

# HAC 2016 ABSTRACT for Oral Presentations

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**Project title**

Success of a Comprehensive Infection Control Program to Stop the Spread of Vancomycin-Resistant Enterococci

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**Keyword(s)**

Stop the Spread of Vancomycin-Resistant Enterococci

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**Introduction**

Repeated outbreaks and persistent spreading of Vancomycin-Resistant Enterococci (VRE) has been seen in Queen Elizabeth Hospital since 2012 despite intensive environmental decontamination and “Find and Confine” infection control policy. Poor hand hygiene compliance is considered to be one of the contributing factors for spreading VRE. Furthermore, VRE is found with very high number in the stool of the patients colonised or infected with VRE. The environment around these patients is more likely to be contaminated. Thus continence care is identified as one of the highest risk nursing procedures for spreading VRE.

**Objectives**

To assess the effect of a comprehensive infection control program including hand hygiene enhancement program, screening for gastrointestinal colonisation and development of Continence Nursing Care Workflow on limiting the spread of VRE in the Department of Medicine of Queen Elizabeth Hospital.

**Methodology**

Design Retrospective observational study Task Force on Multiple Drug-Resistant Organisms (MDROs) was formed under the Medical Infection Control Working Group of the Department of Medicine and a comprehensive infection control program was developed and instituted in the beginning of 2014. Hand hygiene enhancement program via real-time feedback was performed by Medical Infectious Diseases Nurses. An independent hand hygiene audit was conducted by the hospital infection control team. A new rectal VRE culture surveillance program called Day14 for all medical patients who had been hospitalised for more than 14 days was initiated as well. All patients colonised or infected with VRE were placed in contact isolation or cohorted to a designated isolation ward. Continence Nursing Care Workflow with enhanced infection control measures was developed and implemented, starting from one female and one male medical wards as model wards then extending to all other medical wards by phases. The Continence Nursing Care Workflow training included lectures, workshops at the Simulation Training Centre and on-site briefing. Audit and monitoring were also conducted to ensure good compliance. The number of new patients per week with cultures positive for VRE was compared before and after the intervention.

**Result**

Overall hand hygiene compliance rate was significantly increased from baseline around 40% to 90%. Implementation of Continence Nursing Care Workflow in all medical wards was completed in September 2015. Training of Continence Nursing Care Workflow was given to all medical ward nursing staff, supporting staff and student nurses. The number of new VRE cases in the Department of Medicine was significantly reduced from a peak of 35 per week to zero in most of the time with only occasional sporadic cases since August 2015, Conclusion The comprehensive infection control program including hand hygiene enhancement program, screening for gastrointestinal VRE colonisation (D14 program) and implementation of Continence Nursing Care Workflow successfully stopped VRE spreading in the medical wards.