

CIS SELF-STUDY LESSON PLAN

Lesson No. CIS 283 (Instrument Continuing Education - ICE)

Sponsored by: AESCULAP ACADEMY*

Making the Most of Tracking Software

BY RANDALYN HARRELD, CRCST, CIS, CHL, CSPM, CFER, BLS

Certified Instrument Specialist (CIS) lessons provide members with ongoing education in the complex and ever-changing area of surgical instrument care and handling. These lessons are designed for CIS technicians, but can be of value to any CRCST technician who works with surgical instrumentation.

Earn Continuing Education Credits:

Online: Visit www.iahcsmm.org for online grading.

By mail: For written grading of individual lessons, send completed quiz and \$15 to: Purdue University - Online Learning Young Hall, Room 527 155 S. Grant Street West Lafayette, IN 47907

Subscription Series: Purdue Extended Campus offers an annual mail-in or online self-study lesson subscription for \$75 (six specific lessons worth 2 points each toward CIS recertification of 6 hours). Call 800.830.0269 for details.

Scoring: Each online quiz with a passing score is worth 2 contact hours toward your CIS recertification (6 hours) or CRCST recertification (12 hours).

More information: IAHCSMM provides online grading service for any of the Lesson Plan varieties. Purdue University provides grading services solely for CRCST and CIS lessons. Direct any questions about online grading to IAHCSMM at 312.440.0078. Questions about written grading are answered by Purdue University at 800.830.0269.

LEARNING OBJECTIVES

- Understand the benefits of tracking systems and how they contribute to efficiencies
 Review the fundamentals of tracking systems and how they help Sterile Processing professionals' skill sets and help them adhere to standards
- 3. Understand the importance of "clean" data
- Describe the difficulties associated when scanning compliance is inconsistent or inaccurately completed

he success of any Sterile Processing (SP) professional starts with having the proper tools and effective processes to complete their responsibilities safely and efficiently. Utilizing information technology to create reports and deliver critical information can contribute to better outcomes within the SP department (SPD). Tracking systems are often utilized more in new age SPDs due to high costs and the implementation structure; however, all SPDs should be requesting these systems and utilizing them to their fullest.

Information technology systems were first introduced as a means to replace the manual ways of documenting processes and tracking instruments, but these systems have since grown into much more and now offer SP professionals many resources to guide them in their daily duties. These data-driven platforms offer enormous benefits for SP leaders and can result in better patient outcomes.

Objective 1: Understand the benefits of tracking systems and how they contribute to efficiencies

Data programs for SPDs now offer SP professionals many tools and resources to ensure their workflow is of top quality and is efficient and error free. A robust tracking system offers technicians not only the ability to locate all of the department's inventory and print reports but also contributes to true quality outcomes.

By tracking surgical instruments and implants to the patient level and also tracking each item through every stage in the process, we can better serve our patients and correct failures if any should occur. Allowing scan points to be put in an ordered format that alerts the user when scanning failure or "out of sequence" occurs enables the SP professional to identify process failures in real time. Surgical trays can be traced and results can be documented during each step of the process. SP leaders can monitor their teams' productivity and track workflow time gaps just by reviewing the scan points. Regulatory agencies recommend

that items be tracked to the patient level but for many years, this was difficult or done by paper only. SPDs with tracking capabilities can now scan items to a patient identifier number as well as to the case cart and Operating Room (OR) suite. A vigorous tracking system will also guide SP professionals through their workflow. For example, many tracking systems offer detailed instructions on their container page to associate instructions for the technicians to follow as they process specialized items. Not only can detailed parameters be programmed, the same is true of step-by-step instructions for each step in the process, including washing techniques and count sheet memos that contain special instructions. The Centers for Disease Control and Prevention's (CDC)'s Guideline for Disinfection and Sterilization in Healthcare Facilities (2008) states to "review the written reprocessing instructions regularly to ensure they comply with the scientific literature and the manufacturers' instructions." Not only can instructions be added manually but the IFU itself can be uploaded through the media icon, offering a full-length view of a PDF document for ease of use. Some software companies have linked with a document management system to offer a straight link connection to the IFU database, providing easy access to IFU.

Tracking systems can also aid education, with some now offering competency modules that allow education and training to be monitored, documented and verified. A few software companies offer a detailed module where each employee's competencies can be entered into the system. This is extremely helpful when new processes are implemented or inservices take place. The education can be reflected within the program, allowing technicians to only complete the tasks once they have been fully checked off as "completed" and "independent." ANSI/ AAMI ST79:2017, Comprehensive guide to steam

sterilization and sterility assurance in health care facilities states that "sterile processing personnel should receive an initial orientation covering all tasks performed in the area." Imagine having each educational competency available at any time to review and track progress of everyone on the SP team. This would also allow all the written documentation stored in file cabinets to be uploaded into one well-organized program. Utilizing these systems for educational purposes and documentation allows SPDs to provide records in a quick, effective manner to accrediting agencies during audits and surveys.

