Cleaned, Sterilized, Delivered: Ensuring all instruments needed for surgery arrive on time and ready for use

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What Is CSPD?
The Central Sterile Processing Department (CSPD) decontaminates, assembles and sterilizes all reusable surgical instrumentation for Michigan Medicine’s University Hospital. Their work is critical in order to provide patients with timely, high quality care.

What is the goal of CHEPS’ work with CSPD?
“To have all items required for the proper care of the patient available at the time of surgery, properly cleaned, sterilized, and in working condition – while ensuring the efficient use of resources.”

What are the challenges?
Every day, CSPD processes 16,000+ instruments arranged as surgical sets
- Set composition variability complicates process standardization and workload predictions
- Process decisions often made without awareness of instruments’ difficulty to clean
- Frequent changes to set composition requires constant communication between ORs and CSPD

What are our solutions?
Cleanability Index (CI)
Provides a measure of the time and difficulty to clean a set

Surgical Instrument Cleanability Dashboard (SICdash)
Web application to manage sets and make processing decisions informed by the CI

Cleanability Index
- Features on Instruments
- Time Needed To Clean
- Number of Instruments
- Visibility / Accessibility of Features
- Decontamination Specifications

SICdash
We are creating a web application for CSPD and OR staff. This application:
- Displays the Cleanability of instruments and sets
- Facilitates the set design process by instantly presenting the impact on Cleanability of adding and removing instruments from sets
- Promotes and expedites communication between ORs and CSPD of key processing information

Notable features of the SICdash are highlighted on the figure to the left!

How will this help?
These tools will enable:
- Improved flow of crucial information between ORs and CSPD
- Managing, predicting & leveling demand in CSPD
- Redesigning sets to level burden on CSPD and reduce risk for bioburden events

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