lessons learned in the Not Just a Maid Service video, which highlights the role of environmental service workers in preventing CDI.

What We Learned

- Forming multidisciplinary teams was important, particularly for enhancing communication across departments and gaining better appreciation for each staff member's role in preventing CDI.
- Education and resources for environmental cleaning was an area of high interest and need.
- It is important to consider how to sustain the successes achieved beyond the collaborative period.
- Support from hospital leadership is important for long-term success, and leadership from the state can strengthen facilities' CDI prevention efforts.
- Hospitals have competing priorities and more needs to be done to get them to prioritize CDI prevention.

For more stories, visit
www.cdc.gov/stltpublichealth/phpracticestories

For information about this story, contact
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E-mail: OSTLTSfeedback@cdc.gov
Web: www.cdc.gov/stltpublichealth

Publication date: 5/13/2013

Feedback and reporting - sample ICC reporting template

SAMPLE INFECTION CONTROL COMMITTEE REPORT

Infection Control Committee meeting – insert date

Subject

Total Knee Replacements

The number of days between Total Knee Replacement (TKR) up to and including 31/3/2013



What we did

Using the VICNISS surveillance methods infection control staff have identified a hospital's associated TKR surgical site infection on 12/11/2012. This is the TKR surgical site infection that has occurred in **100 consecutive days**. Since this infection in November 2012 there have been **139 consecutive days without an infection**.

The VICNISS surveillance method uses a standardised definition which includes clinical and microbiological criteria to define an infection. It should be noted that this definition is for surveillance purposes ONLY and not for clinical purposes and on occasions may miss or overcall some infections.

It is important for infection control and organisation performance improvement purposes that we adhere to VICNISS surveillance criteria so that when measuring our own performance over time or when reviewing our performance in relation to other like facilities that the data we are comparing has been collected in a standardised manner.

SAMPLE INFECTION CONTROL COMMITTEE REPORT

What we aim to accomplish

We aim to the following:

- Provide clinical staff involved in the management and care of patients undergoing TKR procedures with simple, easy to interpret graphs that enable them to see the frequency at which infections are occurring in their unit/ward/department on a bi-monthly basis
- Provide clinical staff with in-service education so they can develop an understanding of the principles of infection control hospital associated infection surveillance and what types of infections will and will not meet set surveillance criteria
- Provide individual cases details to treating physicians for follow-up and case review
- Encourage clinical staff to implement evidence based interventions (i.e. care bundles) to reduce the risk of patients acquiring a hospital associated infection
- Provide staff with the *Institute for Healthcare Improvement (IHI) How-to Guides along with preview publications on successful interventions*
- Encourage the establishment of multidisciplinary groups, supported by executive management to implement evidence based interventions to minimize the risk of patients acquiring a hospital associated infection
- Show case multidisciplinary groups efforts through storytelling
- Use days between infection/s as an indicator for improvement in outcomes.

Using the same reporting as outlined above provide the Infection Control Committee with bi-monthly reports for review and action. Following review forward to:

- Clinical Services administration for distribution and
- Riskman Q to capture quality improvement initiatives that are implemented by clinical staff in response to the findings or as a result of quality improvement intervention strategies.

What we are learning

Surveillance data should not be collect for the sake of data collection. Surveillance data needs to be feedback to clinical staff for review and action as needed.

Prevention of hospital associated infection requires a multidisciplinary team effort with support and endorsement from organization key opinion leaders and executive

HCW influenza vaccination rates

State target 75%

Influenza vaccination campaign

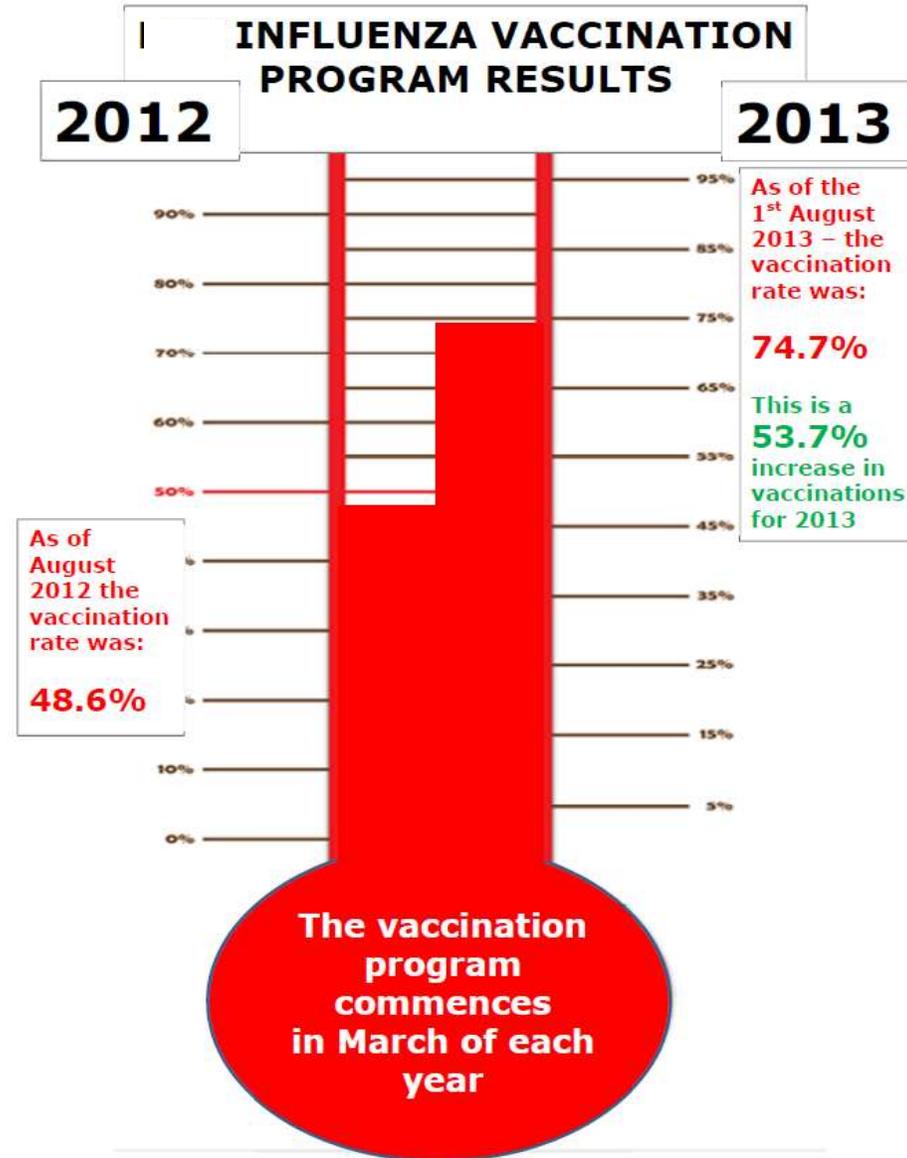
- ▶ Maintain the current marketing/promotional/vaccine availability strategies across all sites

2014 New!

- ▶ Set the benchmark at 80%
- ▶ Mandatory completion of employee consent/declination forms

2014 Results YTD

- ▶ **Local target > 80%**



Participate in hospital improvement teams

- ▶ Performance improvement teams
- ▶ The key outcome measure should clarify the aim and makes it tangible
- ▶ Integrate measurement into people's daily routine
- ▶ Plot data on the outcome measure over time
 - ▶ Run charts, control charts
- ▶ When people see that they can effect change, results will become more of a personal goal

Central line catheter maintenance bundle

- Minimise skin bioburden - Chlorhexidine wash (ICU patients)
- Device selection - Impregnated catheters
- Aseptic manipulation of catheter connectors - Scrub the hub!
- CHG impregnates sponge dressings
- Antimicrobial/antiseptic locks

Prevention possibility 70-100%

Participate in hospital improvement teams

- ▶ **Performance improvement teams**
- ▶ Improvement teams set attainable goals and get constant feedback
- ▶ The improvement goal, or aim, is:
 - ▶ Strategic
 - ▶ Relevant
 - ▶ Compelling
 - ▶ Important
 - ▶ A stretch (i.e., challenging but not unattainable)
 - ▶ Achievable
 - ▶ Unambiguous

Central line catheter insertion bundle

- Catheter checklist
- Hand hygiene
- Selection of correct catheter and insertion in optimal site
- Catheter insertion cart or kit
- Maximal barrier precautions
- Chlorhexidine (CHG)/alcohol skin antisepsis (prep)

Prevention possibility 70-100%

Participating in performance improvement teams

Institute of Healthcare Improvement - Project Joins

Susan S. Huang et al. Targeted versus Universal Decolonization to Prevent ICU Infection. May 29, 2013 NEJM

THE WALL STREET JOURNAL.
ASIA EDITION | Monday, March 11, 2013 At 6:53 PM EDT

Home World Asia China India Japan SE Asia Business Markets Tech
Arts & Entertainment Cars Books & Ideas Fashion Food & Drink **Health** Speakeasy Olympics

TOP STORES IN HEALTH & WELLNESS 1 of 8
Investing the Downward Dog Way
2 of 8
Lessons About Sound From the 17-Year Cicadas

THE INFORMED PATIENT | Updated March 11, 2013, 6:53 p.m. ET

Steps for Surgical Patients to Fight Infection

Article | Video | Comments (10)

Email | Print | Save | Facebook | Twitter | LinkedIn | A A

A new federally-funded program is trying to prevent one of the most persistent problems for those procedures: surgical site infections. Laura Landro joins Lunch Break. Photo: AP.

It was more than two weeks before David Dwyer was scheduled for a hip replacement, but already he was at the hospital, prepping. First he had his nose

CDC News
Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People.™

Home A-Z Home A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

CDC News Room

Digital Press Kit | Digital Press Kit Archives
This Page = Graphics/Charts | Multimedia | Speakeasies | Related Links

MRSA study: simple steps slash deadly infections in sickest hospital patients

Bloodstream infections cut by more than 40 percent in study of more than 24,000 patients

A **new study** on antibiotic-resistant bacteria in hospitals shows that using germ-killing soap and ointment on all intensive-care unit (ICU) patients can reduce bloodstream infections by up to 44 percent and significantly reduce the presence of methicillin-resistant *Staphylococcus aureus* (MRSA). Patients who have MRSA present on their bodies are at increased risk of developing a MRSA infection and can spread the germ to other patients.

Researchers evaluated the effectiveness of three MRSA prevention practices: routine care, providing germ-killing soap and ointment only to patients with MRSA, and providing germ-killing soap and ointment to all ICU patients. The study found:

- Routine care did not significantly reduce MRSA or bloodstream infections.
- Providing germ-killing soap and ointment only to patients with MRSA reduced bloodstream infections by any germ by 23 percent.
- Providing germ-killing soap and ointment to all ICU patients reduced MRSA by 37 percent and bloodstream infections by any germ by 44 percent.

The study, REDUCE MRSA trial, was published in the *New England Journal of Medicine* and took place in two stages from 2009-2011. A multidisciplinary team from the **University of California, Irvine**, **Harvard Pilgrim Health Care Institute**, **Hospital Corporation of America** (HCA) and the **Centers for Disease Control and Prevention** (CDC) carried out the study. A total of 24 adult ICUs and 24,256 patients were part of the study, making it the largest study on this topic to date.

