

A Practical Model for Implementing a Hand Hygiene Culture Change Program at Melbourne Health

Celene Mc Mullan and Cindy Grieve
Infection Prevention & Surveillance Service

Background

Hospitalised patients are at risk of acquiring nosocomial infections which are known to have a negative impact on their morbidity and mortality, length of stay and increased health care costs

Despite the extent to which Infection Control practices have evolved to date, hand hygiene remains the single most effective means of preventing the transmission of these infections

However, hand hygiene compliance amongst health care workers (HCWS) remains poor

As part of a quality initiative to improve hand hygiene compliance within health services, in July 2004 Melbourne Health, along with 6 other Victorian hospitals were selected by the Victorian Quality Council (VQC) to participate in a hand hygiene project

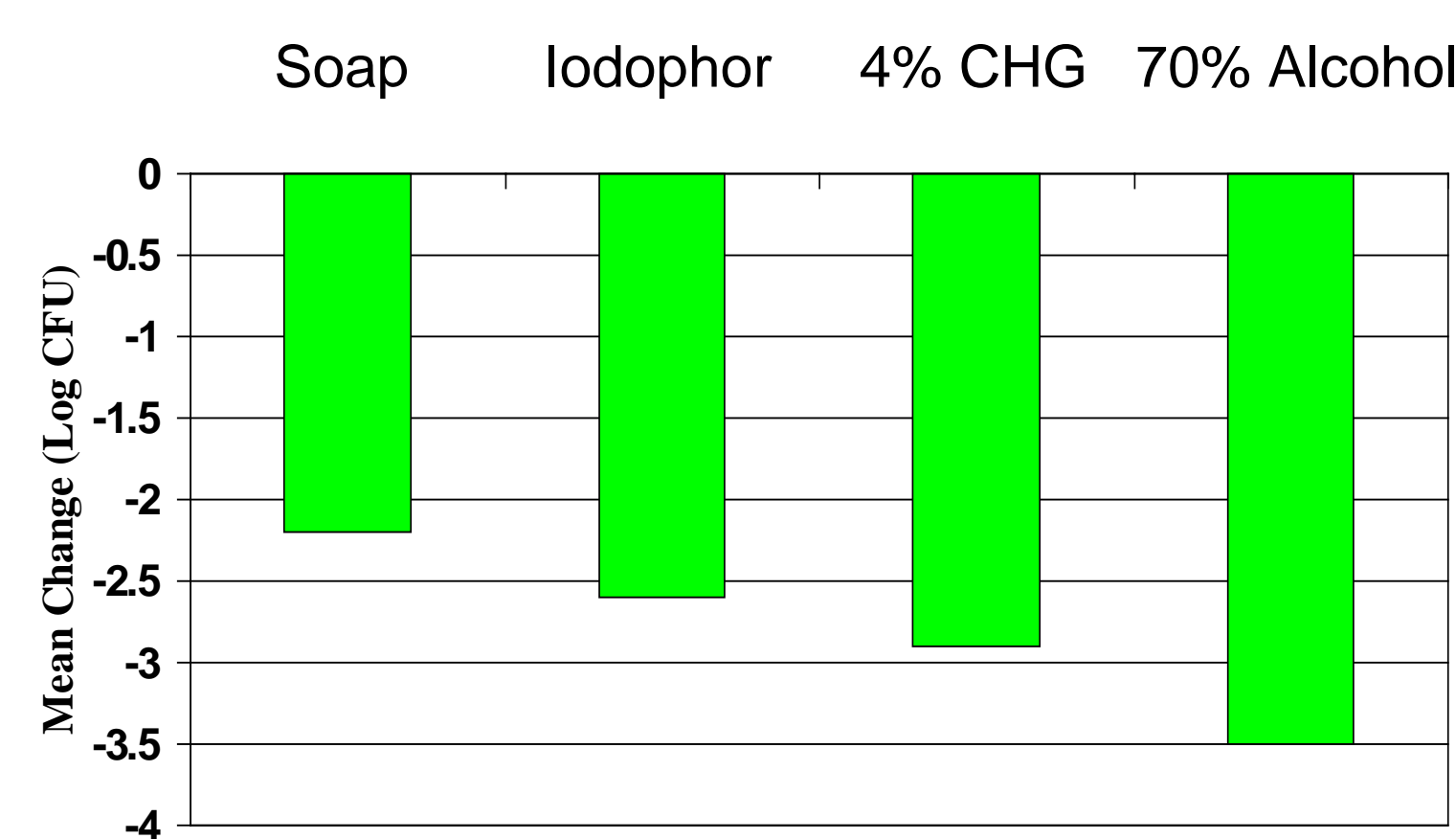
Wards 3South, 6North and 7South West were invited to pilot the project

