Implementing Infection Control

Ways to get your hospital to talk about infection control

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Healthcare anno 2018

ECDC Core Competencies

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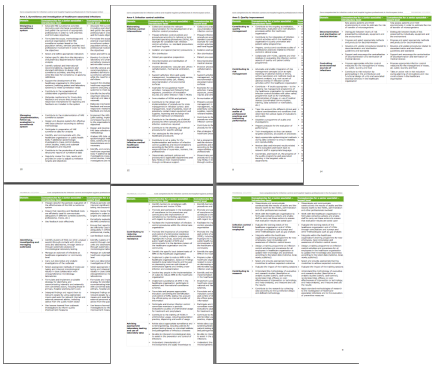
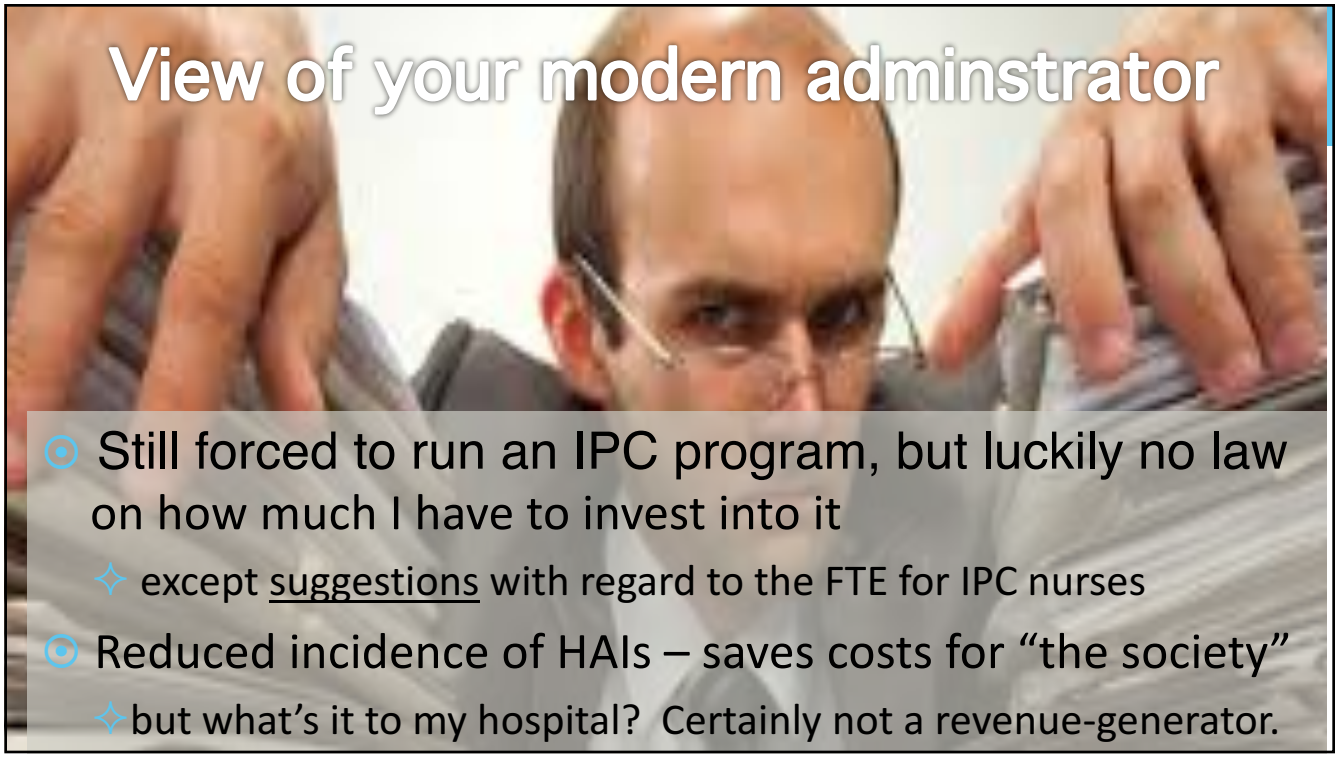
- Programme management
- Quality improvement
- Surveillance and investigation HAIs
- Infection control activities



Generating money or convincing administrators is nowhere in it

[iprevent] Core competencies for infection control and hospital hygiene professionals in the European Union. Stockholm: ECDC; 2013



Two questions to answer

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#1 What can I do to convince my hospital director?

