

Information Summary and Recommendations

Surgical Technologist Certification Sunrise Review

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For more information or

Additional copies of this report contact:

Health Systems Quality Assurance

Office of the Assistant Secretary
PO Box 47850
Olympia, WA 98504-7850
360-236-4612

Mary Selecky
Secretary of Health

Page **Contents**

1	The Sunrise Review Process
2	Executive Summary
3	Summary of Information
9	Review of Proposal Using Sunrise Criteria
11	Detailed Recommendations
12	Summary of Rebuttals to Draft Recommendations
	Appendix A: Applicant Report
	Appendix B: Proposed Bill
	Appendix C: Applicant Follow Up
	Appendix D: Public Hearing Summary and Participant List
	Appendix E: Written Comments
	Appendix F: Rebuttals to Draft Recommendations

THE SUNRISE REVIEW PROCESS

A sunrise review is an evaluation of a proposal to change the laws regulating health professions in Washington. The legislature's intent, described in Chapter 18.120 RCW, is to permit all qualified people to provide health services unless there is an overwhelming need for the state to protect the interests of the public by restricting entry into the profession. Changes to the scope of practice should benefit the public.

The Sunrise Act, RCW 18.120.010, says a health care profession should be regulated or scope of practice expanded only when:

- Unregulated practice can clearly harm or endanger the health, safety, or welfare of the public, and the potential for harm is easily recognizable and not remote or dependent upon tenuous argument;
- The public needs and can reasonably be expected to benefit from an assurance of initial and continuing professional ability; and
- The public cannot be effectively protected by other means in a more cost-beneficial manner.

If the legislature identifies a need and finds it necessary to regulate a health profession not previously regulated, it should choose the least restrictive alternative method of regulation, consistent with the public interest. Five types of regulation may be considered as set forth in RCW 18.120.010(3):

1. *Stricter civil actions and criminal prosecutions.* To be used when existing common law, statutory civil actions and criminal prohibitions are not sufficient to eradicate existing harm.
2. *Inspection requirements.* A process enabling an appropriate state agency to enforce violations by injunctive relief in court, including, but not limited to, regulation of the business activity providing the service rather than the employees of the business, when a service being performed for people involves a hazard to the public health, safety or welfare.
3. *Registration.* A process by which the state maintains an official roster of names and addresses of the practitioners in a given profession. The roster contains the location, nature and operation of the health care activity practices and, if required, a description of the service provided. A registered person is subject to the Uniform Disciplinary Act, Chapter 18.130 RCW.
4. *Certification.* A voluntary process by which the state grants recognition to a person who has met certain qualifications. Non-certified people may perform the same tasks, but may not use "certified" in the title.¹ A certified person is subject to the Uniform Disciplinary Act, Chapter 18.130 RCW.
5. *Licensure.* A method of regulation by which the state grants permission to engage in a health care profession only to people who meet predetermined qualifications. Licensure protects the scope of practice and the title. A licensed person is subject to the Uniform Disciplinary Act, Chapter 18.130 RCW.

¹ Although the law defines certification as voluntary, many health care professions have a mandatory certification requirement such as nursing assistants – certified, home care aides, and pharmacy technicians.

EXECUTIVE SUMMARY

Background and Proposal

Surgical technologists in Washington have been required to register with the Department of Health since 1999. They work under the supervision of licensed health care practitioners such as physicians and registered nurses (RNs) and assist in an operating theatre with tasks like creating and maintaining a sterile field and passing instruments to the surgeon. A list of tasks that surgical technologists typically perform is in state rule, WAC 246-939-030(3). An RN experienced in the operating room is required to serve as the circulating nurse during surgeries.

The House Health Care and Wellness Committee requested a sunrise review of House Bill 2414, which would require surgical technologists to submit evidence of holding a current credential as a certified surgical technologist from the National Board of Surgical Technology and Assisting (NBSTSA) in order to practice in Washington. The applicant' stated intent is to maintain the current list of authorized tasks in WAC 246-939-030(3) and not to increase the scope of practice.

In addition, the applicant stated at the public hearing that they intended the proposal to apply only to surgical technologists working in hospitals and assisting with major surgeries. However, the proposal applies to all Washington surgical technologists in all settings and surgeries.

Recommendations

The department recognizes the value of education and certification in health care professions. However, we cannot support the proposal to increase the level of credential for surgical technologists from registration to mandatory certification because it does not meet the sunrise criteria:

- The applicant has not provided sufficient verifiable evidence of a clear and easily recognizable threat to public health and safety caused by the registration, rather than certification, of surgical technologists in Washington.
- A surgical technologist works in the operating room under the delegation and direct supervision of a surgeon and RN or advanced registered nurse practitioner (ARNP), who must ensure the surgical technologist's competence to perform delegated tasks.
- The proposal would place a significant burden on surgical technologists to obtain the national certification without a corresponding increase in public protection.
- The bill contains flaws that would make it difficult to implement.

SUMMARY OF INFORMATION

Background

Surgical technologists in Washington have been required to register with the Department of Health since 1999. Surgical technologists are part of the surgical team and work under the supervision of licensed health care practitioners such as physicians, RNs and others identified in law. They assist in the operating theatre with tasks such as creating and maintaining a sterile field and passing instruments and supplies to the surgeon. Hospital laws require an RN qualified by training and experience to function as the circulating nurse in every operating room during surgical procedures. Ambulatory surgical facilities have similar requirements.

In 1996, the department conducted a sunrise review of House Bill 2458, which proposed regulation of surgical technologists. The department recommended against enacting the bill as drafted, stating certain terms used in the bill had to be defined and clarified. The report recommended if regulation was enacted, it should be at the level of registration under the secretary of health. The report stated it was difficult to conclude the sunrise criteria had been met in the proposal.

In 1999, the legislature passed Substitute House Bill 1864 requiring the registration of surgical technologists and granting regulatory authority to the state secretary of health. Registration requires no minimum training or experience. Surgical technologists may attend a formal training program or receive on-the-job training.

Proposal for Sunrise Review

House Bill 2414 was introduced in the 2012 regular legislative session and forwarded to the department for a sunrise review by the chair of the House Health Care and Wellness Committee. The bill:

- Amends chapter 18.215 RCW to require certification rather than registration of surgical technologists.
- Amends the definitions in RCW 18.215.010 to add tasks a surgical technologist may perform including:
 - Maintain surgical instrument integrity from within the surgical field during surgical procedures;
 - Perform surgical support tasks, including instrument and equipment transfers and counts, and managing fluids, specimens, and supplies;
 - Identify and correct asepsis;² and
 - Perform “other surgical tasks as directed.”
- Requires applicants for certification as a surgical technologist to submit evidence of holding a current credential as a certified surgical technologist from the National Board of Surgical Technology and Surgical Assisting (NBSTSA). This national certification

² The department believes the language in the proposed bill “identify and correct asepsis” was an error because the surgical technologist would want to correct “sepsis.”

requires formal education, passage of an examination, and 60 credits of continuing education every four-year renewal cycle.

- Allows grandfathering of an individual who “was practicing surgical technology in a health care facility at any time during the six months immediately preceding” the effective date of the bill.

At the public hearing, the applicant stated it was their intent that this proposal only apply to hospitals and major surgeries. The applicant stated they do not intend it to apply to minor surgery, ophthalmology surgeries, or procedures done in ambulatory surgical facilities. However, the language in the proposed bill applies to all surgical technologists, regardless of where they are practicing or the types of surgeries involved.

Public Participation and Hearing

The department received the request from the legislature to conduct this sunrise review March 22, 2012, and received the applicant report in June. We notified interested parties of the sunrise review June 12, 2012, and gave them the opportunity to provide written comments. We held a public hearing August 14, 2012. A summary of the written and oral testimony we received is as follows:

A number of comments were received supporting the proposal. Other comments supported state certification with specific educational and exam requirements, but not national certification. Some nurses stated national certification is a personal and professional achievement that should be requested by facilities, rather than a requirement for a state credential.

We received comments from many groups, including the Washington State Podiatric Medical Association, Washington Ambulatory Surgery Center Association, and the Washington State Medical Association stating the proposal failed to provide verifiable data that the proposal is necessary to protect the public, is not supported by the best available evidence, and will adversely affect small practices. These groups and others stated the proposal did not tie any of the instances of harm to surgical technologists or their level of formal training.

