

## Summary of talks presented at the ASEAHHC, Palm Cove, 18<sup>th</sup> & 19<sup>th</sup> June 2010

### Regional Updates Session

#### Australia

*Phil Russo, National Program Manager, HHA*

HHA has three years funding to implement the National Hand Hygiene Initiative (NHHI) from the Australian Commission on Safety and Quality.

HHA is independent of jurisdiction and reports directly to ACSQHC

Objective of HHA is to

- Develop reliable *indicators of hand hygiene compliance*
- *Accurately measure* hand hygiene compliance
- Obtain and *sustain* improvements in hand hygiene compliance rates and reductions in HCAI
- Make hand hygiene and prevention of HCAI '*core business*' for all healthcare workers

HHA resources include website, DVD, online learning package, workshops, manual.

Three hundred and seventy seven hospitals submitted data in April 2010. This included 56 private hospitals.

Work continues on collecting SAB data, implementation of the Hand Hygiene Compliance Application, development of an education package for clinical staff and advising university curricula.

#### New Zealand

*Sally Roberts, Hand Hygiene New Zealand*

The National Quality and Improvement Project sponsors 5 programs including Infection Prevention and Control which includes implementing the WHO '5 moments for hand hygiene' initiative

Sharing elements of the HHA program, HHNZ has also developed an electronic data collection system and established Platinum and Gold standard editors.

Goals of the Hand Hygiene New Zealand programme include:

- Culture change
- Introduce and support a hand hygiene
- Monitor and evaluate outputs and outcomes

Training commenced in February 2009 and presently there are 90 Gold Standard auditors.

Development of a PDA application has been completed.

Implementation is nearing the end of the 2 stage roll out.

Issues have included product specification and cost and resource allocation.

A good supportive network has been established, and work continues on national sustainability.

#### Malaysia

*Nordiah A Jalil, UKM Medical Centre, Malaysia*

Malaysia has a very active hand hygiene campaign which commenced in 2006, characterised by:

1. National guidelines (adopted WHO document)
2. Hand Hygiene Campaigns in hospitals
3. HH techniques - in-house training a must!
4. Budget allocation for hand rub
5. Distribution of education material
  - National and hospital base
6. Existing nursing audit on hand hygiene -monitored by ICN/ICLN regularly.

Employing a multimodal strategy has included reminders in the workplace, feedback of data, placing ABHRs at the point of care, education and training of all HCWs, and encouraging a hospital safety climate.

Data indicates that HAIs and MRSA rates have decreased with improved HH rates.

## **Singapore**

*Dale Fisher, National University Singapore*

National University hospital commenced a multimodal strategy in October 2006 to improve hand hygiene compliance by

- Availability of product
- Education
- Audits on compliance
- Feedback of compliance rates
- Champions and rewards
- Promotion and hand hygiene day

Monitoring of ABHR use and active surveillance for MRSA was also undertaken.

Use of ABHRs before and after patient contact forms part of assessment of medical students. Compliance audits conducted post 2006 used a standardised tool, and performed by trained staff monthly. Compliance rates together with infection rates are displayed on wards. A steady increase in compliance rates has been demonstrated together with a reduction in hospital acquired infections.

## **Fiji**

*Margaret Leong, Ministry of Health*

Following an outbreak in 2007, ABHRs were introduced together with strict hand hygiene measures. In 2008, 3 Infection control nurses attended a one month attachment at John Hunter Hospital, where they were introduced to the WHO 5 Moments for Hand Hygiene and HHA Resources.

There is ongoing education and training, and monthly hand hygiene compliance audits in high risk areas where ABHRs are placed.

In the future it is intended to introduce ABHRs to all wards and formalise compliance training and reporting, and improve on infection control networks.

## **World Health Organisation**

*Didier Pittet, WHO*

A comprehensive review of the World Health Organisations 1<sup>st</sup> Global Safety Challenge was presented by Didier. Successful hand hygiene programs are characterised by:

Key Parameters

- System change
- Education of healthcare workers
- Monitoring and feedback of performance
- Administrative support
- Leadership and culture change
- Associated with reduction in cross-transmission and infection rates

It is clear that only multimodal strategies are efficient when implementing a hand hygiene campaign.

