



Chairman Anderson, members of the Committee:

My name is Rachel Bruce, writing on behalf of the Oregon State Assembly of the Association of Surgical Technologists as President. I represent 650 Oregon Certified Surgical Technologists today. I'm proud to represent a very diverse profession.

Neutral After Opposing in House

We are neutral on this legislation after opposing it in the House. House Bill 3596 was introduced at the 11th hour with the proponents stating it's a simple technical fix.

House Bill 3596 was far from being a simple technical fix. However, we were able to amend the bill in the House to find middle ground that allows an alternative pathway for surgical technologist legislation, while keeping intact the high educational standards promised by the proponents. We oppose any further changes to this legislation.

Not only is accredited education essential for surgical patient safety, but also it was the *promise that allowed for negotiations during the last legislative session*. Certain stakeholders were neutral on the legislation last year because of the inclusion of accredited education.

Many compromises were made last session including the addition of apprenticeships, and additional credentials. Removal of accredited programs was not one of the compromises.

Last year, the proponents stated in the slide deck they submitted to the Committee, quote, "Educational elements will be provided through approved, certified and experienced partners, i.e., certified community college and/or certified existing trade school programs." And, quote, "Standards will be even higher than existing programs."

The legislative record from last year reflects that multiple legislators voted in favor of the legislation only because of the high educational standards in the legislation.

While accredited education is not required for apprenticeships under the amended bill, a suitable alternative was put in place, requiring BOLI to review educational standards in alignment with surgical technologist core curriculum.

If this legislation passes, it means accredited education will no longer be required prior to an apprenticeship as is currently required by law. It means BOLI will approve the education.

Rural Options Are Available

The Committee should be aware distance programs are available for rural Oregonians and community colleges in rural areas of Oregon are exploring opening surgical technology programs.

Earn While You Learn Options Can Be CAAHEP Accredited

OASCAs testimony states you can't learn while you learn under CAAHEP which is not true. CAAHEP-accredited programs can be done with apprenticeships.

Military Experience Option Available

Graduates of military programs are eligible for the CST from the NBSTSA.

On-the-Job Trained Surgical Technologists Support Accredited Education

We have members of our organization who were on-the-job trained and said they learned bad habits. They returned to school for an accredited education and reported what they learned was essential for patient safety.

A High-Quality Surgical Technologist Education is Critical for Surgical Patient Safety

We know surgical technologists that are undereducated are ill-prepared to enter the operating room. The operating room has no training wheels. It is an intense, demanding, high-pressure, high-paced, high-stakes environment from day one. Surgical technologists need to be 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. Competent performers contribute to the entire team's morale, surgeon satisfaction, patient safety, and better surgical outcomes for the patient.

Surgical Technology Is Not a Profession that Overreaches In Education

Accredited surgical technology educational programs appropriately reflect the amount of time it takes to learn surgical technology. We're not one of the professions that keeps raising the bar. The move away from on-the-job training began in 1950, seventy years ago in 1950, and we have had the same standards for decades. We understand there are many professions where the overly high educational standards are problem. The surgical technology degree is very affordable, even when housing is considered, and surgical technologists make a good wage when they graduate. Distance options are available. Surgical technologists can live at home.

Competent and patient-centered practice as a surgical technologist demands a broad area of knowledge and the development of skills that only graduates of accredited educational programs can achieve. Before they set foot on the job and before they're with patients, surgical technologists must know:

- Anatomy to provide a basic understanding of operative procedures.
2. Basic physiology, including normal human body structure and function, major systems, organs, and terminology necessary for understanding disease.
3. Medical terminology.
4. The working environment, surgical attire, and safety standards.
5. Chemical hazards.
6. Duties of the scrub role.
7. Surgical wound management.
8. Infection control practices.
9. Hemostasis principles.
10. Basic patient care concepts.
11. Instrument decontamination, disinfection, and sterilization.

12. Electricity as it relates to patient safety.
13. Laser safety.
14. Basic legal responsibilities such as HIPAA.
15. Professional standards of conduct and risk management issues.
16. Infection control includes basic microbiology focusing on pathogenic bacteria, viruses, and fungi.
17. Methods of destruction, removal, and inhibition of microorganisms.
18. Basic education on how the immune system protects against pathogens.
19. Disaster preparedness.
20. Stress management.
21. Professional communication.
22. Ethical and moral responsibilities.
23. HIV/AIDS education training.
24. OSHA standards for universal precautions.
25. PPE and precautions for illnesses like tuberculosis and other airborne diseases.
26. Hepatitis C prevention.
27. Hazard communication in working with blood-borne pathogens.
28. Post-exposure follow-up
29. Basic patient assessment as it relates to surgery.
30. Common medications, stressing identification, handling, and usage.
31. Equipment, supplies, instrumentation, and techniques.
32. The correct order of steps for surgical procedures in general surgery, OB-GYN, orthopedics, urology, cardiothoracic, ENT/oral and maxillofacial surgery, plastic and reconstructive, vascular, ophthalmic, spine, neurosurgery, endoscopic and robotic-assisted surgery.

