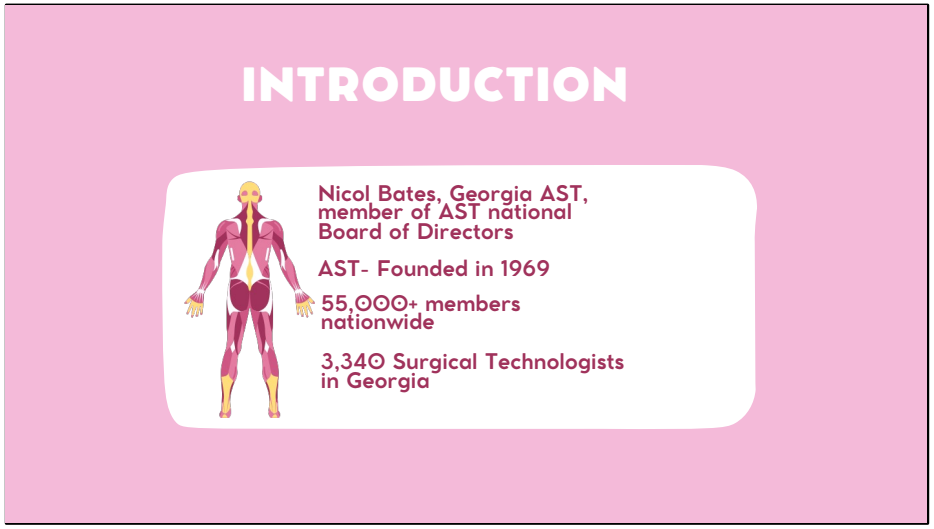
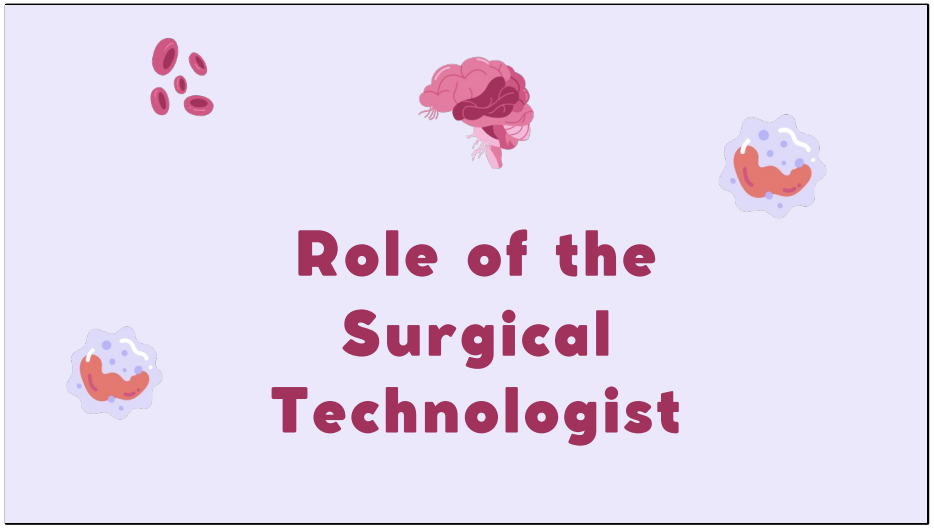
Georgia Association of Surgical Technologists

Rural Workforce

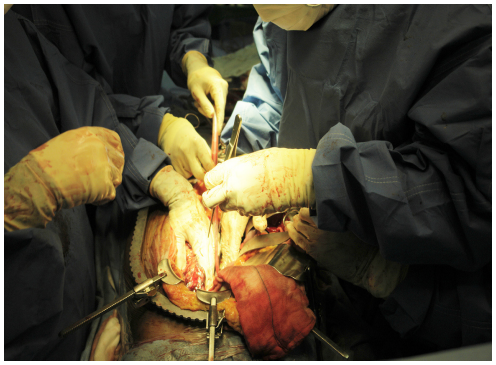


(Introduce yourself and where you're from.). The non-profit Association of Surgical Technologists, founded in 1969, has more than 53,000 diverse members nationwide with about 3,340 surgical technologists in Georgia



The role of the surgical technologist.

SURGICAL TECHNOLOGISTS' ROLE OVERVIEW



Surgical Technologists are an essential part of the surgical team.