For appropriate selection and use of the following should be considered:

- Alcohol-based handrub
  - Meets EN (EU) / ATSM standards
  - Contains at least 80% ethanol / 75% iso-propyl-alcohol
  - Contains skin protective agents (« emollients »)
  - Corresponds to « WHO formulations »
  - Well accepted / well tolerated
  - Results from testing and validation
  - Inexpensive
- Made available at every point of care
- Largely promoted and its use (easily) monitored
- Associated with continuous increased use over time

As an indication of the uptake of the 1<sup>st</sup> Global Safety Challenge, by June 2010 11 915 health-care facilities from 141 countries had registered. This represented ~6.8 million health-care staff, and ~2.8 million patient beds

One of the major activities in the future is the introduction of the Hand Hygiene Self-Assessment Framework. This is a validated tool designed to obtain a situation analysis of hand hygiene promotion and practices and identify the level of progress within your health-care facility. Use of this tool provides an assessment of an institutions progress regarding infrastructures, resources, actions, commitment and achievements, in order to ensure optimal hand hygiene practices. This will then assist in identifying where improvements can be made to the program.

## Europe

*Andreas Voss, Nijmegen, The Netherlands*

This presentation started with a list of comparisons between Europe and Australia. It then goes onto the challenges with implementing a hand hygiene program across many individual countries. The objectives of the challenge were:

- Burden of HCAI/stakeholder engagement- Awareness
- Country pledges/National campaigns- Mobilising nations
- Implementing strategies-Technical guidelines and tools

It appears many European countries signed the “pledge” whereas actually starting a national program is another issue but there are many good “regional” activities occurring

- 30 European countries signed the pledge
- 17 started national/sub-national campaigns
- 13 did not start a campaign

There were many different campaigns ideas ,posters and results presented.

In Europe HH indicators are already in national quality systems

- Structure and consumption data
- Use of electronic surveillance

Possible reasons for poor compliance with the “pledge”

- ABHR was introduced a long time ago so no system changes were required (may need to reinvent )
- most feel they are already doing well
- finances- who should pay

Finishing with suggestions the next move should be

- More attention to behavioral change
- Campaigns for nursing homes & primary care-non acute settings

More detailed information it is Located here:

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19190>

In Summary:

- Not all countries that signed the pledge did actually do something, still many “regional” activities
- HH indicators in national quality systems
  - Structure and consumption data
- Use of electronic surveillance
  - Hand-rub use
  - Intelligent dispensers and badges
- More attention to behavioral change
- Campaigns for nursing homes & primary care

## Making Hand Hygiene Core Business

**How are politicians and bureaucrats different (to us)?**

*Paddy Phillips, Chief Medical Officer, SA Health.*

Beginning with a brief description of what bureaucracy /bureaucrats and politics/ politicians are then moving onto how best to understand them. This was made easy due to links to clips from “Yes Minster/Yes Prime Minster “TV series. It suggested ways to get your agenda across to both. In the view of the presenter, politics is the art of compromise where deals are made all the time and bureaucrats act on decisions, serve politicians and can act politically.

Bureaucrats generally are more scientific will ask what should be done and are fundamental

in getting your message across. The suggestion was that putting your message to a bureaucrat first maybe your best bet to achieve your desired outcome.

### **Public Reporting - Policy Perspective**

*Alison McMillan, Director Quality Safety and Patient Experience , Department of Health Victoria*

This presentation addressed the benefits of public reporting of hand hygiene compliance (HHC) and Healthcare Associated Infections (HCAI). It first compared public spending on healthcare per capita and public confidence in the healthcare system and suggested that these issues are not related, for example despite spending below the OECD mean the Netherlands has the highest confidence ratings as opposed to the USA spending the highest with a lower confidence rating. The presenter suggested that the key driver of public confidence was first hand experience, independent of age, gender and utilization of family doctor or emergency departments and hospitals. However, the use of specialists was negatively associated with confidence, high frequency users' less likely to be confident. So does public reporting lead to change? The suggestion was that no real change was witnessed only that the public became desensitised over time with reports. The issue may be more about how you present the information, for example how do you sell hand hygiene compliance of 65%? Therefore, public reporting needs to be framed in an appropriate and a meaningful manner.

