

# Impact of a Multimodal Strategy of Hands Hygiene in a Tertiary Health Care Center in Colombia

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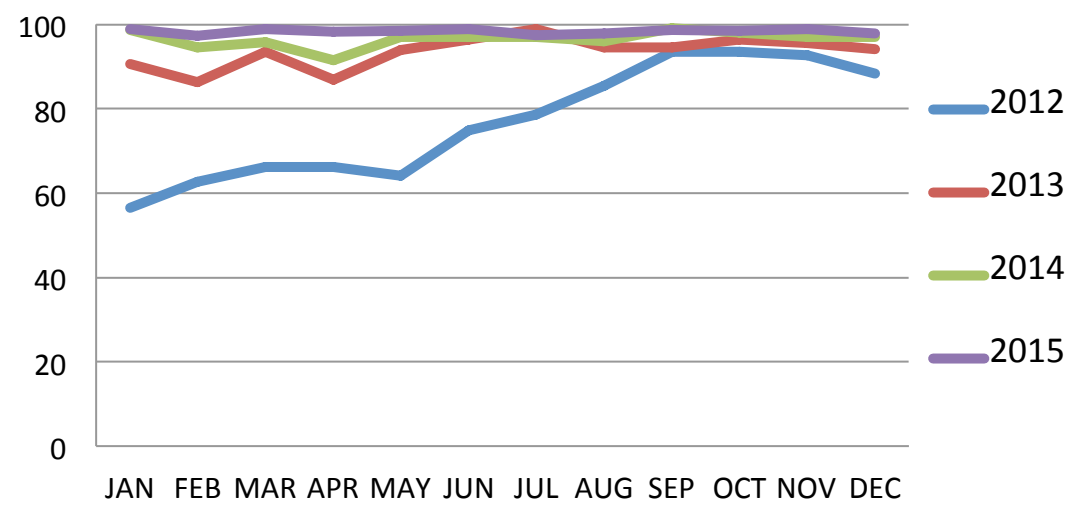
**Background:** This study pretends to show the impact of a multimodal strategy in hands hygiene developed by World Health Organization (WHO) in a tertiary health care center in Colombia.

**Methods:** Finishing 2011 the multimodal strategy was implemented to improve the hand hygiene in the institution. The process was led by a nurse, from the infection control department (ICD). It was developed in 5 phases according to the WHO strategy. 2 hands hygiene leaders were selected in every unit. For the emergency department and intensive care units (ICU), 1 nurse every ward was assigned exclusively to keep the necessary supplies, surveillance, make check lists, and feedback. Prevention bundles defined by ICD were maintained for the prevention of device-associated infections.

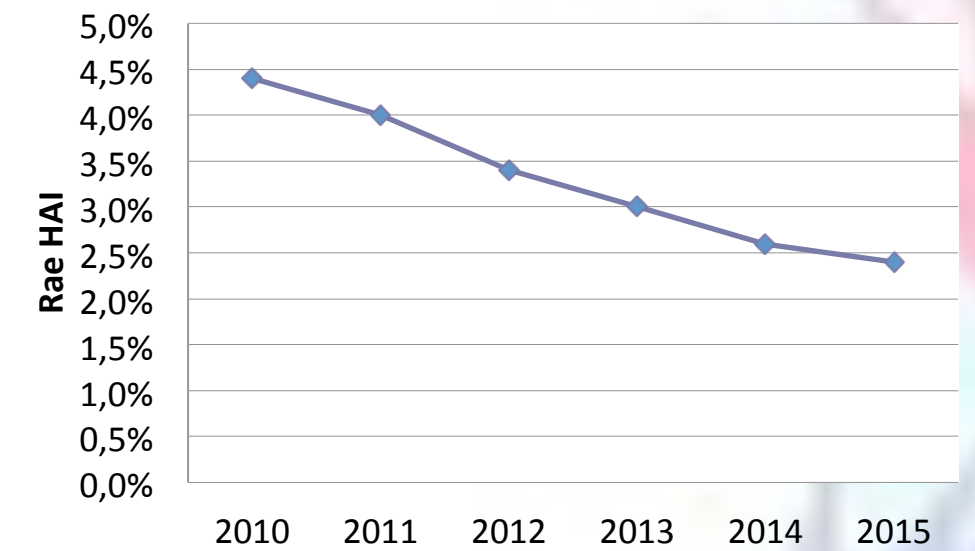
**Results:** 11021 observations of hand hygiene were included for the 2012, with 82.2% of adherence. In 2015, 18522 observations were made with 96.3% of adherence. There were 143 training sessions realized for 95% of healthcare workers (HCW). Before the implementation of the strategy, the availability of supplies was 73.6%, now it is 100%. The perception of the workers about the importance of hands hygiene raised from 89% to 95%. The knowledge was initially 20.9%, after the capacitation it ascends to 80%. The rate of healthcare-associated infections (HAIs) was 3.49% in our Hospital, but in 2015, this rate falls to 2.4%. The HAIs at the ICU falls from 6.7 to 4.3%, and in the neonatal ICU from 2.9 to 2.1%. The central line-associated bloodstream infections rate in the ICU fall from 4.5 to 1.1 per 1000 catheter days.