Objective 2: Review the fundamentals of tracking systems and how they help Sterile Processing professionals' skill sets and help them adhere to standards and best practices

Tracking systems can be utilized to support SP professionals and leaders within the industry by adhering to best practices and standards in the tracking of instruments and defects. For example, when utilizing one tracking system, case assembly allows the case cart to be built and each item scanned to that particular case. Once all items are scanned, a patient identifier is added that links all the items to that particular patient. This supports many standards in ensuring each item is tracked to the patient level.

Another key aspect of documentation is monitoring processes and the results of quality tests. SP professionals are familiar with the stacks of sterilization records that pile up in envelopes, and also the boxes that need to be sent off to storage. By documenting in real time within the tracking system, load results for sterilization and many other equipment pieces can be charted in real time by any user in the department. It is now possible to eliminate the need for keeping redundant documents and records. Many systems allow for scanning capabilities

where physical sterilizer printouts can be scanned directly into the system. Utilizing a flatbed scanner, the documents provided can be uploaded directly into the system and reviewed at any time in the future. When accreditation agencies ask for sterilization records for a particular day, the record can simply be searched by the Julian date of that load and an image of the documents will be provided. Sterilization results for all the entries can be searched and load results for all processes can be monitored. Mechanical washer loads can also be monitored and all items that are flowing through the machines can be checked and verified for proper processing. As the CDC, the Association for the Advancement of Medical Instrumentation (AAMI) and the Association of periOperative Registered Nurses (AORN) discuss the importance of documentation and tracking of sterilization processes and results, it can be much easier to digitally record these results in real time, and offer a faster method for investigating quality assurance measures during a time of recall or when a failure takes place.

Objective 3: Understand the importance of "clean" data

Many of the systems available to healthcare facilities today offer a type of communication or "connection" to neighboring systems (otherwise known as interfacing). This is extremely beneficial for perioperative healthcare workers and SP professionals because they depend on these systems heavily to inform them what to do and what is happening in their departments. One thing that often seems to go unrecognized is the need for "clean" data. Just because the systems can link up and communicate doesn't necessarily mean they will work properly. If the language between the two systems is not the same, failure will arise and, sometimes, too late.



Utilizing one type of nomenclature in the SP tracking system will provide information for technicians that is easy to understand; however, it may somewhat differ from the way the OR communicates, which may cause interference. For example, there may be three different types of laparoscopy sets or sigmoidoscopy sets within the inventory, but if the preference cards only ask for a generalized name, it becomes difficult to know which item will be chosen. The SPD relies heavily on the nomenclature to be accurate, and the items being requested must include the proper name. It is also important to recognize that this is entirely different from a circulator or scrub technician's perspective; they may name things based on their knowledge, or how their surgeons refer to them. The information between the OR scheduling and SP tracking systems must be one and the same for case cart and instrument count sheets to be accurate and true instrumentation needs and turnovers to be identified. These differences in names could cause a lack of inventory being picked or result in a case being delayed due to a missing item. This rationale is the same for surgical instrument naming. It is not uncommon for an instrument name from the manufacturer to be called something different within one's facility. Consider how many different types of Adson tissue forceps are currently in a facility's real back stock, and whether these instrument names match on all the count sheets. Having clean data not only will provide technicians with a more accurate description of the instruments themselves, but will also help them learn the instruments as opposed to just memorizing them by numerical value. Put simply, clean data directly relates to the quality of care provided.

As reports and analytics become increasingly advanced with today's systems, SP leaders can utilize their reports from their tracking system to identify quality defects, monitor productivity, track inventory and audit processes. If the data is "dirty" in any way, this information will be skewed, and errors can occur (often, repeatedly and without realization). Clean data not only provides insight to the problems that can occur, but it also should tell a detailed story of everything taking place within a department. Nomenclature, numerical values, instrument names, procedure names and all language between healthcare facility systems should be standardized to provide accurate information for teams, and to promote quality outcomes in its reporting.

Objective 4: Describe the difficulties associated when scanning compliance is inconsistent or inaccurately completed

Oftentimes, SP software is not utilized to its fullest potential because staff members lack the formal training on the program itself. Unfortunately, many SPDs lack the resources or budget to hire a full-time, experienced person who can provide the staff with the required support to manage and update their system. Subsequently, this leads to many individuals having their hands in the system—creating changes, inputting information or adding count sheets with the way they believe is correct. When more access is given to different members of the perioperative team (even in an effort to help the SPD), it increases the opportunity for errors and inconsistent information. Having a tracking system that is controlled, managed and cleaned up by just one or two staff members will help keep it accurate and updated.