Aim

- ❖ To reduce the risk of nosocomial infections, specifically MRSA through the introduction of an alcohol – chlorhexidine hand rub (ACHR)
- ❖ To facilitate a sustained cultural change aimed at improving hand hygiene

Alcohol-chlorhexidine hand rubs

- ❖ Require less time
- ❖ More effective than standard hand washing with soap and water
- ❖ More accessible than sinks
- ❖ Reduces bacterial counts on hands



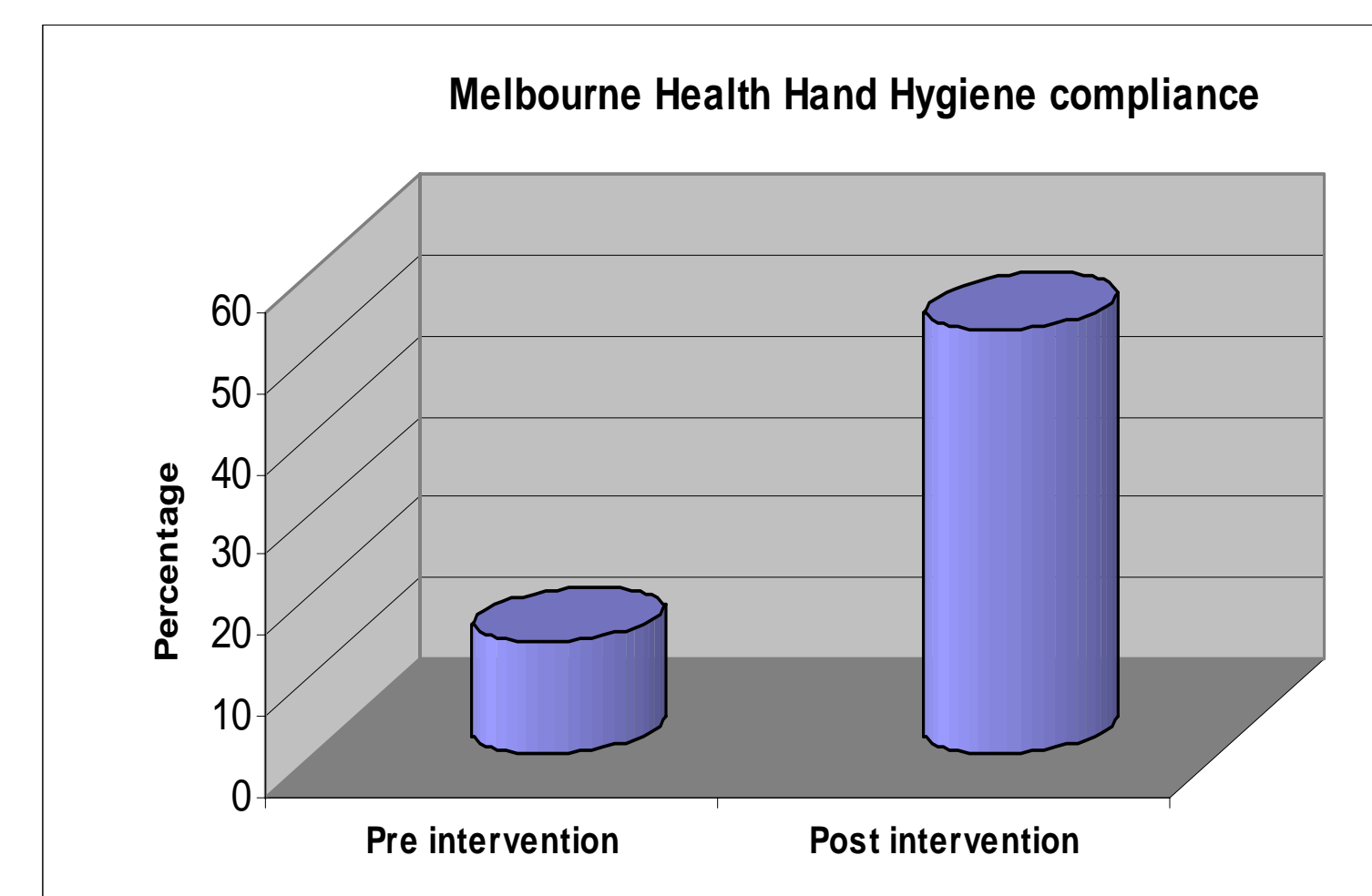
Reprinted with permission from Elsevier
(THE LANCET Infectious Diseases, 2001;April:9-20)

