

Australian Infection Control Association 2008  
5<sup>th</sup> Biennial National Conference  
Melbourne Cricket Ground  
8<sup>th</sup> to 10<sup>th</sup> October 2008  
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The 5<sup>th</sup> Biennial National Conference organized by the Australia Infection Control Association (AICA) was held at the Melbourne Cricket Ground, Australia from 8 to 10 October 2008. The conference theme, Challenge Resistance, recognizes the many challenges faced by today's infection control staff. It not only refers to resistant pathogens, but also resistant healthcare workers, systems, processes, institutions and bureaucracies. All of these factors must be considered in an effort to provide safer healthcare.

This conference aims to provide a forum for exchange of ideas in the ever changing climate of infection prevention and control as well as provide educational opportunities for all infection control personnel from novice to expert.

Among the sessions that I have attended, below are some of the topics, which I would like to highlight:

#### Workshop

**The Basics of Six Sigma and Lean** – Amy M. Richmond, Manager of Hospital Epidemiology and Infection Prevention at Barnes—Jewish Hospital in St. Louis, Missouri.

In this workshop, the speaker shared the basic concepts and terms associated with Six Sigma and Lean methodologies. Six Sigma is a symbol for standard deviation and measure of variation. Lean is a business system devoted to continuous improvement. It focuses on managing processes and leading people in the workplace rather than traditional techniques of managing the business and leading from the back office. Both methodologies attack complex problems with a team that follows a logical thought process, utilizes data and makes fact-based decisions to solve a problem. Both are customer focused, effective for problem solving and collaboratively, they become much more powerful. Examples of tools for quality and performance improvement techniques are:

- Process mapping
- Voting on improvements
- FMEA: Failure Modes Effects analysis
- Outcome & process measurement

She also gave a range of references to aid familiarity with Six Sigma and Lean methods.

References:

- Websites:
  - [www.isixsigma.com](http://www.isixsigma.com) :
    - Offers glossary of Lean & Six Sigma terms, articles & discussion boards
  - <http://healthcare.isixsigma.com/> : Healthcare section of six sigma website
  - [www.leantransformation.com](http://www.leantransformation.com) :
    - Click on Lean & Six Sigma resources button to review articles
- Articles on lean six sigma in healthcare:
  - Chasin R (2008). *The Six Sigma initiative at Mount Sinai Medical Center*. Mt Sinai J Med. Jan-Feb;75(1):45-52.
  - de Koning H (2006) *Lean Six Sigma in Healthcare*. Journal of Healthcare Quality 174. [www.nahq.org/journal/ce/article.html?article\\_id=250](http://www.nahq.org/journal/ce/article.html?article_id=250)

- Eitel DR, Rudkin SE, Malvey MA . J Emerg Med. (2008). *Improving Service Quality by Understanding Emergency Department Flow: A White Paper and Position Statement Prepared For the American Academy of Emergency Medicine* May 29.

### **MRSA – What Sites Should We Screen** – Mr Brett Mitchell, Tasmanian Infection Prevention & Control Unit.

The speaker gave a review of positive MRSA body screens over a 12 month period in a Trust in the United Kingdom (Nth Glamorgan NHS Trust). The aim was to

- Identify rates of colonization from the five sites (nasal, throat, axilla, groin & perineum) previously used for the screening of MRSA
- Identify any correlation between colonized sites
- Identify any further trends of colonization including the location of the patient

A total of 667 patients were initially included in the study and after exclusion criteria applied 297 patients remained. In this group, the most common site of colonization was the nose (32%). The study also found a significant correlation between the perineum and groin ( $p=0.0005$ ). There is a statistically significant association between one hospital, and throat colonization ( $p=0.019$ ) and there is a statistically significant reduced incidence of groin colonization in the community ( $p=0.011$ )

### **Emerging Infections** – Ian Jennens, Victorian Infectious Diseases Service

The speaker spoke of the many challenges facing human life. One of the challenge is the emergence of new or the evolution of old infectious diseases. Widespread, unregulated antibiotic use and alteration of the environment, together with changes to human lifestyle has led to microorganisms evolving and adapting to these new conditions and being able to spread rapidly around the globe. When organisms find new niches in non-immune pockets of the world population, epidemics can occur. The speaker concluded that infection control practices play a vital role in containing these outbreaks. Education and forward planning are essential to minimize the impact of these threats to our society.

### **The Challenge Of Outbreak Management In Three Neonatal Units** – Terri Butcher, The Royal Children’s Hospital

The speaker shared their experience in managing gram-negative organisms and VRE outbreaks in three neonatal units at The Royal Children’s Hospital. *Serratia Marcescens* outbreak occurred in year 2003, *Pseudomonas aerogenes* and *klebsiella* outbreak in year 2006 and a VRE outbreak in year 2007. The challenges Infection Control Practitioners face vary with the resources available, unit layout and staff attitude. Examples are lack of isolation and handwashing facilities, and difficulty in maintaining positive staff morale when the outbreaks does not have a swift conclusion. To manage these outbreaks, the Infection Control Practitioners had to be flexible and develop some unconventional strategies while trying to adhere to the infection control principles.

### **Improvement To Hand Hygiene Compliance Outcomes 24 Months After State-Wide Roll Out** – Kelvin Heard, hand Hygiene Victoria

The speaker shared the results of the Victorian Quality Council hand hygiene project, which involves 86 Victorian Health Services. Data was collected using a standardized compliance tool via observational studies collected at a hospital level by trained/validated staff. Results showed that 74% of the Victorian public health services have reached 55% or above in their “Start Clean Strategy”. The overall hand hygiene compliance rate following the state wide roll out has increased from 47.7% to 58.6% with the rural sector going from 58.4% to 65% and the urban sector improving from 40.9% to 54.1%. The speaker concluded that their challenge is to maintain and improve hand hygiene compliance and sustainability by offering timely feedback using local data aided with education and awareness.

### **TOP 5 Papers Affecting IC Work Practice – Glenys Harrington, The Alfred**

The speaker pointed the importance of peer review scientific journals, which should be the primary source of up to date evidence based practice for Infection Control Practitioners (ICPs). Murphy et al in a 1996 survey of Australian ICPs noted at the time that 31.4% of respondents reported not regularly reading any infection control publications and of those who did the majority were reading non peer review publications. A more recent study of ICPs in the US in 2004 undertaken by Olmsted et al noted that 50% of ICPs were only reading the abstracts of articles published in peer review journals. She emphasized that critical appraisal peer review literature should be a core activity of both the experienced and novice ICPs. In order to learn from peer review publications the full article should be read paying particular attention to the design of the study in the methods section of these publications. The speaker discussed the following recent peer review publications that are relevant to current infection control clinical practice.

1. Why doctors don't wash their hands?  
Ref: Am J. Inf. Ctrl 2008, 36:399-406
2. Influenza vaccination among Registered nurses.  
Ref: Inf Control Hosp. Epid 2008, 29:99-106
3. Implementation of an industrial system – Engineering approach to reduce the incidence of MRSA  
Inf Control Hosp. Epid 2008, 29:702-708
4. Major issues – Challenges of influenza pandemic preparedness in developing countries  
Emerg Infect Dis 2008, 6:875-880

### **Networking**

This conference gave me an opportunity to network with international delegates.

### **Acknowledgement**

I thank the Infection Control Association, Singapore (ICAs) for the sponsorship to attend this conference.