

National Hand Hygiene Initiative

Background

Health care associated infections (HCAI) is a major and growing issue in the quality and safety of health care in both the hospital and community settings requiring urgent national consideration and action and has been nominated as a priority area by the Australian Commission on Safety and Quality in Health Care (ACSQHC). The highest priority area to reduce the risk of healthcare-associated infections is improved healthcare worker hand hygiene (HH). Reliable indicators of HH compliance are essential and mechanisms for the wider implementation and monitoring are required.

The purpose of the National Hand Hygiene Initiative (NHHI) is to develop a national approach to improving HH and monitor its effectiveness. The initiative will be based on the World Health Organisation (WHO) - World Alliance for Patient Safety campaign – “Clean Care is Safer Care” launched in 2005.

Hand Hygiene Australia

Hand Hygiene Australia (HHA) is responsible for implementing the NHHI and ensuring the above objectives are met by 2011. Headed by Professor Lindsay Grayson as Director, the HHA team members will be based at both the Austin and in many States/Territories. HHA reports directly to the ACSQHC. HHA will work closely with existing State/Territory strategies and campaigns to maximise the success of the NHHI, including the establishment of a standard national system of outcome measures to assess the effectiveness of the NHHI. While initially focusing on acute-care public hospitals, HHA resources are also available for all healthcare facilities, both public and private. Ultimately it will be the responsibility of each State/Territory jurisdiction to determine their participation in the NHHI.

NHHI Objective

The key aims of the NHHI are to develop a national HH culture-change program that will:

- Achieve sustained improvements in HH compliance rates
- Accurately measure rates of staphylococcal disease – a key outcome measure of the program
- Reduce the rates of HCAs
- Develop an effective education and credentialing system to improve knowledge about HH and infection control
- Make HH and infection prevention ‘core business’ for all healthcare institutions and the wider Australian community

Key interventions

1. Establish a National Hand Hygiene Education Program

The development and maintenance of an ongoing education program to initiate and sustain HH behaviour change is vital. All HCWs and support staff will be included in educational activities. An on-line educational HH credentialing program will be developed for national use.

2. Improve HH compliance

A standardised HH observation assessment tool based on the WHO “5 Moments” Program has been developed and validated. It is proposed that this tool will eventually be used by all participating hospitals nationwide. Use of a standardised tool and validation of the HH compliance assessors is vital to ensure accurate data that can be compared both nationally and internationally. Regular assessment of HH compliance should be performed on a routine basis in all hospitals. The 5 moments for assessment are as follows:

Moments	Title	Activity
Moment 1	Before Patient Contact	Before and after direct contact with patients
Moment 2	Before A Procedure	Before any procedure (regardless of whether or not gloves are worn).
Moment 3	After a Procedure or potential Body Fluid Exposure Risk	After any procedure listed in <i>Moment 2</i> After contact, or potential contact, with body fluids. After removing gloves
Moment 4	After patient Contact	After any contact listed in <i>Moment 1</i> . After removing gloves from a Moment 1 contact
Moment 5	After Contact with Patient Surroundings	After contact with inanimate objects (including medical equipment) in the immediate vicinity of the patient. Contact with patient/bedside charts

3. Standardised assessment of *S. aureus* bacteraemia (SAB) rates

A standardised system of assessing the patient rates of SAB in each hospital and for each State/Territory has been developed. This will include information regarding antibiotic susceptibility and whether the infection was likely to have been hospital-acquired. Thus, the following information will be collected:

1. Antibiotic susceptibility of each isolate to allow categorisation as:
 - a. Methicillin-susceptible *S. aureus* (MSSA)
 - b. Methicillin-resistant *S. aureus* (MRSA) – including, multi-resistant MRSA and non-multi-resistant MRSA
2. Timing of SAB in relation to patient admission: ≤ 48 hs, >48 hs
3. No. of patient separations (including all day cases) per month for each institution
4. SAB rates will be calculated for each hospital and State/Territory per month as follows:

$$\frac{\text{No. patients with SAB}}{\text{no. separations at the institution}} \times 100$$

Thus, the monthly rate for each hospital will be expressed as:

Patients with SAB per 100 separations.

Participation in the National Hand Hygiene Initiative

In agreeing to participate in the NHHI your State/Territory is agreeing to:

1. Implement a HH culture-change program based on, or similar to, that proposed by HHA, including HH credentialing in your State/Territory
2. Collect and supply de-identified hospital level data on *S. aureus* bacteraemia – monthly numbers (submitted to HHA 3 times per year - March, July, November) as outlined above.
3. Undertake regular Hand Hygiene compliance auditing using the HHA 5 Moments Program (or similar, as per an agreed arrangement with HHA submitted to HHA 3 times per year - March, July, November to HHA).
4. Participate in future discussion regarding how best to appropriately measure and report hospital performance regarding the NHHI.

What Hand Hygiene Australia will do for you:

1. Collate data from all States/Territories on Hand Hygiene compliance and SAB rates.
2. Provide generic and standardised educational resources
 - a. HHA Manual
 - b. HH Credentialing programs
 - i. For all healthcare workers
 - ii. For assessors

- c. Generic educational programs and templates (e.g. PowerPoint) that can be used in each State/Territory if desired
- d. Educational posters
- e. Training DVD
- f. HHA website
3. Assist States who are not currently using the HHA 5 Moments compliance tool to either adopt this tool or to successfully translate their results into a format that is consistent with those of the HHA 5 Moments tool to provide national consistency
4. Provide a prepared database for HH compliance and SAB rate collation for use in each State/Territory
5. Human Resources:
 - a. Assist in designing and conducting workshops
 - b. Advice on implementation strategy
 - c. Attendance at relevant hospital and jurisdictional meetings
6. Establish Working Parties to explore special areas of interest:
 - Improvements in the education and credentialing package
 - Curriculae for undergraduate & post-graduate education
 - Development of a standard data collection tool for accurately undertaking root-cause analysis on patients with SAB, to more accurately identify the source of SABs
 - Efficacy of alcohol based hand rub solutions – defining the optimal product
 - Consumer involvement

Summary

The NHHI is one of ACSQHC five major initiatives to reduce hospital acquired infection, and represents the first ever national roll out of such a program. The NHHI will change healthcare worker education and practice, and result in a safer environment for patients.

Questions?

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