

## **Just in Time: Improving Preoperative Checklist Compliance in the Cardiac Cath Lab**

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**Introduction:** Surgical Safety Checklist (SSC)s are necessary to ensure patient safety and improve patient morbidity and mortality. Initially SSCs were only used in the intraoperative phase of care; however, the World Health Organization advocates for its implementation to be adapted into practice in preoperative and/ or preprocedural areas.

**Identification of the problem:** In the Cardiac Catheterization Lab (CCL) the SSC process starts in the pre-operative area. Organizational wrong-site, wrong procedure, wrong-patient error findings led to increased attention on the CCL's preoperative utilization of the SSC. Audits of the CCL's SSC compliance noted a 70% compliance rate. Further investigation found that CCL staff and physicians were not aware of the mandatory completion of this checklist.

**QI Question:** For CCL staff and physicians, will education and just-in-time (JIT) coaching, compared to not receiving education and JIT coaching improve preoperative SSC compliance in the CCL to 90% in six months?

**Methods:** The Plan-Do-Study- Act (PDSA) framework was the change mode used to improve SSC compliance. The "Plan" phase identified the goal of improving preoperative SSC compliance. During the "Do" phase education to providers and staff included the importance of SSC compliance, closed-loop communication, and the elements included in the preoperative SSC. This was followed by JIT coaching for non-compliant team members by the CCL Manager. Unit-based leaders performed JIT education huddles and collected metrics. The "Study" phase included continued data collection and analysis and lastly, during the "Act" stage, the plan was adopted due to its promising measures.

**Outcomes/Results:** By the fourth month the compliance SSC rate for the preoperative CCL was 100% and has maintained at 100% for 12 months, finding that JIT coaching improves SSC compliance in the CCL preoperative areas.

**Discussion and Conclusion:** SSCs are a cornerstone of preoperative safety. Education programming and JIT coaching are successful in addressing barriers and reinforcing education and performance related to SSC compliance in real time. Further, JIT methods offer one-on-one conversation with staff in a safe environment.

**Implications for perianesthesia nurses and future research:** SSCs improve patient safety. The use of JIT education and coaching may prove successful in all perianesthesia environments and should be used as an instrument for quality improvement.