

Success Factors	Continued collaboration with the Infection Prevention and Control Department as well as the chief quality officer and engaging the C-suite were crucial to our success. Our intervention made residents more conscientious of hand hygiene.
Barriers	Barriers included difficulty gathering hand hygiene compliance data from all GME programs because of limited monitoring resources; discordance between the interventions occurring by Infection Control and GME; and a decline in enthusiasm to receive education and facilitate hand hygiene tools. Also, surveillance was performed by medical students on internal medicine teams.
Lessons Learned What is the single most important piece of advice for another team embarking on a similar initiative?	Form a good relationship with the Infection Prevention and Control Department so efforts are collaborative and create a big impact. Establishing champions is key to continued education and promotion of proper practice.

Orlando Health, Orlando, FL

Quality Improvement – A Humbling Experience Triggering Change in Resident Education Revisited

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Background: Quality improvement has become an essential part of all aspects of clinical medicine. After the Institute of Medicine's landmark *To Err Is Human* report in 1999, many institutions, including Orlando Health, incorporated quality improvement into their GME curriculum. We implemented the IHI Open School training modules as a core training curriculum for residents. After more than 1 year of training, a reassessment of residents' quality improvement knowledge was deemed prudent.

Methods: We conducted a literature survey to identify available questionnaires and created a baseline questionnaire. The questionnaire was administered to residents of internal medicine, and IHI quality improvement training was provided. A maintenance questionnaire was administered, and the posttest assessment was compared with maintenance results.

Results: The posttest passing rates by department after completion of the IHI quality improvement training were 64.3% for internal medicine, 52.6% for emergency medicine, 78.9% for pediatrics, 100% for Ob/Gyn, 64.7% for surgery, 100% for pathology, and 88.9% for orthopedics. The maintenance test passing rates by department were 30% for internal medicine, 33% for emergency medicine, 10% for pediatrics, 17% for Ob/Gyn, 50% for surgery, 25% for pathology, and 36% for orthopedics.

Conclusion: The maintenance questionnaire results forced us to reevaluate the effectiveness of our core curriculum and whether the lack of retention requires ongoing quality improvement training.

FINAL WORK PLAN – Orlando Health

Team Charter/Objectives	Our goals were to evaluate residents' retention of quality improvement knowledge after formal training and to evaluate the effectiveness of the quality improvement core curriculum and the possible need for continued training.
Project Description	Evaluate the retention of the knowledge obtained from the curriculum developed previously in NI III after completion of formal training by administering questionnaires/surveys provided on the IHI website to all the GME residency programs.

Vision Statement	We will maintain a simple, yet effective quality improvement curriculum that is adaptable to all GME programs at Orlando Health and will help residents better facilitate quality improvement projects.
Success Factors	We were able to collaborate with all the GME program representatives to administer the questionnaire/survey to the residents. Now we have an idea of how much the residents are retaining from the developed curriculum. We were inspired by the level of retention (percentage) to find ways to ensure that resident education in quality improvement core concepts is more effective as well as sustainable.
Barriers	The largest barrier we encountered was resistance and lack of eagerness to participate. Time management was another issue, principally related to the busy schedules and responsibilities of the residents. We worked to overcome these challenges by reaching out to chief residents and clinical coordinators of the residency programs so the task of collecting the data could be completed.
Lessons Learned What is the single most important piece of advice for another team embarking on a similar initiative?	Have a realistic time frame to collect the data and maintain frequent communication with clinical coordinators and chief residents of the respective programs. Having a representative on the corporate level is helpful for fostering excitement about the project.

OSF Saint Francis Medical Center and University of Illinois College of Medicine, Peoria, IL

Rates of Medical Errors and Adverse Events in a Medical ICU Following Implementation of a Standardized Computerized Handoff System

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Background: The current process in the adult ICU does not include a controlled environment or a consistent process for delivering handoffs or standardized time. This project evaluated the effectiveness of and staff satisfaction with resident handoffs at baseline and then performed a reevaluation after the I-PASS handoff system was integrated with Epic in the OSF Saint Francis Medical Center (SFMC) adult ICU.

Methods: We provided a controlled and quiet environment for handoffs, an integrated handoff tool (I-PASS plus Epic), and a robust educational bundle with simulation/role playing, didactics, and small group work. There is a monthly rotation of residents in the adult ICU. We observed handoffs, completed the intervention education, and observed handoffs again (verbally and electronically). The intervention consisted of a 3-4 hour training seminar consisting of a standardized didactic component, sample videos of appropriate and inappropriate handoffs, and interactive simulation training on proper handoffs and event reporting, followed by a debriefing period. Staff and providers completed a daily nursing or resident survey for unreported events, good catches, and near misses. These survey responses were compared to the electronic event reporting system for transparency.

Results: We have data for discussion but lack the depth needed to show significance in the intervention month to month. No significant change in the depth of handoff was seen although we found more transparency of the handoff process in the adult ICU.

Conclusions: We brought awareness and increased communication about failure points in the process, and this project brought strong leadership commitment to the handoff. Adding *good catch* to the resident survey was a quick win so the focus was not negative. Standardizing the monthly calendar in advance in terms of timing of education and observations requires more work.