#2 What do I have to ask my hospital director?

[iprevent]

What can I do to convince my hospital director?

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1. Convince your administration that ”we” have a problem
2. The “business case for IPC”
3. Ensure your “mission” is known
4. Show that IPC is more than “saving costs”
5. Choose best things to do with your “fixed budget”
6. Never waist a good outbreak or public health crisis

[iprevent]

1. Convince your administration that ”we” have a problem

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Do we have a real problem?

Show that HAIs are a problem in your hospital

First prevalence study of NI at HUG, 1994

Prevalence of infected patients	16.9 %
Total number of admissions	40’000 ~ 6800 infected
Additional costs associated with treatments, complications, and increased length of stay (estimates, CHF)	23.5 mio

[iprevent]

Houston we have a problem

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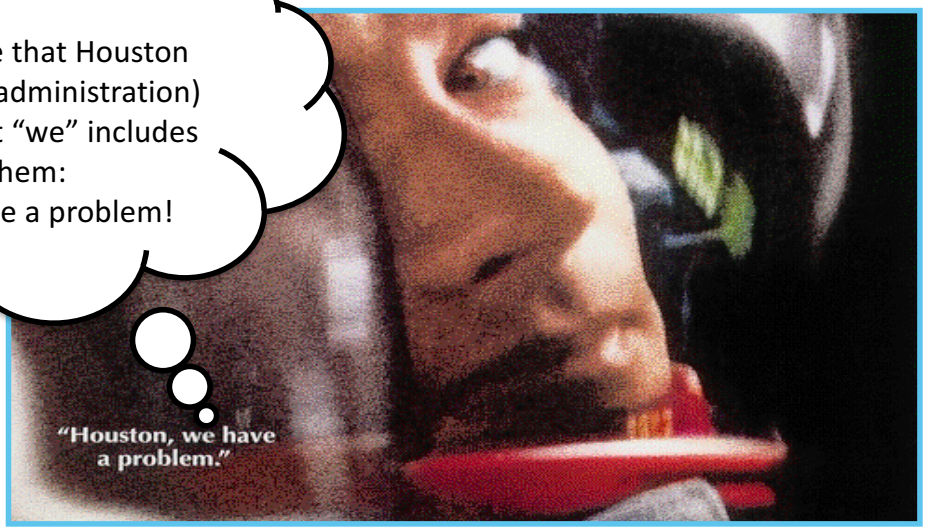
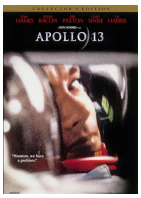
Make sure that Houston (=hospital administration) knows that "we" includes them:
They have a problem!





[iprevent]

IPC not the problem holder, but …

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[iprevent]

2. The Business Case For Infection Control

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[prevent]

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INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY OCTOBER 2007, VOL. 28, NO. 10

SHEA GUIDELINE

Raising Standards While Watching the Bottom Line: Making a Business Case for Infection Control

Eli N. Perencevich, MD, MS; Patricia W. Stone, PhD, MPH, RN; Sharon B. Wright, MD, MPH; Yehuda Carmeli, MD, MPH; David N. Fisman, MD, MPH, FRCP(C); Sara E. Cosgrove, MD, MS

[prevent]

The business case for ICP (SHEA guideline)

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1. Frame the problem + create hypothesis about solutions
2. Create interest by meeting with key stakeholders
3. Determine local costs of intervention, costs that can be avoided by reducing HAI, and attributable and variable costs
4. Calculate financial impact and other health benefits
5. Communicate the possibilities of the BC
6. Prospectively collect cost and outcome data