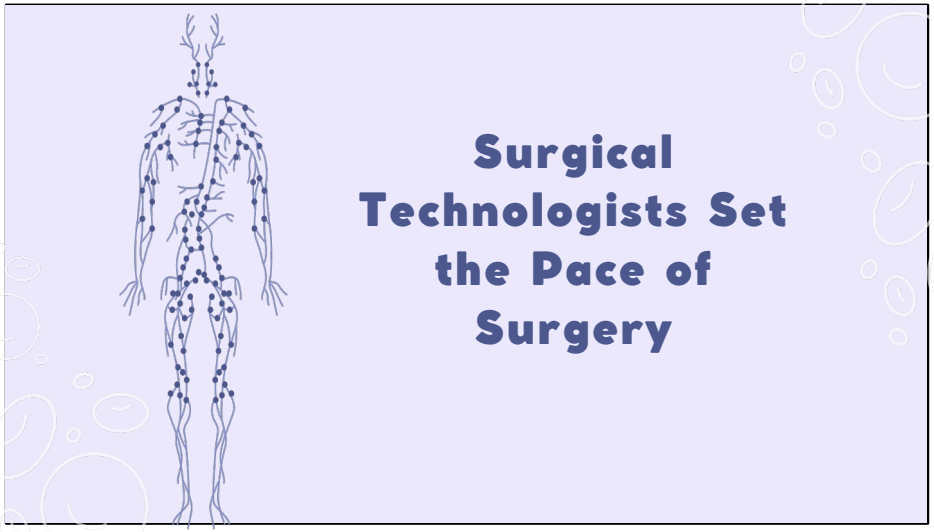
- Surgical Technologists not only serve as the surgeon's co-pilot and provide instruments and supplies to the surgeon, but they prevent patient death and harm related to medication, surgical fires, instruments and implants, cancer specimens, infection, and bleeding.
- Surgical technologists are the surgical team member that 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, surgical technologists must perform very effectively to prevent events, including medication errors, surgical implant errors, unintended retained surgical items, patient burns, and incorrect site surgery.
- Surgical technologist's role in passing instruments plays a very small part of their overall role in protecting patients.

Surgical Technologists Ensure Presence of Instrumentation Needed for Surgery

The surgical technologist sets up the room, not the surgeon. This requires a deep understanding of thousands of instruments in various specialties. Surgeons often enter the room after the patient is asleep. Adverse events happen when surgical technologists don't have all the needed instrumentation in the room before surgery.

For example, some spine surgeries have two different approaches and require two completely different sets of instruments. Another example is that a surgery may be a neuro and ENT, again requiring two different sets of instruments that the surgical technologist needs to comprehend. New technologies like navigation and robots have also added complexity to case set-up, especially if the robotic case is only partially robotic.

You can see a back table here. No one sets this up besides the surgical technologist. The surgeon isn't even in the room yet. The nurse is doing his or her own responsibilities.

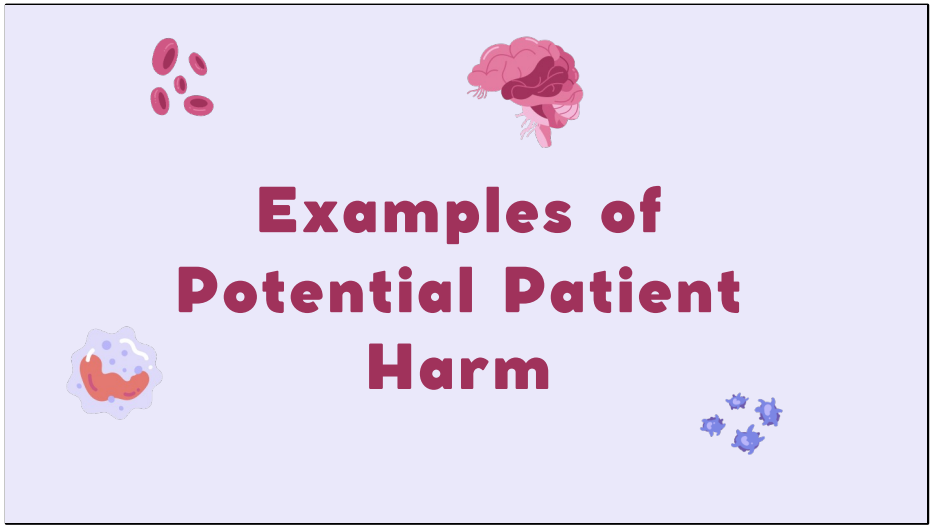


Surgical technologists set the pace of surgery.

They serve as the surgeon's co-pilot and provide instruments and supplies to the surgeon during surgery, and they must constantly anticipate the surgeon's needs. Every extra minute a patient is under anesthesia the risk of infection and anesthesia-related complications increase.