Contact Information
CDC Media Relations
1-800-638-3090
media@cdc.gov

Speakeasies
- Tom Frieden, MD, MPH

Graphics / Images

"CDC invested in these advances in order to protect patients from deadly drug-resistant infections. We need to turn science into practical action for clinicians and hospitals. CDC is working to determine how the findings should inform CDC infection prevention recommendations."
Tom Frieden, MD, MPH - Director of the Centers for Disease Control and Prevention

Funded by the Agency for Healthcare Research and the Centers for Disease Control and Prevention; REDUCE MRSA

HH compliance program - what are the challenges?

- ▶ **Resource intensive**
 - ▶ Requires direct observations
- ▶ **Not always able to observe all 5 moments**
 - ▶ Some only observing in and out of the room
- ▶ **Hawthorn effect**
 - ▶ People altering there behaviour because they are being observed
- ▶ **High KPIs**
 - ▶ Selected as an outcome indictor

The screenshot shows the 'Resources For Healthcare Workers' page on the Hand Hygiene Australia website. The page features a blue header with the HHA logo and navigation tabs for 'For Healthcare Workers' and 'Online Learning Package'. A left-hand navigation menu lists various resources. The main content area includes a disclaimer about resource usage, followed by six categories of resources: Manual, Auditing, Education, FAQs about, Promotion, and HHA e-bulletin. Each category is represented by a small image and a label.

Hand Hygiene Australia
For Healthcare Workers | Online Learning Package

Resources For Healthcare Workers

All materials in this resource section are able to be freely downloaded and used by all healthcare workers. HHA encourages the use of these resources to help develop and sustain your own Hand Hygiene programs. All resources can have individual facility logos added to them, but to guarantee that the message remains the same we would like to ensure that the HHA logo remains and that the content is not changed.

- Manual**: Images of hand hygiene manuals and brochures.
- Auditing**: Images of auditing checklists and forms.
- Education**: Images of educational materials and posters.
- FAQs about-**: Images of question marks.
- Promotion**: Images of promotional materials and posters.
- HHA e-bulletin**: Images of e-bulletin newsletters.

HH compliance program - how accurate is compliance data?

- ▶ **Recent HH compliance publications**
- ▶ **Kingston L et al. Hand hygiene-related clinical trials reported since 2010: a systematic review. *Journal of Hospital Infection* 92 (2016) 309-320**
 - ▶ Systematic search for peer-reviewed, published studies
 - ▶ “We concluded that adopting a multimodal approach to hand hygiene improvement intervention strategies, **whether guided by the WHO framework or by another tested multimodal framework, results in moderate improvements in hand hygiene compliance**”.
- ▶ **Hand hygiene compliance: are we kidding ourselves? Editorial, *Journal of Hospital Infection* 92 (2016) 307-308**
 - ▶ “It is clear that **monitoring hand hygiene compliance using direct observation is flawed** and that electronic devices/methods in combination with smaller observational audits using appropriately trained staff would enable a better assessment.....
 - ▶ Hence, in an era of multi-resistant Gram-negative bacteria, **it is now time to take stock and consider that we have spent a number of years performing research on hand hygiene with little evidence that any particular strategy works**. Perhaps future research should be focused not on campaigns to improve hand hygiene at all costs, but on understanding when hand hygiene is most beneficial, setting reasonable, achievable targets, and then monitoring using validated, reproducible methods”.
- ▶ **Scheithauer S et al. Workload even affects hand hygiene in a highly trained and well-staffed setting: a prospective 365/7/24 observational study. *Journal of Hospital Infection* 97 (2017) 11-16**
 - ▶ “**Calculated compliance was inversely associated with nurses’ workload. Hand-rub activities (HRA)/patient-day (PD), observer-determined compliance and amount of disinfectant dispensed were used as surrogates for compliance, but did not correlate with actual compliance** and thus should be used with caution”.

HH compliance program - how accurate is compliance data?

- ▶ *Yen Lee Angela Kwok et al. Automated hand hygiene auditing with and without an intervention. American Journal of Infection Control 44 (2016) 1475-80*
- ▶ “HHA rates (Hand Hygiene Australia human audits) for June 2014 were 85% and 87% on the medical and surgical wards, respectively.
- ▶ **These rates were 55 percentage points (PPs) and 38 PPs higher than covert automation rates for June 2014 on the medical and surgical ward at 30% and 49%, respectively.**
- ▶ During the intervention phase, average compliance did not change on the medical ward from their covert rate, whereas the surgical ward improved compared with the covert phase by 11 PPs to 60%.
- ▶ On average, compliance during the intervention without being refreshed did not change on the medical ward, whereas the average rate on the surgical ward declined by 9 PPs”.

American Journal of Infection Control 44 (2016) 1475-80

Contents lists available at ScienceDirect

 American Journal of Infection Control 

journal homepage: www.ajicjournal.org

Major Article

Automated hand hygiene auditing with and without an intervention 

Yen Lee Angela Kwok MBBS, MPH, MHM, PhD^a, Craig P. Juergens MBBS, DMedSc, FRACP^b,
Mary-Louise McLaws DipTropPubHlth, MPHlth, PhDMed^{a,*}

^a School of Public Health and Community Medicine, UNSW Medicine, UNSW Australia, Sydney, NSW, Australia
^b Southwestern Sydney Clinical School, UNSW Medicine, UNSW Australia, Sydney, NSW, Australia

Key Words:
Intervention
Technology
Hawthorne effect
Compliance
Behavior

Background: Daily feedback from continuous automated auditing with a peer reminder intervention was used to improve compliance. Compliance rates from covert and overt automated auditing phases with and without intervention were compared with human mandatory audits.

Methods: An automated system was installed to covertly detect hand hygiene events with each depression of the alcohol-based handrub dispenser for 5 months. The overt phase included key clinicians trained to share daily rates with clinicians, set compliance goals, and nudge each other to comply for 6 months. During a further 6 months, the intervention continued without being refreshed. Hand Hygiene Australia (HHA) human audits were performed quarterly during the intervention in accordance with the World Health Organization guidelines. Percentage point (PP) differences between compliance rates were used to determine change.

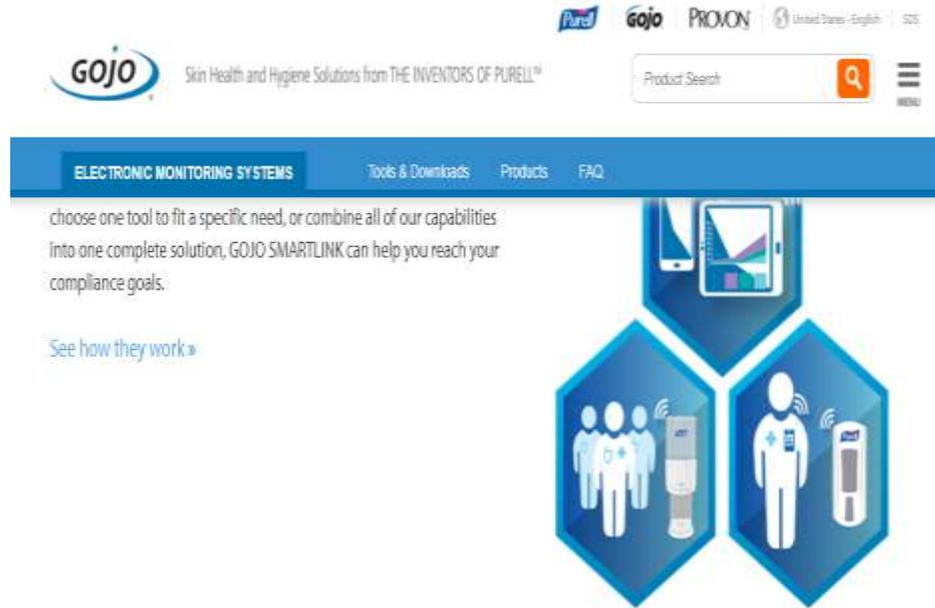
HH compliance program - the way forward?

▶ Education and training

- ▶ Online learning modules and competency based training
- ▶ Use of florescent markers for HH training
- ▶ Just-in-time peer review

▶ Monitoring compliance

- ▶ Electronic devices/methods in combination with smaller observational audits using appropriately trained staff would enable a better assessment
 - ▶ Observations without the Hawthorne effect
 - ▶ These technologies are rapidly developing and improving



The screenshot shows the GOJO website header with logos for Purell, Gojo, and PROXON. Below the header is a navigation bar with 'ELECTRONIC MONITORING SYSTEMS' highlighted. The main content area features a blue background with a central graphic of three hexagons. The top hexagon contains a smartphone and a tablet. The bottom-left hexagon shows three stylized human figures. The bottom-right hexagon shows a single stylized human figure. Text on the page reads: 'choose one tool to fit a specific need, or combine all of our capabilities into one complete solution, GOJO SMARTLINK can help you reach your compliance goals.' and 'See how they work »'.



Seamless Integration

GOJO SMARTLINK Hand Hygiene Technology is engineered to easily fit into GOJO® touch-free dispensers, eliminating the need for special equipment. Once the module is in place, it can monitor real-time use and transmit that data for review.

[Find how easy it can be »](#)

HH compliance program - the way forward?

- ▶ **Key performance indicator (KPI)**
 - ▶ Rather than an outcome indicator consider HH as a **process indicator**
 - ▶ Audit program in place as a KPI rather than a compliance target/benchmark
 - ▶ Setting reasonable, achievable targets
 - ▶ Less frequent auditing
 - ▶ Fewer number of observations
- ▶ **Research**
 - ▶ Encourage further research
 - ▶ Understanding when hand hygiene is most beneficial
 - ▶ Monitoring using validated, reproducible methods

Hand Hygiene Compliance Monitoring Systems
Automated, Reliable. Results.

Home > Solutions > Infection Prevention > Compliance Monitoring

Halyard takes a human-centered approach when evaluating healthcare solutions, considering clinical outcomes and clinician workflow needs.

We understand how to design for human behaviors with hygiene solutions and brands that interact with more than one billion people every day.

