

Hand Hygiene Initiatives in Australia

Phil Russo, Hand Hygiene Australia

A Webber Training Teleclass

Hand Hygiene Initiatives in Australia
The National Hand Hygiene Initiative

Mr Phil Russo
 National Project Manager
 Hand Hygiene Australia

Hosted by Jane Barnett
 jane@webbertraining.com

www.webbertraining.com June 13, 2012

Overview

- Background
- Key features
- Compliance Data
- Future challenges

Background

- 8 Jurisdictions
- Coordinated hand hygiene programs in
 - VIC
 - QLD
 - NSW
- Different programs & methods

Background

Efficacy of an alcohol/chlorhexidine hand hygiene program in a hospital with high rates of nosocomial methicillin-resistant *Staphylococcus aureus* (MRSA)

Paul DR Johnson, Rhea Martin, Laurelle J Burrell, Elizabeth A Grabsch, Susan W Kirs, Jason O'Keeffe, Barrie C Mayall, Deidre Edmonds, Wendy Barr, Christopher Bolger, Humsha Naidoo and M Lindsay Grayson

Conclusions: Introduction of ACHRS and a detailed culture-change program was effective in improving hand hygiene compliance and reducing nosocomial MRSA infections, despite high-level MRSA endemicity.

MJA 2005; 183: 509-514

A Total clinical isolates of MRSA

B Patient-episodes of MRSA bacteraemia

MRSA isolates and patient-episodes of bacteraemia

After 36 months:

- Total MRSA isolates:
 - 40% reduction (95% CI, 23%–58%)
 - 1008 fewer clinical isolates
- Patients with MRSA bacteraemia:
 - 57% reduction in monthly rate (95% CI, 38%–74%)
 - 53 fewer bacteraemias than expected (95% CI, 36–68 episodes)

Johnson et al. Med J Aust 2005; 183:509-514

Background

Significant reductions in methicillin-resistant *Staphylococcus aureus* bacteraemia and clinical isolates associated with a multisite, hand hygiene culture-change program and subsequent successful statewide roll-out

M Lindsay Grayson, Lisa J Janvie, Rhea Martin, Paul D R Johnson, Meryanda E Jodoin, Celene McMullan, Roger H C Gregory, Kaye Bellis, Katie Cunningham, Fiona L Wilson, Diana Quin and Anne-Maree Kelly, on behalf of the Victorian Quality Council's Hand Hygiene Study Group and Hand Hygiene Statewide Roll-out Group

Conclusions: Pilot and subsequent statewide implementation of a multimodal HHCCP was effective in significantly improving HH compliance and reducing rates of MRSA infection.

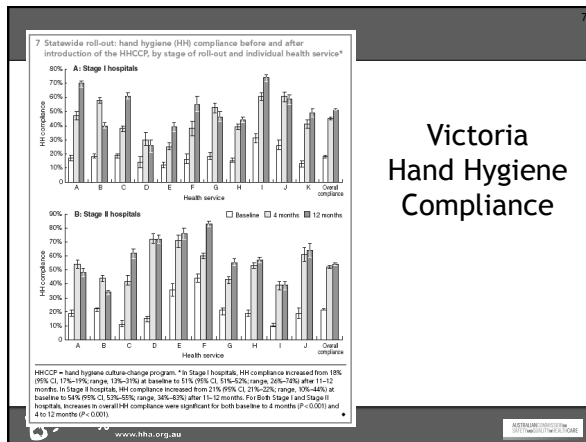
MJA 2008; 188: 633-640

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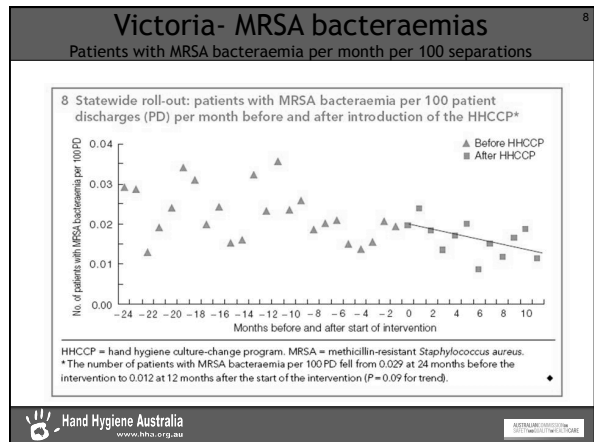
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Victoria Hand Hygiene Compliance



