

Abstract Title:

Impact on Hand Hygiene Compliance after Implementation of an Active Audit/Immediate Feedback Model in Two Different NICU Settings

Presenter:

Michael Luu, MPH
4650 Sunset Blvd., Mailstop #31
Los Angeles CA, 90027
Phone: 626-310-1152
Email: miluu@chla.usc.edu

Author:

Michael Luu
Professional Title: MPH
Organization / Affiliation: Children's Hospital Los Angeles
Mailing Address:
4650 Sunset Blvd., Mailstop #31
Los Angeles, CA 90027, US
Phone: 626-310-1152
Email: miluu@chla.usc.edu

Co Author/Co-Investigator Names/Professional Title: Ting-Yi Lin, MD PHD; Ashwini Lakshmanan, MD MPH; Steven Chin, MD MMSc; and Srikumar Nair, MD MSHA

Introduction: Background: Proper Hand Hygiene (HH) has received much attention as one of the sole measures in improving health-care associated infections, yet HH compliance rates remain suboptimal in many healthcare settings, including the neonatal intensive care unit (NICU). Objective: (1) To determine whether high HH compliance rates of >90% can be achieved and sustained using an active audit and immediate feedback (AAIF) model. (2) To determine the effects of an AAIF model on two different NICU settings: a single family room (SFR) floor plan vs. an open-bay ward (OPEN).

Methods: This is a multisite ongoing prospective trial of HH compliance among NICU providers and ancillary staff. All NICU staff have been given a standardized in-service by infection control on the World Health Organization 5 Moments of HH. NICU auditors include select physicians (MD), nurses (RN), and respiratory therapists (RT), who have been trained to use standardized HH auditing tool, reviewed the 5 moments, and coached to provide real-time, constructive feedback following an audit. Each auditor observes a staff and patient/patient-environment interaction, documenting compliance to each of the 5 HH Moments. Real-time positive reinforcement is provided at the time of the audit. All

data is entered into the iScrub™ application on a hand-held device.

Results: Pre intervention, positive compliance data for the SFR NICU ranged from 56% to 100% and 54% to 67% in the OPEN NICU. Post education and intervention, a significant improvement can be observed in the OPEN NICU (Table). Among the three isolated provider groups (MD, RN, RT), RNs' in both NICUs' showed significant improvement (Table). After adjusting for discipline and HH opportunity, audits were associated with HH compliance: 1.33 times in the SFR NICU (95% CI 1.0-1.8) and 6.4 times in the OPEN NICU (95% CI 3.7-10.77).

Conclusion: Many different means of improving and sustaining HH compliance rates have been reported, but an ideal method has not yet emerged. The role of AAIF has been shown to be a promising strategy among OPEN floor plan NICUs.