Surgical Site Infection Improvement Project

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BACKGROUND AND SIGNIFICANCE

A coordinated effort of members of shared governance, CNO, surgical services department educator and leadership, quality director, infection prevention, operations improvement team to identify and decrease the number of surgical site infections in the Main Operation Room at AMCMC to improve patient outcomes.

ABSTRACT

PURPOSE

Quality improvement project: To standardize the cleaning process with hopes in decreasing the risk of surgical site infections. With surgical site infections being multi-factorial in their cause, one identified opportunity included standardization of the cleaning process.

SETTING

Main OR at AMCMC with approximately 3,500 cases performed annually. There are four operating rooms and one procedure room. The majority of cases are Orthopedic cases including hips, shoulders, knees and podiatry. General surgery, ENT, Ophthalmology, GYN, and Dental cases also make up the majority of the volume. When this project began, the identified staffing mix included OR Nurses, OR Techs, Sterile Process Department, Anesthesia, Physicians, and no dedicated housekeeping team.

RESULTS

ATP testing is occurring at the beginning of the day and prior to all total joint cases with the result relayed to surgeon prior to start of the case during the time out. Standardization of the cleaning process has been implemented and the process is being followed by staff. ATP testing results < 200 have increased indicating that cleaning of the rooms has improved. Surgical Sites infections have decreased after implementation of zone cleaning and ATP testing.

Lean Methodology, Process Improvement Project. Some of the Lean Tools and Principles include standard work flow grounded in consistent evidence-based practice recommendations (“Zone Cleaning”), brainstorming, the “5 Why’s, value stream mapping, Gemba walks, and other Lean Principles.

According to the U.S. Department of Health and Human Services (2017), the average cost of one surgical site infection ranges between $11,778 - $42,177. As a NDNQI nurse sensitive indicator in regards to value based purchasing and producing excellent clinical quality outcomes in a zero-harm high reliability environment, the goal is to have zero surgical site infections.

METHOD

References