Hand Hygiene Australia

- Fully funded by the *Australian Commission on Safety and Quality in Health Care* to implement **National Hand Hygiene Initiative**
- Leverage off existing hand hygiene programs
- Independent of jurisdiction and hospital

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Objectives

- Implement the 5 Moments for Hand Hygiene at a National level
- Establish accurate measurement of
 - Hand Hygiene compliance rates
 - Staphylococcus aureus* bloodstream infection rates (MRSA & MSSA)
- Make hand hygiene 'core business' for all health care workers
- Reduce rates of healthcare associated infection

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Key Components

- Education
 - 2 day workshop
 - Multi modal program
 - How to audit
 - Must pass assessment to submit data
 - Live observations in clinical areas
 - Multi-choice scenarios
 - DVD assessment
 - Annual online assessment
- Online education packages
 - Medical, Nursing, Allied Health, Non Clinical, Standard

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Key Components

- Reports of hand hygiene compliance rates
 - Hospital
 - Type of ward (Intensive Care Unit etc)
 - State
 - National
- Stratify rates by Healthcare Worker and Moment
- Collection of *staphylococcus aureus* bacteraemia data

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Key Components

Number of Moments collected dependent on size of hospital

Number of acute inpatient beds at the hospital	Required number of HH audits per year	Required number of wards per HH audit *	Required number of HH Moments per ward	Total minimum HH Moments for hospital per audit
>400	3	7	350	2450
301-400	3	6	350	2100
201-300	3	5	350	1750
101-200	3	4	200	800
51-100	3	2	100	200
25-50	3	1	100	100
< 25	3	1	50	50

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Key Components - website

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Key Components - website

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Data collection

Hand Hygiene observation - Data collection form.

Organization: _____
 Observer: _____
 Date: _____
 Author: _____
 Start Time: _____
 Finish Time: _____
 Duration of Session: _____ mins

FIVE MOMENTS FOR HAND HYGIENE

- Before touching a patient
- Before a procedure
- After a procedure to your next patient
- After touching a patient
- After touching a patient's surroundings

No.	Moment	Action	Observed	Observed	Observed	Observed	Observed	Action	Observed
1	1	rub	on	1	1	1	1	on	1
2	1	wash	off	2	2	2	2	off	2
3	1	missed	cont.	3	3	3	3	cont.	3
4	1	rub	on	4	4	4	4	on	4
5	1	wash	off	5	5	5	5	off	5
6	1	missed	cont.	6	6	6	6	cont.	6
7	1	rub	on	7	7	7	7	on	7
8	1	wash	off	8	8	8	8	off	8
9	1	missed	cont.	9	9	9	9	cont.	9
10	1	rub	on	10	10	10	10	on	10
11	1	wash	off	11	11	11	11	off	11
12	1	missed	cont.	12	12	12	12	cont.	12
13	1	rub	on	13	13	13	13	on	13
14	1	wash	off	14	14	14	14	off	14
15	1	missed	cont.	15	15	15	15	cont.	15
16	1	rub	on	16	16	16	16	on	16
17	1	wash	off	17	17	17	17	off	17
18	1	missed	cont.	18	18	18	18	cont.	18
19	1	rub	on	19	19	19	19	on	19
20	1	wash	off	20	20	20	20	off	20
21	1	missed	cont.	21	21	21	21	cont.	21
22	1	rub	on	22	22	22	22	on	22
23	1	wash	off	23	23	23	23	off	23
24	1	missed	cont.	24	24	24	24	cont.	24
25	1	rub	on	25	25	25	25	on	25
26	1	wash	off	26	26	26	26	off	26
27	1	missed	cont.	27	27	27	27	cont.	27
28	1	rub	on	28	28	28	28	on	28
29	1	wash	off	29	29	29	29	off	29
30	1	missed	cont.	30	30	30	30	cont.	30

Total Correct Moments: _____ Total Moments: _____

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Hand Hygiene Compliance Application (HHCApp)

Manage Audits and Workflows

Manage Audit Periods | Manage Audits | Manage Sessions | View Reports

Administration

Manage Departments | Manage Auditors

HCW type	Moments	Action	Glances	Edit	Delete
RN	1	rub	on	Edit	Delete
RN	2	wash	off	Edit	Delete
PN	3	missed	off	Edit	Delete
AN	4	rub	cont.	Edit	Delete
AC	5	rub	cont.	Edit	Delete
BL	2	wash	on	Edit	Delete
D	3	rub	off	Edit	Delete
SOR	4	rub	cont.	Edit	Delete
SH	5	missed	cont.	Edit	Delete
SAH	5	wash	on	Edit	Delete
Q	1	rub	on	Edit	Delete
Q	1	rub	N/A	Edit	Delete