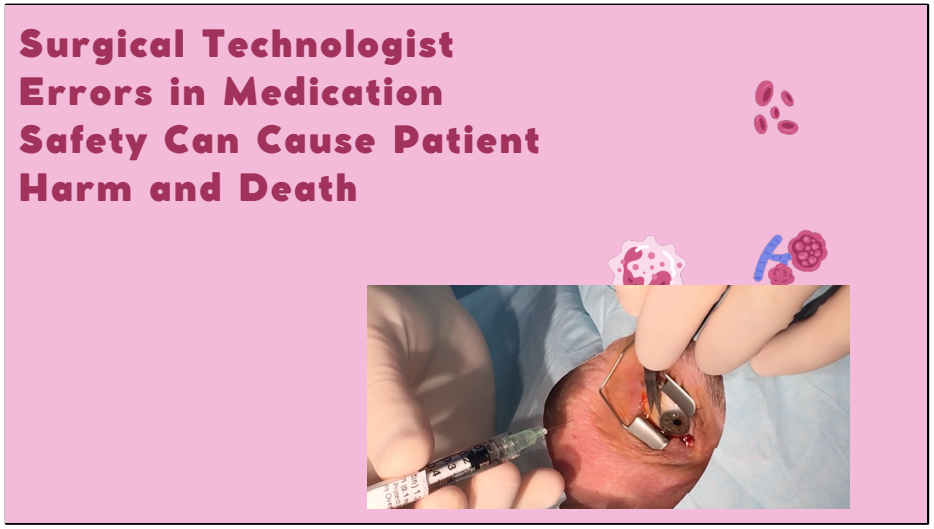
No One Supervises the Surgical Technologist Before or During Surgery

The surgeon is not in the room before surgery. Circulating nurses are busy seeing the patient before surgery. During surgery, the surgeons' eyes are on the surgical site. The surgical technologist's eyes are on the sterile field, the surgeon and the patient. Circulating nurses do not have time to watch surgical technologists. They are busy helping get the patient under anesthesia, setting up surgical equipment, charting, tracking countable items, and preparing for the next case.



Examples of potential patient harm:

Surgical technologists who have received an accredited education, which included skills training before clinical training is essential to prevent harm to patients in the OR. Here are examples of what untrained surgical technologists might encounter.



Surgical Technologist Errors in Medication Safety Can Cause Patient Harm and Death

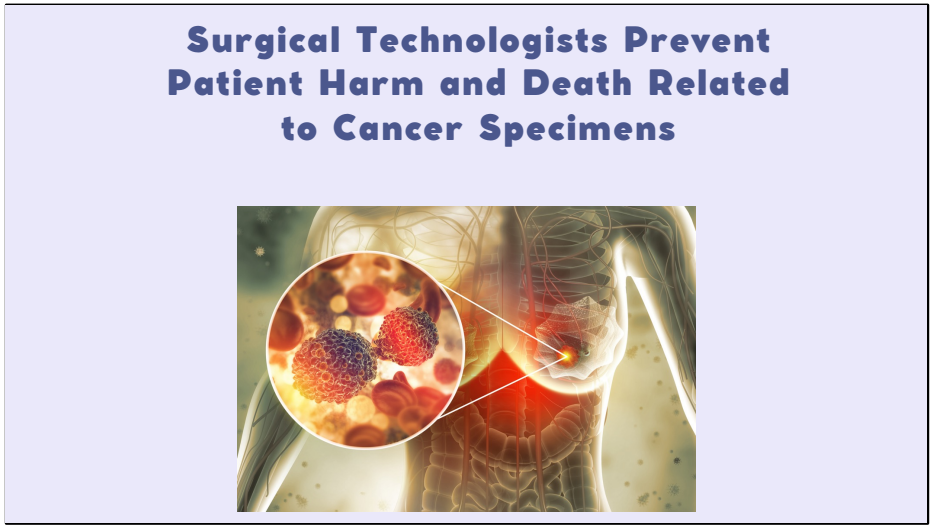
Three very prevalent medications in surgery are heparinized-saline, lidocaine, and epinephrine. Using these medications incorrectly has caused patients to code. Education and skills labs teach surgical medication and medication safety before students enter the operating room. Also, patients have been blinded when the wrong medication was injected into the eye.

Surgical Technologists Prevent Surgical Fires

Surgery creates a high fire risk because supplemental oxygen is often present near ignition sources which are very common in surgery, such as electric cautery. Surgical technologists also play a critical role in preventing surgical fires because they manage electrocautery and lights.

