

Assessing the Impact of Safe Surgery 2015

Safe Surgery 2015, a partnership between the Harvard School of Public Health and the South Carolina Hospital Association (SCHA), was initiated in 2010. Its purpose is to establish a statewide Surgical Safety Checklist that prevents rare and never events, as well as decrease the incidence of surgical complications. HSSC member health systems were early adopters of the surgical safety checklist.

Never events are preventable surgical complications like leaving an instrument in a patient, performing surgery on the wrong place, using the wrong procedure, or even operating on the wrong patient. More than 4,000 never events occur annually in the United States.

HSSC's goal is to understand whether using the surgical safety checklist results in a decrease in serious surgical events. HSSC will work with the Harvard School of Public Health team to create a model for pattern recognition within the clinical data warehouse to identify non-coded complications, work with computer science teams to evaluate Natural Language Processing and Machine Learning tools to identify outcomes, and evaluate the change in surgical outcomes across HSSC-supported organizations. The project will assess the impact of Safe Surgery 2015 complications on participating health systems pre- and post-implementation, develop a model of impact based on the surgical safety checklist implementation, and estimate the impact of statewide implementation on preventable surgical complications across the state.