Many groups stated the proposed language is very broad and could potentially affect any setting where surgery is performed. There were concerns this would apply to ophthalmology and physicians’ offices, as well as office-based surgery centers, creating an unnecessary burden on these types of surgeries. Ophthalmologists and the Washington Academy of Eye Physicians and Surgeons added that this proposal will make it difficult for them to hire and train surgical assistants for their surgery centers. It currently trains its assistants on-the-job in tasks specific to ophthalmic surgeries and requires them to be registered as surgical technologists. In addition, we received statements from ophthalmology malpractice issuers in the state that surgical technologists are adequately supervised and are not a risk as they currently practice. They question why small ophthalmology practices would potentially be crippled by new requirements when there has been no public outcry for this legislation, nor any documented patient harm.

The Washington State Nurses Association and Association of PeriOperative Nurses both wrote in support of requiring certification. These groups requested clarifying language be added to the proposed bill to ensure RN practice is not impeded by the proposal. They stated the legislation

must ensure surgical technologists continue to work under RN supervision. The perioperative nurse association added that its policy is consistent with the *Medicare Conditions of Participation for Hospitals*, which provides that surgical technologists serving in the scrub role as a scrub nurse, do so under the delegated authority and supervision of an RN. The nursing association also stated concerns with the grandfathering language and requested that it specifically define the period of practice required of current surgical technologists.

The ambulatory surgery center association stated the applicant's use of data from a Virginia study to suggest reduced infection rates in hospitals were a result of using certified surgical technologists was seriously misleading because it was clear the data were not specifically related to infections caused by surgical technologists. The medical association said the applicant's assertions that anecdotal incidents of harm submitted to assert that non-certified surgical technologists increase the risks of harm are not supported by major malpractice insurance companies, such as Physicians Insurance A Mutual Company and the Ophthalmic Mutual Insurance Company. It added that both of these companies have determined there is no data to support a need for certification because surgical technologists are adequately trained and closely supervised.

Current Regulation and Practice

Regardless of title, surgical technologists are individuals who are supervised in the surgical setting by a health care practitioner acting within the scope of his or her license. Under current registration requirements, applicants must submit a completed registration application packet, complete an AIDS training course, pass a mandatory background check, and pay an annual fee. No formal education, training, examination, or continuing education is required.

Surgical technologists are used in many types of facilities, such as hospitals, ambulatory surgical facilities, and small clinics. They serve in many different types of surgeries, including ophthalmic surgeries. We heard from representatives of eye physicians and surgeons that most small ophthalmic practices do not use nationally certified surgical technologists because they must train their surgical staff in specialized skills that are unique to ophthalmic surgery. Many small practices have challenges hiring nationally certified technologists because they only perform surgeries part-time and most nationally certified technologists want full-time jobs.

There are about 3,000 surgical technologists registered in Washington. The rate of discipline of surgical technologists is low, and the disciplinary cases are not typically practice-related. Only two registered surgical technologists (.07 percent) were disciplined in the 2009-2011 biennium, compared to the average discipline rate of .5 percent for all health professions combined.

The certifying body for national certification is the National Board of Surgical Technology and Surgical Assisting. The requirements for certification include graduation from a surgical technology program accredited by the Commission on Accreditation of Allied Health Education Programs or the Accrediting Bureau of Health Education Schools and successful completion of the national board's examination. There is also an option for Army, Navy, and Air Force-trained surgical technologists. According to the applicant, 700 of the approximately 3,000 registered surgical technologists in Washington have the national certification.

The scope of practice for surgical technologists is in rule, WAC 246-939-030. Section 2(3) of the proposed bill would expand the scope of practice with the language “perform other surgical tasks as directed.” This language would leave their scope of practice open for broad interpretation. The bill does not explicitly prohibit certain functions such as deep tissue stapling, penetrating or severing tissue, and prescribing and dispensing authority, which the department chose to prohibit when defining the scope in rule (WAC 246-939-030 (j) and WAC 246-939-050).

Formal Education Options

There are seven accredited surgical technologist programs in Washington, and more than 500 programs nationwide accredited by the Commission on Accreditation of Allied Health Education Programs or the Accrediting Bureau of Health Education Schools. These programs range from 12-24 months in length and include basic sciences, microbiology, anatomy and physiology, pathophysiology, and surgical pharmacology. They include surgical procedures, case management, wound care and closure, surgical patient safety, and a clinical externship. Tuition costs range from \$6,000 - \$10,000 or more.³

Requirements and Costs for National Certification

The cost to take the national certification examination ranges from \$190 - \$290. An applicant saves \$100 if he or she is a member of the Association of Surgical Technologists. There are renewal requirements for the national certification. If a renewal applicant has obtained 60 credits of continuing education, the cost is \$50 per year.⁴ If a renewal applicant has not received the necessary continuing education credits, he or she must retake the examination to demonstrate competency, which costs from \$400 to \$550 depending on association membership.⁵

Regulation in Other States

Seven states other than Washington regulate surgical technologists. Like Washington, Colorado⁶ requires registration but no formal educational or examination. Illinois⁷, Indiana⁸, New Jersey⁹, South Carolina¹⁰, Tennessee¹¹, and Texas¹² all have requirements for formal education and examination and/or national certification. Virginia does not currently credential surgical technologists. The Virginia Board of Health Professions conducted a study in 2010 and recommended mandatory certification of surgical technologists performing in the scrub role. The report stated the unregulated practice of surgical technologists poses a moderate potential for harm to patients based on the nature of certain advanced tasks, the inherent hazards, and patient vulnerability associated with surgery and infection.¹³

³ Figure obtained through scan of Washington program Web sites July 6, 2012.

⁴ <http://nbstsa.org/renewal/index.html#ce>, accessed august 14, 2012.

⁵ <http://nbstsa.org/downloads/2012/CSTRenew.pdf>, accessed August 14, 2012.

⁶ <http://www.lexisnexis.com/hottopics/colorado/>

⁷ <http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=2470&ChapterID=24>

⁸ <http://www.in.gov/legislative/ic/2010/title25/ar36.1/>

⁹ <http://lis.njleg.state.nj.us>

¹⁰ <http://www.scstatehouse.gov/code/t44c007.php>

¹¹ <http://statutes.laws.com/tennessee/title-68/chapter-57/68-57-101>

¹² <http://www.statutes.legis.state.tx.us/>

¹³ Virginia Board of Health Professions, “Study into the Need to Regulate Surgical Assistants & Surgical Technologists in the Commonwealth of Virginia,” July 2010.

Applicant's Definition of the Problem

According to the applicant report, the potential for harm exists with surgical technologists because surgery is invasive by nature and surgical patients are unable to make decisions on their own behalf. Surgical technologists are the only members of the surgical team without educational, skill, or competency requirements. The applicant provided a few cases and many anecdotal stories they believe link surgical technologists to patient harm.

The applicant provided malpractice cases of patient harm where surgical technologists were potentially involved but these cases either:

- Could not be tied directly to the surgical technologists;
- Could not be linked to certification; or it did not appear that certification would have prevented the error; or
- Were not applicable to this review, such as one case in which the surgical technologist involved in the case was nationally certified.

The applicant provided a study, published in 2004 in *Clinical Infectious Diseases*, involving a high rate of liposuction patients developing the same infection within a six month period at the same physician's office. The study admits inadequate patient records, lack of any recording of equipment and disinfectant use, and other factors may have impeded the ability to distinguish between these potential routes of transmission. It states the surgical technician involved in all the cases had no formal training in operative techniques or infection control, and that the likely sources of the contamination were inadequate sterilization and rinsing of surgical equipment with tap water.

The applicant submitted a few additional studies (See appendix C, pages 50-51) that they said link lower surgical site infection rates to surgical technologists. One example was a Virginia report submitted that studied the costs of medical care related to extended hospital stays due to surgical site infections. From what we can determine, the applicant took the cost information from that study, saw there were lower costs in the hospitals they verified as requiring certification for surgical technologists, and concluded certification was the link. The referenced study does not make such a link between surgical site infections and certification of surgical technologists; any link is an inference by the applicant.

The applicant submitted many anecdotes from Association of Surgical Technologists members as examples of patient harm. These members told of witnessing unsafe actions by uncertified surgical technologists, such as failing to maintain the sterile field. These were anonymous stories submitted by their members from across the country, and none of the stories was identified as having occurred in Washington. Many of these examples seemed to indicate inadequate training by the facility or inadequate supervision by circulating nurses or surgeons.