Surgical Technologists Prevent Patient Harm Related to Instruments and Implants

The surgical technologist manages instruments and implants that can harm patients during surgery. For example, in neurosurgery cases, the surgical technologist assembles drills that go into the patient's brain. The surgical technologist ensures all equipment is correctly assembled to prevent serious surgical errors. Surgeons don’t check for correct drill assembly. Surgeons expect surgical technologists to get it right. The surgical technologist also prepares surgical implants like heart valves, artificial hips, knees, and spine implants. Patients have died, for example, when an untrained surgical technologist has mixed the bone cement incorrectly for a knee replacement. It takes a team to make an error like this; it also takes a team to prevent one.



Surgical Technologists Prevent Patient Harm and Death Related to Cancer Specimens

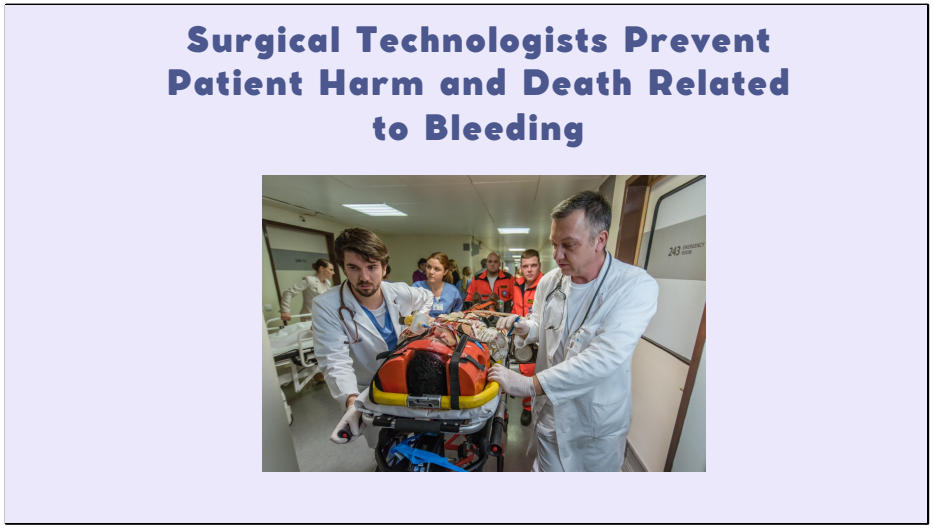
The surgical technologist's ability to manage cancer specimens quickly and accurately can be life or death to the patient, as a mix-up can lead to the wrong cancer treatment. This requires not only mechanical automaticity but also knowledge of medical terminology. Surgeon's place cancer specimens on the surgical technologist's sterile table at an incredibly fast pace. Nurses are not in the sterile field and absolutely rely on surgical technologists to quickly and accurately track and label specimens. Each specialty has about a hundred different names of specimens. It is truly a nightmare situation when an untrained surgical technologist gets befuddled during cancer specimen cases. The surgeon's visual focus is on the cancer itself, so looking away from the field and helping the surgical technologist compromises care. Also, at this point, the untrained surgical technologist has often already confused specimens.

Surgical Technologists Prevent Patient Harm and Death Related to Sterile Technique

Surgical technologists maintain the sterile surgical field to ensure surgical team members adhere to sterile technique. Sterile technique quickly becomes very complex in some instances, such as breast cancer cases with one healthy breast removed prophylactically, bowel cases, and combined ENT/brain surgeries in which a tumor crosses a boundary.

In its *Action Plan to Prevent Healthcare-Associated Infections*, the US Department of Health and Human Services cited that surgical site infections result in an estimated 13,088 deaths annually and cost hospitals approximately $25,546 per infection.

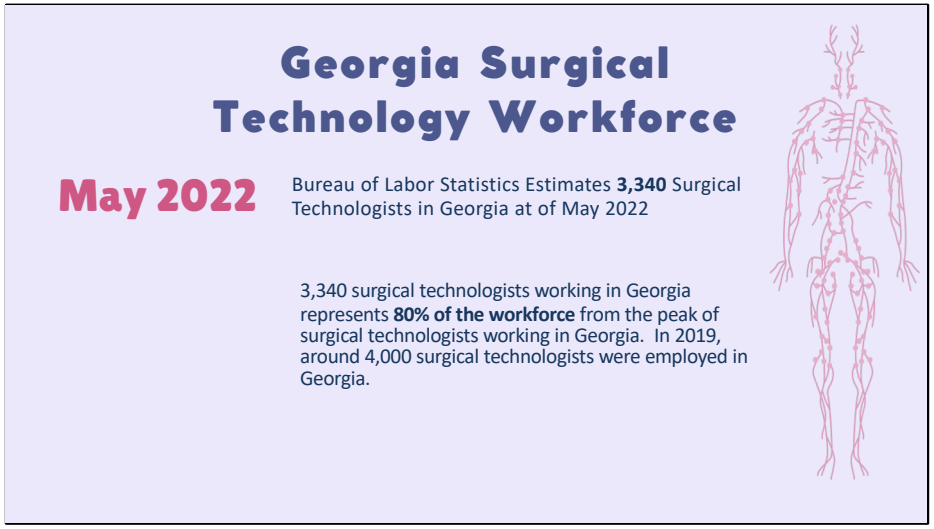
Here is a photo of an infected implant.