Total Correct HH Actions: 7
Total Moments: 13

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Mobile Web Application (MWA)

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MWA Data collection

- www.hha.org.au/hhmobile
- Log in

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MWA Data collection

- www.hha.org.au/hhmobile
- Log in
- Demographics

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MWA Data collection

- www.hha.org.au/hhmobile
- Log in
- Demographics
- Collect compliance data

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MWA Data collection

- www.hha.org.au/hhmobile
- Log in
- Demographics
- Collect compliance data

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MWA Data collection

- www.hha.org.au/hhmobile
- Log in
- Demographics
- Collect compliance data
- Synchronise

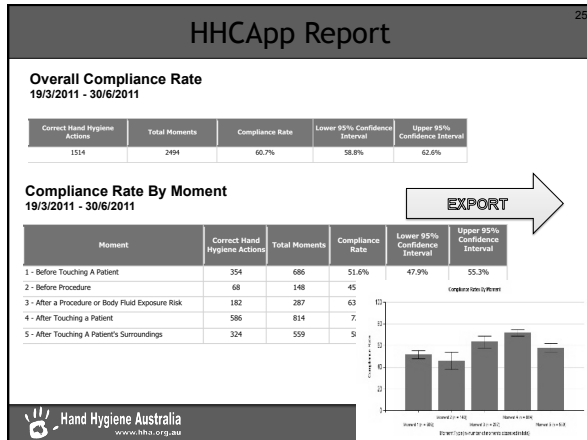
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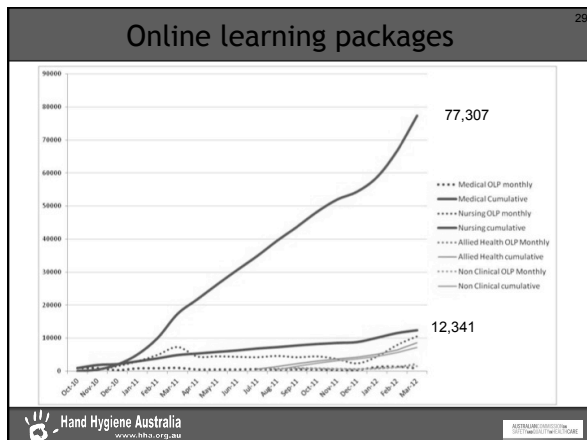
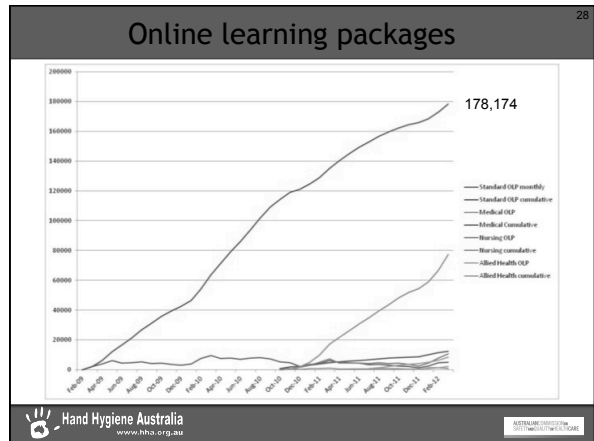
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Direct web entry from enabled devices

- Eliminates
 - Duplicate data entry
 - Data entry error
- Reduces data management time by 50%
- Mobile devices cheap, common
- Flexible reporting options