Methods

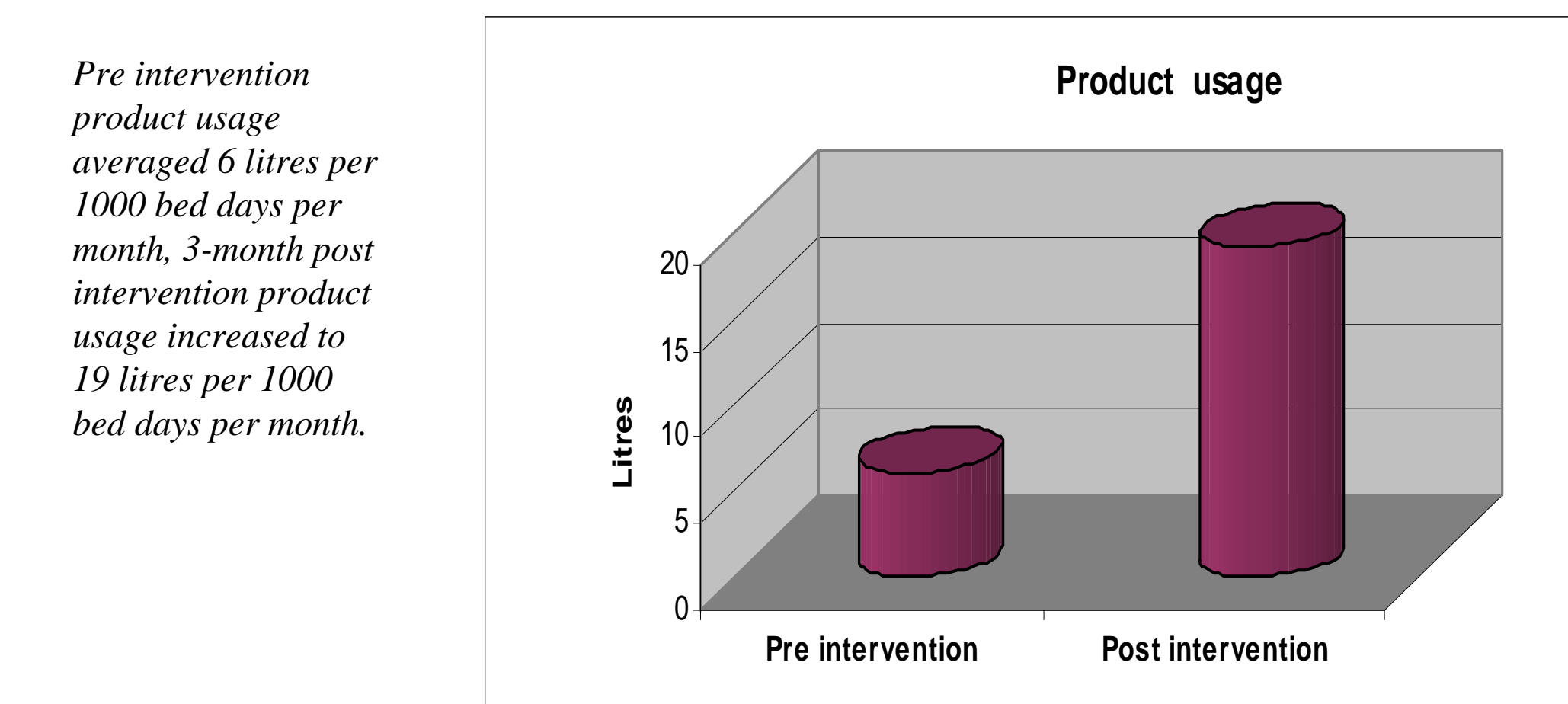
- ❖ A validated hand hygiene observational tool was used to measure Hand hygiene compliance
- ❖ Product usage was calculated in litres per 1000 bed days per month

- ❖ MRSA burden was assessed by determining the total number of positive isolates and the number of patients with MRSA bacteraemia per 100 separations per month
- ❖ The strategies employed to ensure a sustainable culture change include clinician and executive support, education and data feedback, recognition of achievement and ward based competitions, posters and further hand hygiene audits

