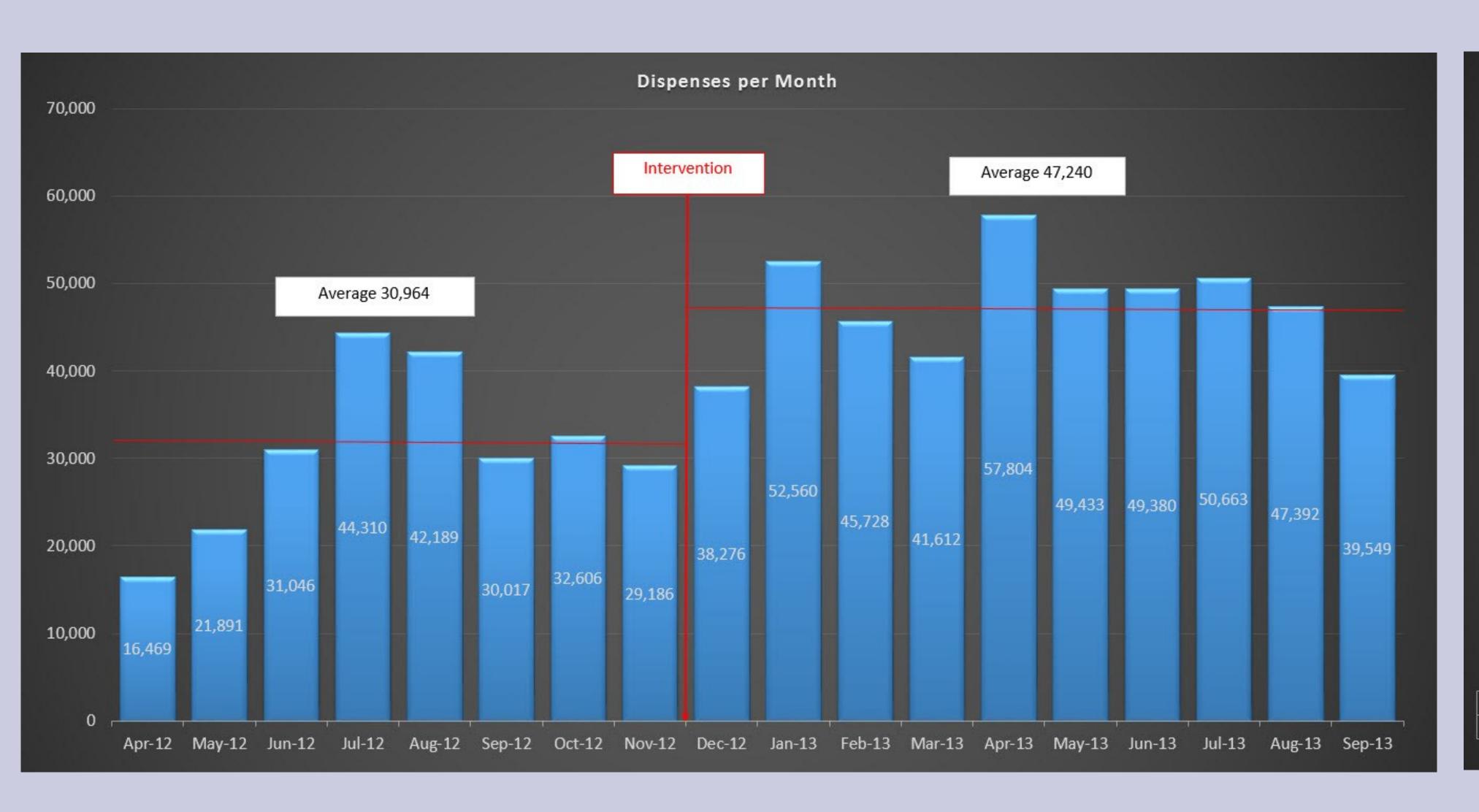
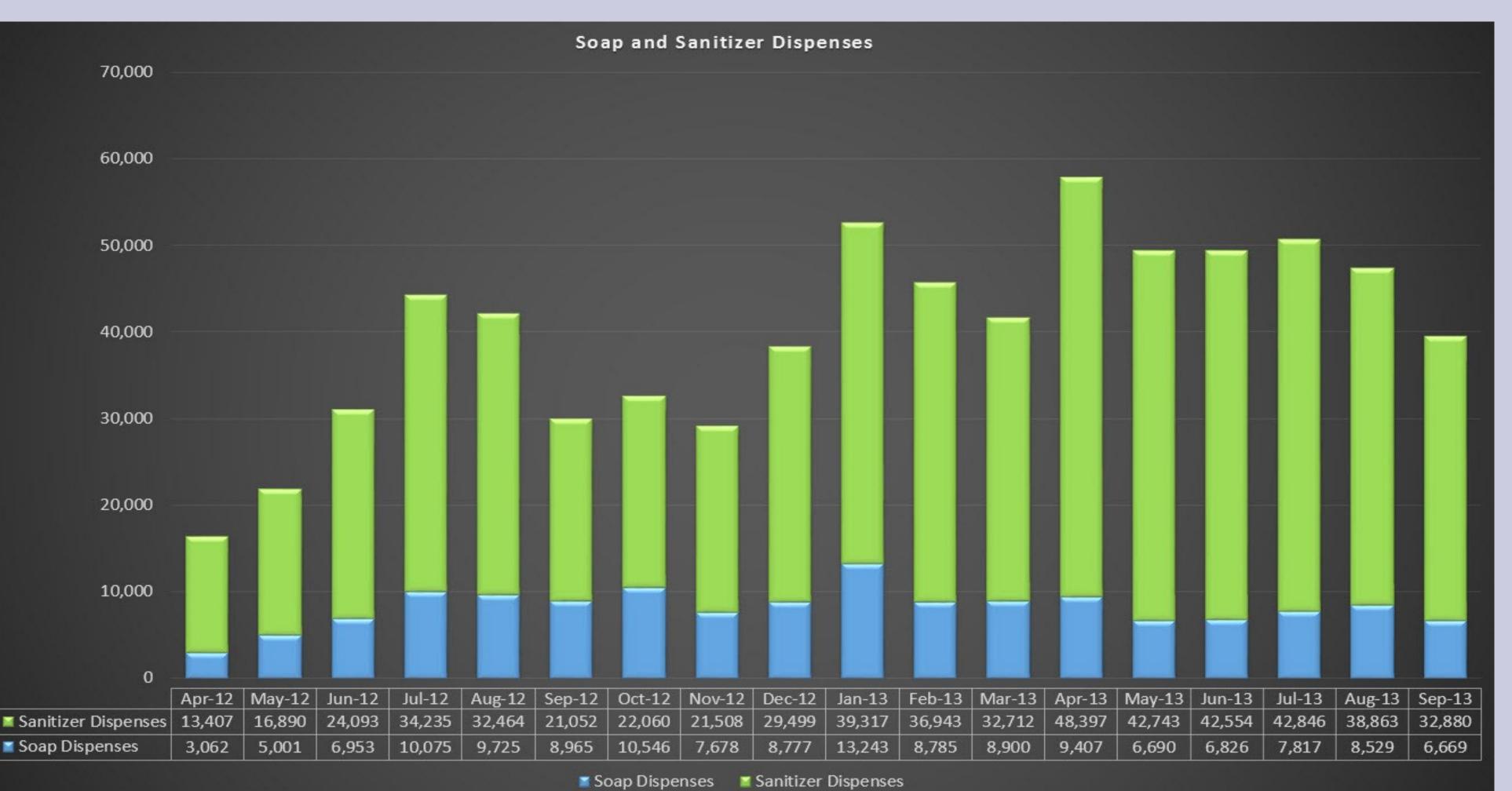
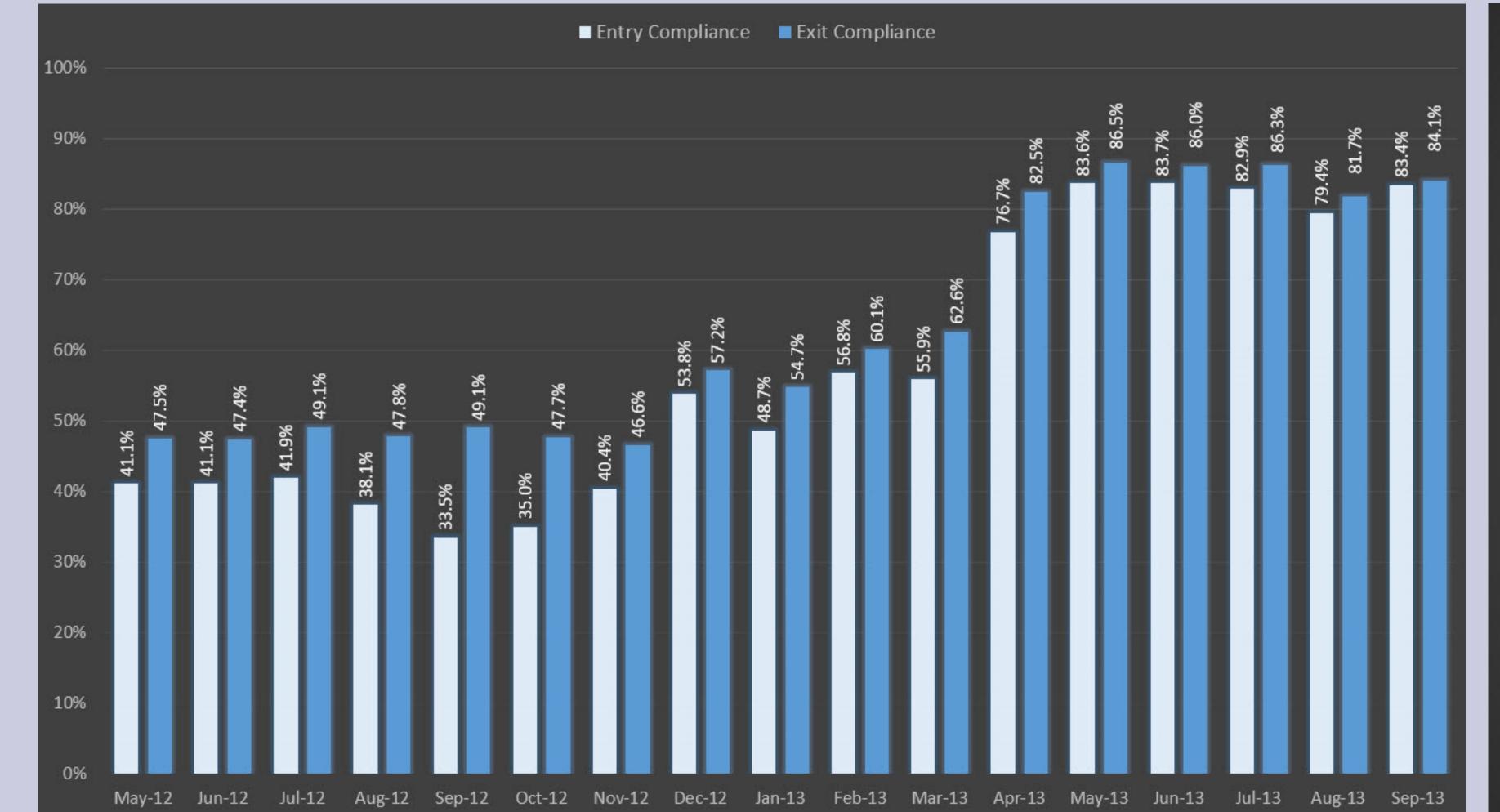
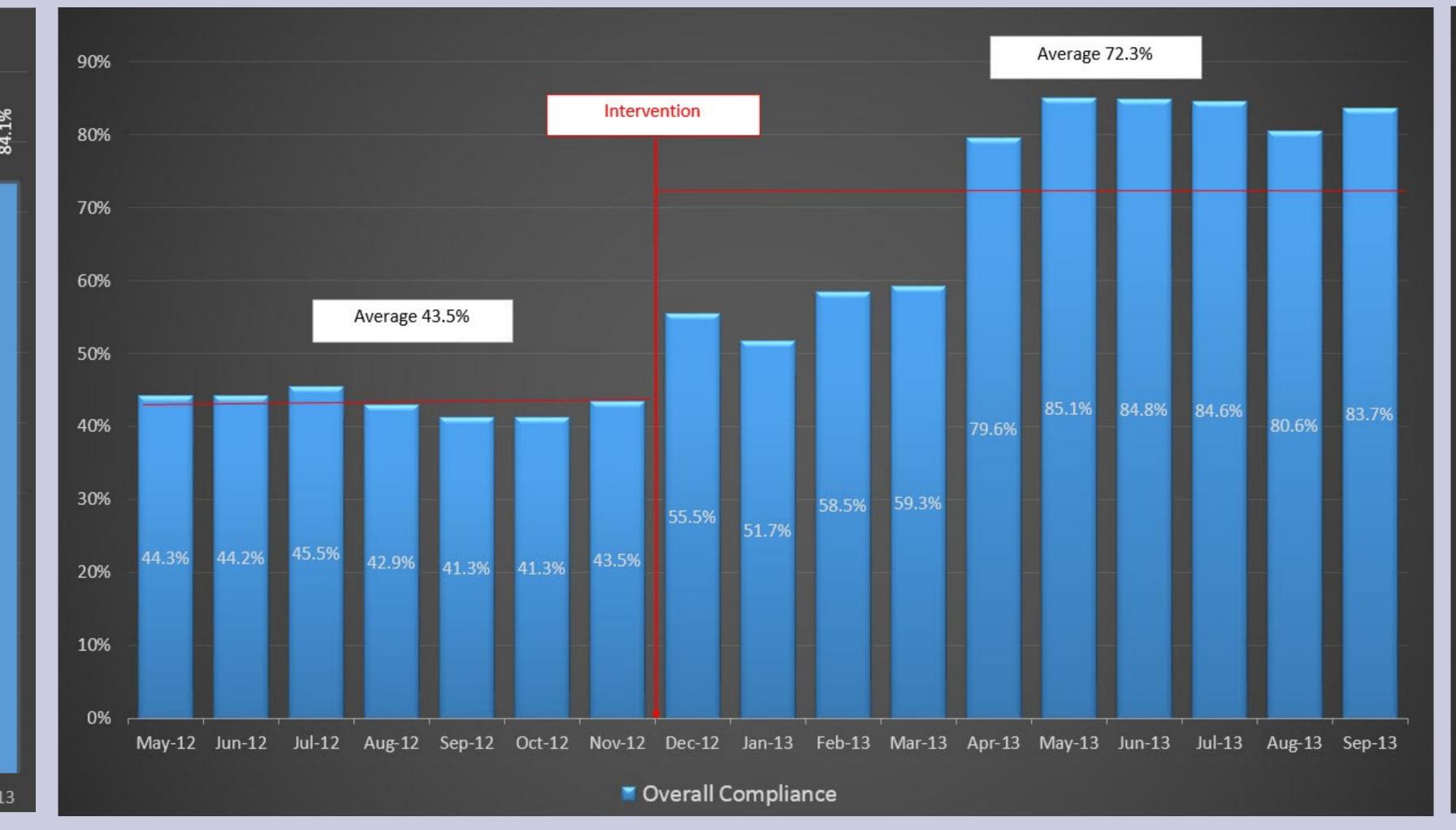
Measuring the Impact of a Caregiver Education and Awareness Campaign on Hand Hygiene in an Adult Critical Care Unit

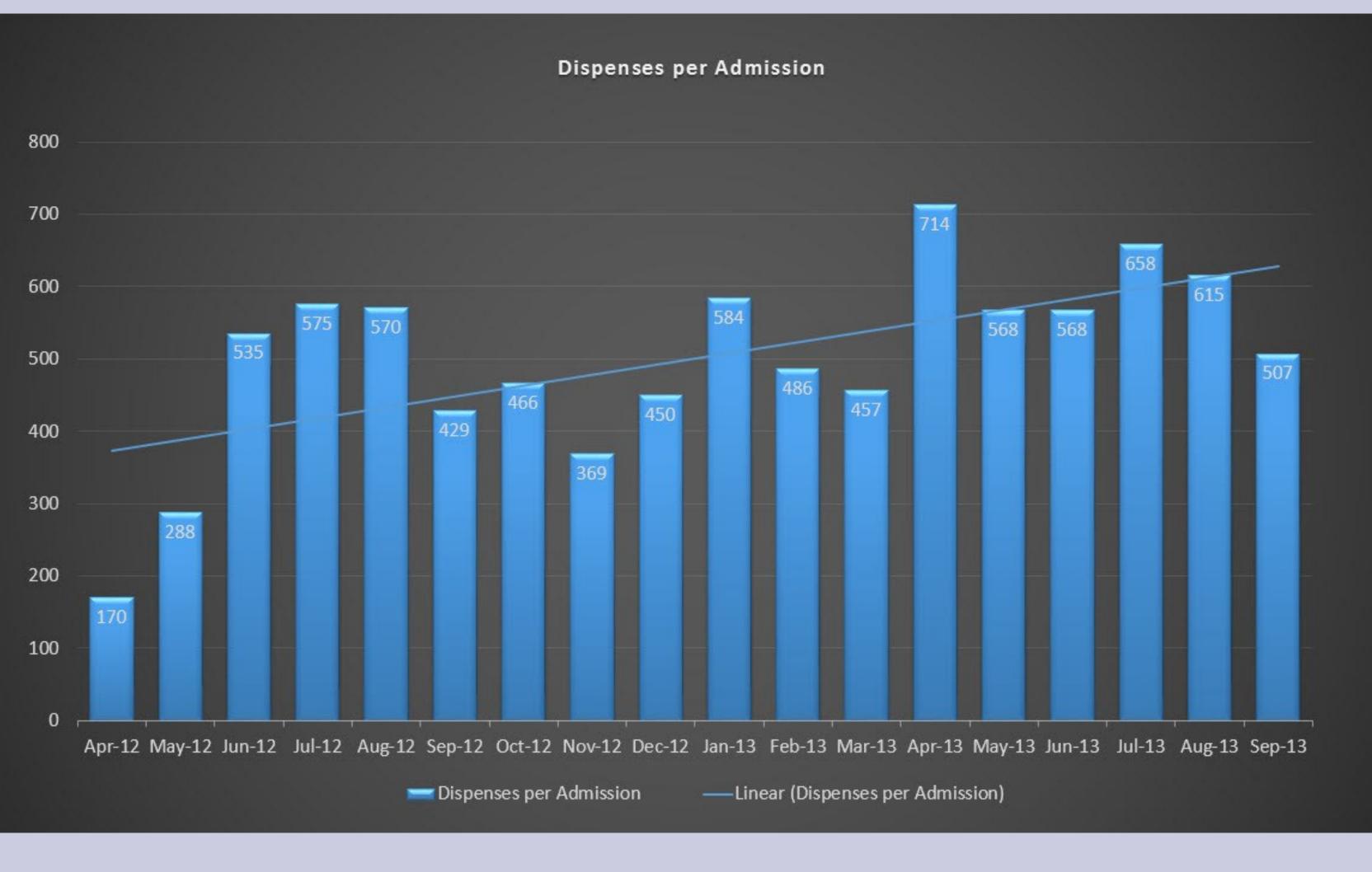
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Background:

This 18-month study assesses the impact of electronic hand hygiene monitoring before and after an employee education and awareness campaign that included the posting of identified, individual hand hygiene