### **Changing Medical Behaviour-involvement of colleges**

*Dr David Hillis, Chief Executive, Australasian College of Surgeons*

Beginning with a brief outline of the structure and activities in Australia and New Zealand medical colleges and how they can help assist with hand hygiene education. Changes need to occur within the curriculum but behavioural change is hard to promote and maintain. Even though we know the facts and figures relating to HCAs the presentation suggested we need to include cognitive changes and also to build on our early childhood patterns of behaviour to reinforce the hand hygiene message. We have the desire to correct the problem; we can show the intervention is effective; it's cheap and "doable". For this to work we need passionate leadership and a comprehensive approach from all levels. One idea is that along with educating on the 5 moments we also need to use the 5 core components for effective behavioural change

1. System change
2. Training and education
3. Evaluation and feedback
4. Reminders in the workplace
5. Institutional safety climate.

Hand hygiene needs to be a mandatory component for all medical training, included in all compulsory inductions, and become part of the performance assessments. Negotiation with the medical board of Australia is required about achieving "points" in the CPD programs. Management of health care facilities must believe in the program for it to be sustainable.

### **Colour Grid, How best to communicate your message.**

*Charles Xuereb, Director CLUTCH*

Pre reading to sent to all attendees to undertake a quick online survey which gave you a personal profile of your colour grid.

The idea behind the colour grid program is to work out what influences people have in their life that may affect their mindset. This does not mean that you can use this solely as a forecaster of product purchasing as the example the presenter gave was he would love to drive a 2 door sports but in reality he drives a 5 door hatch back.

What it does help to do is work out "groups" and group behaviour is a better indicator of purchasing power. "Colour Grid" suggests we are all part of many groups and understanding how they all relate is a more meaningful indicator.

To improve the acceptability of your educational message he suggests you tailor your message to specific groups. E.g. if talking to Nurses focus on the contribution they have made to both the hospital and their patients by using ABHR and on the dollars saved to both on extra patient care because of infections. When talking to the medical staff focus on their reputation and peer group pressure if they don't use ABHR also give them information on how the product works and feedback of their compliance.

### **What haven't we focused on to change behaviour ?**

*Mary-Louise McLaws, University of NSW*

This presentation started by commending the success in hand hygiene compliance improvements amongst health care workers (HCW) using the Geneva model, a multimodal approach to hand hygiene improvement. The presentation went to list some theories used to explain behaviour, commenting that the 'health belief model' can affect change, an example such as smoking cessation, when an individual's health is at risk. However, most hand hygiene in the work place is required for the health of others and has very little effect on the health of the individual HCW who is required to hand hygiene. Marketing campaigns to affect health behaviour change tends to have big peaks of visual attention with little lasting effect, memory or behaviour change. The presenter describe a focus group study she was involved in (Whitby et al, 2006) that asked groups of mothers, children and nurses what prompted them to perform hand hygiene. Discovering self-protection as the primary driver to perform hand hygiene and protection of others was a less important motivation. The presenter summarized hand hygiene behaviour, in-home and in-hospital, as a result of a complex assessment of learnt behaviour (before the age of 9 -10 years old) and societal norms. Once in a hospital hand hygiene resulted from two distinct behavioural categories, inherent, which includes the societal norms and learnt behaviour when hands are either perceived to physically dirty or emotionally dirty (i.e. after toileting. The second category was elective hand hygiene behaviour. Elective behaviour was classified as generally not being affected by societal norms or learnt behaviours, examples include shaking patients' hands and conducting blood pressure. The presenter when to talk about the requirements for organizational change using the Geneva model and this appeared to have been effective at changing the global and country level but not at individual hospital and HCW level. This presentation was summarized with the concept that in order to really change in-hospital hand hygiene behaviour requires hand hygiene behaviour to be changed at societal level.