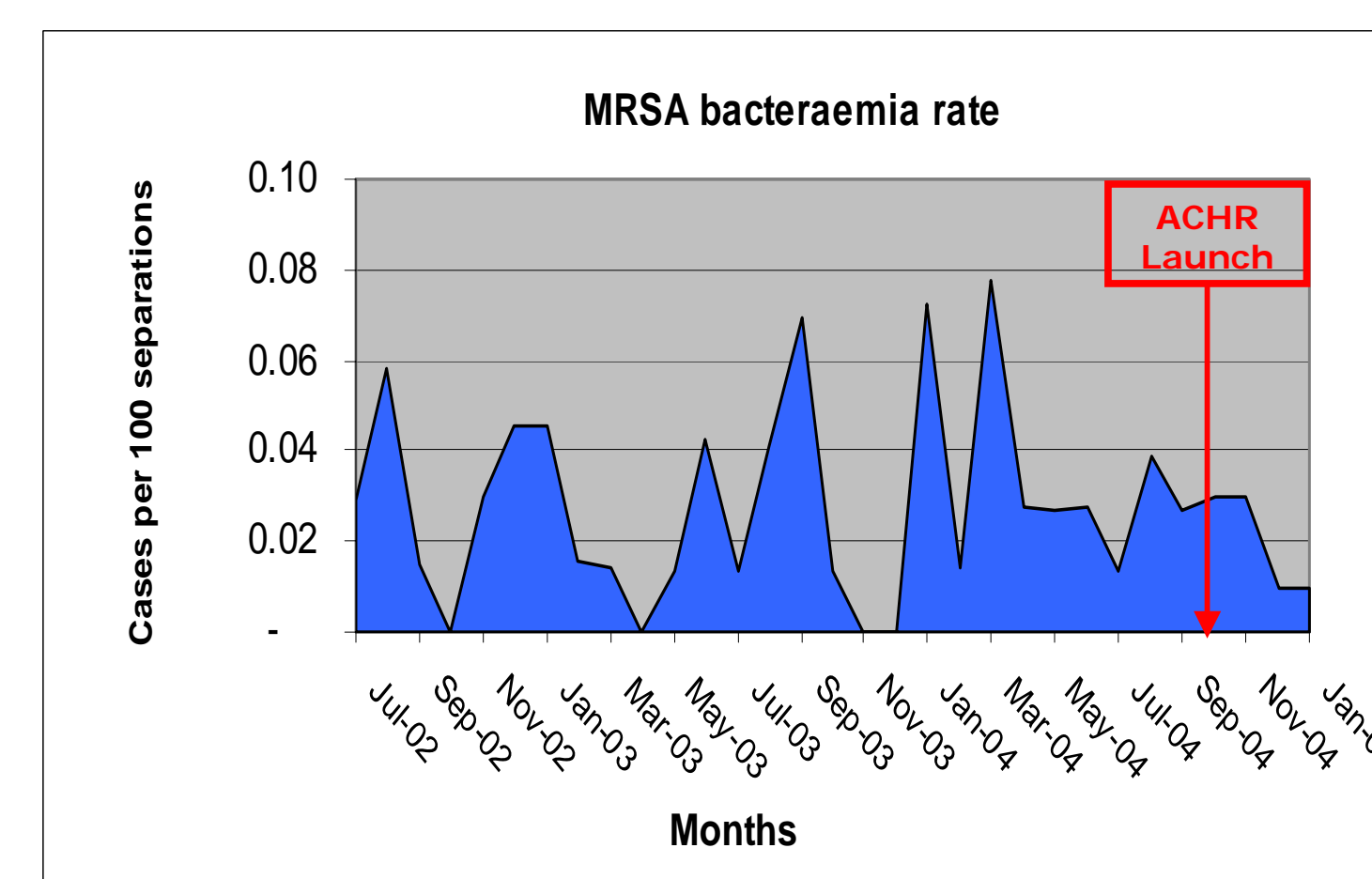
Results



Pre intervention HH observational audit identified 14% compliance; 3-month post intervention HH observational audit demonstrated 53% compliance.



Pre intervention product usage averaged 6 litres per 1000 bed days per month, 3-month post intervention product usage increased to 19 litres per 1000 bed days per month.



The MRSA bacteraemia has not been statistically analysed, 3 months is not a sufficient amount of time to provide an accurate analysis



The new Alcohol-chlorhexidine hand rub (DeBug™) was launched in October 2004 in 3 pilot wards. Education sessions were conducted for all staff and HH Champions appointed to motivate staff.

Photo: Hand hygiene champions ward 6North



The core message for this project is to perform hand hygiene

- Before patient contact
- After Patient contact
- Before Glove use
- After Glove use



Congratulations to the pilot wards 3South, 6North and 7South West who have contributed to the to the marked increase in HH compliance following the introduction of (DeBug™).
Photo: Hand hygiene champions ward 3South

Conclusion

The main source of cross infection for patients in hospital is via the hands of HCWS
In the 3 months since the introduction of this program there has been a significant increase in Hand hygiene compliance and product usage
MRSA bacteraemia rates appear to have decreased however, more data is required to exclude seasonal influences and to ensure the results are a true reflection of sustained change in compliance
A further hand hygiene audit will be conducted in 12 months, this will enable a more comprehensive evaluation of the sustainability of this project

Acknowledgements

Simone Corin
Austin Health Coordinating Centre
Victorian Quality Council