[Browse Products](#) [Watch the video to learn more about automated compliance monitoring](#)

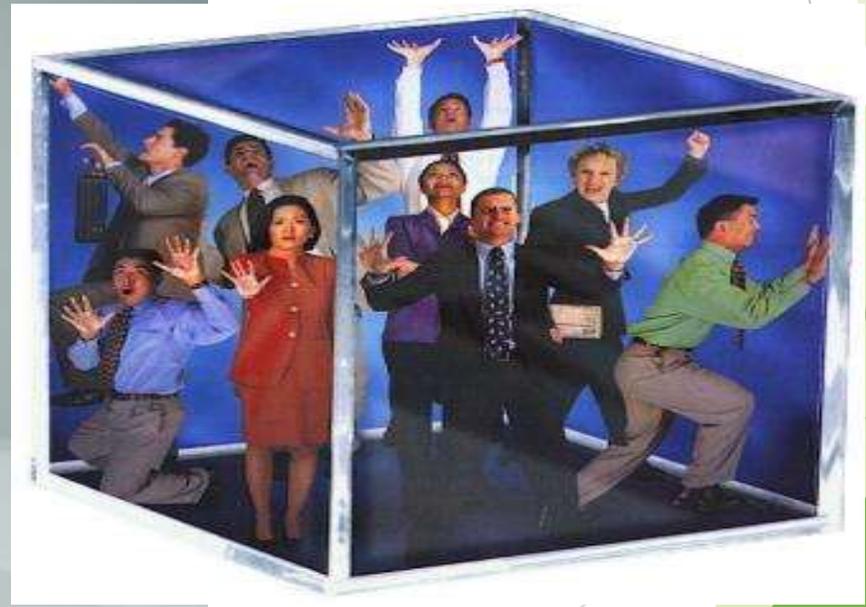
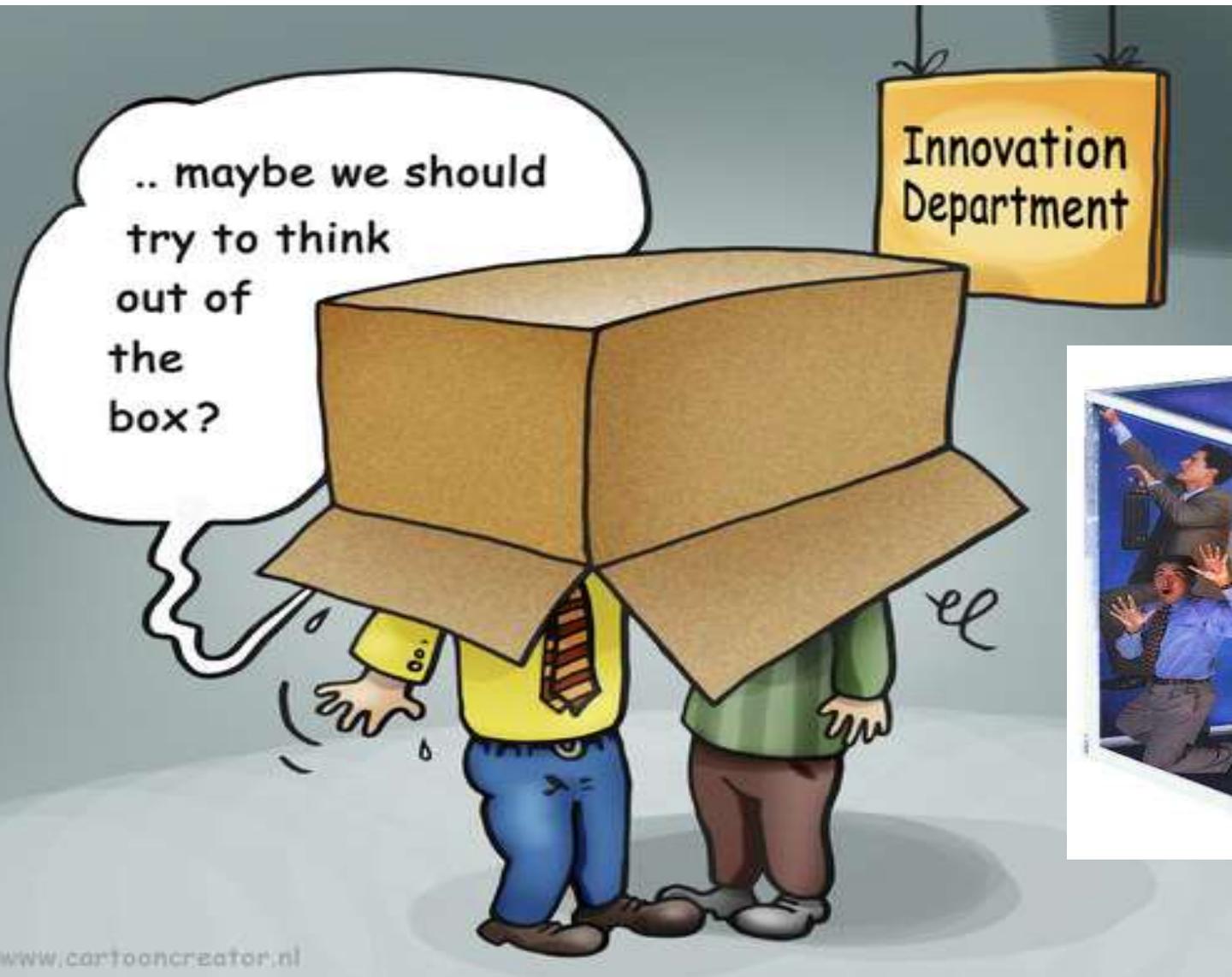


Automated: Replaces "Secret Shoppers"

Using Secret Shopper sampling methods, hospitals may overestimate their actual hand hygiene compliance rates; in fact, hand washing compliance is closer to 40% according to the CDC¹.

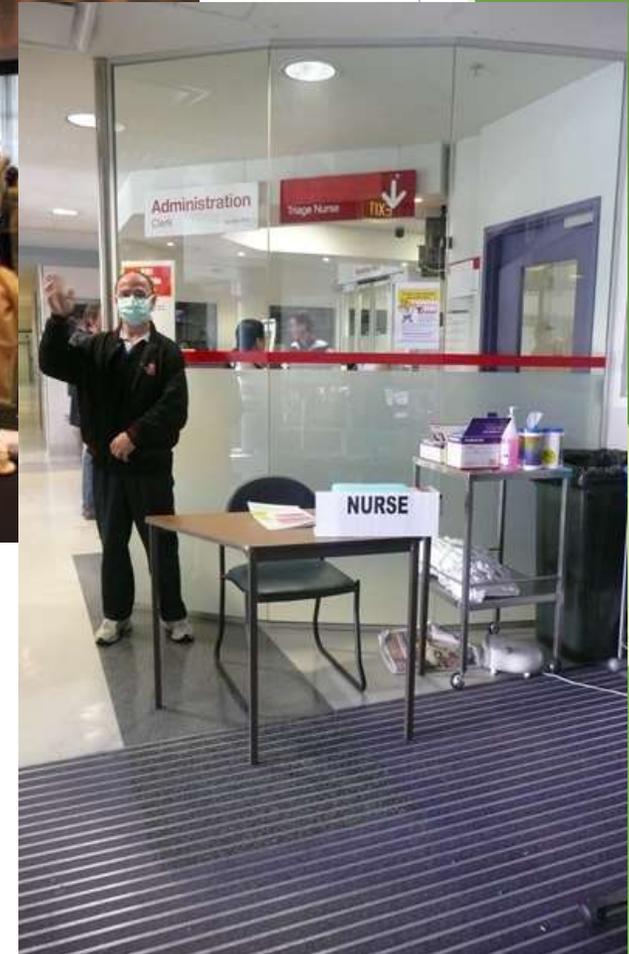
Reliable: Active 24/7/365

Education and training - be innovative!



Education and training programs

- ▶ Organise an education and training program
 - ▶ Policies and procedures
 - ▶ New scientific innovations
 - ▶ Technological innovations
 - ▶ Safety devices
 - ▶ New skills
 - ▶ Isolation procedures
 - ▶ Donning and removing PPE
 - ▶ Aseptic technique practices
 - ▶ Prevention of blood and body fluid exposures
 - ▶ Problems occurring in your facility



Education and training programs

- ▶ Organise an education and training program
 - ▶ Assess the effectiveness of education interventions
 - ▶ Proxies for compliance
 - ▶ Isolation room set up
 - ▶ Random knowledge quiz
 - ▶ Review/audit of practices
 - ▶ CVC insertion practises
 - ▶ Urinary catheter policy



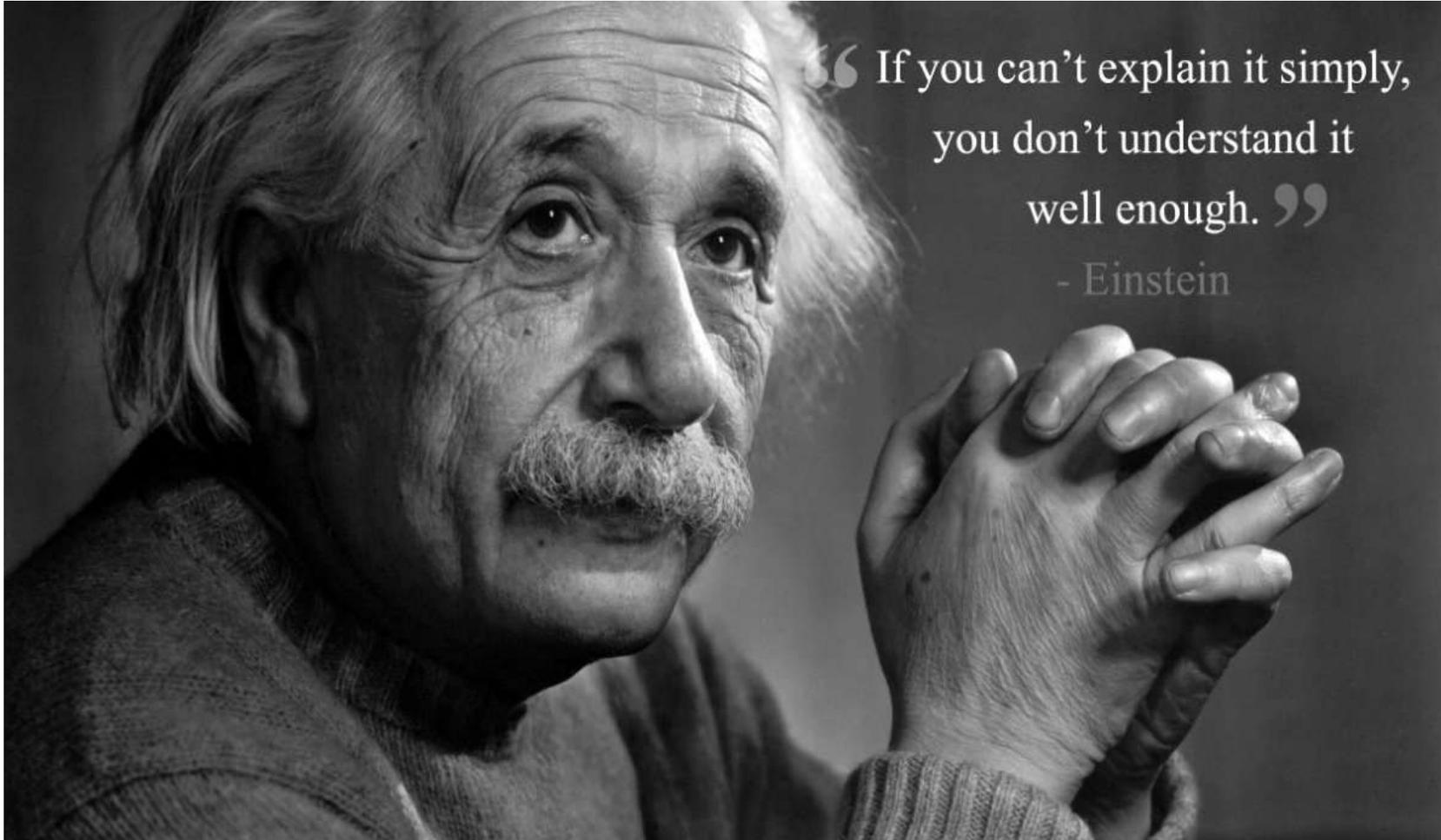
Training techniques

- Adult learning styles that will stimulate behaviours change
 - Simulated exercises
 - Video/computer technology
- Must meet the needs of varying educational background and work responsibilities



