



## Service Priorities and Programmes Electronic Presentations

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### **Quality Improvement Program to reduce transmission of MRSA and MDRA in high risk clinical areas**

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#### **Introduction**

The number of infections caused by MDROs has increased substantially over the last decade. Acute care hospitals are especially affected by methicillin-resistant *Staphylococcus aureus*, vancomycin-resistant enterococci, multidrug-resistant *Acinetobacter baumannii* and *Clostridium difficile*. Increased lengths of hospitalization, increased costs, increased mortality, and decreased therapeutic options have made prevention and control of MDROs a top priority. Source control to reduce the bacterial density on skin of patients and environmental contamination is a pragmatic option to reduce MDROs acquisition despite moderate rates of health care worker adherence to proper hand hygiene.

#### **Objectives**

In response to an increase in MDROs prevalence in acute care setting, we investigated the effects of a quality improvement program, encompassing the component of chlorhexidine gluconate (CHG) bath.

#### **Methodology**

- 1) daily chlorhexidine gluconate (CHG) bath for patients infected or colonized by MRSA or MDRO in O&T and Respiratory wards
- 2) Admission and discharge screening of patients for 8 weeks to delineate the prevalence and risk factors of MDROs carriage and acquisition.

#### **Result**

To reduce MRSA and MDRA transmission in the study wards 1)The newly acquired MRSA rate per 1000 bed days of the study wards (A5, B5, C5, D5, E3, F3) reduced by

39.5% (1.153, 0.697 [95 CI -0.787,-0.125]; p = 0.007).

2)The prevalence of carbapenem resistant Acinetobacter (CRA) and Multi-drug resistant Acinetobacter (MDRA) among admitted patients were 2.77% and 0.39%, respectively.