

FMEA: Operating Room Pharmacy Lehigh Valley Hospital

In early 2003, Lehigh Valley Hospital, Cedar Crest campus, was in the planning stages to open an "Operating Room Pharmacy" within the OR Suite. This satellite pharmacy's purpose would be to control and dispense narcotics and other medications utilized by the Anesthesia department. The organization elected to undertake a proactive risk assessment, or FMEA, on the planned narcotics dispensing process. The multidisciplinary team (consisting of Pharmacy, Anesthesia, Nursing, Risk Management, Management Engineering, Perioperative Services, and Care Management) began by flowcharting the intended process, which would utilize "case-based" boxes. The team then began to identify the potential failure modes associated with each step in the proposed process. After two meetings of identifying failure modes, the Anesthesia and Pharmacy Departments jointly placed a "hold" on the FMEA project. Through the failure mode identification process it had become increasingly clear to both departments that too many failure modes existed; therefore, the intended process was fraught with risk.

After a six week period, the FMEA team reconvened with Anesthesia and Pharmacy's completely redesigned dispensing process, which was now based on a "day" box. The FMEA was completed in its entirety, and recommendations were identified and implemented (see attachments). The OR Pharmacy has been successfully implemented, and the narcotics dispensing process is presently used at the operating rooms of all three campuses. At the present time, no significant errors or any diversion events have been identified or reported.

The FMEA tool, in this instance, proved very valuable in evaluating the feasibility and risk of a planned new process. By utilizing the FMEA process, patient safety, efficiency, and documentation have been improved. Additionally, staff satisfaction has also increased, as noted by the three CRNA's on the FMEA workgroup, who have each enthusiastically praised the new process.