Education and training

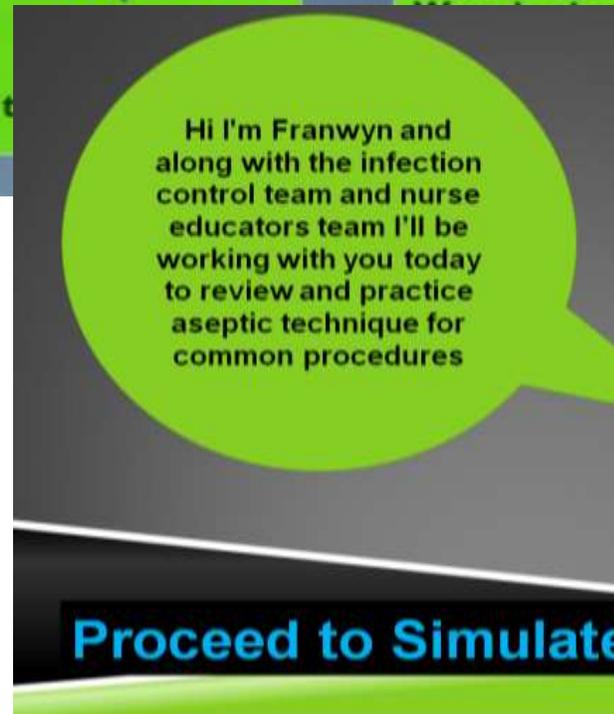
Translating the evidence and science of infection prevention and control



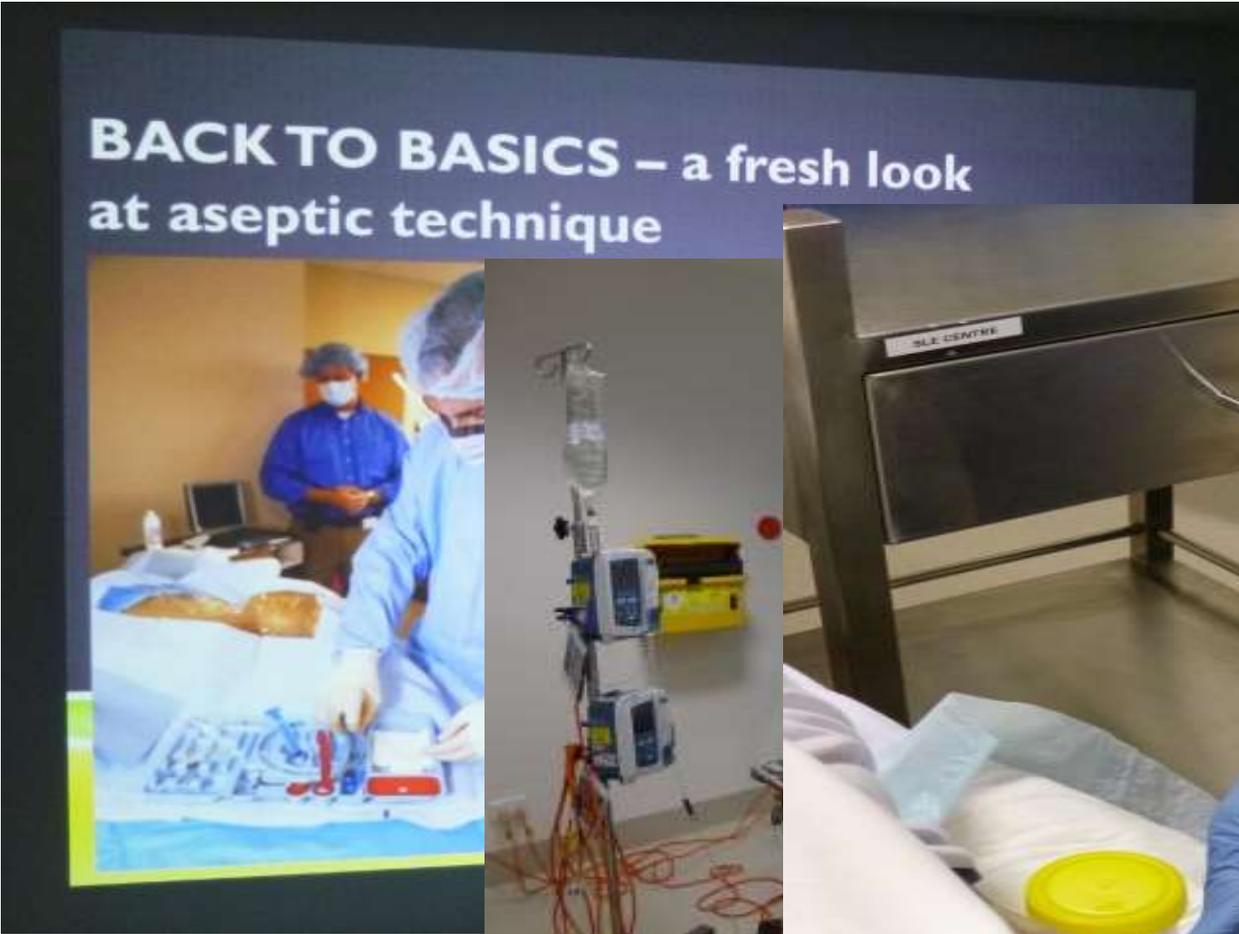
Education and training -Training and compliance in aseptic technique

Accreditation requirement -100% compliance

- ▶ 3.10 Developing and implementing protocols for aseptic technique
- ▶ 3.10.1 The clinical workforce is trained in aseptic technique
- ▶ **Meeting the requirement**
 - ▶ Online PowerPoint training
 - ▶ Simulated Training and Ongoing Annual Credentialing in Aseptic Technique
 - ▶ Annual just-in-time peer review



Education and training - Training and compliance in aseptic technique



Education and training - Improving compliance with transmission based precautions

Accreditation requirement - monitoring program

- ▶ Checklist
- ▶ Monitoring room set up for contact, droplet and airborne precautions
- ▶ Immediate feedback
- ▶ Just-in-time
- ▶ Report % compliance
 - ▶ Governance oversight

INFECTION CONTROL QUALITY IMPROVEMENT INITIATIVE
INFECTION CONTROL ISOLATION SET-UP – CHECKLIST WITH FEEDBACK

APPENDIX 1 – CHECKLIST TO BE PROVIDED TO WARD NUM

DATE	
WARD	
ROOM	
DISEASE/ORGANISM	
TYPE OF ISOLATION REQUIRED	
<ul style="list-style-type: none"> ▪ STANDARD ▪ CONTACT ▪ AIRBORNE 	

EQUIPMENT/SUPPLIES	YES	NO	N/A
Trolley outside room for PPE			
Alcohol hand rub available			
Door closed			
Gowns available			
Gloves available			
Mask available			
N95 mask available			
Isolation sign in place			
Correct isolation sign for disease/microorganism			

Checked by:.....(Infection Control Team)

Education and training - Improving compliance with transmission based precautions

Results - 2mths (8 weeks) between 02/04/2014 – 28/05/2014

TOTAL NUMBER OF ROOMS AUDITED	TOTAL COMPLIANT WITH TRANSMISSION BASED PRECAUTIONS	% COMPLIANT WITH CONTACT PRECAUTIONS	% COMPLIANT WITH CONTACT & AIRBOURNE PRECAUTIONS	% COMPLIANT WITH DROPLET PRECAUTIONS	% COMPLIANT WITH AIRBORNE PRECAUTIONS
47 ROOMS	27/47 (57%)	23/42 (55%) Patients were in Contact Precautions for the following organisms: <ul style="list-style-type: none"> • C.difficile • MRSA • VRE • Viral gastroenteritis • Localized shingles 	1/2 (50%) Patients were in Airborne/Contact precautions for the following infectious disease: <ul style="list-style-type: none"> *Disseminated Shingles 	1/1 (100%) Patients were in Droplet precautions for the following infectious disease: <ul style="list-style-type: none"> • RSV 	2/2 (100%) Patients were in Airborne precautions for the following infectious disease: <ul style="list-style-type: none"> • Query TB

Education and training - be innovative!

Storytelling videos

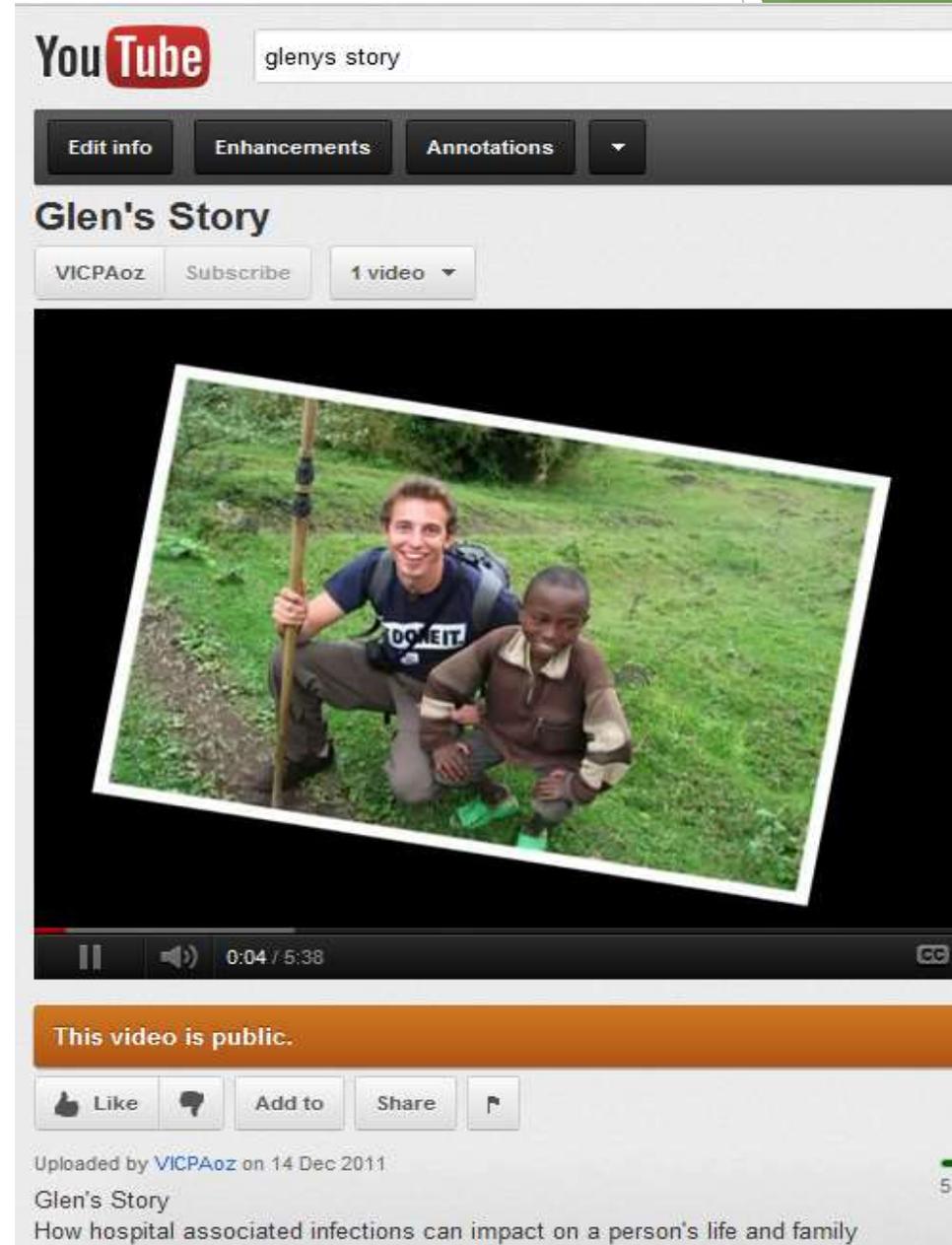
Glen's Story

How Hospital Associated Infections Can
Impact on a Person's Life and Family

Produced by The Victorian Infection
Control Professionals Association (VICPA)

