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**TITLE:**

# AN AUDIT OF HAND HYGIENE COMPLIANCE AT VANUATU NATIONAL REFERRAL HOSPITAL

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# INTRODUCTION

- ❑ The US Centre for Disease Control note that a significant number people get infections whilst receiving health care
  - ❑ Globally, approximately 2 million patients get hospital-acquired infections (HAI) annually
  - ❑ 90,000 patients will die from these infections (Stone, 2009)
- ❑ Hospital-acquired infections have significant effects on patients and hospitals
- ❑ These include:
  - ❑ Increased numbers of deaths and sicknesses
  - ❑ Longer hospital stays
  - ❑ Higher healthcare costs



# INTRODUCTION

- ❑ Many HAIs are transmitted on the hands of healthcare workers.
- ❑ Hand hygiene is an important infection control measure in hospital settings
- ❑ Effective hand hygiene
  - ❑ Stops the transmission of harmful germs to patients
  - ❑ Prevents health care-associated infections



# INTRODUCTION

- The WHO suggests that hand hygiene improvement programs can prevent up to 50% avoidable infections acquired during health care delivery and generate economic savings on average 16 times the cost of implementation



# INTRODUCTION

- In 2022, Vila Central Hospital (VCH) implemented a hand hygiene audit between June and July 2022  
This audit was supported by Pacific Community (SPC)
- The purpose of this study is to describe the findings of this audit and their relevance to hygiene measures at VCH



# METHODS

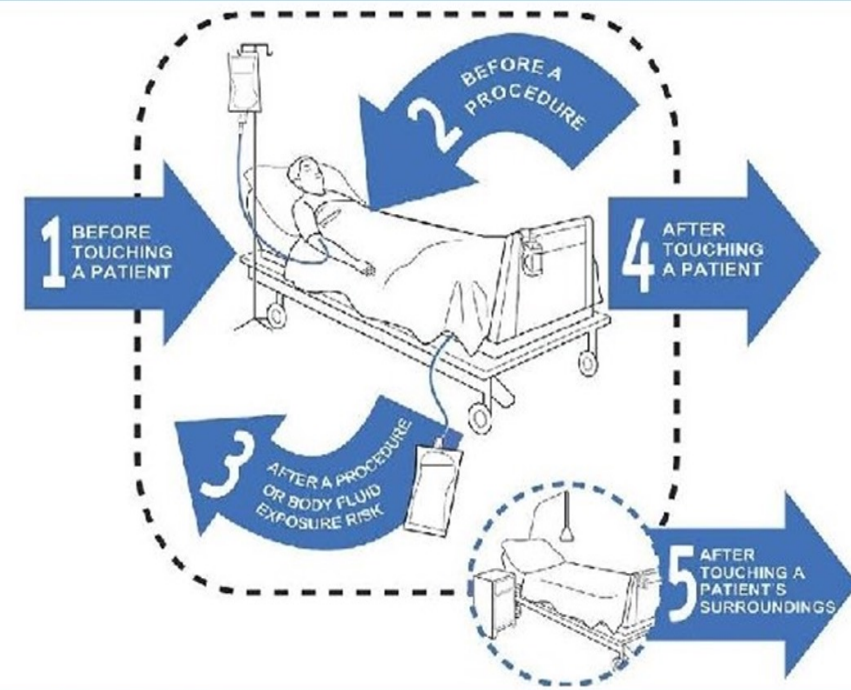
- ❑ A baseline audit was conducted to assess hand hygiene compliance rates across three wards at VCH:
  - ❑ NICU
  - ❑ Medical
  - ❑ Surgical
- ❑ Data was collected by 5 staff members who completed a hand hygiene workshop provided by HH Australia
  - They are considered HHA Gold Standard Compliance Auditors and Assessors
- ❑ They observed a targeted group of health care workers for one hour
  - Doctors, nurses, nurse aids, student nurses, lab officers, physiotherapists, porters and cleaners



# METHODS

- Hand hygiene compliance was assessed based on the WHO's "5 moments for hand hygiene" model
- The 5 moments are defined as:
  - Before touching a patient
  - Before performing a procedure
  - After a procedure or a body fluid exposure risk
  - After touching a patient
  - After touching the patient's surrounding

## The 5 Moments



# METHODS

- Auditors observed 595 hand hygiene moments in total:
  - NICU = 196
  - Surgical = 198
  - Medical = 201
- Hand hygiene was assessed for compliance across each ward and for each of the 5 moments of interest.





