Changing Hand Hygiene Behaviors to Change Outcomes

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Saint Luke’s Health System is a faith-based, not-for-profit, aligned health system committed to the highest levels of excellence in providing health care and health-related services in a caring environment. We are dedicated to enhancing the physical, mental, and spiritual health of the diverse communities we serve.

As part of the health system, Saint Luke’s Hospital of Kansas City is an academic medical center and Magnet® designated hospital. The hospital is one of the largest in the health system and region – offering many specialized programs and services.

Our hospital used traditional observational measurement For monitoring hand hygiene compliance that reflected a near-perfect performance quarter after quarter and year over year.

Despite gallant efforts to improve observational data collection, the data was considered a regulatory requirement, not meaningful to staff, and was not actionable to affect the individual or social behaviors of perceived risks associated with hand hygiene practices. Further, because of the small samples sizes and inherent biases, the manual observational hand hygiene data from our audits offered poor understanding of hand hygiene behaviors contributing to hospital acquired infections.

AIM

Short Term – Improve objective hand hygiene compliance to 80% by 12/31/2019.
Long Term – Reduce absolute numbers of hospital-acquire infections by 30% by 3/31/2020.

ACTIONS TAKEN

• Engaged executives, managers, physicians and front line staff of the problem, intervention, and 80% goal.
• Implemented an electronic hand hygiene system on 3/1/2019.
• Installed system into 454 patient rooms (sensor monitors, location hubs, and communication hubs).
• Issued ~2500 individually identifiable badges.
• Provided education and training on system functionality.
• Used transparency and positive deviance strategies to share performance and celebrate successes.

SUMMARY OF RESULTS

Hand hygiene compliance is foundational to providing patient care and a long standing principle in preventing transmission of disease. The Saint Luke’s Hospital of Kansas City took a bold innovative approach and engineered solution to promote hand hygiene adherence.

LESSONS LEARNED

• Number of hand hygiene opportunities recorded through human observation was extremely limited compared to the actual number that occur.
• With increased hand hygiene compliance we experienced a >60% increase in sanitizer/soap products. This level has been maintained since go-live.
• Three work systems are operating simultaneously: People, electronic hand hygiene monitoring system, and dispensers/product. Individual characteristics and collective-level characteristics (culture) with willingness to conform to the new system is noteworthy.
• Leadership in pursuit of results to both improve hand hygiene adherence and reduce HAIs encourages use and fine tuning of the system.
• Transparency and customized reporting supports adherence but brings to light human traits to excel, technology strengths/weaknesses, and behavior change suggestive of increased mindfulness.

CHALLENGES

• Continuous construction challenges with infrastructure and sensor architecture.
• Communication of results to manager level amid competing “noise”.
• Hand hygiene product selection for “high use” environments.

REFERENCES