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Compliance Data

Period 1 2012

Nov 2011 - Mar 2012

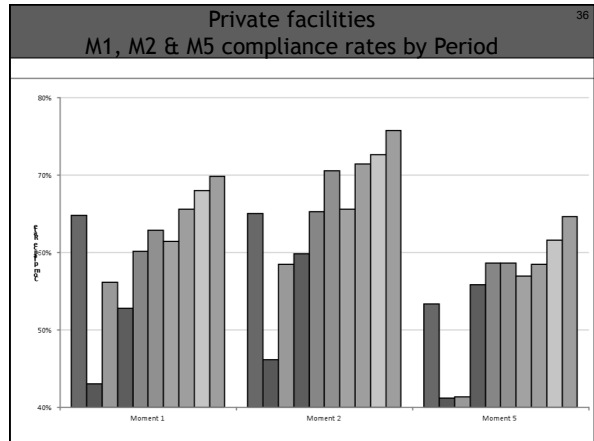
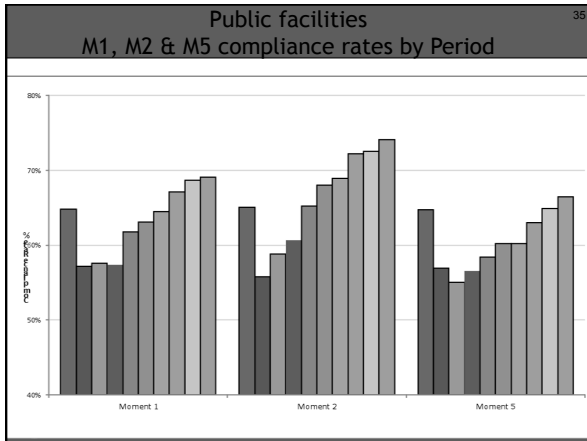
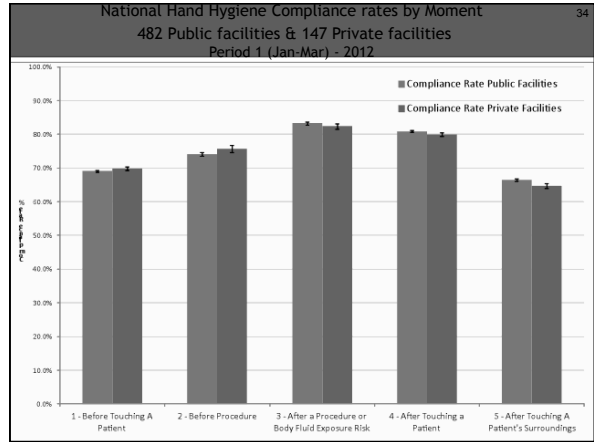
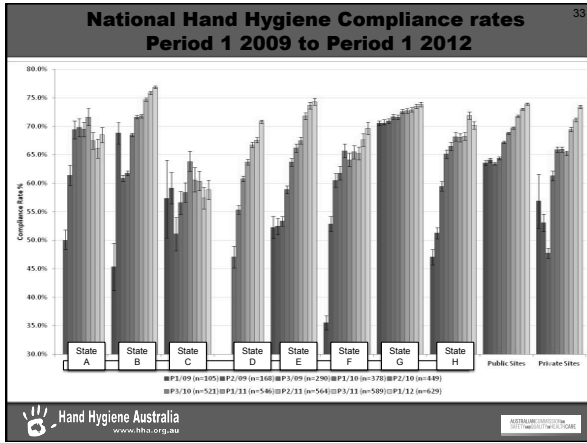
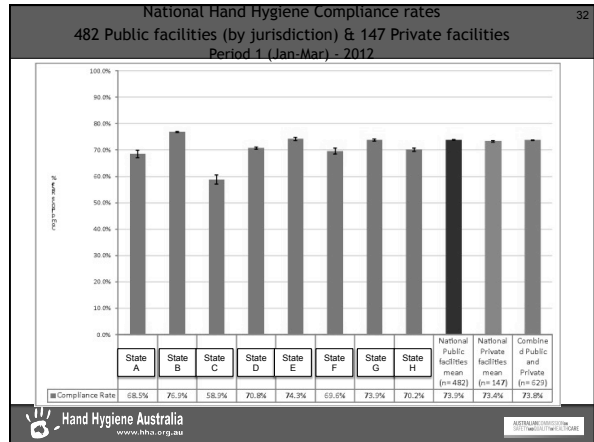