The video is now available on YouTube

<http://www.youtube.com/watch?v=RIsBB6TmZvA>



The image shows a screenshot of a YouTube video player. At the top, the YouTube logo is visible on the left, and a search bar contains the text "glenys story". Below the search bar are three buttons: "Edit info", "Enhancements", and "Annotations". The video title "Glen's Story" is displayed in a large font. Underneath the title, there are three buttons: "VICPAoz", "Subscribe", and "1 video" with a dropdown arrow. The video player itself shows a still image of two people, a man and a woman, crouching in a grassy field. The man is holding a long wooden staff. The video player controls at the bottom show a play button, a volume icon, and a progress bar indicating 0:04 / 5:38. Below the video player, there is a message "This video is public." and a row of buttons: "Like", "Add to", "Share", and a flag icon. At the bottom of the page, it says "Uploaded by VICPAoz on 14 Dec 2011" and "Glen's Story" followed by the description "How hospital associated infections can impact on a person's life and family".

Managing outbreaks, adverse events and critical incidents

▶ Critical Incident

- ▶ Sterilizer failure
- ▶ Legionella in hospital cooling tower/water system
- ▶ A case of measles
- ▶ Influenza season
- ▶ Middle East Respiratory Syndrome Coronavirus, known as **MERS-CoV**

▶ Critical Incident Team

- ▶ Focal point for flow of information
- ▶ Coordination of investigations
- ▶ Develop
 - ▶ Intervention strategies
 - ▶ Communicate strategies
- ▶ Determine the costs
- ▶ Maintain a log of events
- ▶ Prepare a final report

394 SHARES     NOW READING Hong Kong private hospitals

News / Hong Kong / Health & Environment

Hong Kong private hospital wards overflow amid flu peak

Civil service doctors doing admin or research office hours

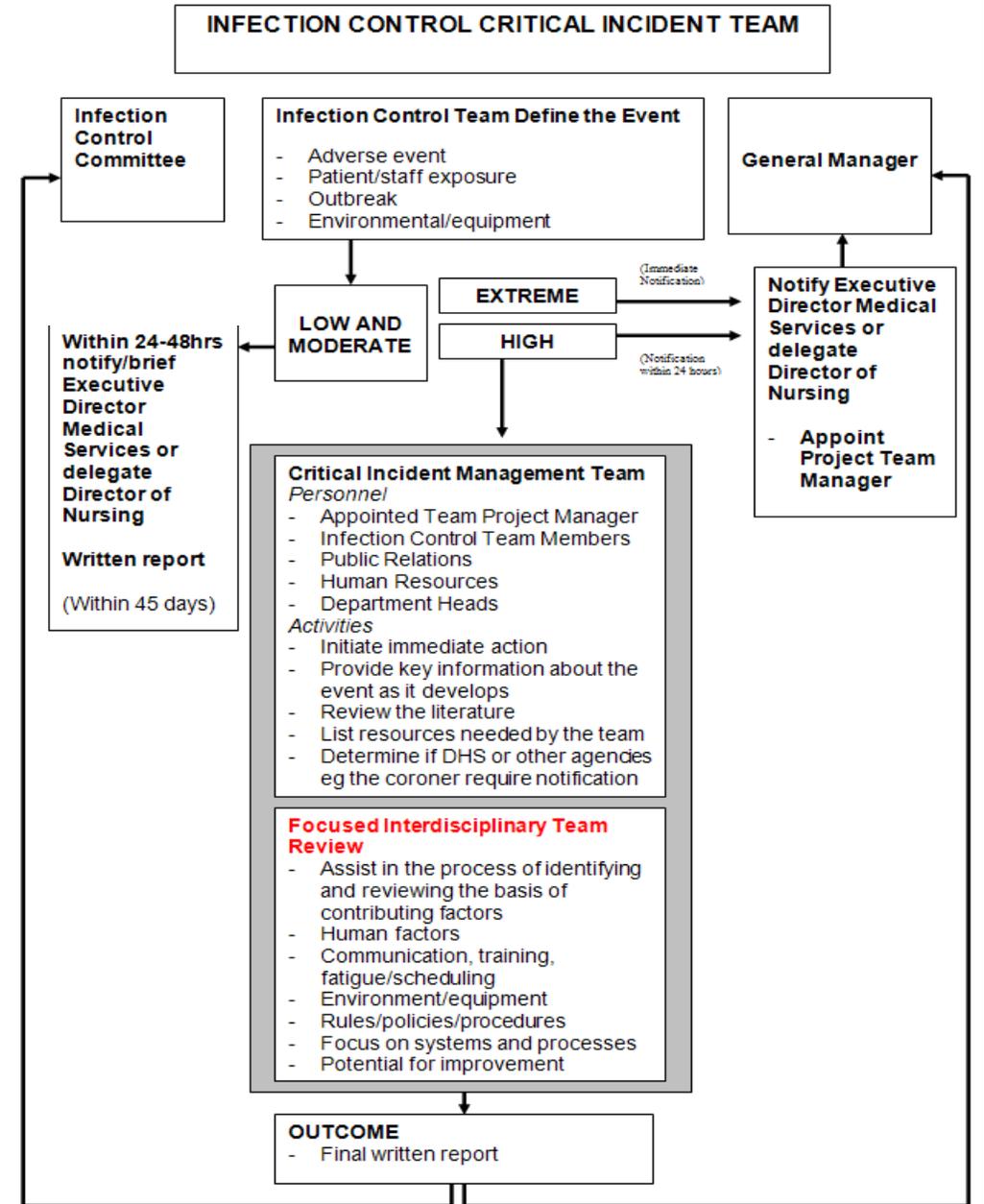
PUBLISHED : Monday, 17 July, 2017, 7:14pm
UPDATED : Thursday, 20 July, 2017, 11:14am



Emily Tsang
Peace Chiu

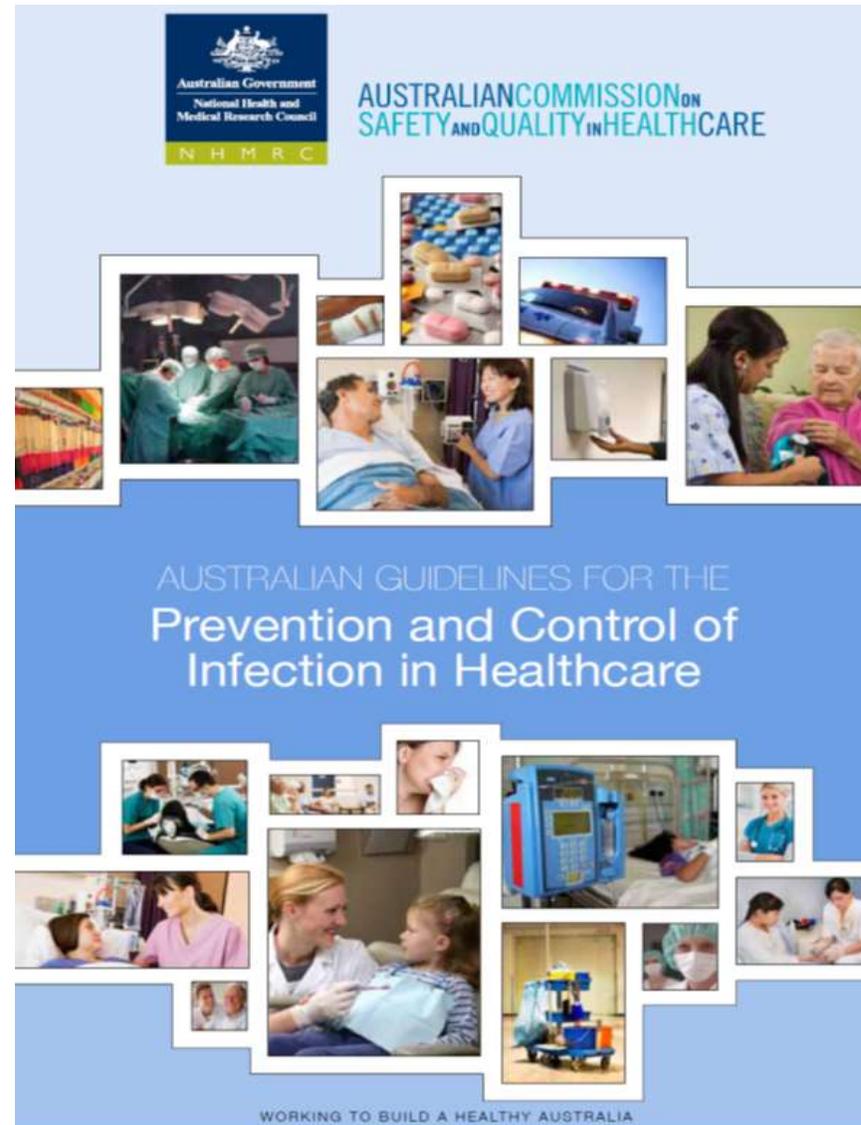
Private hospitals will be struggling to cope with flu season.

