

# Healthcare Associated Infections as Adverse Events: Why is this so hard?

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Infections that were neither present nor  
incubating at the time of admission...

...they were caught it in the hospital

## A story of 4 ICU patients:

- Medication error
- Fall
- Ventilator-associated pneumonia
- MRSA bacteremia

## Are these different?

- All events resulted in death
- All events were preventable

But:

- 2 are “errors”
- 2 are a “cost of doing business”

## Antibiotics to the rescue

- Why prevent when you can treat?
- Golden era is rapidly fading
- Multidrug resistant isolates becoming the norm

## Where is the evidence?

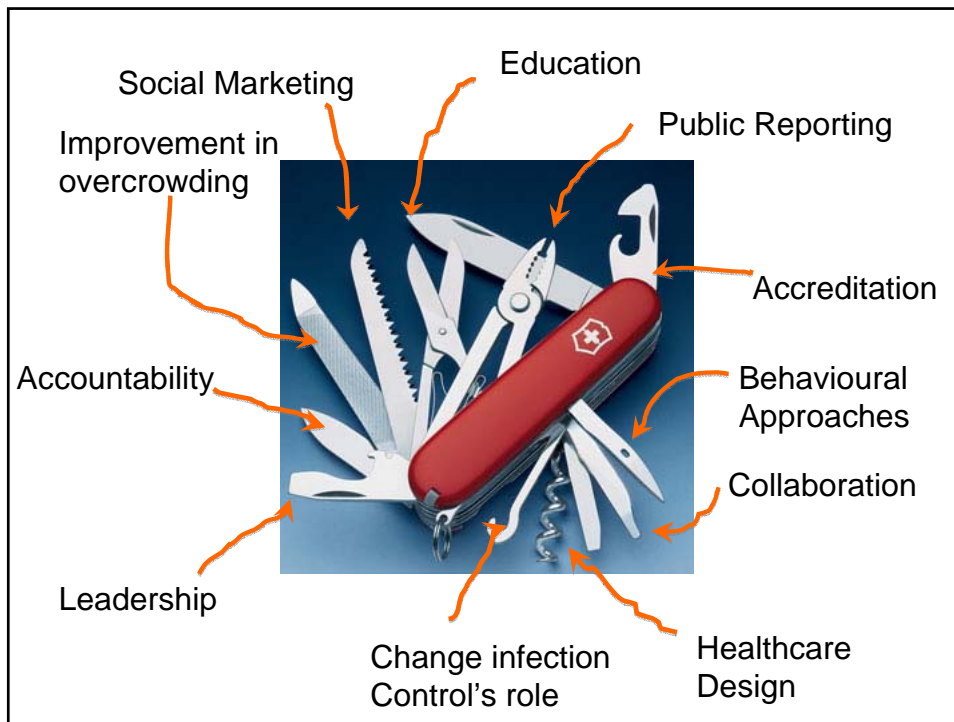
- Most infection control evidence is not based on randomized controlled trials
- Misinterpretation of evidence based medicine
  - Precautionary principle not required

## How is this my problem?

- Typical root cause analyses do not apply in many infection-related events
- Who is “to blame”?

## Nothing works anyways so why bother?

- Not true
- Excellent stalling tactic
  - (especially when combined with “lack of evidence”)




MINISTRY OF HEALTH AND LONG-TERM CARE

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## Patient Safety

The possibility of acquiring a health care-associated infection is a reality at any hospital. Ontario hospitals are working hard to reduce the risk factors that contribute to the spread of infections. They are focusing on minimizing infections and keeping patients safe.

Patient safety is about managing and reducing risk to ensure that the care patients receive is as safe as possible.

Improving patient safety is about creating an environment that is transparent and committed to change. This is the mandate of the government's Patient Safety Initiative.

This site provides information for patients, health care professionals and the public on patient safety issues. It will evolve over time to report on a range of indicators with the goal of enhancing patient safety in Ontario's hospitals.



**PATIENT SAFETY**  
Taking care of patients



**NEWS MEDIA**  
Understanding patient safety



**HEALTH CARE PROFESSIONALS**  
Keeping patients safe

## The indicators

- September '08
  - *C. difficile*
- December '08
  - MRSA
  - VRE
  - HSMR
- April '09
  - Ventilator associated pneumonias
  - Central line infections
  - Surgical site infection prevention
  - Hand hygiene compliance

## Public reporting measures

- Are these numbers helpful?
- Do these numbers mean anything to you personally?
- Is the presentation of the numbers helpful?
- Is this enough to bring about improvement?

## Accreditation

- Similar to mandatory public reporting
- “Required organizational practices”
  - Not accompanied by resources
- Top-down approach
- Creates awareness....not necessarily change

## Accountability

- A new physician is stopped in the hallway by the nurse manager because he has been noted to not wash his hands when entering patient rooms. The physician says it is not important and walks away.

## Accountability

- A new physician is stopped in the hallway by the nurse manager because he has been noted to *be prescribing inappropriate doses of insulin*. The physician says it is not important and walks away.

## Accountability

- What would happen in each of these two scenarios?
- Cedars Sinai approach

## Leadership

- >200 000 patients a year getting infections is either important or it isn't
- Silence speaks volumes

## Education

- You can't show highly trained professionals videos on how to wash their hands...
- Make education relevant, convenient, entertaining, tactile, easy to digest

## Overcrowding

- Ontario hospitals are routinely at >95% occupancy
- 20% of patients in acute beds do not belong there
- Patients in sunrooms, hallways, spending days in the ED

## Hospital Design

- You have to be hospitalized for a complicated cancer operation. Which would you prefer?
  1. A single room with enough space for some of your family to visit/stay
  2. A single room
  3. A double room
  4. A 4 bedded room

## Multibedded rooms

- Are cheaper to build?
- Are cheaper to operate?
- Decrease nursing time?
- Decrease use of pain medication?
- Decrease length of stay?
- Increase healing time? because of support from other patients?
- Decrease infection rates?
- Improve hand washing compliance?
- Improve sleep?
- Decrease medication errors?