Surgical Technologists Prevent Patient Harm and Death Related to Bleeding

Automatic reflexes are built with practice during skills lab and clinicals. The pace and skill of the surgical technologist are vital to patient outcomes during cases with rapid bleeding. I have personally seen the pace of a well-educated and skilled surgical technologist save a life during a trauma.

Workforce



The Bureau of Labor Statistics Estimates **3,340** Surgical Technologists in Georgia at of May 2022

3,340 surgical technologists working in Georgia represents **80% of the workforce** from the peak of surgical technologists working in Georgia. In 2019, around 4,000 surgical technologists were employed in Georgia.

How to Become A Surgical Technologist

- An associate degree accredited education program is required either through a CAAHEP or ABHES.
- **There are 15 accredited surgical technology education programs in Georgia.**
- Certification exam is through the NBSTSA.
- A CAAHEP- or ABHES-accredited program and CST certification is recommended by the American College of Surgeons, the Council on Surgical and Perioperative Safety, and the Association of Surgical Technologists.

How the State Can Help

1. Support CAAHP- and ABHES- accredited surgical technology programs.

- Funding for CAAHEP and ABHES accredited surgical technology programs.

- Funding for scholarships.

- Supporting student recruitment for surgical technology.

- Funding for clinical rotations.

- Consider innovative ways to address verbally abusive workplaces.

How the State Can Help

2. Thinking long-term

With the workforce shortage, we have seen efforts to try to "fast-track" surgical technology education. These efforts have failed.

Thirty years of experience have demonstrated on-the-job training does not work.

Surgical technologists need an accredited education to succeed. Surgeons, operating room nurses, and patients need a well-educated and trained surgical technologist on their team.

Why must surgical technology education be high quality?

- Surgical technologists' role in patient safety was discussed earlier in terms of ensuring appropriate a ready operating room, medication safety, preventing fires, preventing harm and death related to implants, cancer, and traumas.
- The Joint Commission reports that up to 50-60% of accredited hospitals surveyed in 2016 were noncompliant with its standards to reduce the risk of infection associated with medical equipment, devices, and supplies. Surgical technologists are the staff who check medical equipment for appropriate sterilization before it reaches the patient.
- The U.S. Department of Health and Human Services, in its *Action Plan to Prevent Healthcare-Associated Infection*s, cited that surgical site infections result in an estimated 13,088 deaths per year and cost hospitals approximately $25,546 per infection. Surgical technologists are the guardian of the sterile field.

High-quality education must prepare the individual for the high-paced and high-risk world of the operating room.

While we understand the need to address workforce issues, there is a need for surgical technologists to be well-trained rather than receive on-the-job training. We believe there must be accredited education that will prepare the individual for the high-paced and high-risk world of the operating room. The American College of Surgeons strongly supports the accreditation of all surgical technology educational programs and supports examination for certification of all graduates of accredited surgical technology educational programs. The American College of Surgeons has issued a statement in support of this. This statement was then approved by the Association of Surgical Technologists, American Society of Anesthesiologists, American Association of Surgical Physician Assistants, American Association of Nurse Anesthesiology, and American Society of PeriAnesthesia Nurses. AORN's job description for surgical technologists also requires graduation from an accredited program.

Accredited programs qualify trainees for the CST credential. The CST credential is the only credential recognized nationally and the only credential recognized by the American College of Surgeons and the Association of Surgical Technologists. The Council on Surgical and Perioperative Safety (CSPS), in their statement *CSPS Surgical Team Member Role Partner Organizations and Credentials*, recognizes the various perioperative surgical team members and their credentials for an optimal safe surgery team. Only the CST certification is recognized for surgical technologists. AORN's job description for

surgical technologists requires the CST.

The Importance of High-quality Didactic Education with Skills Lab and Diverse Clinical Rotations

High-quality didactic education with skills lab is the appropriate minimum standard for surgical technology and patient safety and both are required for accreditation. This ensures surgical technologists learn everything they need to learn prior to setting foot in the fast-paced, high-pressure, high-stakes operating room. Accredited education includes a skills lab that is 225 hours. This allows trainees who are learning to practice essential skills like assembling drill and maintaining sterility away from an actual patient. Accredited education also includes 540 hours of diverse clinicals. This ensures surgical technologists learn the instrumentation and safety precautions and processes associated with the many diverse surgical specialties. Each specialty has unique patient safety issues.