394 SHARES



Policies/procedure development and maintenance

- ▶ **Policies and procedures**
 - ▶ Scientifically valid
 - ▶ Appropriate literature review
 - ▶ Surveillance data
 - ▶ MDROs
 - ▶ Institutions experience
 - ▶ Professional practice guidelines
 - ▶ Regulatory requirements
 - ▶ Occupational health and safety requirements
- ▶ Should lead to improved prevention or improved patient outcomes



Policies/procedure development and maintenance

► Policies and procedures

- Scientifically valid
 - Appropriate literature review
 - Surveillance data
 - MDROs
 - Institutions experience
 - Professional practice guidelines
 - Regulatory requirements
 - Occupational health and safety requirements
- Should lead to improved prevention or improved patient outcomes

The screenshot displays the website of the Centre for Health Protection (CHP), Department of Health, Government of the Hong Kong Special Administrative Region. The page is titled "Infection Control Corner" and is categorized under "General public". It lists various guidelines and resources, including:

- Advice on Household Disinfection at the Height of Influenza Season (82.00 Kb)
- General Principles of Personal, Home and Environment Hygiene
- Guidance note on monitoring of body temperature (67.42 Kb)
- Perform Hand Hygiene Properly (243.97 Kb)
- Hand hygiene and infection control measures procedures demonstration - video
- Health Advice on Using Drinking Fountains (33.53 Kb)
- Health Education Pamphlet: Multi-Drug Resistant Organisms (MDROs) (1.09 Mb / Web Accessible Version)
- Health Education Pamphlet: Prevent Antimicrobial Resistance - NEW (1.04 Mb)
- Public Health Advice for Play Facilities (78.83 Kb)
- The Use of Bleach (44.89 Kb)
- Use Mask Properly (328.04 Kb)

Under the "Institutions and businesses" section, it lists:

- Hotel Industry**
 - Guidelines on infection control of commercial spa pools (283.03 Kb)
 - Guidelines on Infection Control & Prevention in Hotel Industry (72.26 Mb / Web Accessible Version)
- Schools**
 - Advice to School on Prevention of Middle East Respiratory Syndrome (104.62 Kb)
 - Guidelines on Prevention of Communicable Diseases in Schools / Kindergartens / Kindergartens-cum-Child Care Centres / Child Care Centres - Full text (revised in Jun 2014) (887.89 Kb)
 - Guidelines on Prevention of Communicable Diseases in Schools / Kindergartens / Kindergartens-cum-Child Care Centres / Child Care Centres - Video (38.08 Kb)
 - Guidelines On The Prevention Of Blood-Borne Diseases In Schools (2001) (94.95 Kb)
- Residential Care Home for the Elderly**
 - Guidelines on Prevention of Communicable Diseases in Residential Care Homes for the Elderly (3rd Edition January 2015) (2.40 Mb)
 - Hand Hygiene & Infection Control in RCHEs Educational Videos (183.79 Kb)
- Residential Care Homes for Persons with Disabilities**
 - Guidelines on Prevention of Communicable Diseases in Residential Care Homes for Persons with Disabilities (February 2011) (18.73 Mb)
- Skin Penetration Practice**
 - Recommended Guidelines on Infection Control For Skin Penetration Practice (2.05 Mb / Web Accessible Version)

Compliment policies with infection control quick reference factsheets

Insert hospital name – Infection Control Factsheet

Viral Gastroenteritis (i.e. Norovirus, Rotavirus)



Viral gastroenteritis is a common illness and outbreaks are often encountered in hospital settings.

A number of different viruses can cause the symptoms of gastroenteritis and these include the Norovirus and Rotavirus. Noroviruses are the most common cause of gastroenteritis in the community and healthcare setting.

Signs and symptoms

Acute onset of diarrhoea (non-bloody/loose or watery bowel actions: 6 or 7 on the Bristol stool scale), with or without vomiting is the most common symptom of viral gastroenteritis. Those affected may also have nausea, abdominal cramps and low grade fever. Symptoms usually last 24-72 hours.

30% of those infected may be asymptomatic.

Communicability

Excretion of the virus begins a few hours before the onset of symptoms and can continue for up to 2 weeks or more after recovery. Maximum shedding of the virus occurs 24-72 hours after exposure.

Incubation period

The incubation for viral gastroenteritis is short – usually 24 – 48 hours but can occur within 12 hours of exposure.

How infection spreads

The illness is spread by the faecal/oral route either by consumption of contaminated food or water or direct person to person spread.

Noroviruses are highly contagious and only 10 viral particles are needed to infect someone. Typically, an infected person with symptoms spreads the illness by direct contact with others or by contamination of surfaces e.g. door handles, furniture, bed linen.

Control of infection

Infection Prevention and Control measures are focused on minimising the spread of the virus within and between wards and departments.

Ensuring heightened sensitivity to "cases" with similar symptoms in the same geographical location over a similar time period and implementing outbreak control measures as soon as possible is imperative to successfully containing an outbreak.

Avoid moving "cases" as those sharing rooms will already have been exposed and are likely to be incubating the virus. Moving cases and **cohabiting** may inadvertently lead to extending an outbreak by exposing more patients to the virus.

Notify Infection Control as soon as possible so they can assist with confirming and managing the outbreak.

Notify Environmental Services to advise heightened cleaning and disinfection of affected rooms/ward.

Hand Hygiene

Practicing good hand hygiene and keeping hands away from your face and mouth will reduce the risk of acquiring the virus and spreading gastroenteritis between staff, patients and visitors.

Contact Precautions –

- Place a "Contact Precautions" sign on the patient's door
- Gloves and gowns are to be worn when entering the patient's room
- Gowns and gloves are to be single use only and must be removed on leaving the room
- Wash or disinfect hands immediately after removing gloves and gown
- Staff and visitors should avoid hand/face contact
- All shared equipment should be cleaned and disinfected before removal from the room and use on another patient.

Exclusion

Staff with symptoms of viral gastroenteritis must be symptom free for 48 hours before returning to work. Sick staff presenting with symptoms at work should go home as soon as possible.

Visitors with symptoms within the previous 48 hours should be discouraged.

For further information contact:

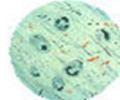
Insert local contact details or leave this section out

Reference –

Alfred Health, Infection Control & Hospital Epidemiology Unit.

Insert hospital name – Infection Control Factsheet

Tuberculosis (TB)



What is Tuberculosis?

Tuberculosis (TB) is an acute or chronic infection caused by *Mycobacterium tuberculosis* that usually affects the lungs but may also affect other parts of the body. Tuberculosis is an uncommon disease in Australia. The most infectious persons are those with open pulmonary or laryngeal tuberculosis. Laryngeal tuberculosis is very uncommon. Patients with extra-pulmonary tuberculosis are not infectious (e.g. renal TB).

How is Tuberculosis spread?

TB may be spread via the air when a person with open pulmonary TB of the lungs coughs, sneezes, laughs or shouts. These organisms can stay in the air for long periods of time, depending on the environmental circumstances. People who breathe in the air containing these organisms can become infected.

What is the difference between active and latent Tuberculosis?

People with latent Tuberculosis have non-active organisms in their lungs or other tissues and most of these people never develop Tuberculosis disease. They do not have symptoms and cannot spread the organisms to others. However some of these people may develop Tuberculosis disease (reactivation) in the future.

People with active Tuberculosis disease generally are unwell and show signs and symptoms. People with active disease of the lungs or throat are capable of spreading the organisms to others.

What are the symptoms?

The general symptoms of TB disease include:

- Cough
- Tiredness
- Night sweats
- Weight loss
- Fever
- Coughing up bloody sputum

Who is at risk of contracting Tuberculosis?

Everyone is at risk of infection however some groups are more susceptible to infection and progression to active disease (reactivation) than others.

Groups at risk include:

- Migrants and refugees
- Those in close contact with a person with active Tuberculosis disease
- Aboriginals and Torres Strait Islanders
- Immunosuppressed persons
- People living with HIV infection and AIDS
- The elderly
- Diabetics
- People who are drug and alcohol dependent
- People living in substandard, overcrowded conditions
- Health professionals

What is the period of communicability?

The infected person can spread Tuberculosis for as long as there are active organisms in their sputum. The risk of transmission is significantly reduced within two weeks after commencing appropriate treatment.

How do you get tested for Tuberculosis?

If your doctor suspects that you have active TB or have been infected with the Tuberculosis organism, a skin test can be done, a chest x-ray may be taken or sputum can be tested.

How is Tuberculosis treated?

Active Tuberculosis disease can be treated with medication. It may take up to six months to cure Tuberculosis disease, sometimes longer.

Patient Management

Whilst in hospital and infectious, patients with open pulmonary or laryngeal TB need to be transferred to a hospital with a negative ventilated room which is no longer infectious. All staff and visitors must comply with Standard and Airborne precautions including the wearing of an N95 mask.

For further information contact

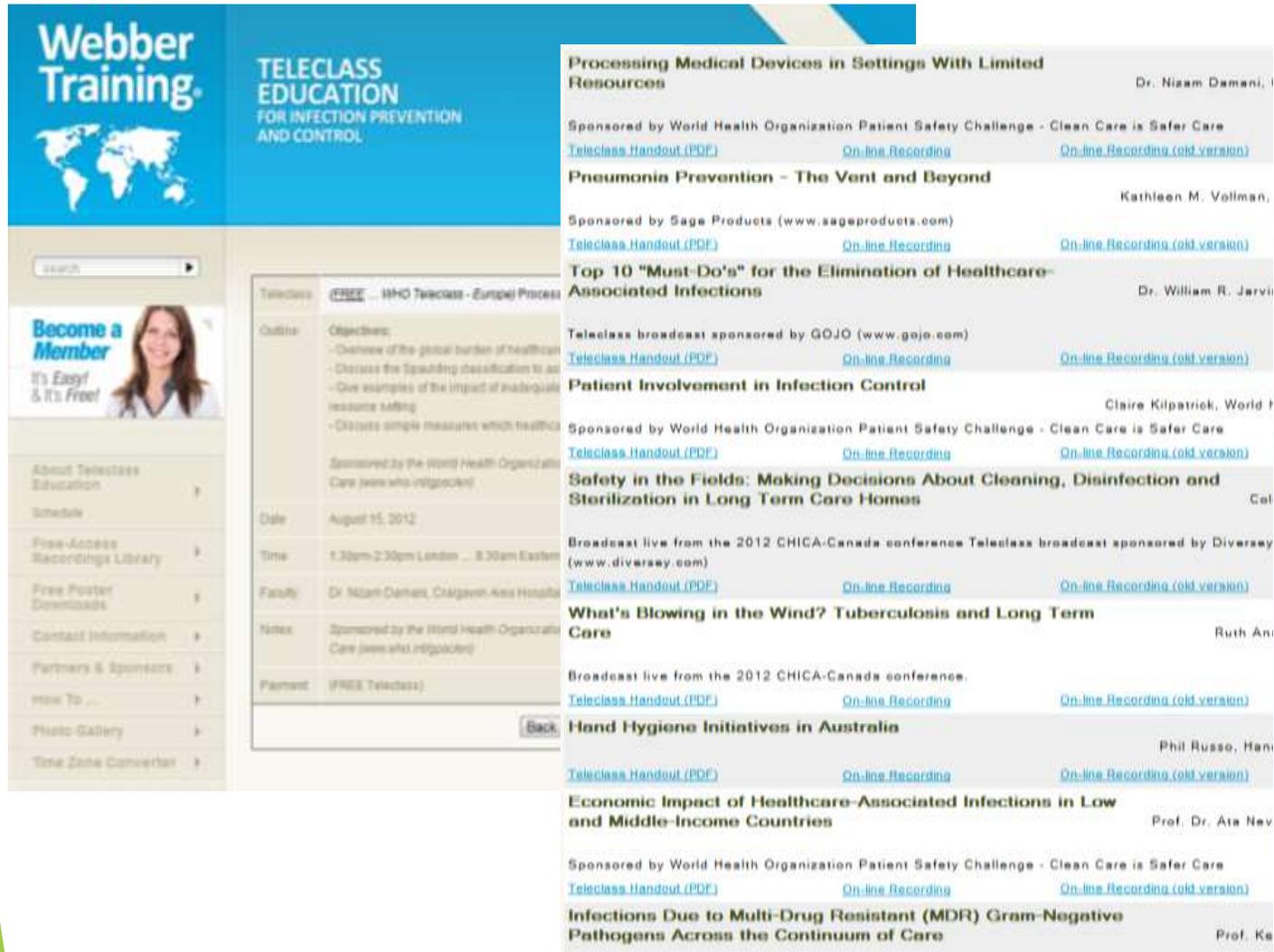
Insert local contact details or leave this section out