The applicant did not produce data on harm caused directly by surgical technologists. They provided some data on harm that occurs in the operating room, such as surgical site infections, stating it is the type of harm that could occur from surgical technologists if they do not maintain a sterile field. They also cited general data on foreign objects left in surgical patients since surgical technologists help to track all objects used during surgical procedures (the applicants noted, however, that the surgical technologist and circulating nurse share responsibility for the

final count of surgical instruments). We have found no evidence of a direct link between surgical technologists and any adverse events.

The applicant identified some challenges with the current method of determining the competence and supervision of surgical technologists. The delegator is responsible for ensuring a surgical technologist is competent to perform delegated tasks. The surgical technologist works under the delegation and supervision of a surgeon (such as a physician licensed under chapter 18.71 RCW or osteopathic physician licensed under chapter 18.57 RCW) an RN (licensed under chapter 18.79 RCW), and others identified in law. The challenges to determining competence were identified as:

- The delegator does not hire or have control over the qualifications of surgical technologists that are hired, and
- Minimum qualifications for surgical technologists vary by facility.¹⁴

Some challenges to the supervision of surgical technologists were:

- Some surgical technologist tasks, such as setting up the back table using sterile technique, occur before the surgeon has arrived and while the circulating nurse may be focused on the patient, making supervision difficult.
- The circulating nurse is outside the sterile field, monitoring the patient's vital signs and updating the patient record, making it difficult to observe all actions of surgical technologists they are supervising.

The state nurses association and the perioperative nurse association, which represent many RN delegators, support the addition of educational and examination requirements for surgical technologists to ensure a minimum level of competency of those they supervise.

Harm to the Public with Increased Regulation

This proposal would be a significant barrier to entry into the profession of surgical technology. The requirement for national certification would eliminate the option for on-the-job training and be a burden on surgical technologists, increasing the time and financial commitment for them before entering the workforce. This proposal would add costs for surgical technologists because they would be required to pay \$6,000 - \$10,000 or more for an educational program, and national certification. The cost for the certification examination would be between \$190 - \$290, with a \$50 to \$550 annual renewal fee, depending on whether the surgical technologist has continuing education or has to re-take the exam for renewal qualification.¹⁵

The proposal would also be a burden on employers. Surgical technologists with a large investment in education could demand higher pay. Small specialty practices would no longer have the option of providing on-the-job training to potential employees. These burdens on health care employers could result in higher health care costs and/or fewer surgical options for patients.

¹⁴ Please note the applicant provided information showing varied hiring requirements between Washington hospitals; however this review did not assess on-the-job training programs or identify deficiencies with training.

¹⁵ ABHES Web site, <http://www.abhes.org/>, accessed July 6, 2012.

REVIEW OF PROPOSAL USING SUNRISE CRITERIA

The Sunrise Act, RCW 18.120.010(2), states that the scope of a profession's practice should be expanded only when:

- Unregulated practice can clearly harm or endanger the health, safety, or welfare of the public, and the potential for the harm is easily recognizable and not remote or dependent upon tenuous argument;
- The public needs and can reasonably be expected to benefit from an assurance of initial and continuing professional ability; and
- The public cannot be effectively protected by other means in a more cost-beneficial manner.

First criterion: unregulated practice can harm or endanger health or safety.

The proposal does not meet this criterion.

The practice of surgical technology is a thoroughly regulated profession. They are currently registered by the department, with specific authorized tasks in rule. There are regulations directing hospitals to define staff qualifications and oversight for surgical services, including the requirement for surgical technologists to be supervised by a qualified RN.¹⁶ Ambulatory surgical facilities must have an RN circulator in every operating room when deep sedation or general anesthesia is used.¹⁷

The applicant did not provide sufficient, verifiable evidence of harm occurring to the public from registered surgical technologists. The instances of harm cited were not specifically tied to surgical technologists, did not show the proposed certification would have prevented the errors, were purely anecdotal, and/or were provided without information indicating in which state they occurred. There is no corresponding evidence of complaints to the department about surgical technologists registered in Washington to conclude the current level of regulation is inadequate to protect the public from harm.

Second criterion: public needs and will benefit from assurance of professional ability.

The proposal does not meet this criterion.

The surgical technologist works in the operating room under the delegation and supervision of a surgeon (such as a physician licensed under chapter 18.71 RCW or osteopathic physician licensed under chapter 18.57 RCW) and an RN or ARNP (licensed under chapter 18.79 RCW). An RN is required to serve as the circulating nurse in hospitals during every surgical procedure and in ambulatory surgical facilities when deep sedation or general anesthesia are used during surgical procedures. The delegator is responsible for ensuring the surgical technologist is competent to perform the tasks delegated to him or her. Many of the anecdotes submitted seemed to indicate a lack of oversight by the delegator during the technologist's training and a lack of supervision in the operating room which, if true and verified as occurring in Washington, are issues that would be addressed separately from this report.

¹⁶ WAC 246-320-236 and Medicare Conditions of Participation for Hospitals 42 C.F.R. § 482.51(a)(2).

¹⁷ WAC 246-330-210.

National certification for registered surgical technologists is already available for those who wish to show a higher level of education and knowledge. It is also an option for hospitals and ambulatory surgical facilities to use to evaluate minimum competence when hiring. Many hospitals already include national certification and/or formal education as desired or required qualifications for employment for surgical technologists.

Third criterion: public protection cannot be met by other means in a more cost-beneficial manner.

The proposal does not meet this criterion.

The applicant has not shown a lack of public protection in Washington under the current surgical technologist registration. The proposal would place a significant burden on surgical technologists to acquire formal training, national certification, and pay credentialing and renewal costs without a corresponding increase in public protection. The proposal as written would place the additional burden of requiring surgical technologists to maintain both their national certification and state certification (and pay renewal fees for both) without evidence of a corresponding increase in public benefit.

DETAILED RECOMMENDATIONS TO THE LEGISLATURE

The department does not support the proposal to increase the level of credential for surgical technologists from registration to mandatory certification because it does not meet the sunrise criteria.¹⁸ The department cannot support adding a significant barrier for surgical technologists without documented evidence of a problem in Washington. The sunrise law requires identification of an overwhelming need for the state to protect the interests of the public before restricting entry into the profession.

Rationale:

- *The applicant has not provided sufficient verifiable evidence to identify a clear and easily recognizable threat to public health and safety with the current level of registration of surgical technologists in Washington.*
- *The surgical technologist works in the operating room under the delegation and supervision of a surgeon and an RN or ARNP, who are responsible for ensuring the technologist is competent to perform the tasks delegated to him or her. An RN is required to serve as the circulating nurse in hospitals during every surgical procedure and in ambulatory surgical facilities when deep sedation or general anesthesia are used during surgical procedures. Hospitals providing surgery services and ambulatory surgical facilities are required to define the qualifications and oversight for all staff working in the operating theatre.*
- *The proposal would place a significant burden on surgical technologists to obtain national certification without a corresponding increase in public protection.*
- *The proposal contains flaws that would make it difficult to implement. The applicants stated their intent was for the proposal to only apply to certain facilities and certain surgeries. However, it applies to all surgical technologists, regardless of setting. Surgical setting is currently defined as “any place surgery takes place where the patient is placed in a sterile field.”¹⁹*

¹⁸ Please note a 2007 performance audit by the Washington State Auditor’s Office recommended the legislature review and modify existing laws for registered health care providers where needed. This was in response to concerns with the registered counselor profession, a profession that worked independently with no supervision. The department does not see a similar risk of leaving the surgical technologist, a highly supervised profession, at the level of registration.

¹⁹ The applicant rebuttals stated they intend to respond to the stakeholder feedback they have received during this process and to re-draft the bill for the 2013 session to ensure it only applies to specific facilities and not to minor surgeries, such as office-based surgeries. The department must review the language in the bill submitted with the review request.

SUMMARY OF REBUTTALS TO DRAFT REPORT

Applicant Rebuttals

I. The applicant disagreed that they did not provide verifiable data to identify a clear and easily recognizable threat to public health and safety caused by registration of surgical technologists in Washington. The applicant stated the following:

- It is an unreasonable standard to require proponents to meet a threshold of complaints from patients who are under anesthesia, which is the case for most of a surgical technologist's work.
- They believed the examples they provided show clear and easily recognizable patient injuries or harm.
- The highest potential for harm by a surgical technologist is not clear and easily recognizable because of the invisible nature of infectious organisms, yet prevention of surgical site infections is the surgical technologist's most important role.
- Data they provided demonstrated a positive correlation between certified personnel and reduction in surgical site infections. The applicant said a Virginia sunrise review found the need to require certification of surgical technologists despite the lack of unequivocal data. They also said it is inappropriate to use lack of data to decide whether a profession poses a risk to patients despite a public policy conclusion that more educated professionals achieve more positive outcomes.
- They claim the following statement in the report was inaccurate: "the applicant provided malpractice cases of patient harm where surgical technologists were potentially involved but these cases could not be tied directly to the surgical technologists" because they said many of the lawsuits submitted showed causation by surgical technologists.