[iprevent] adjusted from 9 point SHEA guideline

My personal view on business cases

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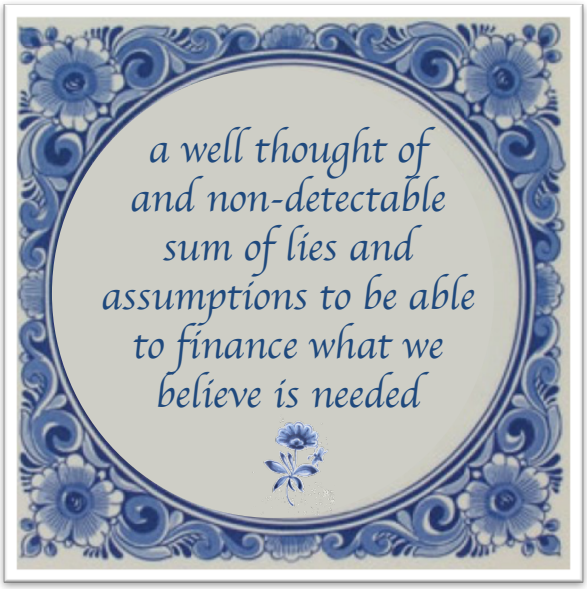

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Truly and accurately evaluate the cost-benefit

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- Describe a problem (e.g. CLABSI)
- Look for possible solution (e.g. coated catheters vs "bundle")
- Do a full economic evaluation estimating the costs of CLABSI in your hospital (including extra LOS) and the costs of the intervention
  - Benefit is reduction of costs AND gain of revenue (e.g. shorter LOS)
- First use basic IPC – than start on the "gadgets"

[iprevent]

Be proactive with regard to BC's

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Do not wait until a typical doctor in your hospital wants to implement a new gadget based on alternative facts, or on arguments

such as …

[iprevent]

3. Ensure your "mission" is known

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[iprevent]

Example of "mission statement"

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Our mission is to promote a healthy and safe environment by preventing the spread of MDROs and the transmission of infectious agents among patients and staff.

We strive to accomplish this in an efficient and cost effective manner, based on external and internal standards, keeping in mind the best ways we can support our clinical colleagues and serve our patients and their families.

[iprevent] adapted from Hoffmann K, Infect Control Today, Dec 2000

4. Show that IPC is more than "saving costs"

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[iprevent]

Cost-effectiveness is not the only key to your administrator's heart…

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- Safe care = better care
- Corner-stone in preserving antibiotics
- Stimulate general preventive measures e.g. flu-shot
- Engage in visible actions e.g. hand hygiene action that get picked-up by press
- Educate not only HCWs, but patients and the public
- Try to evaluate patients satisfaction with regard to IPC

[iprevent]

4. Never waist a good outbreak

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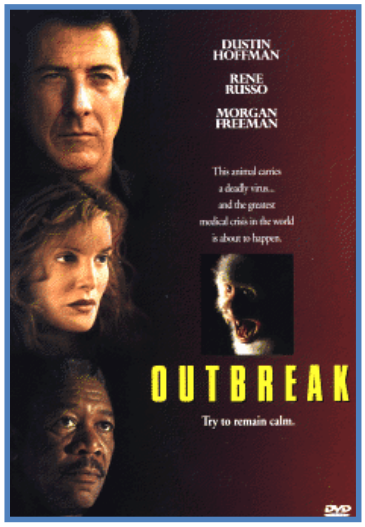

[iprevent]

Never waist an outbreak or PH-threat

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- This is the time to put all your knowledge and engagement into visible action
  - the better you do your job normally, the less your work is recognized
- Time to stress the importance of new typing methods, rapid diagnostic test or an IPC measure that so far weren't funded
  - VRE outbreak: cleaning wipes
  - Flu-threat: GeneXpert and others

[iprevent]

What are you asking for?

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[iprevent]

What are you asking for?

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[iprevent]

5. Choose best things to do with your "fixed budget"

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- Task differentiation
- Link-nurse system
- Prioritize high prevalence units/problems
  - actually choose "posteriorities" you really don't do!
  - turf unwanted tasks (e.g. needle-stick accidents to occupational health)
  - invent new positions in professional guidelines (DSMH/DSRD)
- Invest in better software and automation (e.g. surveillance)
- Engage clinicians (e.g. surgeons in charge of SSI improvement)

[iprevent]

What do I have to ask my hospital director?