History has proven that the appropriate level of education for surgical technologists is an accredited college-based or technical-school-based education, skills lab, and clinical rotations to be prepared for the very high-tech, fast-paced, high-stakes, high-pressure, and diverse world that is the operating room. Accredited surgical technology educational programs appropriately reflect the time it takes to learn surgical technology, protect patients, protect themselves, and protect other

staff members.

The reason over time surgical technology has moved from in-hospital training to educational settings. Healthcare facilities have come to realize that these professionals had too much to learn on the job. The structure of accredited programs is the perfect fit for the didactic, simulation lab, and clinical training required to enter practice as a competent, safe surgical technologist. Didactic education prepares students for skills lab. Didactic education and skills lab provides the foundation for clinicals. Didactic education, skills lab, and clinicals prepare students for certification. Then, the surgical technologist is ready to work.

How the State Can Help

2. The state can help by thinking long-term.

For surgical technology graduates to feel ready for the workforce and to STAY in the workforce they need:

- **Adequate classroom education, whether in-person or online.**
- **A skills lab to practice their skills.**
- **Diverse clinical rotations in every specialty.**

CAAHEP- and ABHES- accredited programs assure students get a high-quality education that prepares them for the operating room and qualifies them for the CST credential recognized nationwide.

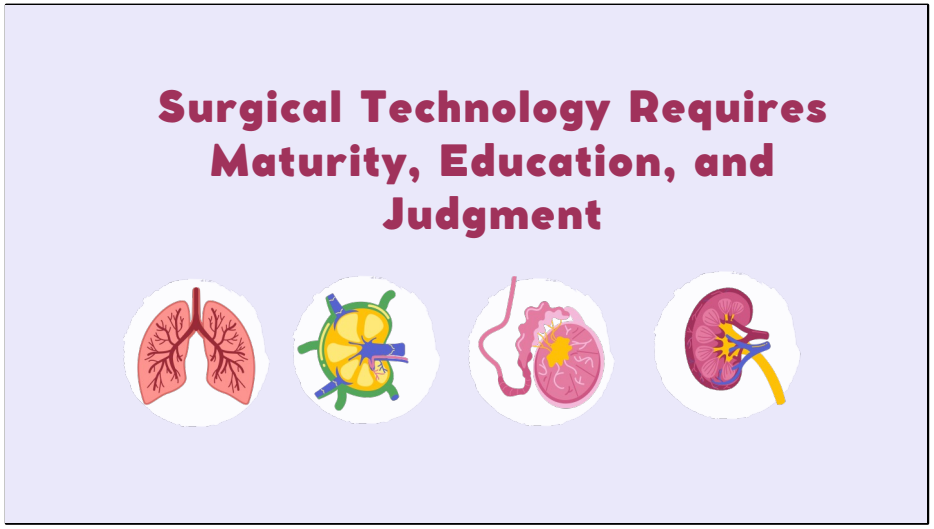
How the State Can Help

2. Thinking long-term

Surgical technologists with adequate education and certification are empowered and safe workers who know how to communicate with their team. Well-educated and trained surgical technologists create patient safety and they STAY in the workforce.

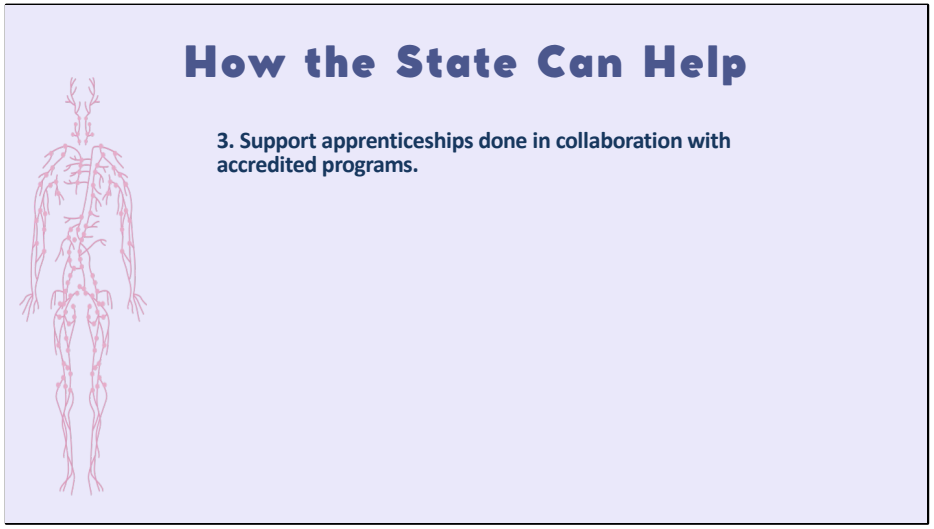
We have seen on-the-job programs where people only last a few WEEKS in the intense, demanding environment of the operating room. For example, they start with 13 trainees and keep two. These two team members end up being a liability to the patient, the surgeon, and the surgical team. Poorly trained workers also decrease the morale and retention of other surgical team members such as nurses.

