Maximize Instrument Fleet Efficiency with Surgical Asset Management

Surgical instruments are health systems’ most valuable mobile asset. It’s a multi-million dollar investment, a major driver of OR revenue, and a crucial component of maintaining quality patient care.

Standardization and Optimization
In a study of 10 health systems over the past five years, Aesculap found hospitals had far more surgical instruments than were regularly used, and they could save both time and costs by optimizing their instrument fleets. The average results are staggering.1

3,000 INSTRUMENTS
unnecessary or unusable

573 ANNUAL HOURS
saved by not reprocessing needless instruments

17% AVERAGE REDUCTION
in instruments after optimization

$150,261 ANNUAL REPROCESSING SAVINGS

The Study Concluded:
“With health care expenditures continuing to be a topic of both national and individual importance, it is critical that hospitals streamline care to provide equivalent or superior outcomes at a lower cost. Overall, our study demonstrates that across 4 surgical specialties and multiple tray types, the percent use of instruments in surgical trays is low, and use rapidly declines with an increasing number of instruments per tray. Attention to tray composition may result in immediate and significant cost savings in the form of reduced central sterile processing labor.”2

Researchers at the University of Chicago Pritzker School of Medicine released similar findings last year.

- 78–87% of instruments in trays went unused
- 17% of trays had only one instrument used
- 17% of trays had missing or broken instruments
- $0.51 cost to reprocess an instrument
- Errors per tray increases with size of tray
- Excess instrumentation is likely due to poorly predicting what will be needed

When optimizing instruments, SPD, OR staff and surgeons, with the support of senior hospital leadership, come together to examine instrument sets, eliminate obsolete sets, reduce vendor variety and develop standard set configurations and instrument processes for all surgical disciplines.

Other researchers validated the finding that health systems routinely have suboptimal instrument trays. The Virginia Mason Medical Center reported in 2013 in the Journal For Healthcare Quality that they reduced their instrument fleet by 70 percent, potentially saving $2.8 million each year through waste reduction and quality improvement, with no adverse impact on surgery times.2

1 Aesculap Data File