

Measurement of Improving Safety Culture Through Better Teamwork, Communication, and Hand Hygiene Monitoring

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Background: Effective communication is requisite for delivering planned outcomes in complex healthcare environments. Briefs, huddles, and debriefs have long been examples of effective communication platforms, providing opportunities to prevent, detect, and correct errors that could lead to patient harm. For example, Executive Patient Safety Rounds are a research-proven strategy for building cultures of safety. Though effective, the ability to routinely conduct these interactions is limited by scheduling, logistics, and competing priorities. Hospital leaders were interested in applying electronic messaging to augment and amplify the effects of traditional interpersonal interactions. They leveraged the electronic messaging capabilities provided in an automated hand hygiene monitoring system to improve hand hygiene adherence and increase patient satisfaction.

Methods: The team conducted a prospective case study of the effects of electronic surveillance technology on hand hygiene activity using soap and sanitizer dispenser counts and patient satisfaction survey results as outcome measures. Hand hygiene and communication devices from Proventix Systems were installed on the 3rd floor in February 2011. The technology utilizes a wireless RFID network to accurately assess caregiver movement and correlate it with their hand hygiene activity at existing sanitizer and soap dispensers. Communication Unit (CU) screens display user-defined messages with each dispense, including internet-based RSS news feeds interspersed with unit-specific messages. While cleansing their hands, caregivers receive updated weather, sports, headline news, stock reports, and healthcare education. The system also compels compliance through positive reinforcement with user specific “thank you” messages and recognition of weekly high compliers and unit-wide improvements. Patient perception of hand hygiene activity was measured by the frequency of the patient response of “always” to the custom question on the Patient Insight Inpatient survey, “How often did the patient care staff wash their hands or use an alcohol hand rub before providing patient care?”



Assess your patient's need for a Foley catheter DAILY.

Patient

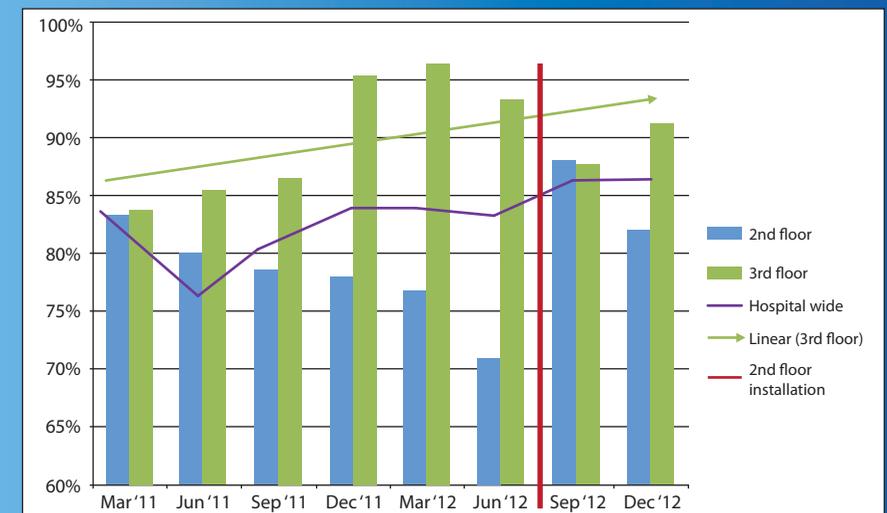
ALWAYS educate your patients on new medicines they are taking.

Professional

Toronto Maple Leafs collapse in game 7 as Boston Bruins rally for 5-4 win i

Personal

Patient Insight Survey Answer of "Always" to the Question: "How often did the patient care staff wash their hands or use an alcohol hand rub before providing patient care?"



Results: At the end of the first year of service, hand hygiene compliance increased 160.6%, healthcare associated infections (HAI) measured by an electronic HAI surrogate called the Nosocomial Infection Marker® (NIM-Carefusion) decreased 35.7%, resulting in a \$35,500 decrease in direct costs, \$24,580 decrease in loss, and 40.3 days avoided. In addition, a 9% increase in “always” to the survey question compelled leadership to install another medical-surgical unit on 2nd floor in November 2012. From the beginning of installation through April 30, 2013 a total of 470,526 messages had been delivered at the point of care via CU screens to caregivers, patients, and visitors. This has allowed the hospital to communicate at a much higher and greater rate.