Sharing Infection Prevention and Control Experience in Europe

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Overseas Training in Geneva

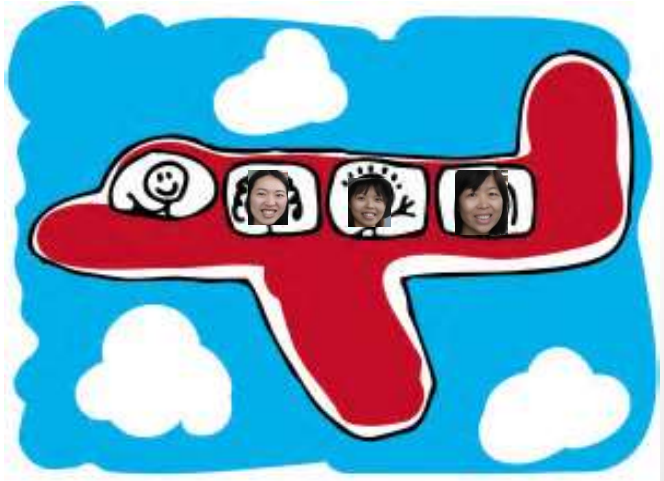
Hospital visit:

- **University Hospitals of Geneva, Switzerland:**

  Period: 1.5 days (4 - 5 Oct 2016)

Course:

- **4th International Course on Implementation in Infection Control** (6 - 7 Oct 2016)



Content

- Background
- Influenza Vaccination Promotion
- Hospital-wide surveillance program
- Hand Hygiene strategies
- Site visit sharing

University Hospitals of Geneva

HUG Hôpitaux Universitaires Genève

University Hospitals of Geneva

- Total no. of beds: 1800 beds
- The HUG (Geneva University Hospitals) operate 8 hospitals
- 40 outpatients clinics

Influenza Vaccination Promotion

Hong Kong data

Seasonal Influenza Vaccination

As of February 11, a total of 14,830 HA staff (with an uptake rate of 20.43%) have received the seasonal influenza vaccination. Figure 3 showed the number of HA staff and vaccination uptake rate in HA clusters during the 2013/14, 2014/15 and 2015/16 (up to 17 weeks of the program) programs. The current vaccination rate 20.43% is higher than the first 17 weeks as compared with the figures during the same period from last year, 17.98% in 2014/15.