System compliance begins with scanning. All trays and items that are brought into the SPD must be entered into the system and then scanned. Surgical trays and devices should also be scanned by the end user at the time of delivery and use. This offers a realtime, trackable story that can lead to the creation of reports and analytics to be shared with upper management and showcase how much work the department is completing). Having this level of data can prove highly beneficial at year's end when exploring inventory and purchasing needs. For compliance reports to be accurate, a department must have scanning compliance; that means each scan point should be created based on the workflow and processes of the department, not necessarily what the software company recommends. These systems can also offer alarms that alert the technician when an out of sequence scan takes place. This not only helps with compliance but can proactively locate an error in the process before it has an opportunity to affect the patient.

Analytics from the dashboard can be created and shared with the teams to set goals for the SPD. Defect goals can be monitored and reduced. Productivity numbers can also be accurately monitored, and goals can be set around production. Accurate inventory scans of trays and items within the SPD— and workflow charts—can help facilitate lean practices.

Conclusion

SP professionals should be offered detailed knowledge about tracking systems and software programs offered within their department and organization. Having a complete understanding of what is available can allow SP professionals to complete their tasks more efficiently and monitor processes more effectively. Utilizing tracking systems to their fullest potential will contribute to more effortless traceability, resulting in fewer defects. SP departments can overcome barriers more quickly, and also forecast future events to prevent patient risks and poor outcomes by collecting data and tracking progress in real time. 🕞

CIS Self-Study Lesson Plan Quiz - Eliminating Missing Instruments

Lesson No. CIS 283 (Instrument Continuing Education - ICE) • Lesson expires January 2024

- 1. The primary goal of tracking software is to: a. Provide information about safety
 - data to leadership b. Track Sterile Processing inventory and processes and contribute to quality outcomes
 - c. Track inventory only
 - d. Monitor production
- **2.** Tracking systems can be utilized to create reports and provide detailed information about the department's processes.
 - a. True
 - b. False
- 3. Tracking systems aid in the training process by:
 - a. Maintaining competency results
 - b. Tracking ongoing education
 - c. Allowing only fully trained technicians to perform assigned tasks
 - d. All the above
- 4. Compliance with documentation can now be recorded by:
 - a. Scanning both the items as well as the physical documentation into the software system
 - b. Handwriting items and then reporting results in the tracking system
 - c. Utilizing a flatbed scanner to scan documents directly into the software svstem
 - d. None of the above
- 5. Sterile Processing department educators can benefit from tracking software because they:
 - a. Can upload educational documents into their system
 - b. Can upload all case cart revisions for the entire year
 - c. Can preview future education needs reports
 - d. Can view media from the source

- 6. Analytics can be created to set and monitor productivity goals. a. True

 - b. False
- 7. Which of the following is not a beneficial result of a clean software integration or interface?
 - a. It provides standard nomenclature
 - b. It supports the technician in learning instruments
 - c. It automatically provides critical updates to industry standards
 - d. It reduces inaccurate and conflicting information
- 8. Computerized tracking systems are fast, but manual tracking methods are more effective for retrieving records.
 - a. True
 - b. False
- 9. Once a tracking system is implemented, there is generally no need to update system information.
 - a. True
 - b. False
- 10. Tracking systems can help Sterile Processing professionals in their daily responsibilities by:
 - a. Offering instructions on each item they complete and tracking their productivity
 - b. Including instructions for use referencing for count sheets
 - c. Providing useful scanning information and offering accurate inventory data
 - d. All the above

- 11. Clean data for healthcare organizations: a. Is critical because interfacing will
 - not work properly without it
 - b. Is not always needed because the system can communicate properly with or without it
 - c. Is not a realistic goal due to the many types of information shared between departments
 - d. None of the above
- **12.** Sterile Processing leaders benefit from utilizing their software because it can:
 - a. Allow accurate productivity measures
 - b. Provide accurate delivery records
 - c. Provide detailed reports and analytics around processes
 - d. All the above
- **13.** The most critical component in tracking system accuracy is scanning compliance. a. True
 - b. False
- 14. When a tracking system is not used to its fullest potential, data and numerical values can be skewed, and the amount of work completed will not always be recognized.
 - a. True
 - b. False
- **15.** A primary focus of a Sterile Processing department software system should be:
 - a. Employee satisfaction
 - b. Increased processing speed
 - c. Accurate inventory and scanning compliance
 - d. All the above

Request for paper/pencil scoring (please print or type information below)

- O I have enclosed the scoring fee of \$15. (please make checks payable to Purdue University. We regret that no refunds can be given)
- O Check here if you have a change of address

O Check here if you wish to have your results emailed to you

Detach guiz, fold, and return to:

Purdue University - Online Learning Young Hall, Room 527 155 S. Grant Street

West Lafayette, IN 47907 800.830.0269

Mailing Address (be sure to include apartment numbers or post office boxes)			
City	State/Province Zip Code/Postal Code		
()Da	aytime telephone	IAHCSMM Membership Number	

If your name has changed in the last 12 months, please provide your former name Purdue University is an equal access/equal opportunity institution

CIS SELF-STUDY LESSON PLAN