## Change the role of infection control

- “Police” role
  - Will not change staff behaviour
  - Infection control practice is not the responsibility of infection control...
  - Leads to burn out
- “Educator” role
  - Education is unlikely to change behaviour
- Change to an advisory role

## Social marketing

- Make the message relevant to those you are trying to reach
- Why do you try to eat well and get exercise?
  1. To improve your well-being?
  2. To decrease overall healthcare expenditures i.e. save Canada money?

## Behavioural Approaches

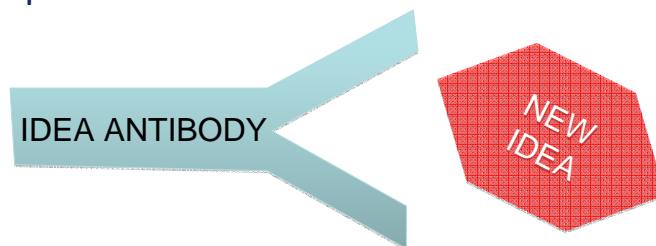


## Why turn to a behaviour change approach?

- Current “top down” approaches have had limited success and are resource intensive
- “best practice” approach has been disappointing
- *We need to acknowledge that healthcare workers are human!*

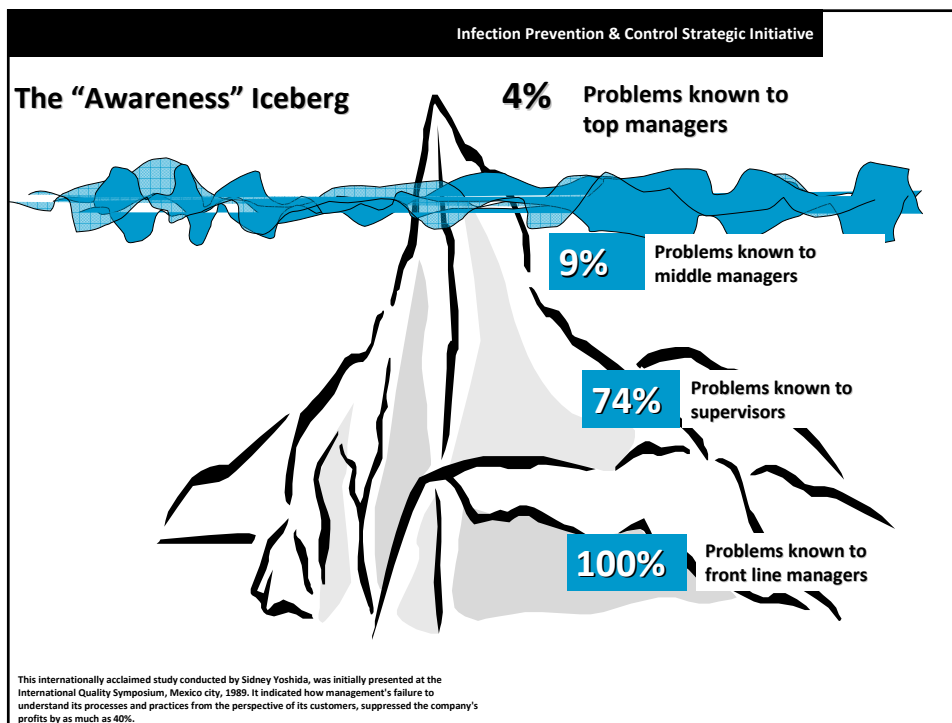
## Sharing best practices

- Solutions imported from external sources results in “social immune response” in the same way that our body triggers an immune defense response

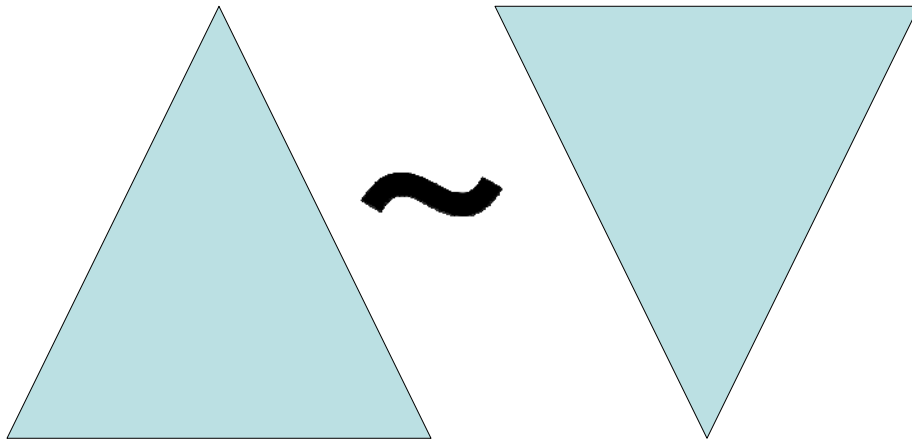


## The Premise Of Positive Deviance

*No matter how seemingly intractable a problem, in every community there are individuals whose uncommon practices/behaviours enable them to find better solutions to problems than their neighbours who have access to the same resources*



Who have the knowledge?



## Empowering the front line

- They know the problems, and now how to solve them
- They need leadership support to make this happen.

## Conclusions

- We cannot ignore that healthcare workers are human
- We are moving in the right direction
- Addressing the problem requires a multipronged approach



[Positivedeviance.ca](http://Positivedeviance.ca)