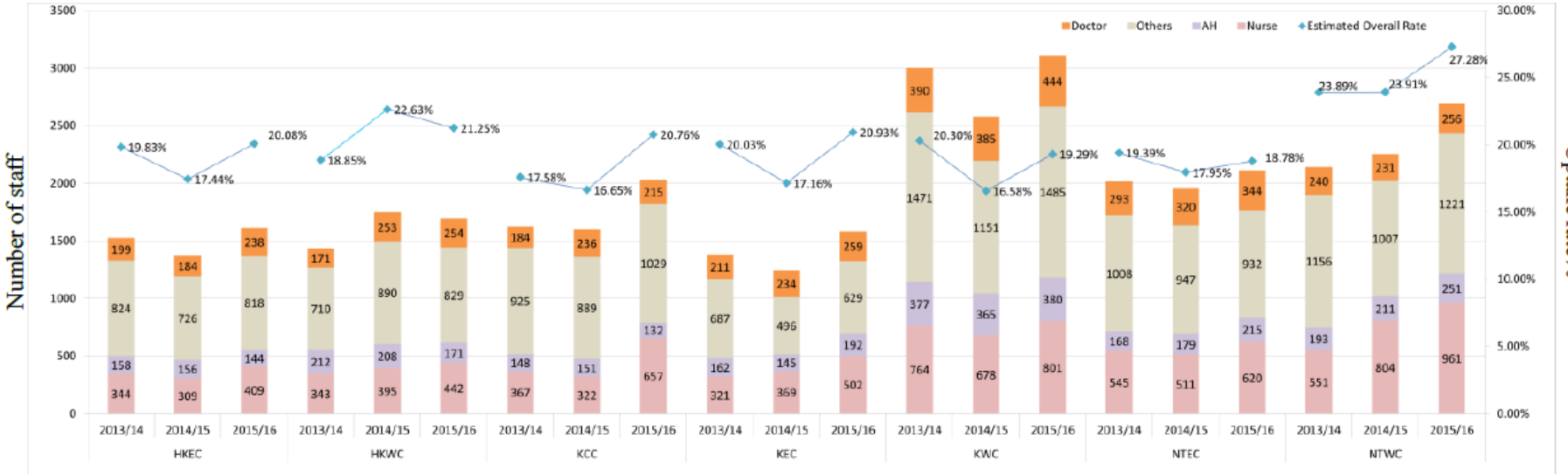


Figure 3: Number of HA staff who received seasonal influenza vaccination by cluster and profession in 2013/14, 2014/15 and 2015/16 (as at 11 February 2016).
Footnote: Head count as of 30 Sep in each year

Strategies associated with increased influenza vaccine uptake in healthcare workers

- On-site vaccination
- Vaccination free of charge
- Lectures about influenza and influenza vaccine
- Organization of campaigns
- Mobile vaccination teams
- Use of reminding systems
- Leadership support
- Implementation of a mandatory vaccination policy

Mandatory vaccination: arguments

- ☐ Patient safety
- ☐ Duty not to harm patients
- ☐ Reduction of mortality in long stay institutions
- ☐ Decrease in nosocomial influenza in hospitals
- ☐ Cost reduction
- ☐ Absenteeism
- ☐ Failure of voluntary vaccination

- ☐ Paternalism
- ☐ Lack of total effectiveness of a vaccine that has potential side effects
- ☑ Possible alternative (mask)
- ☐ Increase in costs induced by the search for alternatives
- ☐ Interests of management of the institution
- ☐ Breach of civil liberty and autonomy
- ☐ Reducing people to object status
- ☐ Sanctions for non-compliance

Strategies associated with increased influenza vaccine uptake in healthcare workers

	HUG
• On-site vaccination	✓
• Vaccination free of charge	✓
• Lectures about influenza and influenza vaccine	✓
• Organization of campaigns	✓
• Mobile vaccination teams	✓
• Use of reminding systems	✓
• Incitative programs	✓
• Leadership support	✓

• Wearing of a mask for the seasonal influenza if not vaccinated	2011
• Mandatory badge wearing	2012
• ↑compliance check with the instructions for prevention	2013
• HR measures in case of non respect of recommendations	2013

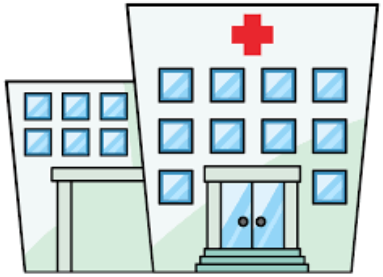
All HCWs were obliged to wear a badge that explained their choice to patients/visitors. If vaccinated, this was clearly stated by the badge message; if not, the HCW was obliged to wear a mask during the seasonal epidemic and to display a badge with the message "I wear a mask to protect you".

Implementation of Infection Control Program

What's the myth?

The reported "evidence" in the literature

Hospital-wide project
Catheter related Blood Stream Infection (CR-BSI)



World-wide project
Hand Hygiene Campaign

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 DECEMBER 28, 2006 VOL. 355 NO. 26

