**Da Vinci XI Implementation Project**

Alisha Loy, BS, Connie Costas, CRCST, Greg Meister, CRCST
Jessica Lewiston, CRCST, Joy Good, CRCST
Rae Jean Hollopet, CRCST, William Larew

University of Iowa Health Care Iowa City, Iowa

**Considerations**
- Amount of time reprocessing takes for each Da Vinci XI case
- Risk associated with improper reprocessing and/or handling
- Speed of implementation for use
- Amount of time planning committee members are removed from normal work flow
- Staff available to complete processing on committee meeting days
- Physical space/ environmental barriers
- Size of instrumentation/ Complexity of Manufacturer Instructions for Use (IFU) and reprocessing time requirements

**Scope**
Life cycle of instrumentation from point of use through reprocessing.
We expanded the scope to include Da Vinci SI instrumentation, as demonstrated best practice.

**Metrics**
Monthly metrics are collected and analyzed based on key performance indicators identified at the time of project implementation. The monthly review of metrics has provided opportunities to identify isolated sections of the process to review for improvement and make ongoing recommendations.

**Team Process Work**
- Quality Improvement strategies were utilized in the creation of each phase of the implementation of the Da Vinci XI instrumentation:
- Affinity Diagrams
- Process Maps
- Mind Maps
- Chart/ Metrics
- Standard Work Documentation
- Evidence Based Best Practice
- Quality check system for both individual processors & process system review
- Visual resources for IFU instructions

**Conclusion & Recommendations**
- Improve current system safety for CST’s with use of portable sinks (Mid Range Plan)
- Staffing of 1.2 FTE that is specially trained in Da Vinci reprocessing during identified peak hours (1220-2030)
- Ongoing evaluation to meet identified barriers for Robotics including staffing and instrument usage/tray configuration
- Facility improvements with equipment large enough to accommodate longer instruments & dedicated reprocessing space (Long Term Plan)
- Compatible washer with Da Vinci XI Washer Rack (Long Range Plan)
- Review manufacturer instructions for SI instruments, complete process improvements to standardize processing

**Materials & Methods**
- Standard work was created for all areas of processing for Da Vinci instruments that meet the IFU AAMI ST 79 and AORN standards
- Use of manufacturer training materials and competency are used to demonstrate proficiency
- Current state and future state maps were completed with recommendations for needs being included with future state maps
- Specially trained Da Vinci technicians demonstrate completion of standardized work process competencies for reprocessing of Da Vinci kamments
- In service from Intuitive and Steris regarding instruments and equipment is completed routinely
- Completion of process audits provides oversight for process quality
- Use of a quality check provides metrics on process effectiveness and improved outcomes

**References & Acknowledgements**

References:
- ANSI/AAMI, ST79
- AORN, Guidelines for Perioperative Practice, 2015 Edition
- Reprocessing Instructions, Da Vinci XI, Intuitive Surgical
- Reprocessing Instructions, Da Vinci SI, Intuitive Surgical

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The project team was comprised of multidiscipline professionals from: Central Sterilizing, Robotic Perioperative Nursing, OR Supply Chain, Environmental Services and the Manufacturers. Team members were pulled together during applicable sections of process review and improvement, with Central Sterilizing Technicians involved in each section of review.