Department Response

The department acknowledges the important role surgical technologists play in patient safety and in the preventing surgical site infections. However in order to show this sunrise criterion has been met we need verifiable cases of harm that can be tied to surgical technologists in which certification could have prevented the harm. The Virginia study the applicant references on the cost of extended hospital stays due to surgical site infections does not link lower infection rates to the use of certified rather than registered surgical technologists. The Virginia study on the need to regulate surgical technologists recommended certification, based on a moderate potential for harm to patients due to the nature of some tasks, inherent hazards, and patient vulnerability. Washington's sunrise criterion requires easily recognizable potential that unregulated practice can clearly harm or endanger the public.

The department made two changes to the report in response to the applicant's rebuttal. The statement referred to in the last bullet above was inaccurate so we corrected and clarified it in the report. We also added information about the Virginia study on regulation of surgical technologists in the section "Regulation in Other States."

II. The applicant had concerns about the statement, “A surgical technologist works under the delegation and direct supervision of a surgeon and RN nurse circulator, who must ensure the surgical technologist’s competence to perform delegated tasks.”

- In the applicant’s rebuttals, they said the department has incorrectly applied Washington law and that surgical technologists are under the supervision of a surgeon.

Department Response:

The Medicare Conditions of Participation for hospitals require surgical technologists working in the scrub role to work under the supervision of an RN circulator. Washington law states surgical technologists are under the supervision and delegated authority of a health care practitioner acting with the scope of his or her license, which are listed in WAC 246-939-010 and include physicians licensed under chapter 18.71 RCW, osteopathic physicians licensed under chapter 18.57 RCW, and registered nurses and advanced registered nurse practitioners licensed under chapter 18.79 RCW. We clarified the statement so it reads accurately.

- The applicant also stated that human resource departments at health care facilities hire the surgical technologists, making it difficult for the surgeon or nurse to have input on who is hired or their qualifications. They gave examples of why the department cannot assume the surgeon or nurse is able to supervise all of the actions of a surgical technologist, which included:
 - Oversight is challenging due to the pace and risks in an operating room;
 - This assumption does not take into account the universally-accepted team approach to surgery;
 - After scrubbing in, surgical technologists generally set up the back table independently, using sterile technique and knowledge of the operational order of the procedure, before the surgeon has arrived and while the circulating nurse is with the patient.
- The applicant stated that supervision did not prevent 110 cases of foreign retained objects reported to the Adverse Event Reporting Program between 2006 and 2009. Their statement assumes the number is actually higher since they indicated only 53 percent of facilities submitted reports. The applicant stated they agree with the statement made in the report that many of the anecdotal examples of patient harm indicated inadequate training by the facility. They stated inadequate training creates a threat to patient safety that can be corrected through accredited education, training, and objective credentialing.

Department Response:

In response to these comments the department added challenges to oversight and delegation in the “Applicant’s Definition of the Problem” section of the report. Adverse events are recognized as system issues, not individual practitioner issues, and cannot be tied to surgical technologists.

III. The applicant disagreed the proposal would place a significant burden on surgical technologists to obtain the national certification without a corresponding increase in public protection, and stated the following:

- Neither the national association nor state agencies that regulate surgical technologists have received complaints about an inability to find qualified surgical technologists.

- This would not be a burden on facilities because there are 700 surgical technologists in the state who already hold national certification. They pointed out an error in the report that stated it is unknown how many surgical technologists in Washington have national certification. An additional 500 surgical technologists have graduated from accredited programs and passed the national examination, making them eligible for certification.
- This legislation only applies to newly-practicing surgical technologists, and there will be 2,140 grandfathered surgical technologists to choose from.
- Washington already produces enough graduates to meet demand.
- Costs of certification are included in the program tuition, most currently-practicing technologists will be grandfathered, those trained in the military are exempt, and maintenance of the certification only requires 15 credits of continuing education per year which can be obtained for as little as \$11 per year.
- Certification increases public protection because it is the most objective measure of competency and individuals formally educated in surgical technology provide better patient care because of their training and curriculum.

Department Response

The department believes that tuition costs of up to \$10,000 or more, added to the cost of maintaining dual state and national certifications, would be a burden on the surgical technologists. Small specialty practices that would no longer have the option of providing on-the-job training would also be negatively impacted.

IV. The applicant responded to the statement that the proposal contains flaws that would make it difficult to implement with the following:

They intend to respond to the stakeholder feedback they received and plan to re-draft the bill for the 2013 session to ensure it only applies to specific facilities and does not apply to minor surgeries, such as office-based surgeries.

Department Response:

We can only evaluate the bill language included in the legislature's sunrise review request.

Rebuttals from Others

Washington State Nurses Association statement:

- They support requiring passage of a certification examination to assure surgeons and circulating registered nurses in the operating room that surgical technologists on the team meet a minimum level of competency when joining the team and would benefit the team as well as patients.
- Research is available to show higher education levels for a health professional increases patient safety.
- They disagreed that certification would be an undue burden because they state physicians and registered nurses are required to pass examinations.
- The department did not give due consideration to the 93 instances of harm reported in the applicant report.

Department Response

The department made one change in response to these comments. We added language in the Definition of the Problem and “Why (Increased) Regulation is Necessary” section of the report to indicate that state nurses association and the Association of PeriOperative Nurses support the addition of educational and examination requirements for surgical technologists to ensure a minimum level of competency of those they supervise.

We did not make any other changes because we had to review the proposal according to the statutory criteria, which were not met. The department could not consider the applicant’s 93 anecdotal stories as evidence of harm. They were provided to the department after the public hearing as additional evidence of patient harm, but lacked identifying information on whether any had occurred in Washington or in which state they had occurred.

Appendix A

Applicant Report

**Surgical Technologist
Application for Sunrise Review
HB 2414: June 1, 2012**



Submitted by:
The Washington State Assembly of the
Association of Surgical Technologists

Washington State Department of Health Sunrise Review
Increase Registration Requirements for Surgical Technologists
Submitted by:
Washington State Assembly of the Association of Surgical Technologists

SUMMARY AND APPLICANT INFORMATION

- **Legislative proposal being reviewed under the sunrise process (include bill number if available):**

HB 2414: An Act relating to the certification of surgical technologists; amending RCW 18.215.005, 18.215.010, 18.215.020, 18.215.030, 18.215.040, 18.215.060, 18.215.070, and 18.215.080; creating a new section; repealing RCW 18.215.050; and providing an effective date.

- **Name and title of profession the applicant seeks to credential/institute change in scope of practice:**

Surgical Technologists

- **Applicant's organization:**

Washington State Assembly of the Association of Surgical Technologists

Contact person: Janice E. Olmsted, CST

Address: 90 E Old Ranch Road
Allyn, WA 98524-9723

Telephone number: (360) 275-4049

Email address: wsalegislation11@gmail.com

- **Number of members in the organization:** 525 members
- **Approximate number of individuals practicing in Washington:** As of May 15, 2021, the Washington Department of Health records show 2,981 registered surgical technologists in Washington State. The Bureau of Labor Statistics (BLS) estimates the number of surgical technologists in the State to be 2,140. However, the actual number of practicing surgical technologists may be less than either figure, as these data may capture more practitioners than actually serve as the surgical technologist member of the surgical team.
- **Name(s) and address(es) of national organization(s) with which the state organization is affiliated:** Association of Surgical Technologists
- **Name(s) of other state organizations representing the profession:**

Association of Surgical Technologists

Address: 6 West Dry Creek Circle, Suite 200
Littleton, CO 80120

Contact: Catherine A.G. Sparkman

Telephone Number: 303-325-2504

Email address: catherine.sparkman@ast.org

APPLICATION FOR SUNRISE REVIEW

Pursuant to RCW 18.120.030 the Washington State Assembly of the Association of Surgical Technologists hereby submits its Application for Sunrise Review addressing the following factors:

(1) Define the problem and why regulation is necessary:

Surgery is invasive by nature and has inherent risks. The surgical patient is unable to make decisions or act on his or her own behalf and must instead rely on the members of the surgical team performing and assisting in the surgical procedure. Allowing under trained or inappropriately trained health care professionals to be used in operating rooms puts the patients at risk of unintended consequences that may include physical harm or even loss of life. The public assumes that everyone in the operating room has the proper training and skills. However, the surgical technologist is the only member of the surgical team that has no objective requirements of education, skill or competency. Potential errors of an unskilled, unregulated surgical technologist may include: higher incidence of infection, excessive and sometimes avoidable blood loss, allergic reactions, damage to major organs, disfiguring scars, loss of function of any limb or organ, paralysis, brain damage and even loss of life. The Institute of Medicine conducted studies that reveal that at least 44,000, and up to 98,000 patients die annually because of preventable medical errors.¹ These errors include adverse drug events, surgical injuries, wrong-site surgery, falls, burns, infections, and mistaken patient identities, with the highest error rates with serious consequences in intensive care units, operating rooms and emergency departments. Over half of the preventable medical errors (“never events”) occur in the operating room. The two chief causes of harm related to the role of the surgical technologist are surgical site infections and foreign objects left in surgical patients.

