During the study period, HA-MRSA and CLABSI rates decreased significantly. In 2007-2009, the significant decrease in HA-MRSA rates with stable CLABSI rates suggests an impact from MRSA-specific guidelines” Li et al (2017).

Abstract:

OBJECTIVE: We examined the impact of methicillin-resistant Staphylococcus aureus (MRSA) guidelines in Québec adult hospitals from January 1, 2006, to March 31, 2015, by examining the incidence rate reduction (IRR) in healthcare-associated MRSA bloodstream infections (HA-MRSA), using central-line associated bloodstream infections (CLABSIs) as a comparator.

METHODS: In this study, we utilized a quasi-experimental design with Poisson segmented regression to model HA-MRSA and CLABSI incidence for successive 4-week surveillance segments, stratified by teaching status. We used 3 distinct periods with 2 break points (April 1, 2007, and January 3, 2010) corresponding to major MRSA guideline publications and updates.

RESULTS: Over the study period, HA-MRSA incidence decreased significantly in adult teaching facilities but not in nonteaching facilities. Prior to MRSA guideline publication (2006-2007), HA-MRSA incidence decrease was not significant (P=.89), while CLABSI incidence decreased by 4% per 4-week period (P=.05). After the publication of guidelines (2007-2009), HA-MRSA incidence decreased significantly by 1% (P=.04), while no significant decrease in CLABSI incidence was observed (P=.75). HA-MRSA and CLABSI decreases were both significant at 1% for 2010-2015 (P

CONCLUSION: During the study period, HA-MRSA and CLABSI rates decreased significantly. In 2007-2009, the significant decrease in HA-MRSA rates with stable CLABSI rates suggests an impact from MRSA-specific guidelines. In 2010-2015, significant and equal IRRs for HA-MRSA and CLABSI may be due to the continuing impact of MRSA guidelines, to the impact of new
interventions targeting device-associated infections in general by the 2010-2015 Action Plan, or to a combination of factors.

Reference:


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