### **Hand Hygiene and Entry to Practice Medical Programs - How should we begin?**

*Geoff McColl, University of Melbourne*

The presenter introduced the subject of hand hygiene (HH) education for medical students suggesting that there was current a scarcity of training being provided. Where HH education was being provide it appeared to occur in a format that did not see best HH practice translate from the classroom to the clinical environment. The presenter suggested the following reasons for this:

- Not enough time and too much course material
- Lots of pressure from disciplines/pressure groups and unhappy students
- Bureaucratic University processes

He went on to suggest influencing medical curriculum required:

- Being empathetic, bring the problem and the solution at the same time
- Understand the complexity and logistics of curriculum development and delivery with reasonable timelines
- Follow up decisions and actions

Finally the presenter suggested that providing a bolt on HH/infection control module had still not eventuated in improved practice and to embed HH in a medical program required:

- Convince the medical schools that it is a good idea and consider how a program in HH would be developed over the length of a course (knowledge, skills and attitudes)
- Consider curriculum partners
- Consider the complexity of the clinical training environment
- Consider assessment tools and evaluation strategies

He also suggested that it is a two stage approach:

- Preclinical phase
  - in the context of a quality and safety curriculum introduce HH knowledge
  - In the context of an early clinical skills program introduce HH skills and standards
- Clinical phase

- Reinforce HH knowledge and embed HH skills in the context of the health service
- Consider critical incident assessment (OSCEs)
- Consider involving students in HH education in the health service

## Future Challenges

### The Economics of Infection Control

*Nick Graves, Queensland University of Technology*

Nick Graves works conjointly between Queensland University of Technology & Queensland Health & has been commissioned by the ACSQHC & NHMRC to evaluate the National Hand Hygiene Initiative. Nick outlined the aim of the research programme, including the main research questions; how does the program work & is it worth doing. Nick highlighted research methods that will be used to evaluate measurable factors that influence SAB rates & at what level these impact & how the research program will assess the costs & health benefits of the National Hand Hygiene Initiative.

### Engaging The Private Sector: Australia -

*Dr Peter Thomas, Australian Private Hospital Association*

Peter Thomas is the Policy Manager for the Australian Private Hospital Association. Peter outlined the current level of private sector participation in the National Hand Hygiene Initiative & the diverse structures & ownership patterns of private hospitals in Australia. Peter also outlined some of the challenges faced by the Private Sector in light of the funding models, & how these are being overcome.

### Global Updates from the Private Sector:

Nordiah Jalil highlighted the Hand Hygiene activities of private hospitals in Malaysia, in particular focused on staff participation & inclusion of Hand Hygiene Compliance rates in quality indicators.

Didier Pittet discussed implementation of the WHO Campaign in private facilities in Geneva.

Dale Fisher (Singapore) & Sally Roberts (New Zealand) also commented on hand hygiene culture change programs in private facilities within their region. Dale discussed how funding arrangements in Singapore resulted in a different structure for healthcare in Singapore. In New Zealand collection of data & participation of the private hospitals is not included as part of national program, as resources are coordinated from within the Public sector.

### National Registration & Credentialing

*Marilyn Cruikshank, Australian Commission for Safety & Quality in Healthcare*

Marilyn is the Policy Manager with the Australian Commission for Safety & Quality in Healthcare, who are currently implementing the conversion to a National registration for health practitioners. The aim of National registration is to provide greater safeguards for the public, to help health professionals move around the country more easily & therefore promote a more flexible, responsive & sustainable health workforce & to reduce red tape. Credentialing is also included in the work of the ACSQHC and will provide consistency to the verification process for medical professionals, which currently is varied across all states & territories. The interface between credentialing & national registration will allow for continuing professional development to include elements such as Hand Hygiene as part of annual renewal of registration for health practitioners.

