

# COST-BENEFIT OF HAND HYGIENE COMPLIANCE ARTICLES

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## **Cost-Effectiveness of a National Initiative to Improve Hand Hygiene Compliance Using the Outcome of Healthcare Associated *Staphylococcus aureus* Bacteraemia**

Link : [Cost-Effectiveness of a National Initiative to Improve Hand Hygiene Compliance Using the Outcome of Healthcare Associated \*Staphylococcus aureus\* Bacteraemia | PLOS ONE](#)

The data used in this study was gathered from 38 hospitals among six states in Australia. The results were total annual costs increased by \$2,851,475 for a return of 96 years of life giving an incremental cost-effectiveness ratio (ICER) of \$29,700 per life year gained. Finally the analysis revealed that the National Initiative was cost effective in two states with a 100% while in the rest were from 81% to 1% cost effective.

## **Cost-Effectiveness of Interventions to Improve Hand Hygiene in Healthcare Workers in Middle-Income Hospital Settings: A Model-Based Analysis**

Link : [Cost-effectiveness of interventions to improve hand hygiene in healthcare workers in middle-income hospital settings: a model-based analysis - ScienceDirect](#)

This study that aims to evaluate the cost effectiveness of improve Hand Hygiene in a middle-income country hospitals were achieved by developing a model that determined whether reductions in MRSA-BSIs would make HH interventions cost-effective within the ICUs. Increasing compliance from 10% to 40% was estimated to cost \$2,215 USD per 10,000

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bed-days with 3.8 QALYs in PICU and \$1,743 per 10,000 bed-days with 3.7 QALYs gain in adult ICU. Furthermore with the compliance improved only to 10% it is still always cost effective.

## **Economic burden of healthcare-associated infections: an American perspective (paywalled or subscription-based article)**

Link : [Economic burden of healthcare-associated infections: an American perspective: Expert Review of Pharmacoeconomics & Outcomes Research: Vol 9, No 5 \(tandfonline.com\)](#)

In the United States there are approximately 2 million of patients suffering from HAIs per year. Nearly 90,000 are estimated to die. The overall estimated cost of HAIs to hospitals ranges from \$28 billion to \$45 billion. Whilst most of the HAIs are really preventable.

## **Cost-effectiveness of a hand hygiene program on health care-associated infections in intensive care patients at a tertiary care hospital in Vietnam**

Link : [Cost-effectiveness of a hand hygiene program on health care-associated infections in intensive care patients at a tertiary care hospital in Vietnam - ScienceDirect](#)

This article analyzes the impact of hand hygiene compliance with the incidence of HAIs and its cost-effectiveness after putting in practice an HH program in ICU. The results indicated that after the HH program implementation, the HH compliance rate increased significantly from 25.7% to 57.5% and the incidence of patients with HAIs decreased by 36% (from 31.7% to 20.3%). The mean cost for patients with HAIs was \$1,908 (2.5 times higher than for those without an HAI). The cost-effectiveness was estimated at \$1,074 saved per hospital-acquired infection prevented.