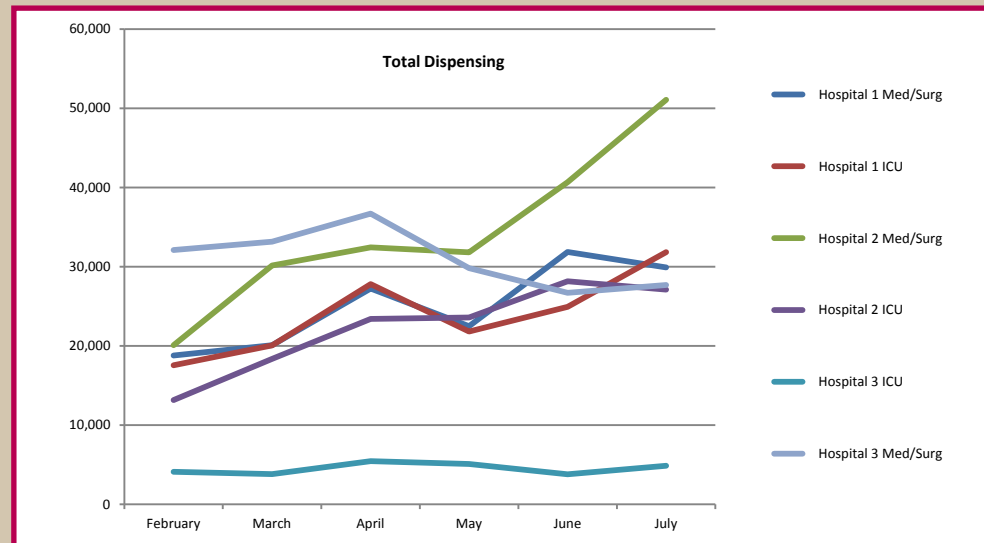


# The Importance of Culture in Successful Implementation of a Hand Hygiene Compliance Monitoring System

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Regulatory agencies as well as the World Health Organization (WHO) recommend instituting programs which emphasize patient safety and lead to sustainable quality improvement. Hospital leadership must endorse and consistently emphasize the importance of such programs in order to be successful. This study describes the importance of unit-level leadership to the successful adoption of a hand hygiene monitoring technology.

**Project:** Three hospitals within the same healthcare network installed a radio frequency identification (RFID) hand-hygiene compliance monitoring technology. One 150-bed hospital (1) monitored 82 employees in a 12-bed ICU and 22-bed medical-surgical unit. The second 454-bed hospital (2) monitored 94 employees in a 12-bed MICU and a 23-bed orthopedic unit. A third 85-bed rural hospital (3) monitored 59 employees on a 6-bed ICU and a 29-bed medical-surgical unit. Two of these facilities approached clinical implementation of the technology by directly involving nurse managers in the performance feedback mechanism. These managers received individual compliance scores for their staff and were personally involved in dissemination of that data. They were also involved with setting performance expectations at the unit level and ensuring accountability to those expectations. The third facility relied primarily on the Infection Preventionist to communicate expectations and results and to ensure performance at the unit level.



**Results:** Although the facilities are in the same network, their implementation of the same hand hygiene monitoring system from Proventix yielded differing results. The two hospitals with heavily engaged nurse managers achieved dispensing increases of 70.8% and 130.2% and hand hygiene compliance rate increases of 33.6% and 50.4% respectively. The hospital with only peripheral nurse manager involvement saw a dispensing increase of only 2.8 % and a 43.6% decrease in compliance. Using an electronic proxy for healthcare-associated infection called the Nosocomial Infection Marker<sup>®</sup> (NIM-Carefusion), researchers identified 8.7% and 17% NIM reductions in units with nursing leadership involvement and a 50% NIM increase in the unit with less unit leadership involvement.

**Lesson Learned:** The most rapid improvements in hand hygiene adherence are obtained when expectations are set by clinical leadership at the unit level. Infection Preventionist involvement is important for education and support, but the engagement of clinical leaders directly responsible for staff adherence is a key accelerator of performance. Results experienced by these organizations suggest that engaged unit level leadership can impact the application of technology and can positively affect clinical outcomes. Clear communication of performance expectations and consistent, unit-level reinforcement of desired front-line caregiver activity are key components in successfully increasing hand hygiene compliance and reducing HAIs.