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1. Structure and position in organization
2. Access to all data sources
3. Use of rapid diagnostic tests & typing
4. Moral support (by administration and medical director)
5. Finance CME including (non-ICP) education
6. Freedom and support to implement new idea's

[iprevent]

1. Structure and position in organization

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- Independent department
- Direct line with administration
- Referred responsibilities for ICP
- ICT support & software
- Located within hospital, preferably in conjunction with MMB or ID-service
- A better than SENIC formation

[iprevent]

Infection Control-team
(SENIC guideline)

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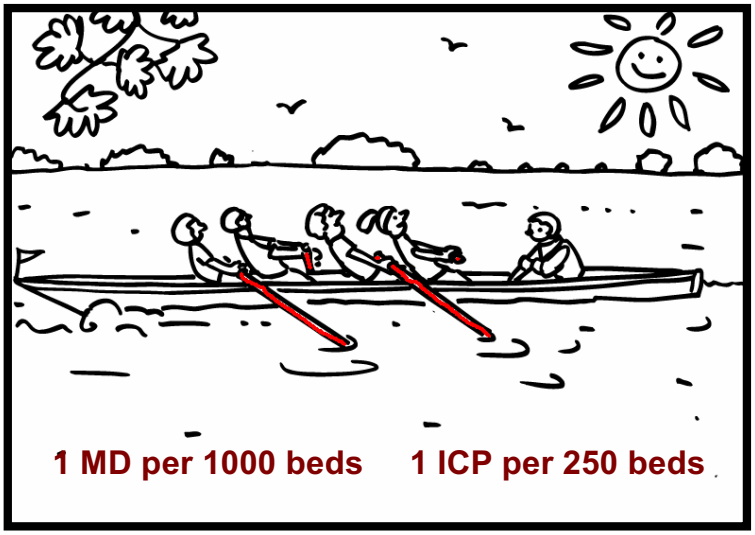


[iprevent]

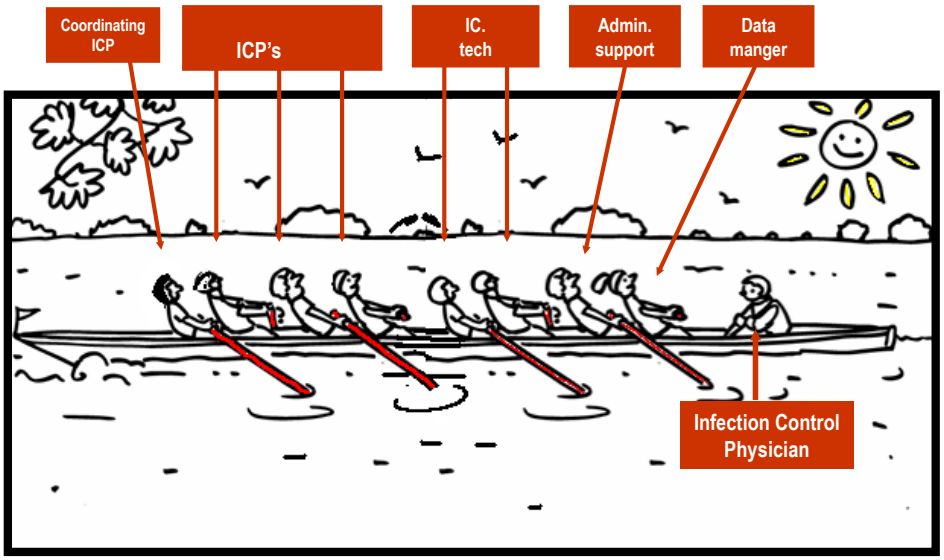
Infection Control-team
(in real life)

29

[iprevent]

Infection Control-team
(as it should be)

30



[iprevent]

1 ICP per 5000 admissions, 1 IC-MD per 25000 admissions

2. Access to all data sources

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Access to:

- All departments (requested and un-requested)
- All patient files
- OR systems
- Complication registration systems
- Census data of the hospital
- Facility services and medical technique reports

[iprevent]

3. Access to rapid diagnostics & typing

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Rapid detection = 1st step of control

[iprevent]

POCT & zero-costs diagnostics

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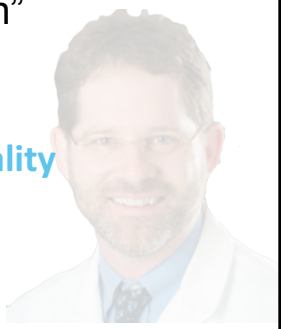
- Testing in all healthcare settings
  - **– today mainly hospital**
- Direct action with regard to "isolation"
  - **– less transmission, better logistics**
- Change of empiric treatment
  - **– as a consequence reduction of mortality**
- Paradigm shift in LMI-countries
  - **– from no diagnostics to the top**



Sorry Dan –
needed to say this

[iprevent]

4. Moral support

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- Administration and medical director (or executive board of the medical staff) need to be main and visible drivers of the patient safety culture change
- Without their support no major changes in your institution will be achievable

[iprevent]

Human nature in one picture

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[iprevent]

Certainly true with regard to Infection Control.