Image obtained from Centers for Disease Control and Prevention web site

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Outline: Objectives:
- Discuss the global burden of healthcare-associated infections
- Discuss the Spaulding classification to assess the impact of inadequate resource setting
- Discuss simple measures which healthcare facilities can implement to reduce the burden of healthcare-associated infections

Sponsored by the World Health Organization Patient Safety Challenge - Clean Care is Safer Care (www.who.int/goacc)

Date: August 15, 2012
Time: 1:30pm-2:30pm London ... 8:30am Eastern
Faculty: Dr. Nizam Damani, Chicago-Kook Health
Notes: Sponsored by the World Health Organization Patient Safety Challenge - Clean Care is Safer Care (www.who.int/goacc)
Payment: (FREE Teleclass)

Processing Medical Devices in Settings With Limited Resources
Dr. Nizam Damani, Chicago-Kook Health
Sponsored by World Health Organization Patient Safety Challenge - Clean Care is Safer Care
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Pneumonia Prevention - The Vent and Beyond
Kathleen M. Vollman, Chicago-Kook Health
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Top 10 "Must-Do's" for the Elimination of Healthcare-Associated Infections
Dr. William R. Jarvis, Chicago-Kook Health
Teleclass broadcast sponsored by GOJO (www.gojo.com)
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Patient Involvement in Infection Control
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Safety in the Fields: Making Decisions About Cleaning, Disinfection and Sterilization in Long Term Care Homes
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Broadcast live from the 2012 CHICA-Canada conference Teleclass broadcast sponsored by Diversey (www.diversey.com)
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Hand Hygiene Initiatives in Australia
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Economic Impact of Healthcare-Associated Infections in Low and Middle-Income Countries
Prof. Dr. Ata Nav...
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Infections Due to Multi-Drug Resistant (MDR) Gram-Negative Pathogens Across the Continuum of Care
Prof. Ka...

“And you didn’t clean your hands why?”



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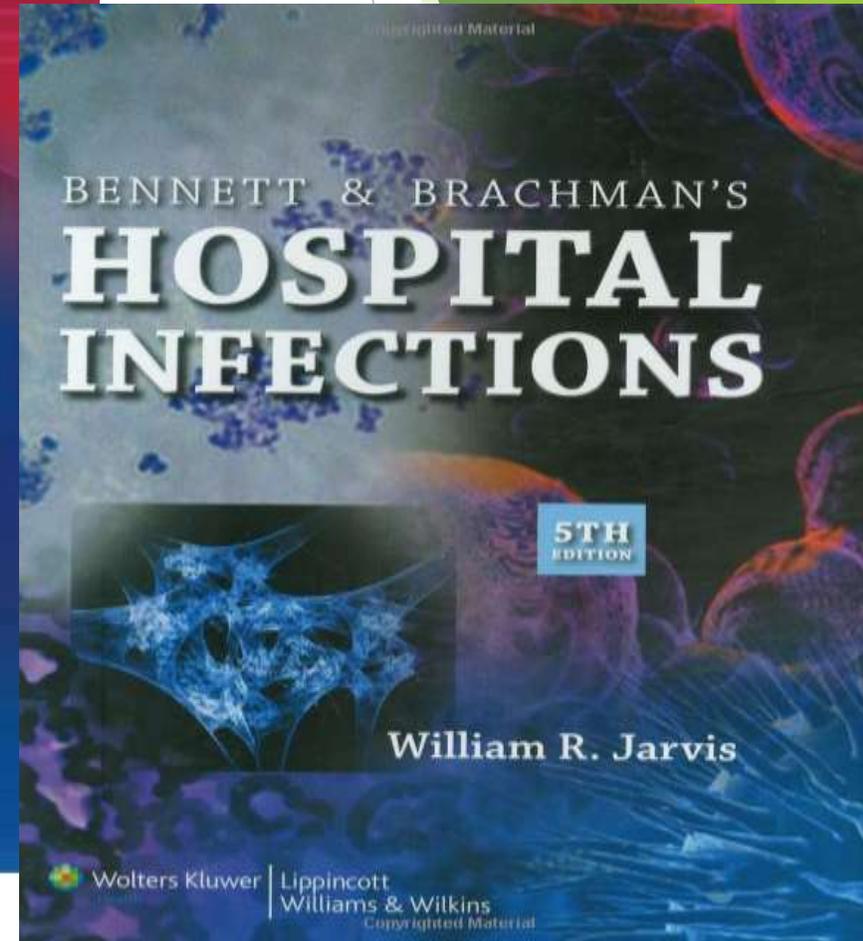
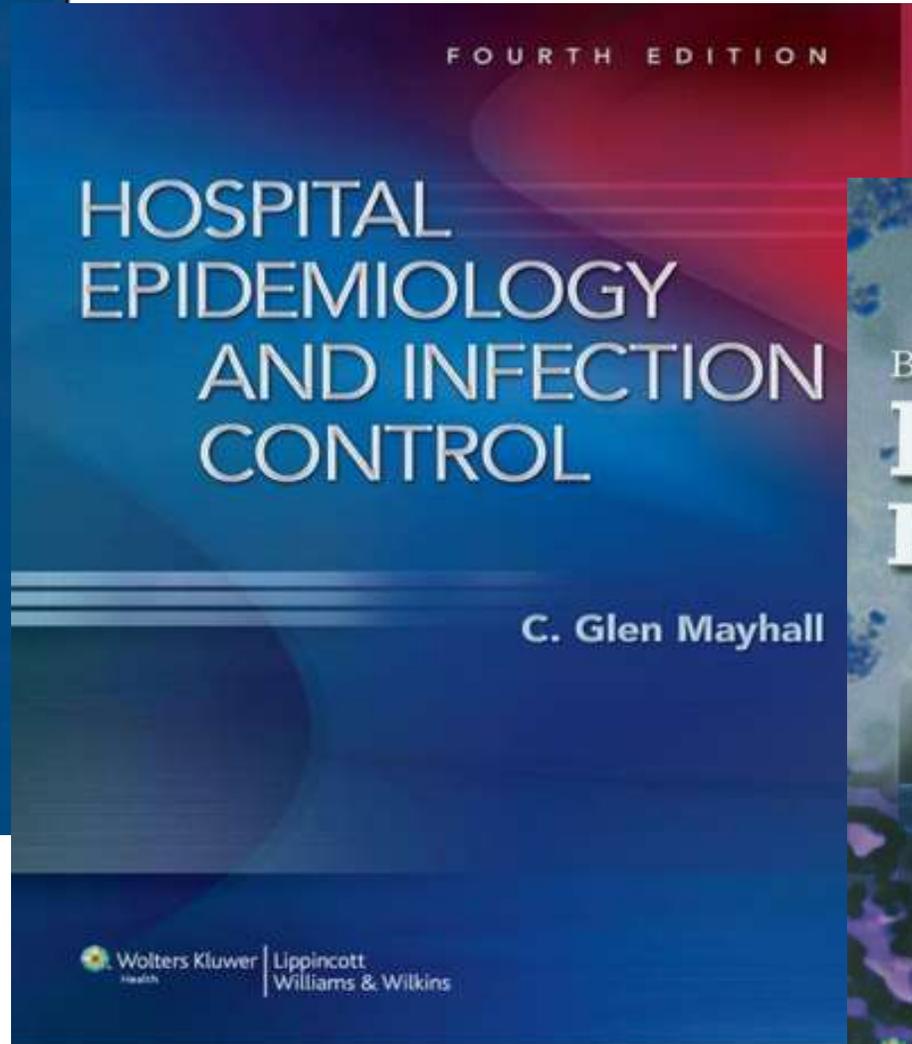
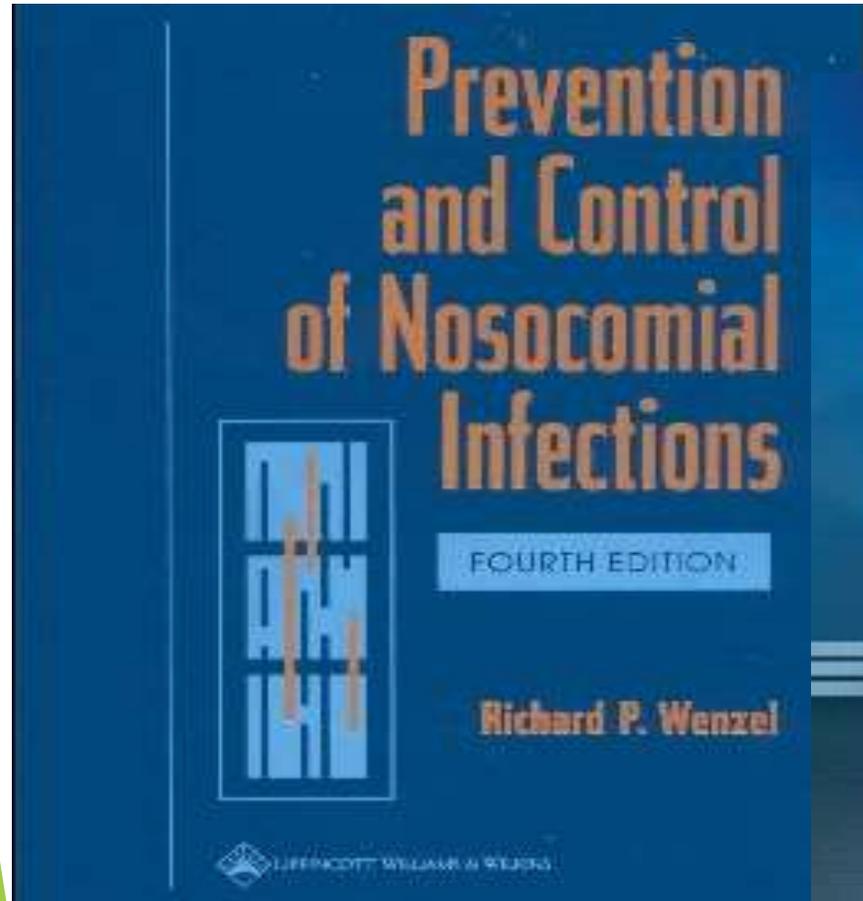
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Keeping up-to-date - journal reading

The image displays the website for the American Journal of Infection Control (AJIC), which is the official journal of the Healthcare Infection Society. The page is divided into several sections:

- Header:** Features the journal title "Infection Control & Hospital Epidemiology" and "American Journal of Infection Control". It includes a search bar, social media icons (LinkedIn, Facebook, Twitter), and navigation buttons for "Submit your article", "Information", and "Subscribe".
- Journal Information:** A section on the left provides details about the journal's history, ISSN (0899-823X for print, 1559-6834 for online), editor (Suzanne F. Bradley), and editorial board. It also includes a "Get access" link.
- On the Cover:** A central section featuring a thumbnail of the current issue cover and a "Subscribe to Journal" button.
- Current Issue:** A section on the right highlights the "October 2017" issue (Volume 97, Issue 2). It lists "Issue Highlights" such as "Systemic antimicrobial prophylaxis in burn patients: systematic review" and "Hospital effect on infections after four major surgical procedures: outlier and volume-outcome analysis using all-inclusive state data".
- Issue Highlights:** A detailed list of articles from the current issue, including "Implementation of ethnography to prevent and control infection" and "Health care work health care-associated infections".
- Subscription Options:** A section at the bottom left offers "Supports Open Access" and "New Content Alerts", along with a "Free Trial Issue" button.
- APIC Information:** A blue button at the bottom center provides access to APIC (Association for Professionals in Infection Control) information.

