

**Extra Length of stay of Nosocomial Infections in Pediatric ICUs at Four Hospitals of Colombia and Mexico.**

**Findings of the International Nosocomial Infection Control Consortium (INICC).**

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**OBJECTIVE:** Our goal was to determine the extra length of stay (LOS) of the health care associated infections (HAI) at Pediatric intensive care units (ICU) of hospitals members of the INICC in Colombia, and Mexico.

**METHODS:** We conducted a case control analysis nested in a prospective cohort study in 4 Pediatric ICUs at 4 hospitals members of the INICC, to analyze the extra LOS of patients with central vascular catheter associated blood stream infection (CVC-BSI), mechanical ventilator associated pneumonia (VAP), and catheter associated urinary tract infection (CA-UTI). All patients were assessed for LOS. Patients with HAI were called cases, while those without HAI were called controls. HAIs were identified using the CDC-NNIS definitions. We calculated E-LOS subtracting nosocomial average length of stay (ALOS) of patients with and without HAI.

**RESULTS:** From 2003 to 2005, we enrolled 379 patients, representing 2,543 bed days. The overall HAI rate was 10.0 per 100 patients and 14.9 per 1000 bed days. The CVC-BSI rate was 14.9 per 1000 CVC days, the VAP rate was 2.8 per 1000 device days, and CA-UTI rate was 3.4 per catheter days. LOS of patients without HAI was 5.5 days; LOS of patients with CVC-BSI was 15.0 days (RR, 2.73; 95% CI, 2.45-3.04; P, 0.0000), representing 9.5 extra days; LOS of patients with VAP was 8.7 days (RR, 1.58; 95% CI, 1.07-2.33; P, 0.0193), representing 3.2 extra days; and LOS of patients with CA-UTI was 23.6 days (RR, 4.30 ; 95% CI, 3.57-5.19; P, 0.0000), representing 18.1 extra days.

**CONCLUSION:** This study has identified that CVC-BSI, VAP, and CA-UTI increase from 3.2 to 18.1 days the length of stay of patients at ICUs.