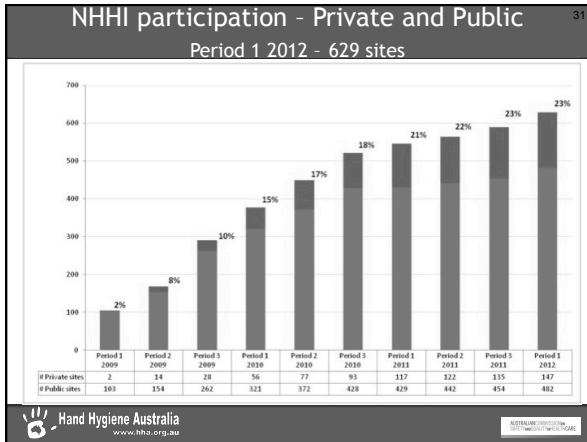
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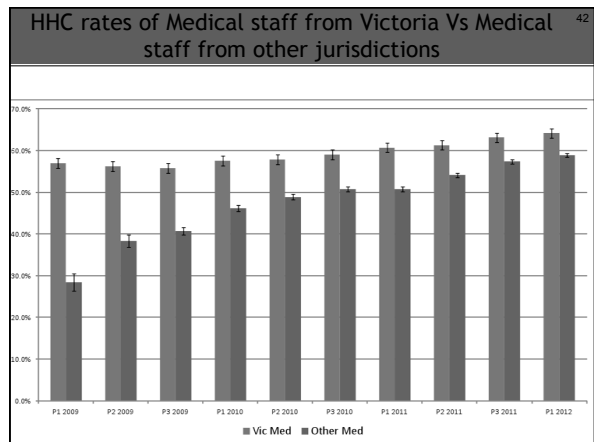
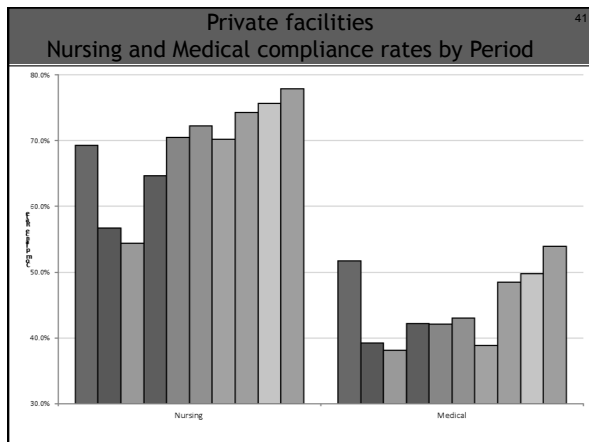
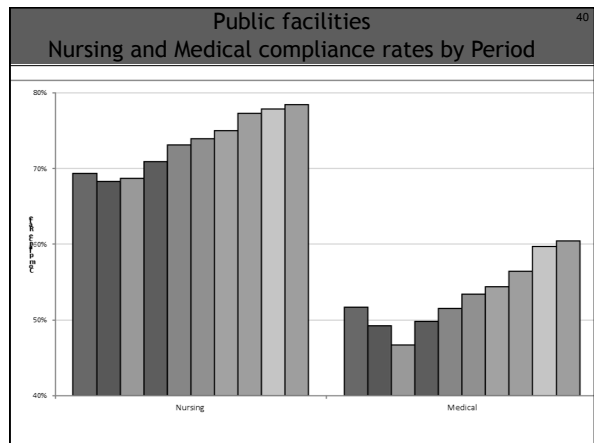
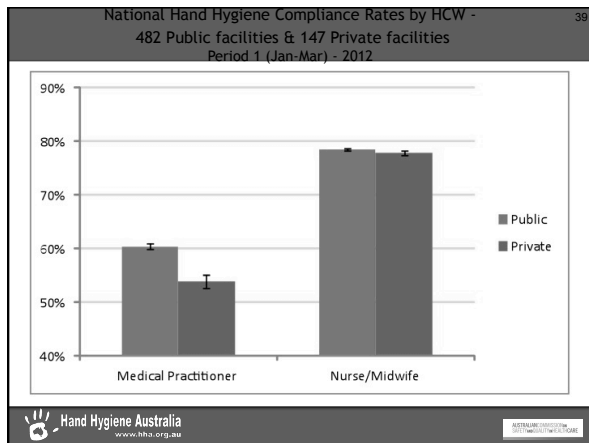
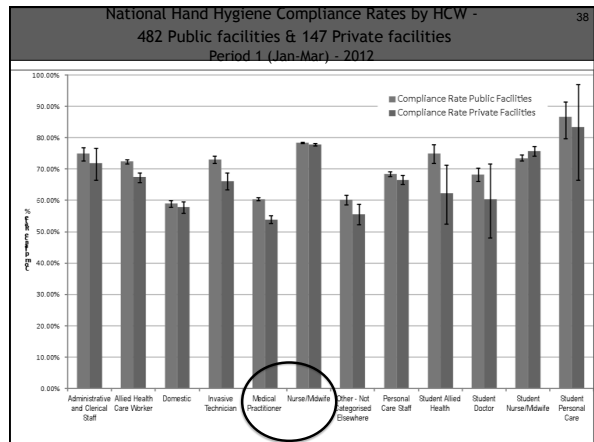
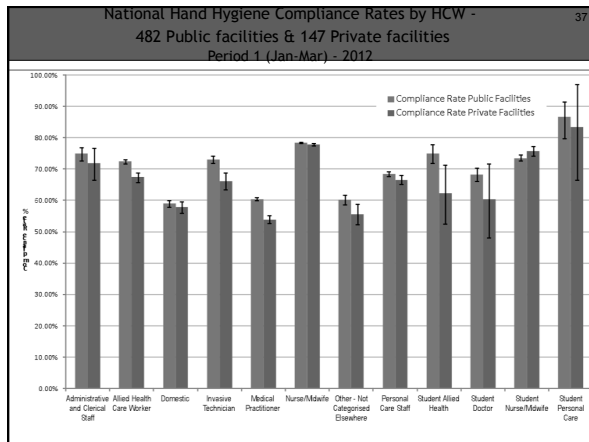