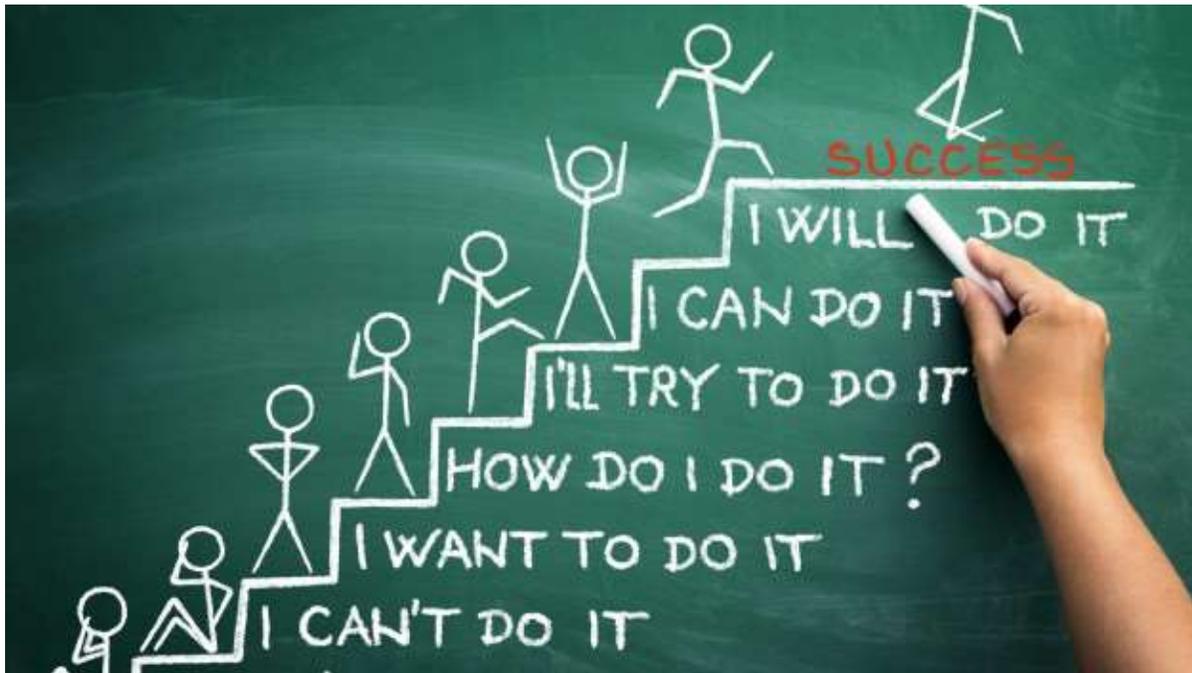
Keeping up-to-date - office text book



Self efficacy

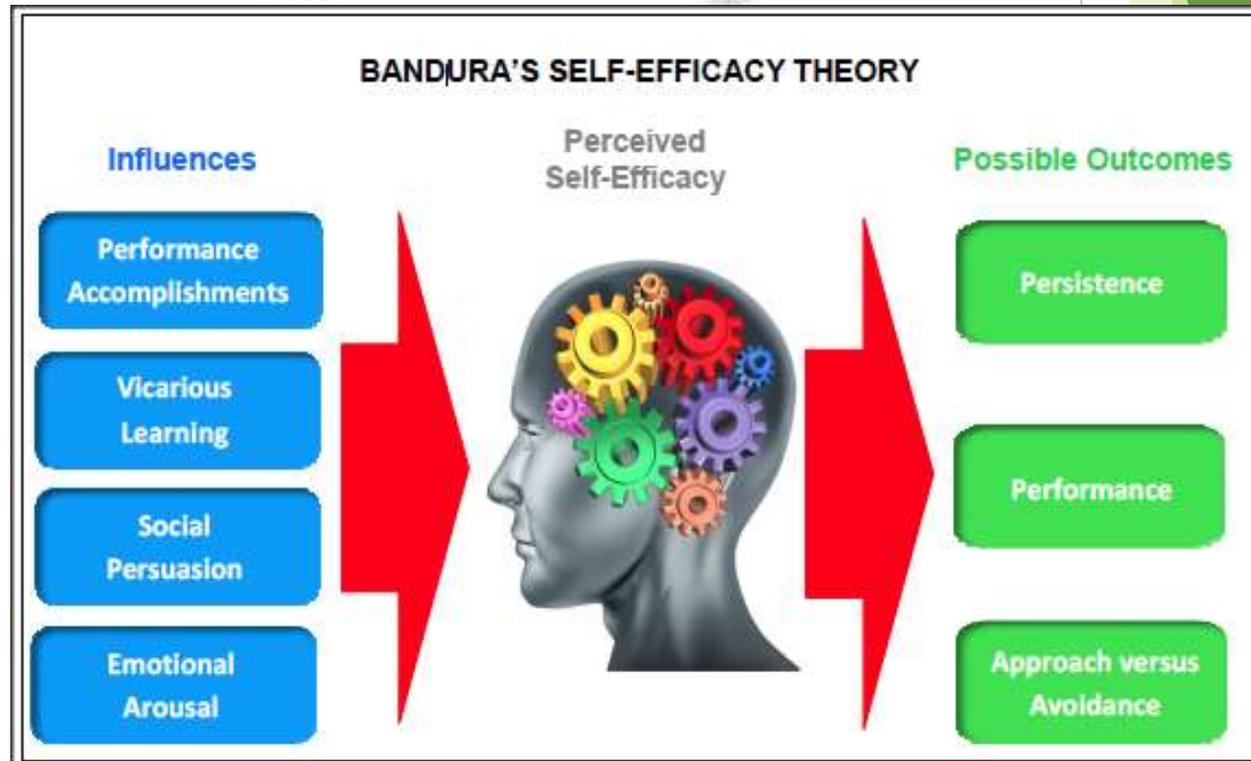
- ▶ “Is the belief in ones capabilities to organise and execute the sources of action required to manage prospective situations”

Albert Bandura



Self efficacy

- ▶ Your team needs people with a strong sense of self efficacy.....
 - ▶ View challenging problem's as tasks to be mastered
 - ▶ Develop deeper interests in the activities in which they participate
 - ▶ Form a strong sense of commitment to their interests and activities
 - ▶ Recover quickly from set backs and disappointments



Team member skills

▶ Good communicators

- ▶ Say what you mean, and mean what you say
- ▶ Keep it simple
 - ▶ Say what you mean in as few words as possible
- ▶ Find your voice
 - ▶ Focus on being distinct and real
 - ▶ Customizing your language for individual groups
- ▶ Face to face communications



Team member skills

- ▶ Do a “calendar test” to make sure you’re allocating time regularly to be out on the wards/units
- ▶ Show staff that you’re engaged and care about them and their work
- ▶ **Listen with your eyes and ears**
 - ▶ Listen and hear what is coming back at you
 - ▶ Look for the nonverbal cues
 - ▶ You need to read between the lines



“The most important thing in communication is hearing what isn't said”

Team member skills

- ▶ Good writing skills
 - ▶ Turing technical data into plain language
 - ▶ 1-2 pages only
 - ▶ Pictures tell a story
- ▶ Good time management skill
- ▶ Not easily distracted
- ▶ Task orientated
- ▶ Good organisation skills



Team work

- ▶ **Performance goals**
 - ▶ Set achievable goals
 - ▶ Self directed
 - ▶ Realistic time frames for completion
 - ▶ Support from other team members to assist with achieving the goals
 - ▶ Encouragement and positive feedback



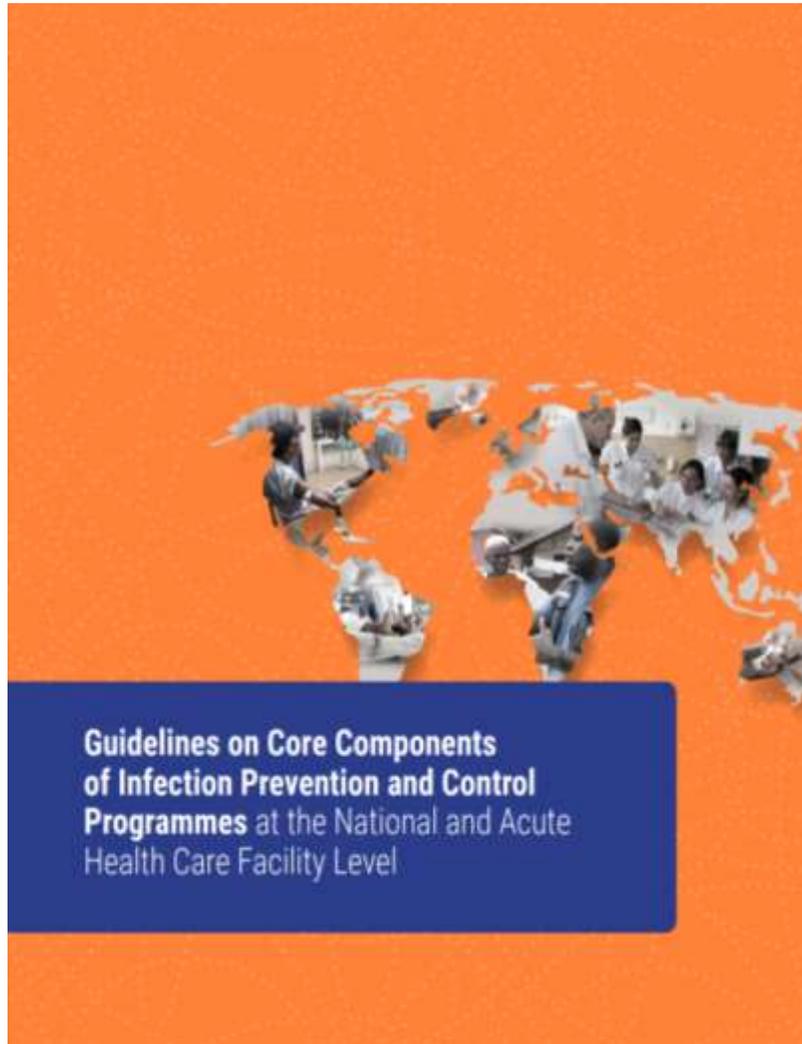
Reward your team for their achievements

▶ Academic reward

- ▶ Sponsorship to a conference
- ▶ Linked to a surveillance portfolio abstract submission
- ▶ Ask for hospital executive support -\$\$\$\$
- ▶ Payback periods for academic preparation
- ▶ Acknowledging achievements
 - ▶ Public relations support - News articles
- ▶ Medical industry support
 - ▶ Unencumbered/transparent /educational grants
 - ▶ Scholarships



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



WHO: What are the core components for effective infection prevention and control?

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World Health Organization

Published on Jul 20, 2017

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This instructional video from the World Health Organization explains the evidence-based core components of infection prevention and control programmes, critical at both the national and acute health care facility level for patient safety and for health systems to provide quality care. This video

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<http://www.who.int/gpsc/ipc-components/en/>

https://www.youtube.com/watch?v=LZapz2L6J1Q&t=2s&list=FLyvJPvg__hyg_nicjUddV6A&index=1

Thank you

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