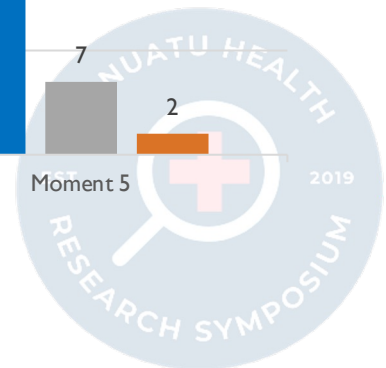
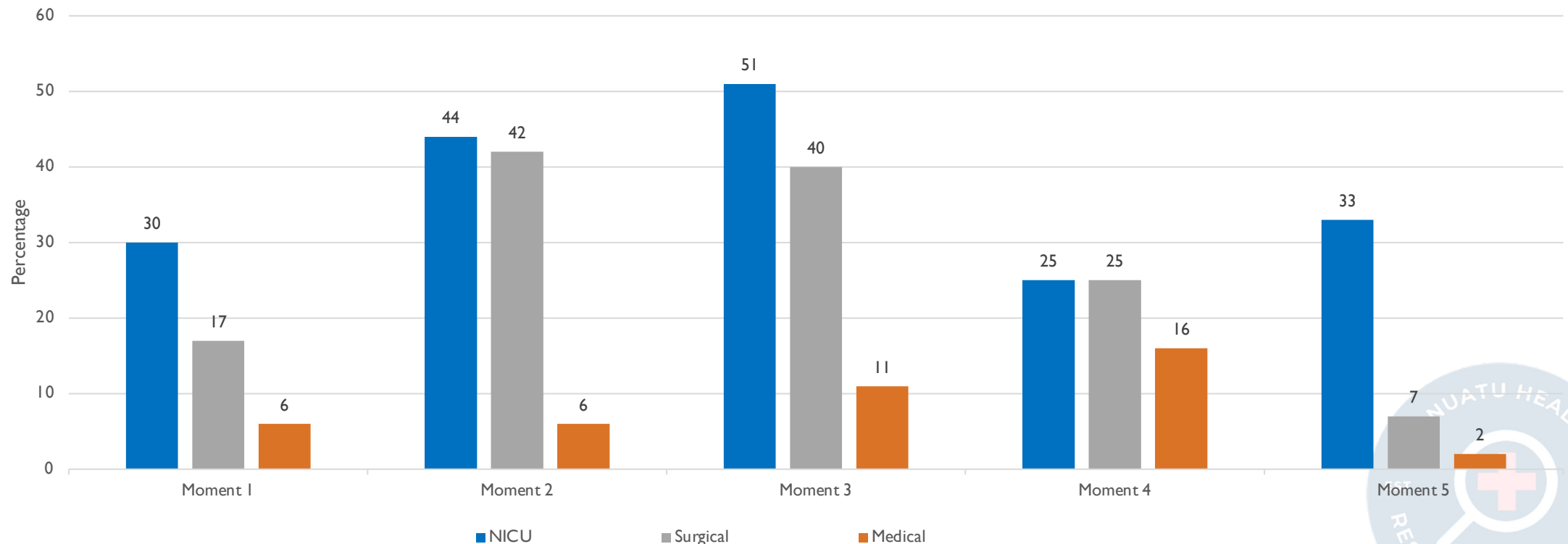
## RESULTS: OVERALL COMPLIANCE

- Total compliance with hand hygiene protocols across all wards was 23%.
- Compliance across all wards were:
  - NICU: 34%
  - Surgical: 26%
  - Medical: 8%



# RESULTS : BASELINE COMPLIANCE RATE BY MOMENT - NICU, MEDICAL & SURGICAL WARDS

Baseline Compliance Rate (%) by Moment - VCH Pilot Wards - NICU, Surgical, Medical - June-July 2022



# DISCUSSION

- Overall hand hygiene compliance was 23%
  - Therefore only 1:4 interactions with patients meet appropriate hygiene standard
- Across the wards, NICU had the highest compliance rate, however all wards showed hand hygiene levels below 50%, which is cause for concern



# DISCUSSION

- Health care staff were more likely to perform appropriate hand hygiene processes
  - Before performing a procedure (Moment 2)
  - After a procedure or a body fluid exposure risk (Moment 3)
- There was less compliance
  - Before touching a patient (Moment 1)
  - After touching a patient (Moment 4)
  - After touching the patient's surrounding (Moment 5)



# DISCUSSION

- The result show that we need to improve the overall compliance rate because the low compliance will increase HAI in the wards
- What should be done?
  - More training of personnel
  - Repeated audits
  - An audit of resources
  - Define best practice and set compliance goals into the future



# DISCUSSION

- What are the benefits of improving hand hygiene?
  - Improve patient recovery
  - Reduces stay time
  - Reduce repeat surgery
  - Frees up beds
  - Reduces load on staff
  - Saves on medication
  - Reduces risk to staff



# RECOMMENDATIONS / IMPLICATIONS

- Staff Education on Hand Hygiene
- Improve Hand Hygiene :
  - Infrastructure
  - Hand Hygiene supplies
- Repeat Auditing



# CONCLUSION

- Hand hygiene is important, and good hand hygiene management will have benefits for patients, staff, and the hospital
- To date, there has been no hand hygiene compliance program at VCH
  - This study represents the first project of its kind into the state of hand hygiene
- These data have shown that hand hygiene compliance needs to be improved across the hospital
  - All wards showed compliance rates below 50%
- On going auditing, research and training of staff is needed to ensure that VCH is providing gold standard hygienic care to patients into the future





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