Human nature in one picture

36

[iprevent]

Certainly true with regard to Infection Control.

5. Support CICE including (non-ICP) education

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ICPs

- Continuous Infection Control Education (CICE) for ICPs is a must
- Invest in "soft" education such as communication skills, behavioral science, negotiation skills, …

other HCWs

- Make in-house ICP education mandatory (min. starting HCWs)
- IC-meetings for regional stakeholders (and the general public)
- Include ICP training early-on in training of nurses and interns (preferably at school level)

[iprevent]

6. Freedom to implement new idea's

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[iprevent]

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Basics Are (Still) The New Black

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Basics Are The New Black

- Behavior
- Patient participation
- Transmission prevention
  - Hand hygiene, environmental control
- Surveillance
- Guidelines

Patient participation

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PREVENTING SURGICAL SITE INFECTIONS

A PATIENT INFORMATION LEAFLET

What is a Surgical Site Infection (SSI)?

Surgical site infections (SSIs) are wound infections that occur after invasive surgical procedure at the body part where surgery has been performed. These infections may involve only the skin, or may be more serious and involve tissue under the skin or organs.
A surgical site infection may cause symptoms such as: redness, warmth, pain or tenderness around the affected site, discharge of pus or fever. The majority of SSIs become apparent within 30 days from the surgical procedure.
Surgical site infection can often be prevented if care is taken before, during and after surgery.

What are hospitals doing to prevent the occurrence of surgical site infections?

Hospitals perform surgical site surveillance for specific operations and can then compare to national levels.

- **Ask your health care provider information if they participate in surgical site infection surveillance programme?**

As part of the preoperative process, for cardiothoracic, orthopaedic or other high risk surgery you will be screened for *Staphylococcus aureus* carriage (a nasal swab will be collected).

- **If you are a carrier of *Staphylococcus aureus* you will need to adhere to treatment with an ointment and possibly an antiseptic wash for the recommended duration before and after your surgery.**

You may be prescribed antibiotics to further reduce the risk of developing an infection. In most cases, antibiotics will be administered within 60 minutes before the surgery starts and should not last for longer than 24 hours following surgery.

What can I do to prevent Surgical site infections?

Before the surgery:

Smoking is a known risk factor associated with complications during and also after the surgical procedure. People who smoke are prone to developing more infections after surgery.

- **It is recommended that you stop smoking 4 weeks or longer before your surgery**

Your healthcare provider should be informed of the following:

- **Your medical history, particularly in case of diabetes mellitus.**
- **Your travel history within the last year or previous recent hospitalisation abroad.**

[prevent]

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New dispensing systems
Automated use/compliance data
New models for OPC, OR, …
(Glove disinfection)
(Self-disinfecting foam gloves)

ABHR saves lives.

Another basic - long ignored (in the NL)

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Hospital Cleaning

[iprevent]

Modern cleaning

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+/- special wall paint

HPV UV

[iprevent]

Modern cleaning

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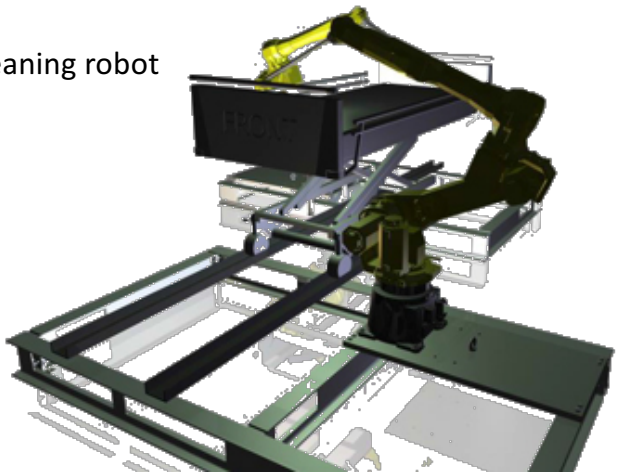
Bed cleaning robot



[iprevent]