An Intervention to Decrease Catheter-Related Bloodstream Infections in the ICU

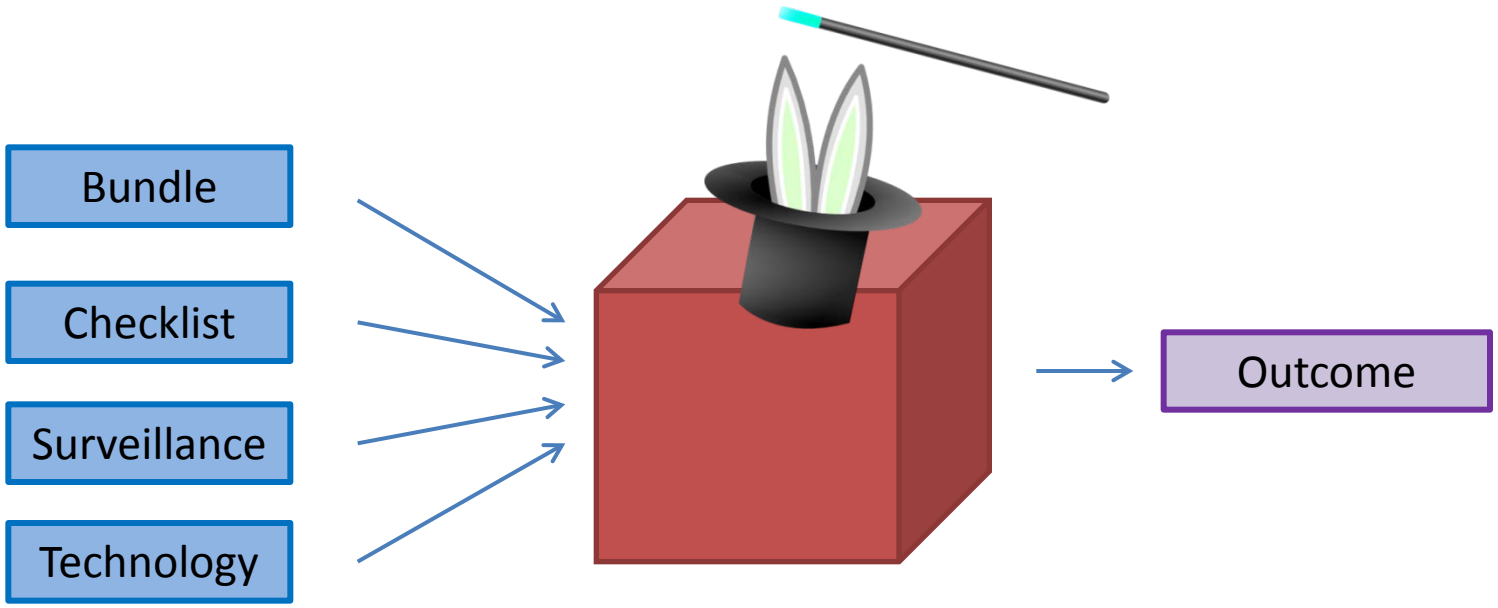
Peter Pronovost, M.D., Ph.D., Dale Needham, M.D., Ph.D., Sean Berenholtz, M.D., David Sinopoli, M.P.H., M.B.A., Haitao Chu, M.D., Ph.D., Sara Cosgrove, M.D., Bryan Sexton, Ph.D., Robert Hyzy, M.D., Robert Welsh, M.D., Gary Roth, M.D., Joseph Bander, M.D., John Kepros, M.D., and Christine Goeschel, R.N., M.P.A.

- Michigan Keystone programme
- 103 ICUs in the state of Michigan, USA
- **Mean rate of CVC-BSIs**
  - **7.7** infections per 1,000 CVC-patient days at baseline
  - **2.3** at 0 to 3 month after implementation *($p \leq 0.002$)*
  - **1.4** during 18 months of follow up (median = 0)
  - Sustained reduction (up to 66%) for 3 year follow-up

Key interventions:

1. Hand hygiene
2. Chlorhexidine skin disinfectant
3. Maximum sterile precautions
4. Proper maintenance
5. Timely removal

Matching Michigan

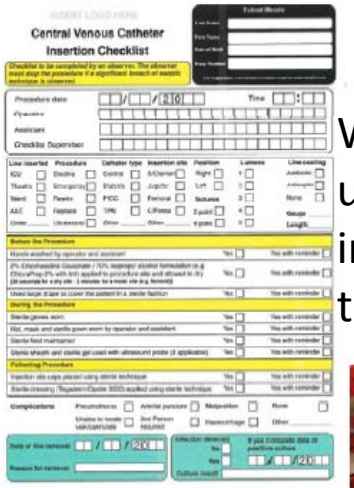


Lessons from attempts to replicate a successful programme in a new setting

- Identifies the mechanisms that link those activities and resources to the desired outcomes
- Identifies how implementation is influenced by context
- Identifies possible unwanted outcomes (the side effects)

Adopted keystone interventions

- Data definition
- Technical interventions – change in clinical practice
- Non-technical interventions – linked to leadership, team work and culture changes (e.g. safety briefs, leadership walkrounds)


Central Venous Catheter
Insertion Checklist

Widespread uptake of technical interventions: trolley & checklists

Matching Michigan was not an exact replica of keystone

Dixon-Woods et al. Implementation Science 2013, 8:70
http://www.implementationscience.com/content/8/1/70