In 2006, surgeons performed almost 46 million inpatient procedures in the United States. Even more were performed at ambulatory surgery centers. Procedures range from simple outpatient procedures, to complex and highly invasive surgeries such a coronary artery bypass surgery or neurosurgery. Surgical technologists perform in the scrub role at all levels of surgical complexity.

Surgical Site Infections. The surgical technologist is responsible for maintaining the integrity of the sterile field. The sterile field is a notional area surrounding invasive or surgical procedures. Rather than a dedicated area, the sterile field refers to surfaces that sterile objects, such as surgical instruments, may contact. Protecting the sterile field involves carrying out specific procedures known as aseptic technique.

Nosocomial or hospital-acquired infections (HAIs) are a growing concern in the healthcare field. A 2007 U.S. Public Health Service (PHS) study estimated that approximately 1.7 million patients developed HAIs in 2002, resulting in an estimated 98,987 deaths. The study estimated that 22 percent, or approximately 290,000, of the infections were surgical site

¹ To Err is Human: Building a Safer Health System (National Academy Press 1999)

infections.² The cost of treating HAIs is estimated to be \$37 to \$45 billion annually. The Center for Disease Control and Prevention (CDC) estimates that 22 percent of hospital acquired infections are surgical site infections.

In addition to the direct risk of harm to patients, health care workers and the public at large are also at risk from nosocomial diseases. Hospitals use antibiotics to treat and prevent infections in vulnerable patients. The use of antibiotics encourages bacteria to develop resistance. They also kill less harmful bacteria, providing a non-competitive environment where resistant bacteria can flourish. These resistant strains can spread to health care workers and to the public.

Methicillin-resistant *Staphylococcus Aureus* (MRSA) is the most common drug resistant bacteria associated with nosocomial infections. The incidence of MRSA has grown rapidly over the past few decades. In 1974, MRSA caused only 2 percent of Staph infections. By 2003, that number had jumped to 64 percent.³ The CDC estimates that there were 94,360 MRSA cases in 2005 (85 percent were healthcare related) resulting 18,650 deaths.

Foreign Objects. Along with the circulating nurse, the surgical technologist is responsible for keeping track of all objects used during the surgical procedure. This includes performing counts of objects, especially sponges, and ensuring that no pieces have broken off instruments. Even though the circulator and scrub person are responsible for counts, the surgeon retains primary responsibility for ensuring no objects are left inside patients. Retained foreign objects (RFO) can lead to multiple problems, including pain, infection, internal damage, additional surgeries or even death. Occasionally RFOs are asymptomatic for years, or create non-specific symptoms.

Estimates of retained foreign objects after surgical procedures range from 1 in 8,000 to 1 in 18,000 inpatient operations. A notably thorough study of surgical cases performed at the Mayo Clinic, Rochester found that 1 in 5,500 inpatient operations resulted in foreign body retention. In abdominal cavity operations, incidence rate estimates rise to one in every 1,000 to 1,500 procedures.⁴ RFOs may be underreported, however.

Benefits to patients. Consumers of surgical services (patients and their families) will benefit from a more qualified and competent workforce. The education, training and assurance of competency of this vital member of the surgical team will reduce the incidence of surgical site infections and retained surgical instruments and other foreign objects, resulting in a reduction of readmissions and surgical complications. Healthcare facilities hiring only competent, educated personnel should experience a reduction in costly surgical errors (often not reimbursable by Medicare, Medicaid and private insurance) and surgical site infections.

² R. Monina Kleven, Jonathon R. Edwards, Chesley L. Richards, Teresa C. Horan, Robert P. Gaynes, Daniel A. Pollock and Denise M. Cardo. March-April 2007. "Estimating Health Care-Associated Infections and Deaths in U.S. Hospitals, 2002." *Public Health Reports*. Vol. 122, pp 164.

³ McCaughey, Betsy. *Unnecessary Deaths: The Human and Financial Costs of Hospital Infections*, 3rd edition. Committee to Reduce Infection Deaths. Available at www.hospitalinfection.org.

⁴ Cima, Kollengode, Garnatz, Storsveen, Weisbrod and Deschamps. 2008. "Incidence and Characteristics of Potential and Actual Retained Foreign Object Events in Surgical Patients." *Journal of the American College of Surgeons*. Vol. 207. pg. 80.

Autonomous practice. Surgical technologists work collaboratively with the surgeon and other health care team members to achieve optimal patient outcomes. Surgical technologists assist in surgical procedures under the direction and supervision of surgeons and other licensed medical personnel. While their practice is not completely autonomous as other licensed medical professionals, surgical technologists are held accountable and governed by: surgical conscience, individual policies and procedures established by their employing institutions, and best practices, policies and procedures promulgated by the Association of Surgical Technologists (AST), the Association of periOperative Registered Nurses (AORN), the Occupational Safety and Health Administration (OSHA), Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and other professional and regulatory agencies and organizations. Moreover, surgical technologists are specifically trained to utilize their knowledge of anatomy, pathophysiology, microbiology to anticipate the needs of both the surgeon and other members of the surgical team.

(2) The efforts made to address the problem:

Health regulatory and professional organizations have elevated infection control to a policy issue. Health care facilities have increased procedures and safeguards, such as hand washing and instrument sterilization techniques, to combat the rise of HAIs. The 2009 American Recovery and Reinvestment Act directed \$50 million in stimulus funding to state efforts to reduce HAIs. The Joint Commission has made reducing the risk of health care acquired infections one of its Patient-Safety goals for hospitals and ambulatory surgery centers, specifically including reducing the risk of surgical site infections. The Patient Protection and Affordable Care Act includes several provisions aimed at reducing HAIs, including financial penalties for providers with high HAI rates and increased measurement and reporting of HAIs. However, the incidence and cost of surgical errors and surgical site infections continue to have a significant adverse impact on medical costs and outcomes.

Voluntary efforts to assure the education and competency of surgical technologists are inadequate, not enforceable, and inconsistent. They fail to afford patients the security that a surgical technologist participating in their care meets even minimal competency standards. Hospital employed surgical technologists are only obligated to comply with the requirements of their job descriptions. These requirements will vary from one hospital to another. They may even be different among similar facilities within the same organizational ownership.

Existing Washington law (RCW 18.215.005 *et seq.*), enacted in 1999, only partially regulated the practice requiring persons performing surgical technology tasks and functions to register. While this effort may identify practitioners and elements in the applicant's background, such as criminal convictions, the regulatory scheme did not require either education or professional certification, or establish any measure of competency or accountability of surgical technologists, as House Bill 2414 provides. Building on this existing regulatory framework by requiring appropriate accredited education and certification constitutes the most effective and efficient means of assuring competency of surgical technologists.

(3) The alternatives considered:

An alternative to amending RCW 18.215.010 *et seq.* that requires education and certification would be the enactment of entry-to-practice legislation requiring hospitals, ambulatory surgical centers and other healthcare facilities performing surgical procedures to employ only surgical technologists who have completed a nationally accredited surgical technology program and hold and maintain a certified surgical technologists credential issued by a nationally accredited credentialing organization. This entry-to-practice approach has been proposed in several states, and implemented in six. However, refining the regulatory scheme in place since 1999 – surgical technologist registration – is consistent with the approach taken with regard to other allied health practitioners and would cause the least divergence from existing Washington law.