Poorly-trained people also leave feeling disempowered.



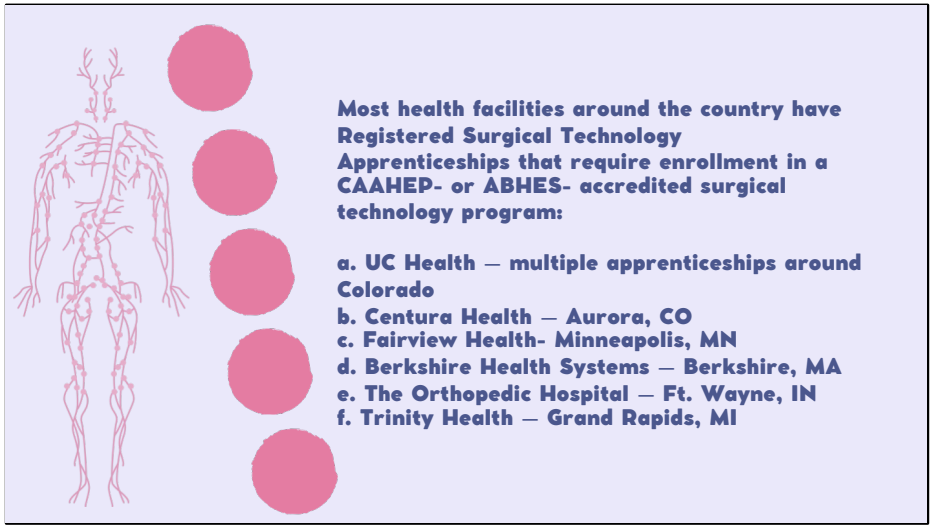
Surgical Technology Requires Maturity, Education, and Judgment

There is an impulse to increase workforce as fast as possible. It is important remember the level of needed education, training, and judgment is more on the level of nurses and physician assistants than diploma health tech positions. A level of maturity and judgment is also required to be in the operating room. Surgical technology is only a good fit for some people. If a person does not yet have the life skills to pass college-level classes, the chances are they are not sufficiently skilled yet to be in an operating room. The operating room is full of highly-educated professionals who expect a very high level of performance. The operating room is an incredibly intense environment.



The state can help by supporting apprenticeships done in collaboration with accredited programs.

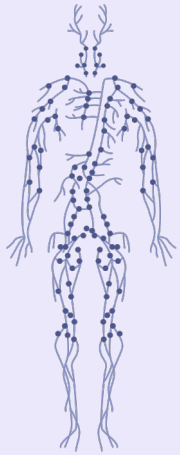
REGISTERED APPRENTICESHIPS



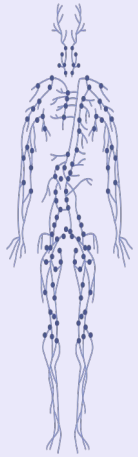
Most health facilities around the country have Registered Surgical Technology Apprenticeships that require enrollment in a CAAHEP- or ABHES- accredited surgical technology program:

a. UC Health – multiple apprentices around Colorado
b. Centura Health – Aurora, CO
c. Fairview Health - Minneapolis, MN
d. Berkshire Health Systems – Berkshire, MA
e. The Orthopedic Hospital – Ft. Wayne, IN

f. Trinity Health – Grand Rapids, MI



If the education meets CAAHEP or ABHES accreditation standards, it will almost definitely meet federal registered apprenticeship standards



The Georgia chapter of the Association of Surgical Technologists urges apprenticeships be done in collaboration with CAAHEP- or ABHES- accredited programs to ensure the training will adequately prepare the surgical technologists for the *fast-paced, high-pressure* world of the operating room and to protect patients.