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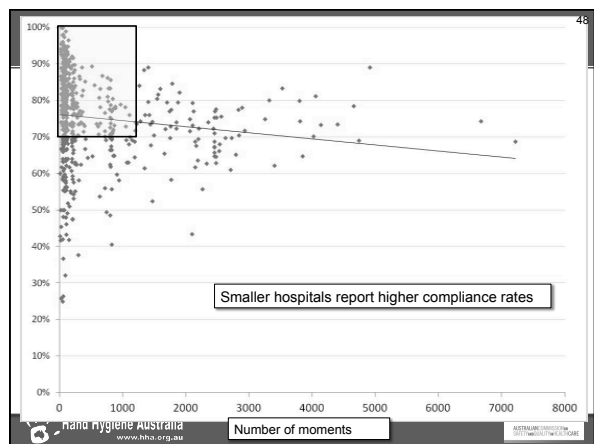
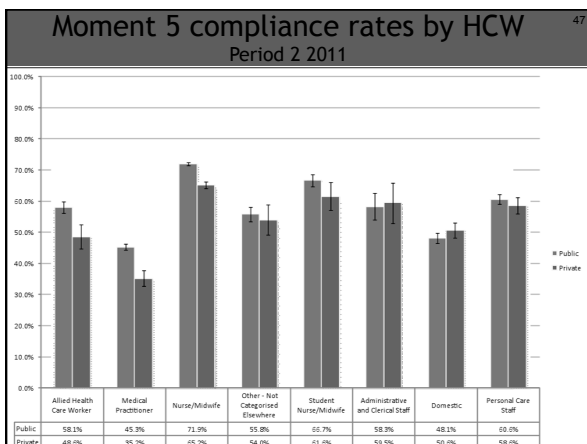
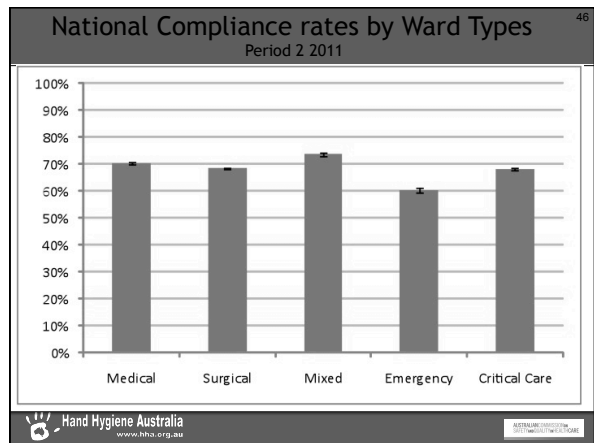
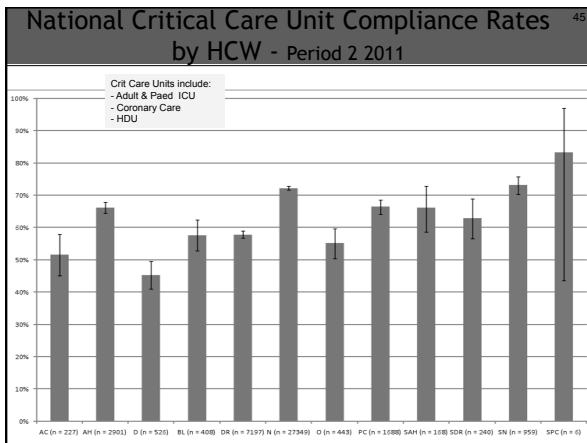
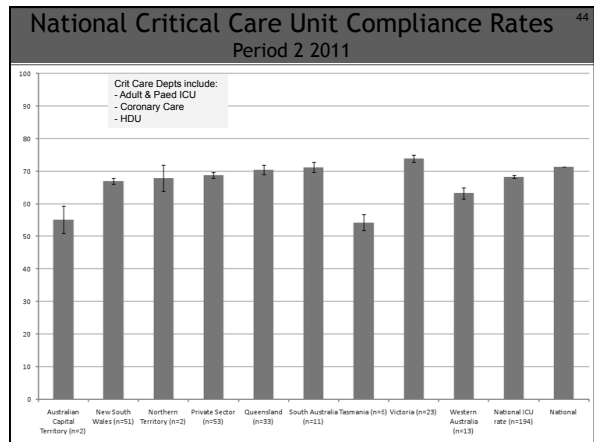
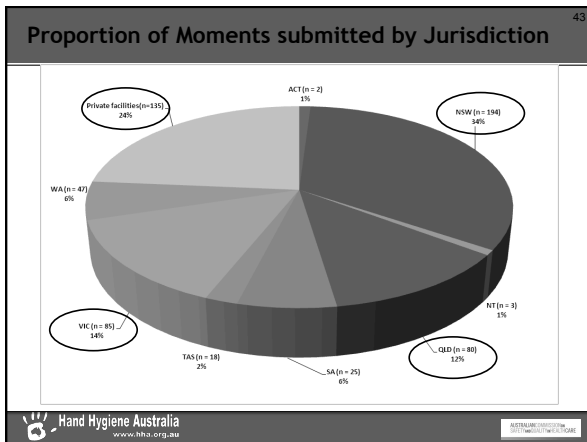


