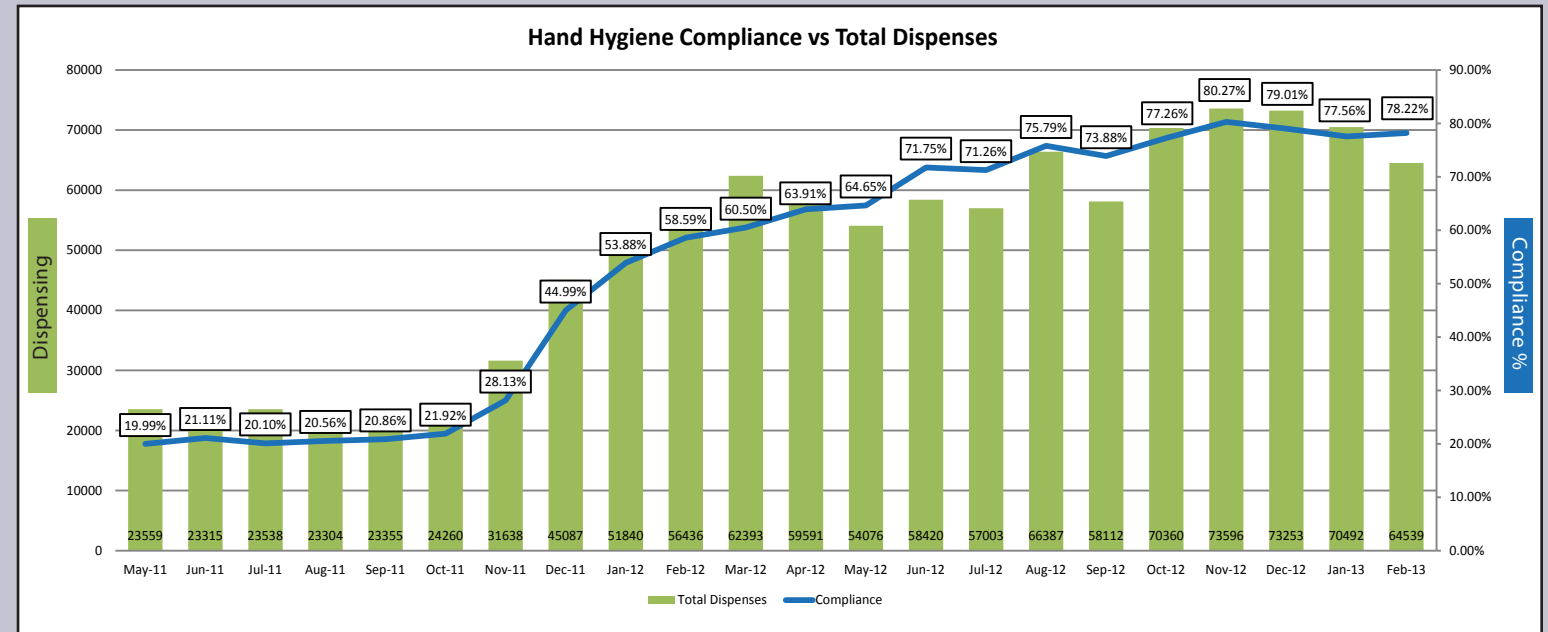


Hand hygiene improvement programs have been instituted at most acute care hospitals with limited long-term success. Regulatory agencies as well as the World Health Organization (WHO) recommend instituting programs which emphasize patient safety to ultimately lead to sustainable quality improvement. However, hand hygiene compliance monitoring methods, such as periodic surveillance, self-reporting, and aggregate volume measurements are often inaccurate and hard to implement. High levels of sustained hand hygiene compliance are elusive in healthcare facilities around the world.

Project:

A 35-bed intermediate care unit of a 242-bed acute care hospital studied the impact of an automated hand hygiene monitoring technology on compliance rates and hand hygiene solution dispensing rates from May 2011 to February 2013. Employees (~76) of the unit participated in the program by wearing radio-frequency identification (RFID) tags as part of Proventix's technology which were utilized to monitor hand hygiene compliance. Opportunities for hand hygiene were determined by sensing the RFID-tagged caregiver's entry and exit of the patient room. Compliance was confirmed by the caregiver's activation of a sensor within both soap and sanitizer dispensers when accessing the solution. No workflow changes were needed to measure hand hygiene compliance, and automated surveillance occurred 24 hours a day, 7 days a week. All soap and sanitizer dispensers on the unit were included in the dispensing and compliance measures.



Results:

At the 22-month mark of the hand hygiene monitoring program, monthly dispensing increased 173.9%, from 23,559 total dispenses (May 2011) to 64,539 total dispenses (February 2013). Compliance, measured by hand hygiene upon entry into and exit from patient rooms, had increased 291.3% (from 19.99% in May 2011 to 78.22% in February 2013). Achieving and maintaining this level of performance has taken leadership and support from Kenneth Belue, the Nurse Manager, and the unit Charge Nurses. The employees have sustained this high level of compliance through a focused emphasis on the importance of hand hygiene and the competition from sharing feedback of the overall unit and individual peer results among the staff.