## Future Innovations

### The use of electronic data collection devices.

*Dr Sally Roberts, HHNZ*

Following a thorough scoping exercise prior to the commencement of the New Zealand HH program a decision was made to invest in the development of an electronic data collection tool using a PDA. User acceptability has been high with only a few issues related to the cost of purchasing more PDAs and some IT compatibility issues. With smart phones become more readily available a move to creating applications that will also work on these devices is the way of the future.

### **Outcome measures for HH.S. aureus bacteraemia (SAB) reporting**

*Prof. M. Lindsay Grayson, Director HHA*

Multiple studies over the past 20 years have demonstrated the effectiveness of hand hygiene to reduce HAIs. The ACSQHC have developed a national system for recording SAB which is being viewed as the “blueprint” for a national system for nosocomial infection surveillance. SAB data has been collected from 5 of the 8 states/territories of Australia with the remainder to follow.

Potential problems with SAB reporting have been identified but the goal of developing a national system of standardised SAB reporting is important and should be led by the experts in Infectious Diseases and Infection Control rather than become a political issue. Tasmania and Western Australia have shown that it can be achieved.

### **Mandatory Reporting HA-SAB - Western Australia**

*Rebecca McCann - HISWA*

In Western Australia, reporting of healthcare acquired *S.aureus* bacteraemia is one of 9 clinical indicators (8 are mandatory) for all public hospitals and 2 private hospitals. A validation of reported Healthcare acquired SABs against laboratory results demonstrated that the laboratory results had a sensitivity of 77% and a specificity of 99.6%. A review of discharge coding of the same patients demonstrated a sensitivity of 50%. Validation of SABs is now routine procedure.

Main emphasis should be on ensuring good local systems for case detection, investigation, learning clinician feedback and improved patient safety outcomes.

### **Notification of *Staphylococcus aureus* bacteraemia**

*Brett Mitchell TIPCU*

In 2008 all public and private hospitals agreed to commence collecting SAB surveillance data using a blended approach from Western Australia, Queensland and South Australia. At the end of 2008, SAB became a notifiable disease. TIPCU is notified by the laboratory of all blood cultures that are positive for *S.aureus*. Further information is then sought directly from the hospital.

SAB notification in Tasmania means that we they are able to capture every case of SAB not just acute admissions and therefore able to get a true incidence of SAB in a population. They are in a unique position to inform future discussions, supported by the data about whether mandatory SAB notification enhances the process.

### **Hand Hygiene Research Agenda**

*Professor Didier Pittet*

5 key steps in hand hygiene improvement have been identified as - 1) System change: AHR at point of care; 2) 5 elements multimodal promotion 3) 5 moments for hand hygiene; 4) Adaptability of actions/interventions; 5) Leadership commitment/Safety culture

Since 1996 the number of scientific papers on hand hygiene has grown from just over 100 to just under 400 in 2008.

HH research agenda should be targeted at the 5 elements:

- 1) Education, eg Value of e-learning / distance education;
- 2) System change, eg ABHR skin tolerance & acceptability, role of additional active agent(s), formulation (rinse, gel, foam), alternatives to ABHR?
- 3) Monitoring performance and feedback - eg role of self-monitoring / auto monitoring, mode, type an frequency of feedback, value of surrogate markers of performance
- 4) Workplace reminders, eg role in promotion/sustainability, role of adaption for increase /better adoption, is there a NO LIMIT policy to materials produced.
- 5) Safety Culture eg Study institutional parameters, leadership commitment (parameters of), role of internal / external benchmarking.

Also, scaling - What are the minimal parameters at ward, department, institution. Study key parameters for successful scale-up. Sustainability of actions / interventions. Behavioural models - Socio-cultural models. Innovation and diffusion of that innovation.

Other overall areas on the research agenda include, defining the next level of intervention, defining the relationship between compliance improvement and infection reduction, develop and validate mathematical models.