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Medical Journal Australia

Research

Outcomes from the first 2 years of the Australian National Hand Hygiene Initiative

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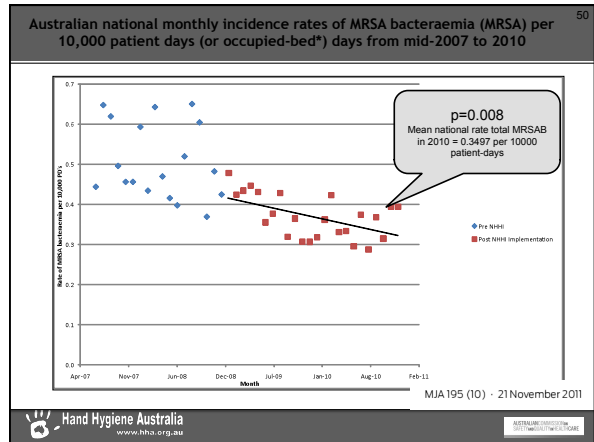
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Bonnie McLean
MBBS, FRACP, FRCR
President, National Health Commission

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MJA 195 (10) - 21 November 2011



Future Challenges

- Medical staff
- University curricula
- Meaningful public data

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MyHospitals

Learn about your local hospital

Better information on Australian hospitals

Browse hospitals

Hand Hygiene Australia
www.hha.org.au

MyHospitals

Austin Hospital [Heidelberg]

This is a public hospital

145 Studley Road Heidelberg, VIC 3084

Phone: 03 9496 5000

Safety and quality

Readily, safety in health care is about avoidance of patient harm. Quality is about whether the health care achieved the desired effect for the patient, and whether it was delivered in the way with standards or guidelines. Quality can also refer to whether the health care was delivered in a coordinated way, and whether it was patient-focused. More information about health care safety and quality is available from the Australian Commission on Safety and Quality in Health Care.

Australian governments are committed to improving the safety and quality of care in hospital. The MyHospitals website supports this goal by making safety and quality information available for individual hospitals. More information will become available in the future.

To learn more about how these safety and quality measures are defined and data collected, read [About the data](#).