(4) The benefit to the public if regulation is granted:

Patient safety requires that all surgical personnel meet minimal educational and competency requirements. The surgical patient does not pick their surgical support team ahead of time. During the procedure, the patient is under anesthesia and unable to make decisions or act on his or her behalf. Surgical patient care is enhanced when all members of the surgical team are appropriately educated. This legislation will ensure that all personnel caring for surgical patients are qualified and meet minimum continuing education standards. A competent surgical team can prevent and reduce surgical errors and surgical site infections. Documented evidence from other states indicates that preventable surgical errors were reduced by over 30 percent in facilities where only appropriately educated and credentialed surgical technologists were utilized. And in Virginia, the cost of treating trauma and surgical site infections was reduced 11 percent in facilities hiring only certified surgical technologists. It is axiomatic that increased educational and professional competency impacts positive patient outcomes.

(5) The extent to which regulation might harm the public:

Registration requiring nationally accredited education and private certification will not substantially restrict entry into the profession of surgical technology. First, the proposed regulation (RCW 18.215.030) grandfathers currently practicing surgical technologists, surgical technology students, and military trained surgical technologists; and grants a 12-month period for new surgical technology programs to become accredited. Currently there are seven accredited programs in the State of Washington; and there are 475 programs accredited by the Commission on Accreditation of Allied Health Programs (CAAHEP) and 29 programs accredited by the Accrediting Bureau of Health Education Schools (ABHES). Because CAAHEP and ABHES accreditation is a national function, those program graduates from other states would qualify to register as a surgical technologist in Washington. Accredited surgical technology programs graduate over 5,500 students annually, including more than 100 students in Washington. Because Washington hospitals serve as the clinical training sites for surgical technology students, the pathway to employment is direct and immediate. The certification examination is administered by the National Board for Surgical Technology and Surgical Assisting (NBSTSA) and is offered as part of the curriculum of every CAAHEP accredited surgical technology program. And, similar to accredited programs, certificants from other states will meet the requirements of the proposed registration act. A national catchment for prospective surgical

technologists practicing in Washington is supported by national program accreditation and national certification.

Licensed practitioners who perform surgical technology tasks and functions are exempted from the registration provisions. RCW 215.18.030(4).

(6) The maintenance of standards:

Currently existing law (RCW 18.215.0005 *et seq.*) provides for the adoption and enforcement of disciplinary standards based on unprofessional conduct or impairment. The core curriculum of every accredited surgical technology program contains a course of study on medical ethics, medical conscience and legal standards for the surgical technologist practitioner. Continuing education is necessary to maintain certification.

The legal and professional liability standards that will apply to surgical technologists will be the same as for all other medical practitioners: the violation of the standard of care required of surgical technologists in the same or similar circumstances. The health care facility, as the employer of the surgical technologist may incur vicarious liability (under the doctrine of *respondeat superior*) for the actions of the surgical technologist when performing his or her duties. Additionally, under the “captain of the ship” doctrine or the legal doctrine of “borrowed servant,” the surgeon may incur liability for the actions of the surgical technologist under the surgeon’s delegation, direction or control.

As stated, the guarantee of competent, educated, credentialed surgical technologists as valuable members of the surgical team will serve to reduce preventable medical errors and surgical site infections, promote positive surgical outcomes, solidify and support the surgical team.

(7) A description of the group proposed for regulation, including a list of associations, organizations, and other groups representing the practitioners in this state, an estimate of the number of practitioners in each group, and whether the groups represent different levels of practice.

The regulation will govern all practicing surgical technologists who are not otherwise licensed to perform surgical technology tasks and functions. As stated, the exact number of actual practicing surgical technologists is unknown, although 2,891 persons are currently registered. It is estimated that the number of persons affected by the new regulation will be approximately 2,000 persons. The Washington State Assembly of the Association of Surgical Technologists has approximately 500 members.

(8) The expected costs of regulation:

Currently, the Department of Health exacts a fee of \$65 from each registered surgical technologist. Washington law requires that registration fees underwrite the entire cost of regulation. Hence, registration costs under the amended statute should have no appreciable economic effect on the registrants. The current fee will defray costs of regulation and oversight. A database easily accessible to registrants, the Department and the public already exists; and verification of credentials is available online.

The increased cost to the public should also be negligible. According to BLS statistics, surgical technologist wages and compensation in states that require certification are not appreciably higher than in states that do not. Wages for certified surgical technologists continue to parallel the general rise in wages due to overall inflation. The cost of an accredited education program varies with the type of program offered, whether the program is associated with community colleges or technical schools or with private proprietary institutions. Surgical technology courses of study vary from a 2-year associate's degree program to a 14-month certificate program. All accredited programs offer didactic and clinical education (the latter in conjunction with hospitals and health care facilities), based on a 257-page Core Curriculum. As stated, the certification examination administered by the NBSTSA is offered at every accredited program as a performance outcomes indicator.

(9) List and describe major functions and procedures performed by members of the profession (refer to titles listed above). Indicate percentage of time typical individual spends performing each function or procedure:

HB 2414 summarizes the authorized tasks and functions of a surgical technologist in its amended definition section, RCW 18.215.010-(3). A more comprehensive definition follows:

Surgical technologists perform important tasks before, during and after operative and other invasive procedures. Before an operation, surgical technologists help prepare the operating room by setting up surgical instruments and equipment, sterile drapes, and sterile solutions. They assemble both sterile and non-sterile equipment, as well as check and adjust it to ensure it is working properly. Technologists also get patients ready for surgery by washing, shaving, and disinfecting incision sites. They transport patients to the operating room, help position them on the operating table, and cover them with sterile surgical drapes. Technologists also observe patients' vital signs, check charts, and help the surgical team put on sterile gowns and gloves.

During surgery, surgical technologists participate in the surgical pause (or "time out"), pass instruments and other sterile supplies to surgeons and surgeon assistants, hold retractors, cut sutures, transfer and pour fluids at the sterile field, and sponge and suction the operative site. They help count sponges, needles, supplies and instruments. They help prepare, care for, and dispose of specimens taken for laboratory analysis and help apply dressings. Some surgical technologists operate sterilizers, lights, or suction machines and help operate diagnostic and laparoscopic equipment.

After an operation, surgical technologists may help transfer patients to the recovery room and clean and restock the operating room. The Association of Surgical Technologists has prepared a job description of the surgical technologist, which details the tasks, roles and functions in the surgical technologist scope of practice.⁵ The knowledge and skills necessary to perform these functions are rigorously taught in accredited programs in well-defined and comprehensive curricula. On-the-job training by hospitals and other healthcare facilities cannot offer the same assurances.

⁵ See link below

http://www.ast.org/professionals/documents/2008_Surgical_Technologist_Job_Description_12.9_Final.pdf

Appendix B

Request from Legislature and Proposed Bill

STATE REPRESENTATIVE
34th DISTRICT
EILEEN CODY, R.N.

State of
Washington
House of
Representatives



HEALTH CARE & WELLNESS
CHAIR
HEALTH & HUMAN SERVICES
APPROPRIATIONS & OVERSIGHT
WAYS & MEANS

March 22, 2012

Mary C. Selecky
Secretary
Department of Health
P.O. Box 47890
Olympia, Washington 98504-7890

Dear Secretary Selecky:

I am requesting that the Department of Health consider a Sunrise Review application for a proposal that would require that surgical technologists become certified. The bill, HB 2414, would require that surgical technologists maintain certification from the National Board of Surgical Technology and Surgical Assisting. Currently, surgical technologists are a registered profession and the Health Care and Wellness Committee would be interested in an assessment of whether or not the proposal meets the sunrise criteria to justify an increased level of regulation.

I appreciate your consideration of this request and I look forward to receiving your report. Please contact my office if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Eileen Cody".

Eileen Cody, Chair
House Health Care and Wellness Committee

cc: Mark Gjurasic
Christopher Blake
Jim Morishima

LEGISLATIVE OFFICE: PO BOX 40600, OLYMPIA, WA 98504-0600 • 360-786-7978
E-MAIL: Eileen.Cody@leg.wa.gov
TOLL-FREE LEGISLATIVE HOTLINE: 1-800-562-6000 • TDD: 1-800-635-9993

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HOUSE BILL 2414

State of Washington

62nd Legislature

2012 Regular Session

By Representatives Cody, Hinkle, Kelley, Warnick, Green, Schmick, and Harris

Read first time 01/13/12. Referred to Committee on Health Care & Wellness.

1 AN ACT Relating to the certification of surgical technologists;
2 amending RCW 18.215.005, 18.215.010, 18.215.020, 18.215.030,
3 18.215.040, 18.215.060, 18.215.070, and 18.215.080; creating a new
4 section; repealing RCW 18.215.050; and providing an effective date.

