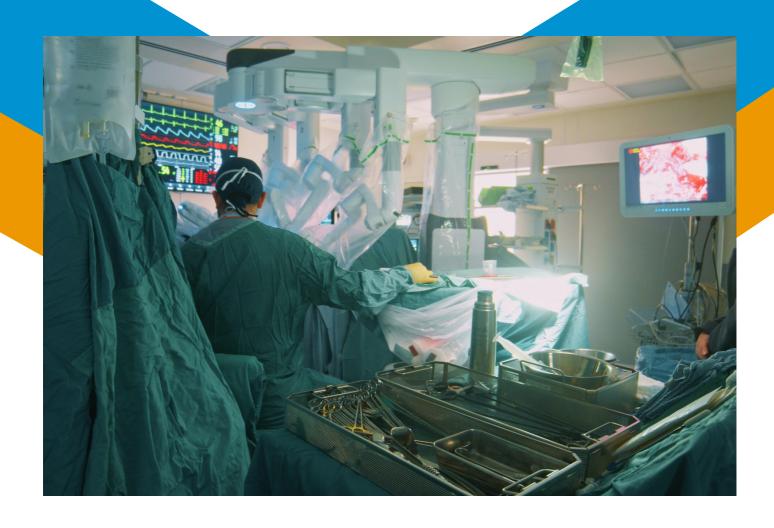
Should Healthcare Facilities Require CST Certification in States without Regulation?

Yes. Here's why ...

September 2023, detailed version





In states where Certified Surgical Technologists (CSTs) are not licensed or certified, CSTs fall within the employer's (healthcare facility or physician) jurisdiction and must meet the employer's requirements as allied health professionals.



See AST's-recommended job description.

Generally, CSTs work under the delegatory authority of physicians, specific provisions for which vary slightly from state to state. The underlying principle is that "physicians/surgeons may delegate to nonphysicians those tasks normally carried out by another physician when performed under the direct supervision and in the physical presence of the physician and the physician and/or employer has made a reasonable determination that the person to whom those tasks are to be delegated has the appropriate skills and knowledge to perform those tasks safely."

Healthcare Facility Responsibility to Demonstrate Current Competence for Surgical Technologists

CSTs not only serve as the surgeon's co-pilot and provide instruments and supplies to the surgeon, but they also prepare the operating room for each surgery, ensuring all needed equipment, instruments, and supplies are available, prepare power equipment such as drills, manage sterile medications, prepare surgical implants, operate robotic equipment, manage cancer specimens, fulfill a prominent role in patient outcomes during trauma procedures, and maintain the sterile surgical field to ensure members of the surgical team adhere to sterile technique to prevent surgical site infections.

As essential surgical team members, CSTs must perform very effectively to prevent

"never events," including medication errors, surgical implant errors, unintended retained surgical items, patient burns, and incorrect site surgery. CSTs also play a critical role in preventing surgical fires. For example, a recent study demonstrated that 78% of surgical fires were due to electrocautery (Day et al., 2017).

Healthcare facilities' policies provide credentialing requirements regarding who can provide surgical technologist services. **Healthcare facilities would expose** themselves to considerable liability by allowing inadequately-trained personnel to perform the role of a CST. The law can hold employers liable for acts of employees performed during their employment. Healthcare facilities' exposure to liability for surgical errors or healthcare-associated infections resulting from insufficiently trained employees performing the duties of the CST, as well as the healthcare costs associated with those errors, are incentives for healthcare facilities to ensure the individuals hired to work as a surgical technologist are graduates of an accredited program and have maintained the CST credential from the National Board of **Surgical Technology and Surgical Assisting** (NBSTSA).



AST Recommends Graduation from an Accredited Program and Certification as a Certified Surgical Technologist to **Demonstrate Current Competency**

The Association of Surgical Technologists' Recommended Standards of Practice urges that any individual employed as a surgical technologist graduate from an accredited surgical technology program and maintain the CST credential administered by the NBSTSA. In their Statement on Surgical Technologist Training and Certification, the American College of Surgeons (ACS) recognizes accredited education and the NBSTSA. The Council on Surgical and Perioperative Safety recognizes only the CST. AORN recommends graduation from an accredited program and the CST in its recommend job description. To apply for the CST, one must graduate from a CAAHEP- or ABHES-accredited program. Many healthcare facilities nationwide require the CST.

Accredited surgical technology educational programs appropriately reflect the time it takes to learn surgical technology, protect patients, protect themselves and protect other staff members.

Education and Training from an Accredited Program Is Essential to Create Competent and Safe Entry-Level CSTs

Education for surgical technology has grown to nearly 400 accredited colleges, technical schools, hospital-based, and military programs because of the demand from healthcare facilities.