Hand Hygiene

See more number hospital information published by Victoria

Hand Hygiene Australia
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MyHospitals

Austin Hospital [Heidelberg]

This is a public hospital

145 Studley Road Heidelberg, VIC 3084

Phone: 03 9496 5000

Hand hygiene rate

Hand hygiene in hospitals generally refers to the use of soap and water or a waterless antimicrobial agent (for example, an alcohol based hand rub) by healthcare workers to clean their hands. The aim is for healthcare workers to perform hand hygiene correctly at every opportunity, for example, before and after touching a patient. Good hand hygiene is one of the most effective ways to reverse the risk of healthcare associated infections, such as Staphylococcus aureus bacteraemia (SAB). The National Hand Hygiene Initiative is being progressively implemented in Australian hospitals to improve hand hygiene.

The information presented below refers to the hand hygiene audit period July-October 2011.

The national benchmark for hand hygiene is 70%.

To learn more about hand hygiene 'moments' or for information about how rates for hospitals are calculated and compared with the national benchmark, read [About the data](#).

The estimated rate was 75.4% based on 2,465 hand hygiene 'moments'. This rate is higher than the national benchmark.

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Future Challenges

- 👤 Medical staff
- 👤 University curricula
- 👤 Meaningful public data
- 👤 Reducing the burden of auditing

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Future Challenges

- 👤 Alleviating the burden of auditing
 - Online data entry
 - Do we need to measure all 5 Moments?
 - Are there any proxy measurements?
- 👤 Electronic monitoring
 - Number of dispenses/volume use
 - Entry/Exit of room
 - Cost
 - Privacy issues

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Using High-Technology to Enforce Low-Technology Safety Measures: The Use of Third-party Remote Video Auditing and Real-time Feedback in Healthcare

Example of hand hygiene compliance messages posted on the light emitting diode boards mounted in the hallway of the medical intensive care unit for ongoing viewing by the healthcare workers in the course of their work.

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Figure 3. Hand hygiene compliance by week during impact period following feedback.

Armellino D et al. Clin Infect Dis. 2012 Jan 1;54(1):1-7. Epub 2011 Nov 21.

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Summary

- 👤 Rolled out to 620+ facilities
- 👤 High uptake of education
- 👤 Consistent measurement of compliance
- 👤 Increase in compliance rates
- 👤 Parallel reduction in MRSA bacteraemias
- 👤 Inclusion as KPI at hospital and executive level
- 👤 Improved data management processes

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Hand Hygiene Centre for Excellence - WHO

- 👤 One of 4 centres worldwide
- 👤 Recognises the national leadership work done by HHA & ACSQHC

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Acknowledgments

-  Australian Commission on Safety and Quality in Health Care
-  Hand Hygiene Coordinators and Infection Prevention teams at participating hospitals
-  Hand Hygiene Australia team

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SOUTH PACIFIC

Teleclass Series
2012



NOTICE

Look for additional teleclass lectures broadcast live from South Pacific conferences.
www.webbertraining.com

<p style="font-size: 0.8em; margin: 0;">February 12</p> <p style="font-weight: bold; font-size: 0.9em; margin: 0;">Outbreaks of Vaccine Preventable Diseases - Communicating the Science and Closing the Gaps</p> <p style="font-size: 0.8em; margin: 0;">Dr Nikki Turner, University of Auckland, New Zealand</p>
<p style="font-size: 0.8em; margin: 0;">April 18</p> <p style="font-weight: bold; font-size: 0.9em; margin: 0;">Central Line Associated Infection in ICU</p> <p style="font-size: 0.8em; margin: 0;">Professor M.L. McLaws, University of New South Wales, Australia</p>
<p style="font-size: 0.8em; margin: 0;">June 13</p> <p style="font-weight: bold; font-size: 0.9em; margin: 0;">Hand Hygiene Initiatives in Australia</p> <p style="font-size: 0.8em; margin: 0;">Phil Russo, Hand Hygiene Australia</p>
<p style="font-size: 0.8em; margin: 0;">October 18</p> <p style="font-weight: bold; font-size: 0.9em; margin: 0;">Meningococcal Disease and the New Zealand Experience - Where to From Here</p> <p style="font-size: 0.8em; margin: 0;">Dr Tony Walls, University of Otago, New Zealand</p>
<p style="font-size: 0.8em; margin: 0;">December 5</p> <p style="font-weight: bold; font-size: 0.9em; margin: 0;">(WHO Teleclass) New Developments in Infection Control for Renal Dialysis</p> <p style="font-size: 0.8em; margin: 0;">Prof. W.H. Seto, Queen Mary Hospital, Hong Kong</p>

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