5 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

6 **Sec. 1.** RCW 18.215.005 and 1999 c 335 s 1 are each amended to read
7 as follows:

8 ~~((The registration of surgical technologists is in the interest of
9 the public health, safety, and welfare.))~~ The legislature finds that it
10 is necessary to regulate the practice of surgical technologists in
11 order to protect the public health, safety, and welfare. It is the
12 intent of the legislature that only individuals who meet and maintain
13 minimum standards of competence and conduct be allowed to engage in the
14 practice of surgical technology.

15 **Sec. 2.** RCW 18.215.010 and 1999 c 335 s 2 are each amended to read
16 as follows:

17 The definitions in this section apply throughout this chapter
18 unless the context clearly requires otherwise.

1 (1) "Department" means the department of health.

2 (2) "Secretary" means the secretary of health or the secretary's
3 designee.

4 (3) "Surgical technologist" means (~~a person, regardless of title,~~
5 ~~who is supervised in the surgical setting under the delegation of~~
6 ~~authority of a health care practitioner acting within the scope of his~~
7 ~~or her license and under the laws of this state)) an individual who,
8 under the supervision of a licensed health practitioner, is authorized
9 to: (a) Maintain surgical instrument integrity from within the
10 surgical field during surgical procedures; (b) perform surgical support
11 tasks, including instrument and equipment transfers and counts, and
12 managing fluids, specimens, and supplies; (c) identify and correct
13 asepsis; and (d) perform other surgical tasks as directed.~~

14 **Sec. 3.** RCW 18.215.020 and 1999 c 335 s 3 are each amended to read
15 as follows:

16 (~~No person may represent oneself as a surgical technologist by use~~
17 ~~of any title or description without being registered by the department~~
18 ~~under the provisions of this chapter.)) No individual may hold himself
19 or herself out to be a surgical technologist, nor may any individual
20 perform the functions of a surgical technologist, unless the secretary
21 or the secretary's designee certifies such individual as a surgical
22 technologist under the provisions of this chapter. Unless exempted by
23 RCW 18.215.030, applicants for certification as a surgical technologist
24 must submit evidence of holding a current credential as a certified
25 surgical technologist from the national board of surgical technology
26 and surgical assisting or its successor.~~

27 **Sec. 4.** RCW 18.215.030 and 1999 c 335 s 4 are each amended to read
28 as follows:

29 (~~Nothing in this chapter may be construed to prohibit or restrict:~~

30 (1) ~~The practice of an individual licensed, certified, or~~
31 ~~registered under the laws of this state and performing services within~~
32 ~~his or her authorized scope of practice;~~

33 (2) ~~The practice by an individual employed by the government of the~~
34 ~~United States while engaged in the performance of duties prescribed by~~
35 ~~the laws of the United States;~~

1 ~~(3) The practice by a person who is a regular student in an~~
2 ~~educational program approved by the secretary, and whose performance of~~
3 ~~services is pursuant to a regular course of instruction or assignments~~
4 ~~from an instructor and under the general supervision of the~~
5 ~~instructor.))~~

6 (1) In lieu of the credentialing requirements in RCW 18.215.020,
7 applicants for certification as a surgical technologist may:

8 (a) Demonstrate successful completion of a surgical technology
9 training program during the individual's service as a member of any
10 branch of the armed forces of the United States; or

11 (b) Provide evidence that the individual was practicing surgical
12 technology in a health care facility at any time during the six months
13 immediately preceding the effective date of this section.

14 (2) An individual who successfully completes a surgical technology
15 training program within twelve months following the effective date of
16 this section may engage in the functions of a surgical technologist
17 during the twelve-month period immediately following completion of the
18 program. Thereafter, unless exempted by subsection (1) of this
19 section, such individual may not continue to function in the role of a
20 surgical technologist without meeting the credentialing requirements of
21 RCW 18.215.020.

22 (3) Notwithstanding any provision of law to the contrary, nothing
23 in this section prohibits a student from performing the functions of a
24 surgical technologist if the student is under the direct supervision of
25 an appropriately licensed health care practitioner and is functioning
26 within the scope of the student's training.

27 (4) Nothing in this chapter may be construed to prohibit a licensed
28 practitioner from engaging in the full scope of practice for which he
29 or she is licensed.

30 **Sec. 5.** RCW 18.215.040 and 1999 c 335 s 5 are each amended to read
31 as follows:

32 In addition to any other authority provided by law, the secretary
33 has the authority to:

34 (1) Adopt rules under chapter 34.05 RCW as required to implement
35 this chapter;

36 (2) Establish all (~~registration~~) certification and renewal fees
37 in accordance with RCW 43.70.250;

1 (3) Establish forms and procedures necessary to administer this
2 chapter;

3 (4) (~~Register~~) Certify an applicant or deny (~~registration~~)
4 certification based upon unprofessional conduct or impairment governed
5 by the uniform disciplinary act, chapter 18.130 RCW;

6 (5) Hire clerical, administrative, investigative, and other staff
7 as needed to implement this chapter; and

8 (6) Maintain the official department record of all applicants and
9 persons with (~~registrations~~) certification.

10 **Sec. 6.** RCW 18.215.060 and 1999 c 335 s 7 are each amended to read
11 as follows:

12 The secretary shall (~~register~~) certify an applicant on forms
13 provided by the secretary. Each applicant shall pay a fee determined
14 by the secretary under RCW 43.70.250. The fee shall accompany the
15 application.

16 **Sec. 7.** RCW 18.215.070 and 1999 c 335 s 8 are each amended to read
17 as follows:

18 The secretary shall establish by rule the procedural requirements
19 and fees for renewal of (~~registration~~) certification. Failure to
20 renew shall invalidate the (~~registration~~) certification and all
21 privileges granted by the (~~registration~~) certification.

22 **Sec. 8.** RCW 18.215.080 and 1999 c 335 s 9 are each amended to read
23 as follows:

24 The uniform disciplinary act, chapter 18.130 RCW, governs
25 unregistered practice, the issuance and denial of (~~registration~~)
26 certification, and the discipline of persons (~~registered~~) certified
27 under this chapter. The secretary shall be the disciplining authority
28 under this chapter.

29 NEW SECTION. **Sec. 9.** The department of health shall recommend
30 adoption, amendment, and repeal of such rules as may be deemed
31 necessary to administer and enforce this act so long as the rules are
32 in accordance with, and not inconsistent with, the provisions of this
33 act.

1 NEW SECTION. **Sec. 10.** RCW 18.215.050 (Required applicant
2 information) and 1999 c 335 s 6 are each repealed.

3 NEW SECTION. **Sec. 11.** This act takes effect August 1, 2013.

--- END ---

Appendix C

Applicant Follow Up

**Surgical Technologist Sunrise -
Department Follow-Up Questions to Applicant Report
June 12, 2012**

Questions about applicant report response (1)

- 1. Can you provide any examples of actual harm caused by surgical technologists?
Information/data from other states can be included.**

In 2006, surgical procedures were performed at the rate of 1,800 per 10,000 persons in the United States.¹ Safely providing those procedures 100% of the time represents a significant challenge, especially since surgery is inherently invasive and high-risk. The risk of harm during surgery is especially high during complex surgeries, such as traumatic surgeries, joint replacements, organ transplants and abdominal cases. In addition, patients with poor health prior to surgery, such as obesity, poor respiratory health, issues with blood clotting, or multiple diseases compound the challenges the surgical team faces during a surgical procedure.

The Washington State Assembly of the Association of Surgical Technologists (WSA-AST) believes all members of the surgical team should attain minimum education and certification standards to not only reduce preventable errors, but also help the surgical team achieve optimal patient outcomes.

WSA-AST will provide a few examples of patient harm caused by surgical technologists. To find examples of patient harm, WSA-AST searched U.S. District Court and state court of appeals cases and newspapers. WSA-AST has also collected examples from operating room managers, surgical technologists and circulating nurses.

Burns

Patient Experiences Third-Degree Burns Due to Hot Instrument

In this case, the patient brought a medical malpractice action against the hospital and doctor, alleging she received severe burns during surgery. The court held that the hospital breached its standard-of-care when an improperly cooled instrument was used.