Accredited Didactic Education

During didactic education, surgical technologists learn:

- · medical terminology
- anatomy
- physiology
- the physical environment
- · chemical hazards
- surgical wound management
- infection control
- hemostasis
- patient care concepts
- disinfection & sterilization
- electrical, radiation, & laser safety
- fire prevention
- legal responsibilities
- professional standards of conduct
- infection control
- disaster preparedness
- · stress management
- OSHA standards & appropriate PPE usage

- bloodborne pathogen prevention
- surgical medications
- equipment, instrumentation, & supplies

Surgical Procedures & Techniques for:

- general surgery
- · OB-GYN
- orthopedics
- urology
- cardiothoracic
- ENT/oral and maxillofacial surgery
- · plastic and reconstructive
- vascular
- ophthalmic
- spine
- neurosurgery
- endoscopic, interventional radiology, laser,

& robotic-assisted surgery



Every specialty has unique, critical safety issues and unique equipment, instruments, supplies, and processes.

Accredited education also teaches critical thinking. The escalating rate of new technologies in the operating room requires CSTs to apply critical thinking skills in learning new technologies, including multitasking skills and the ability to anticipate the surgeon's needs many steps in advance.

Skills Lab in Accredited **Programs**

Didactic education prepares the student for the skills lab, also called the mock operating room. Programs invest significant resources into skills labs. In an accredited skills lab, students have 225 hours to practice away from the hectic, fast-paced, highpressure operating room environment and, most importantly, away from the patient. Skills labs provide a safe learning environment without putting patients and surgeons at risk. Students gain the automaticity and speed needed to assist the surgeon during unanticipated situations such as rapid bleeding or trauma procedures. They learn sharps safety, including how to rapidly handle scalpels and needles without causing a sharps injury to themselves or others, and appropriately assemble power equipment like neurosurgery drills. The CST is responsible for ensuring all equipment is correctly assembled to prevent serious surgical errors.

Clinical Rotations in Accredited Programs

Didactic education and skills lab provides the foundation for clinical rotations. Diverse clinical rotations not only teach surgical team



interactions and embed physical safety habits, but they also teach an immense amount about each specialty.

Even seemingly simple specialties like ENT have important patient considerations, such as cancer specimens and preventing surgical fires. Even though surgery fires are rare, they happen, and the consequences to the patient are devastating (Day et al., 2018).

CST Certification Demonstrates Mastery of Entry-Level Skills and Current Competence

Graduation from an accredited program and CST certification ensures that Certified Surgical Technologists are ready for the intense and demanding environment of the OR.

A high level of performance is needed from day one for patient safety, surgical outcomes, their own safety, and the safety of their colleagues.

After earning CST certification, Certified Surgical Technologists maintain and demonstrate current competence by completing continuing education to maintain CST certification.

Studies on Certification Show Certification Enhances Staff Retention & Patient Outcomes

- Though peer-reviewed academic studies on surgical technologists are limited, one study demonstrated that surgical care certifications "contributed significantly to improved surgical patient outcomes" (Boyle et al., 2014, p. 526).
- · Another study showed that certification has correlated with staff retention and "improved quality care, patient satisfaction, and knowledge" (Valente, 2010, p. 219).

Competent performers contribute to the entire team's morale, staff retention, surgeon satisfaction, patient safety, and better surgical outcomes for the patient.

Educated and Certified Surgical Technologists and Joint Commission Compliance

The Joint Commission reports that 36% of accredited hospitals were noncompliant with its standards to reduce the risk of infection associated with medical equipment, devices, and supplies (Pyrek, 2013). Certified Surgical Technologists prevent infection and increase compliance by properly decontaminating instruments before sending them to sterile processing. For a substantial number of instruments, proper decontamination requires skillful techniques learned as a student.

Educated and Certified Surgical Technologists' Impact on Healthcare Costs

Surgical technologists significantly impact healthcare facility costs. For example, the Hospital-Acquired Condition Reduction Program incentivizes hospitals to reduce hospitalacquired conditions. If a hospital falls into the top 25% of hospital-acquired conditions for the previous year, then the hospital faces an additional 1% reduction in Medicare reimbursement payments. Many CMS hospitalacquired conditions are surgery related, such as surgical site infections and a foreign object retained after surgery. Surgical technologists' role in preventing surgical site infections readily demonstrates their impact on healthcare costs.

The U.S. Department of Health and Human Services, in its Action Plan to Prevent Healthcare-Associated Infections, cited that surgical site infections result in an estimated 13,088 deaths per year and cost hospitals approximately \$25,546 per infection. Certified Surgical Technologists also save facilities money by preventing long delays and not throwing away expensive equipment. A single mistake of accidentally throwing away equipment, such as robotic equipment, can cost more than a car. Many non-disposable surgical items look disposable to the untrained eye.

Healthcare facilities require Certified Surgical Technologist certification from the NBSTSA for liability protection. AST recommends graduation from an accredited program and certification as a Certified Surgical Technologist from the NBSTSA. Certified Surgical Technologist certification demonstrates graduation from an accredited program, mastery of entry-level skills, and current competence. Studies show certification improves patient outcomes, staff morale, and staff retention.

References

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