IMPLEMENTATION SCIENCE

RESEARCH Open Access

Explaining *Matching Michigan*: an ethnographic study of a patient safety program

Mary Dixon-Woods[1*], Myles Leslie[2], Carolyn Tarrant[1] and Julian Bion[3]

Abstract

Background: Quality and safety improvement initiatives in healthcare often display two disconcerting effects. The first is a failure to outperform the secular trend. The second is the decline effect, where an initially promising intervention appears not to deliver equally successful results when attempts are made to replicate it in new settings. *Matching Michigan*, a patient safety program aimed at decreasing central line infections in over 200 intensive care units (ICUs) in England, may be an example of both. We aimed to explain why these apparent effects may have occurred.

Methods: We conducted interviews with 98 staff and non-participant observation on 19 ICUs; 17 of these units were participating in *Matching Michigan*. We undertook further telephone interviews with 29 staff who attended program training events and we analyzed relevant documents.

Results: One *Matching Michigan* unit transformed its practices and culture in response to the program; five boosted existing efforts, and 11 made little change. *Matching Michigan's* impact may have been limited by features of program design and execution; it was not an exact replica of the original project. Outer and inner contexts strongly modified the program's effects. The outer context included previous efforts to tackle central line infections superimposed on national infection control policies that were perceived by some as top-down and punitive. This undermined engagement in the program and made it difficult to persuade participants that the program was necessary. Individual ICUs' histories and local context were also highly consequential: their past experience of quality improvement, the extent to which they were able to develop high quality data collection and feedback systems, and the success of local leaders in developing consensus and coalition all influenced the program's impact on local practices.

Conclusions: Improved implementation of procedural good practice may occur through many different routes, of which program participation is only one. The 'phenotype' of compliance may therefore arise through different 'genotypes.' When designing and delivering interventions to improve quality and safety, risks of decline effects and difficulties in demonstrating added value over the secular trend might be averted by improved understanding of program mechanisms and contexts of implementation.

Keywords: Patient safety, Improvement programs, Context, Ethnography, Healthcare-acquired infections

Interpretations

Outer context

- Previous efforts to tackle central line infections superimposed on national infection control policies that were perceived by some as top-down and punitive.
- This undermined engagement in the program and made it difficult to persuade participants that the program was necessary.

Local context

- Individual ICUs' histories and local context were also highly consequential: their past experience of quality improvement, the extent to which they were able to develop high quality data collection and feedback systems, and the success of local leaders in developing consensus and coalition all influenced the program's impact on local practices.

BMJ Quality & Safety Online First, published on 20 September 2012 as 10.1136/bmjqs-2012-001325
Original Research

'Matching Michigan': a 2-year stepped interventional programme to minimise central venous catheter-blood stream infections in intensive care units in England

THE MATCHING MICHIGAN COLLABORATION & WRITING COMMITTEE

Programme outcome:

The programme demonstrated a 60% reduction in reported CVC-BSIs in adult ICUs in England

Getting the programme to work at a local level required …

- Senior individuals who were seen as committed, credible, and engaging
- Strong medical and nurse lead working in partnership
- Efforts to
  - create consensus there was a 'problem to be solved', and belief in the programme
  - build multidisciplinary coalition, engage staff, role model new practices
  - embed new practices into routine
- Collection and active feedback of high quality infection rate data

UNIVERSITY OF LEICESTER

International team works out secrets of one of world's most successful patient safety programmes

Posted by **pt91** at Jun 17, 2011 11:05 AM | **Permalink**

How dramatic reduction in infection at 100 intensive care units was achieved is revealed

Michigan programme's most important features is that it explicitly outlined what hospitals had to do to improve patient safety, while leaving specific requirements up to the hospital personnel.

A critical aspect of the programme was convincing participants that there was a problem capable of being solved together.

Hospital visit

Visit to Laboratory

Terminal Cleansing and Disinfection of Discharged Bed

Ebola Isolation Room

Genève, Friday 21 November, 2014

The University Hospitals of Geneva welcome a patient with Ebola virus disease


SafeFAST Premium


DANGER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F21
Num Lock
Home
PgUp
PgDn
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Alt
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Bk Sp
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MACHINE

TSSU

Use of Social Networking

- https://twitter.com/didierpittet?lang=en

Thank you