compliance rates. By balancing the opportunities provided by new technology with historically proven management principles, this organization significantly improved and sustained hand hygiene solution dispensing and hand hygiene compliance rates.

Methods:

This organization implemented a radio-frequency identification (RFID) based hand hygiene monitoring technology from Proventix Systems, Inc. in an adult critical care unit (CCU). The team monitored 18 soap and 18 sanitizer dispensers and 103 caregivers including nurses, physicians, and respiratory and physical therapists. In November 2012, clinical leaders and the RFID vendor implemented a re-education and caregiver awareness campaign including the posting of identified individual compliance rates. Unit leadership began to routinely disseminate and discuss comprehensive, user-specific hand hygiene performance data to improve adherence to hand hygiene policies. They measured success using hand hygiene compliance and hand hygiene solution dispensing rates.

Results:

Researchers collected data detailing 116,870 hours of caregiver activity, 160,135 caregiver-patient interactions, and 720,111 hand cleansings between April 2012 and September 2013. When comparing the pre-intervention and post-intervention time frames described above, total hand hygiene solution use increased 52.6%. Soap use improved 10.5% and sanitizer dispenses improved by 66.6%. For the same assessment periods, the aggregate hand hygiene compliance increase 61.4% was statistically significant (p < .0001). Comparing the dispensing baseline month to September 2013, dispenses per patient day increased 198.6%. Comparing the baseline compliance month to the September 2013, hand hygiene compliance increased 119.7% (p< .0001).



Conclusions:

Recent technological advances have provided exciting opportunities to gain an objective and more comprehensive understanding of caregiver hand hygiene behavior. While these systems represent great opportunity, to be most effective they must be utilized with traditional strategies such as education, meaningful incentives, and consistent performance feedback. By combining equitable performance assessment with effective human resource management methods, this organization significantly improved the frequency of hand cleansing and increased hand hygiene compliance rates.

