# **HAC 2016 ABSTRACT for Oral Presentations**

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### **Project title**

An Innovative Strategy to Improve Hand Hygiene Compliance: Use of Evidenced-based Hand Hygiene Bundled Interventions

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# Keyword(s)

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#### Introduction

Healthcare associated infections (HAIs) pose a global patient safety concern. Despite the fact that there is an increasing trend of compliance rate in Queen Elizabeth Hospital (QEH) (from 62% in 2013 to 88% in 2014), compliance enhancement and sustaining behavioral change remained a significant challenge. Based on the studies by Pittet et al(2000), and Whitby et al(2008), hand hygiene compliance was improved by using a multimodal approach.

# **Objectives**

To address this challenge, the hospital developed the one-year evidence-based hand hygiene bundle to remark its significance in infection control.

### Methodology

The evidence-based hand hygiene bundle recommended by World Health Organization(WHO) consists of five elements. (1) Administrative leadership support demonstrated on visual reminders which conveyed powerful messages to improve hand hygiene compliance. (2) The top-down marketing and promotion team from various departments engaged in the team. The team formulated strategic plan and improved compliance outcomes. (3) Visual and audio reminder such as posters and table stickers were posted in six strategic areas. Clinical leaders and hospital staff participated in music video shooting to promulgate hand hygiene. (4) Behavioral reinforcement was demonstrated by the "Two-week Hand Hygiene Reinforcement Program in Wards" and "Patient Hand Rub Round". (5) Regular audits were essential to evaluate hand hygiene compliance. The compliance measurement was adopted from WHO hand hygiene observation tool performed by trained hand hygiene auditors in QEH. Compliance rate was also measured in "Two-week Hand Hygiene Reinforcement Program in Wards". The overall hand hygiene compliance rate is calculated by dividing the number of hand hygiene actions by the total number of opportunities.

### Result

In the second quarter of 2015, the hand hygiene compliance rate in inpatient units was 89%. It was steadily increasing and the overall compliance rate in 2014 and 2015 was over 80%. In the "Two-week Hand Hygiene Reinforcement Program in Wards", the overall compliance rate had attained at 90%. 16 nurses were awarded the "Qualified Hand Hygiene Auditors" on best hand hygiene practices. The evidence-based hand hygiene bundle served as an innovative strategy to improve hand hygiene compliance. It applied five elements in a synergistic manner to target such encouraging outcomes.