Accredited education also teaches critical thinking. The escalating rate of new technologies in the operating room requires surgical technologists to apply critical thinking skills in learning new technologies.

Accredited Education Includes a Skills Lab So Mistakes are Made Away from the Patient

Oregon programs have invested significant resources into skills labs. In an accredited skills lab, *students have 225 hours to practice away from the hectic, fast-paced, and high-pressure operating room environment and, most importantly, away from the patient.* Students gain the automaticity and speed needed to stop bleeding during a trauma, they learn to juggle knives and needles without causing needlestick injuries to themselves or others and potentially getting Hep C or HIV. Skills labs provide a safe learning environment without putting patients, workers and surgeons at risk.

Surgical Technologists Work Independently

A vast majority of moves and decisions made throughout the day by surgical technologists are made based on their knowledge and not directions. Before surgery, surgeons and circulating nurses rely on surgical technologists to independently ensure the right instruments are in the room and to set up the instruments and supplies using perfect sterile technique. During surgery, the surgeon's eyes are on the surgical site, not the surgical technologists. During surgery, circulating nurses depend on surgical technologists to perform their job well and protect the patient while they are busy with the patient, charting, grabbing supplies, preparing specimen labels, looking up the next patient, and more. Also, the surgical technologist role continues to grow in independence as surgery becomes more complex. Robotic surgery is a great example; the surgeon isn't even near the sterile field.

Surgical Technologists' Role in the Operating Room is Impressive & Important for Patient Safety

They maintain the sterile surgical field to ensure surgical team members adhere to sterile technique to prevent surgical site infections. Surgical technologists prevent patient harm and death related to practice sterile technique. **Sterile technique** becomes very complex quickly in certain cases, such as breast cancer cases with one healthy breast being removed prophylactically, bowel cases, and combined ENT/brain surgeries in which a tumor crosses a boundary. The surgical technologist must keep the instrumentation separate. 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, and the death rate will likely increase with the recent outbreak of a multidrug resistant fungus.

Prior to surgery, the surgical technologist is the lead member of the operating room team who ensures the surgical team has the instrumentation and supplies *needed* for surgery *before* the patient is in the room and under anesthesia. This requires a **deep understanding of various specialties**. Surgeons often enter the room after the patient is asleep.

Surgical technologists serve as the surgeon's **co-pilot** and provide instruments and supplies to the surgeon during a surgery and must constantly anticipate the surgeon's needs.

Surgical technologist errors in **medication safety** can cause patient harm and even death. For example, three very common medications in surgery are heparinized-saline, lidocaine, and epinephrine. Surgical patients have coded when the surgical technologist accidentally hands topical epinephrine to the surgeon for injection. Similarly, patients have coded when a surgical technologist mixes up heparinized saline with lidocaine, as lidocaine is cardiotoxic in large volumes.

Surgical technologists need certain skills to prevent **surgical fires**. Accredited education skills lab gives students a chance to practice fire prevention before they set foot in the operating room. Fires in the operating room are rare, likely because OR professionals are well-educated, however they still happen. One study demonstrated a quarter of surgeons have witnessed a surgical fire during their career. 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. When OR fires happen, they almost always result in acute injury or death to the patient. Everyone in the OR has a role in prevention, but the surgical technologist and the anesthesiologist are two who have most responsibility for preventing fire. The surgical technologist must multitask like a pro and constantly monitor to make sure the electrocautery and hot lights and other ignition sources are not touching fuel like surgical drapes.

Well educated surgical **technologists prevent patient harm and death related to instruments and implants**. For example, in neurosurgery cases, the surgical technologist assembles drills that go into the patient's brain. It is not customary for surgeons to check the drill before they start drilling. They trust the surgical technologist has loaded the right drill. The surgical technologist also prepares surgical implants like heart valves, artificial hips, knees, and spine implants. Patients have died, for example, when a surgical technologist has mixed the bone cement incorrectly for a knee replacement. We acknowledge it takes a team to make an error like this, it also takes a team to prevent one.

Well-educated surgical technologists prevent patient harm and death related to cancer specimens. The surgical technologist's ability to manage cancer specimens very 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 a very strong command of medical terminology.

Well-educated technologists prevent patient harm and death related to bleeding. Automatic reflexes are built with practice during skills lab. *The pace and skill of the surgical technologist is vital to patient outcomes during cases with rapid bleeding.*

Well-educated surgical technologists help with Joint Commission compliance and preventing contaminated instrumentation. 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. Skilled surgical technologists prevent infection and increase compliance by properly decontaminating instruments and other techniques.

Well-educated surgical technologists prevent costly mistakes. The federal Hospital-Acquired Condition Reduction Program incentivizes hospitals to reduce hospital-acquired conditions. Many hospital-acquired conditions are surgery related, such as surgical site infections following certain surgeries and a foreign object retained after surgery. If hospitals fall into the top 25% of hospital-acquired conditions for the previous year, then hospitals face an additional 1% reduction in Medicare reimbursement payments. Skillful 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.

In summary, HB 3596 as currently written is a compromise that preserves educational standards needed for patient safety.

Thank you for your time.

Rachel Bruce
President
Oregon State Assembly of the Association of Surgical Technologists