Modern (continuous) cleaning

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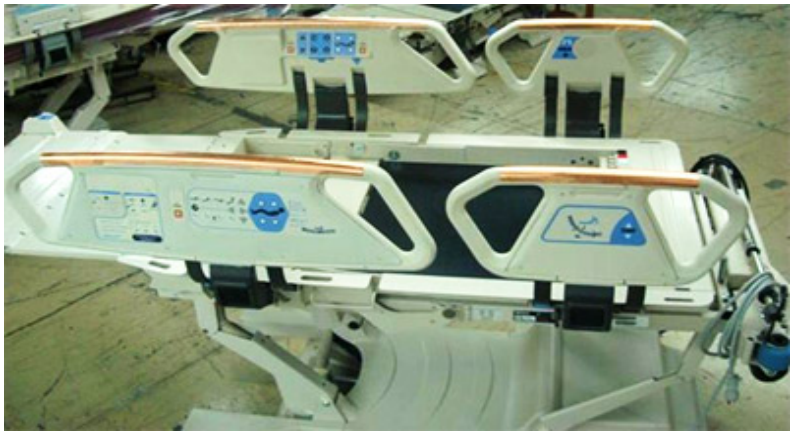

Copper is here already – other (nano)technology will come

[iprevent]

Surveillance

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- The feedback of structure-, process- and outcome parameters to HCWs will continue to be an important part of infection control
- Surveillance only works when going “full-circle” (PDCA)
- Bundles, including bundle compliance, should be included in surveillance systems
- **Not the need for surveillance but the methods will change**.

[iprevent]

Fully-automated surveillance using AI

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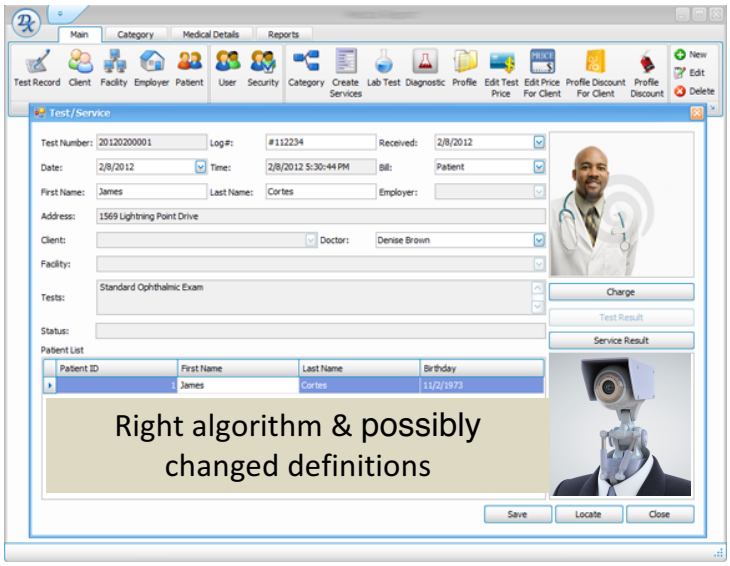

[iprevent]

Far too many guidelines – not enough common sense

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[iprevent]

Thanks a lot

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My own experience with hospital directors

not stopping me from doing something,
but giving me a push !

(even it it sometimes took a while for them to recognize that should be their job)

[iprevent]

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December 14, 2018	*(FREE … WHO Teleclass - Europe)* **NEW PERSPECTIVES ON INFECTION PREVENTION AND CONTROL PROGRAM ASSESSMENTS IN THE SPIRIT OF IMPROVEMENT** Speaker: **Prof. Benedetta Allegranzi**, World Health Association Global Infection Prevention and Control Unit **Sponsored by the World Health Association**
January 17, 2019	*(FREE European Teleclass)* **THE FALLOUT OF FAKE NEWS IN INFECTION PREVENTION, AND WHY CONTEXT MATTERS** Speaker: **Prof. Didier Pittet**, University of Geneva Hospitals, and **Dr. Pierre Parneix**, Hôpital Pellegrin, CHU de Bordeaux, France
January 31, 2019	**BARRIERS AND FACILITATORS TO CLOSTRIDIUM DIFFICILE INFECTION PREVENTION, A NURSING PERSPECTIVE** Speaker: **Dr. Nasia Safdar**, University of Wisconsin School of Medicine and Public

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