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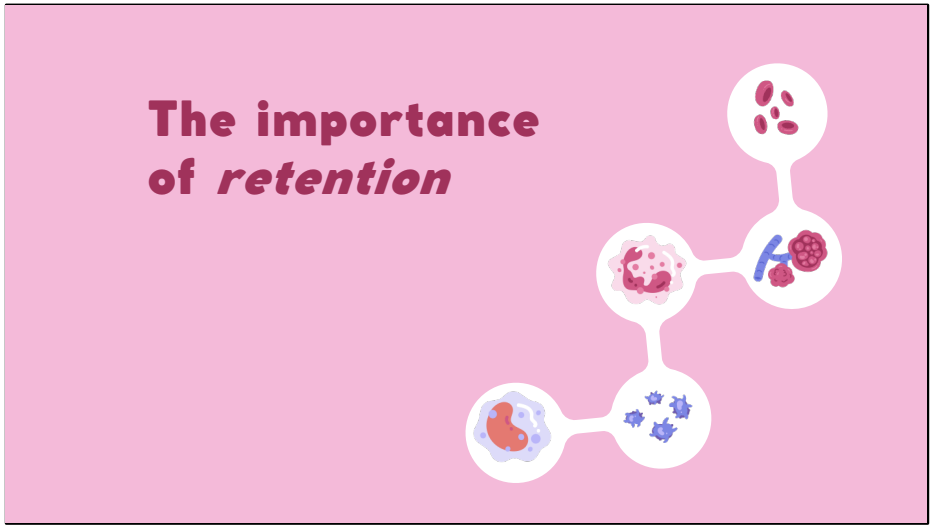
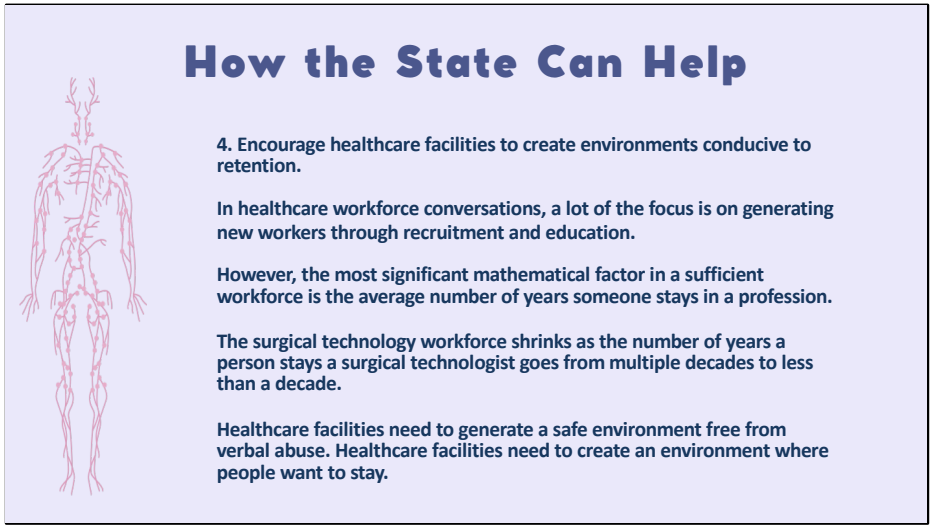


Many surgical technologists being asked to train others on-the-job are leaving that healthcare facility because it's too stressful. Trainees entering operating rooms need a solid educational foundation before setting foot in operating rooms. Many important topics must be taught and practiced for patient safety before a trainee sets foot in the operating room. The teaching burden must not be placed on current Certified Surgical Technologists in rooms with actual patients and real surgeons expected to work very quickly. There isn't time during an actual surgery to lay the foundation for new trainees. ***Being placed in an operating room with an ill-prepared trainee is unsafe, incredibly stressful, and unsustainable.***

On the job training may create a few new surgical technologists per year.

Meanwhile, more than 3,000 surgical technologists in Georgia need to be retained. Retention is a real problem at healthcare facilities.

Trainees who are ready to set foot in the operating room will help with workforce retention.



The state can help by encouraging healthcare facilities to create environment conducive to retention.

In healthcare workforce conversations, a lot of the focus is on generating new workers through recruitment and education.

However, the most significant mathematical factor in a sufficient workforce is the average number of years

someone stays in a profession.

The surgical technology workforce shrinks as the number of years a person stays a surgical technologist goes from multiple decades to less than a decade.

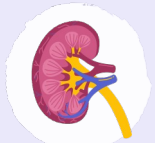
Healthcare facilities need to generate a safe environment free from verbal abuse.

Healthcare facilities need to create an environment where people want to stay.

Georgia-AST and AST are a Resource

Increase the workforce

Well-educated trainees



Surgical patient safety

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Georgia AST believes in increasing the workforce, well-educated trainees, and surgical patient safety. We're here as a resource. Here is our contact information.