**Conclusion:** In a tertiary health care center on an emerging economy country, a significant sustained reduction of the HAIs rate was obtained after the initiation of a multimodal strategy for hands hygiene and keeping the bundles for the prevention of device-associated infections. It is very important the support of the administrative instances in a hospital, and the engage of the HCW to get the goals

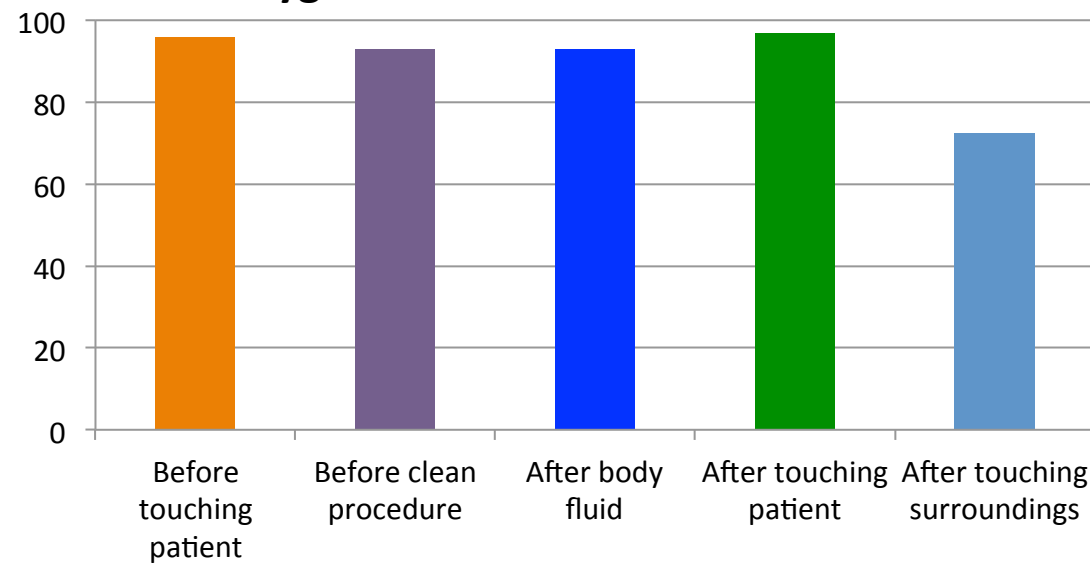
Percentage of Hand Hygiene Adherence  
HUSI 2012 - 2015



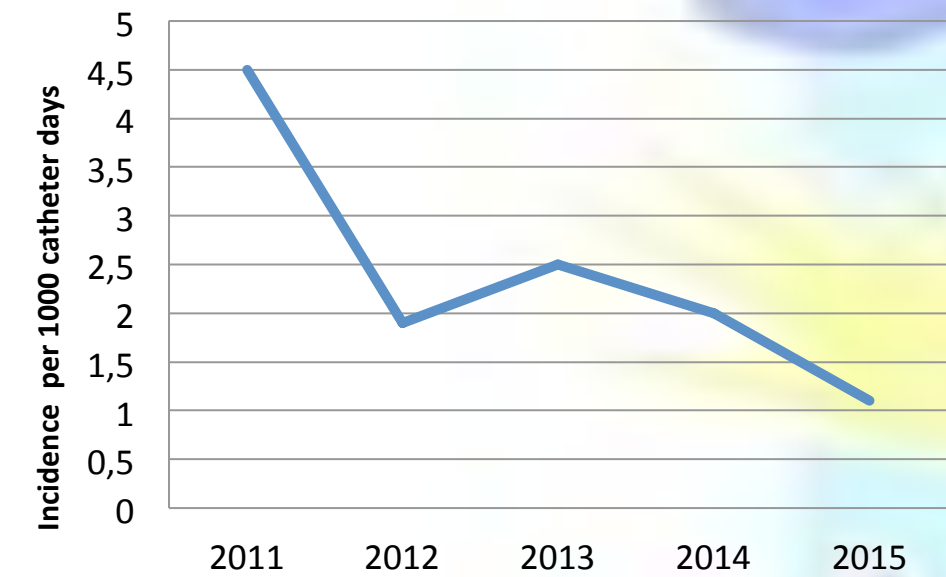
Healthcare-Associated Infections (HAI)  
Hospital Universitario San Ignacio 2010 - 2015



Percentage of Adherence Five Moments of  
Hygiene Hand. HUSI 2012 - 2015



Incidence density of central line-associated  
bloodstream infections. ICU 2011 - 2015



Percentage of Adherence Hand Hygiene.  
HUSI 2012 - 2015

