The Interventional Support Center Improved Delivery of Sterile Instrument Sets When Needed to ORs, While Improving Staff Morale and Ergonomics



Issue:

The ISC of an academic health system was seen as the source of several problems, including:

- Late OR case starts
- Poor instrument set quality and missing supplies
- Lacked capacity to take on further volume from potential customers within the system and externally



Approach:

Value stream analysis to understand current state and design a future state inspired by the ideal

Redesigned processing layout to improve instrument sets flow, and redesigned workstations to improve ergonomics

Process standard work designed, deployed & improved by frontline staff and supervisors

Developed leader standard work for all levels of leadership, including daily process observation and coaching



Results:

- Instrument Set Throughput Time: Reduced from 21.2 to 14.55 hours, 31% Improvement
- Instrument Set Productivity: Increased from 15.2 to 21.2 sets assembled per person per shift, 39% Improvement
- Maintained instrument set quality at <2% of sets with a defect
- Average Number of Instrument Sets Out of Circulation: Reduced from 98 to 44 sets, 55% Improvement
- Case Picking Productivity: Increased from 17 to 22 cases, 29% Improvement
- Supplies Missing from Case Carts: Reduced from 5.9 to 1.2 items per case, 80% Improvement