The patient received the injury when she went to the hospital for a surgical hysteroscopy with endometrial ablation, a vaginal procedure. During the surgery, the patient was badly burned by a hot instrument: a weighted speculum with a large metal ball on the end to weigh it down. The instrument was inserted into the patient vaginally for five to seven minutes while she was under anesthesia. This resulted in third-degree burns. Two weeks after this procedure, the patient had to undergo surgical debridement (removal of dead, damaged, or infected tissue) and skin grafts with skin from her thighs and hips. She was hospitalized for approximately two weeks following the debridement and skin grafts and was in excruciating pain with limited ability to sit and lie down.

¹ Ambulatory and Inpatient Procedures in the United States, 1996, Centers for Disease Control, page 16.

The error occurred when the surgical technologist handed the too-hot instrument to the physician. The surgical technologist testified that she was very busy at the hospital that day and the staff was required to work very quickly. The surgical technologist said she was simultaneously setting-up for two procedures. For this procedure, while she was securing the instruments required for surgery, she noticed that some of the needed instruments, including the speculum, were not on the shelf. She ran to the instrument room to get the needed instruments and placed them in the autoclave² for sterilization for ten minutes. The surgical technologist said she recalled that the instruments were coming out of the autoclave as the patient was wheeled in. After sterilization, the surgical technologist picked up the instruments and placed them on the table in a pan for cooling and poured the saline over the hot instruments.

Since she was setting up for two different procedures simultaneously, she would periodically go back and “swish” the saline around in the pan to cool the instruments more quickly. She stated that she would not be able to determine the temperature of the speculum by feeling the saline solution in the pan.

The surgical technologist testified it is her responsibility to see that the instruments are cool enough to use on the patient.

The surgical technologist testified that when the physician asked for the speculum, the surgical technologist picked it up by the lip and not the weighted ball. She said the physician did not return the speculum to her for further cooling. The physician took the speculum from the surgical technologist by the neck and inserted it into the patient for five to seven minutes. The error was not caught during the surgery.

After the surgery, the patient noticed the burn. The physician testified that when the patient returned after the surgery, he was “flabbergasted” by the burn and “almost fell off the stool.” The physician testified that it would be a violation of the standard of care if a doctor used a speculum which was too hot on a patient under general anesthesia. ***The physician explained that, while he is responsible for the patient's care and directs the circulating nurses and surgical technologists, the responsibility for this burn was “multi-factorial, with a lot of people having some responsibility.”***

The patient’s original doctor treated her three times for burns before she went to a burn specialist and burn unit for treatment where she had skin debridement and skin grafts. The patient testified it was a very painful ordeal. The patient testified she was barely able to walk until six months after she was released from the burn unit. At the time of the trial, which was four years after the surgery, the patient was still unable to sit for long periods of time without pain.

This case demonstrates all surgical team members have a responsibility for preventing harm to patients and that the actions of the surgical technologist can negatively impact patients.

² An autoclave is an instrument in the operating room used to sterilize equipment and supplies.

Third Degree Burn by Surgical Technologist

In another case, a patient who suffered a leg burn when a surgical technologist placed a hot surgical instrument on his leg, brought action against the physician who performed the surgery. The patient alleged vicarious liability for the surgical technologist's act based on failure to supervise. The legal record of the case establishes relevant facts of the case, including during the foot surgery, a surgical technologist placed a hot surgical instrument on the patient's leg, causing a third degree burn. The physician also presented the surgical technologist's affidavit, in which the surgical technologist "admitted that her independent act caused the patient's injury and the physician did not control her placement of instruments during the procedure."

WSA-AST believes in every surgery the surgeon's focus should be on the patient, and that the presence of competent, qualified individuals on the surgical team maximizes the surgeon's ability to focus on the patient, rather than identifying and correcting the mistakes of the surgical team.

Equipment Checks

Failure to Adequately Check Equipment Results in Brain Injury

At a hospital in Colorado, a neurosurgeon was performing brain surgery that required drilling multiple holes in a child's skull. The drill was manufactured to automatically stop drilling the instant the tip of the drill reached the inside of the skull. The tip of the drill had a laser sensor at the end, which, if functioning properly, should automatically cause the drill to stop before the equipment drills into the brain. During the surgery, the drill did not stop and the drill continued past the skull and into the child's brain. The surgical team found the error had been caused by a piece of bodily tissue was left on the drill tip from a previous surgery, blocking the sensor. The child did not die, but he ended up having frequent seizures thereafter. The patient's parents sued the surgeon, the hospital and the drill company. In the end it was neither the surgeon nor the drill company who were found liable, but the hospital. The hospital was found liable because their employees, the surgical technologist setting up the operating room for the case and the central supply team, should have cleaned off the matter prior to the drill's use in the surgical procedure. This anecdote was submitted by the attorney who represented the brain drill company.

The surgical technologist and circulating nurses share responsibility for checking all equipment, instruments and supplies prior to the commencement of each surgical procedure after the instrument trays are received from the sterile supply department. Examples of surgical equipment include power drills, power saws, scopes and suction apparatus. Prior to surgery, surgical technologists generally check the equipment for sterility to the make sure all of the parts are present, assembled and working correctly.

Organic Material from Prior Procedure Remain on Instruments

A Pennsylvania Patient Safety Advisory states that several case reports described instances in which sterilized surgical instruments have been contaminated with organic material from a prior procedure. In some instances, these soiled instruments contaminated the sterile field. Soiled instruments puts patients at risk for a surgical site infection, as well as possibly experiencing prolonged anesthesia while the properly sterilized equipment is obtained.

Certified surgical technologists are trained in examining instrumentation while setting up the surgical procedure.

Breaks in Sterility

Surgical Team Demonstrates Flagrant Negligence in Sterile Technique

Source: An Outbreak of Mycobacterium Chelonae Infection following Liposuction, *Clinical Infectious Diseases* (2002) 34 (11): 1500-1507. Link: <http://cid.oxfordjournals.org/content/34/11/1500.full>.

This study was performed after reported outbreaks of the microorganism Mycobacterium Chelonae following liposuction procedures at a single facility. Among 82 patients who underwent liposuction performed by a single practitioner in a 6-month period, 34 (**41%**) developed cutaneous abscesses. After much investigation, the cause was determined to be due to poor sterile technique by a surgical technologist who lacked formal training in operative technique and infection control.

The investigation found multiple possible routes of transmission: reuse of liposuction tubing after rinsing in tap water, inadequate disinfection of the infusion handle for the tumescent infusion solution or failure to disinfect at all after rinsing in tap water, and inadequate sterilization of surgical equipment by autoclave after rinsing in tap water.

WSA-AST has received reports from members about flagrant disregard for sterile technique. Most of these reports come from small ambulatory surgical centers that perform elective surgical procedures such as cosmetic procedures and bariatric surgery.

Foreign Retained Objects

Foreign retained objects are another example of patient harm that relate to the tasks performed by the surgical technologist. The most commonly retained instruments are fragments or broken parts of instruments, stapler components, parts of laparoscopic trocars, guide wires, catheters, pieces of drains, malleable retractors and sponges. Factors that contribute to foreign retained objects include instrument counts not performed or instruments not included in the count, surgical technologists unfamiliar with the equipment or instruments, lack of formal review processes for the introduction of new equipment and technologies, supplies not easily identified once blood-soaked, and staff being distracted or diverted and failing to identify retained surgical items. Risk factors identified as increasing the occurrence of an incorrect count or retained item include the following: emergency

surgical procedures, unexpected change in the scope of the surgical procedure, procedures involving more than one surgical team, extended procedural length of time, unexpected transfusions, and very obese patients.

The most common foreign retain objects are sponges and pieces of instrumentation that fall off during surgery. Certified surgical technologists are not only trained on the processes to properly perform counts, but also their curriculum includes volumes about instrumentation. The surgical team uses thousands of different surgical instruments. For example, a total knee replacement may require more than a thousand instruments. Certified surgical technologists know how to properly prepare and handle instruments and can readily identify when pieces are missing.

While the Washington Adverse Reporting Program acknowledges in its February 2010 report that only 53% of facilities required to report have submitted any reports, Washington hospitals reported experiencing 110 cases of foreign retained objects between 2006 and 2009. The adverse event reporting law applies only to hospital licensed under chapter 70.41 RCW which does not include Washington ambulatory surgical facilities.

Foreign Retained Object- Bremerton, WA

At Harrison Medical Center in Bremerton, a balled-up 14-inch by 14-inch sponge was left in a woman's abdomen during a cesarean-section. During a surgical procedure, the surgical technologist and the circulating nurse are the responsible parties for counting. In this case, the person performing the role of the surgical technologist was not a certified surgical technologist. