

MUSC TeamWorks Program

The TeamWorks program is a new program developed in collaboration between the Office of Interprofessional Initiatives and the MUSC Medical Center that focuses on teamwork assessment and improvement initiatives on inpatient hospital units. 210,000 - 440,000 people die in hospitals each year from preventable harm and medical error is the 3rd leading cause of death in America behind heart disease and cancer.²⁸ The most common root cause of medical errors is communication problems (written and verbal). Often, poor teamwork sets the stage for such errors, and

This Innovation Addresses:

Objective 2c: Improve students applied teamwork skills through enhanced opportunities in real-world clinical practice and laboratory experiences

Objective 2a: Teach fundamentals of teamwork using the TeamSTEPPS framework to all students at MUSC from all 6 Colleges

Objective 1a: Develop and implement applied teamwork skills curricula in formats designed to reach all students at MUSC from all 6 Colleges

Objective 1b: Improve staff/faculty knowledge, skills and practice models to develop a richer environment in which team-based care training will occur in clinics and labs

Objective 1c: Increase the Institutional capacity for students from different colleges and professions to work together during clinical training and research experiences at MUSC

TeamWorks was developed to address this issue at MUSC. The Office of the Chief Quality Officer (CQO) at MUSC identifies hospital units at MUSC that are performing poorly on standardized quality and safety metrics. Once identified, large teams of MUSC students trained in teamwork assessment using TeamSTEPPS® Team Performance Observation Tool (TPOT) via our Teamwork Rater Certification System are dispatched on the unit in small groups wherein they evaluate the quality of teamwork (often covering programs running 24 hours per day, 7 days per week). These observational data are processed along with staff and faculty self-report data regarding communication, teamwork quality and the practice environment on the unit. A comprehensive report is provided to the CQO and targeted teamwork improvement strategies are developed. OII and Hospital Staff deliver targeted training in TeamSTEPPS®, communication strategies, patient and shift hand-off procedures, safety monitoring, and optimization of clinical workflows often in collaboration with MUSC's Simulation Center. Following the teamwork training intervention, another wave of trained student raters evaluate the unit and another round of self-report measures are collected.

We have used the TeamSTEPPS® Rater Certification System to train student evaluators and to pilot TeamWorks in preparation for our QEP. To date, 678 students have successfully completed the TeamSTEPPS® rater-certification program through pilot sections of IP710 at MUSC. Many of these students (~140) have gone on to evaluate team performance across several clinical programs including labor and delivery, and interventional radiology through the TeamWorks Program.

Findings from our labor and delivery pilot program suggest statistically significant improvement in student-rated team-performance (across all measured domains) following TeamSTEPPS® training to all faculty and staff on the unit. Additionally, the training on the unit was associated with statistically significant improvement in the unit's 1) average length-of-stay, 2) number of cases transferred to the ICU and 3) the mortality index. The TeamWorks program has the potential not only to engage students and improve students applied teamwork evaluation skills, but also to significantly enhance the quality and safety of the clinical care delivered at MUSC.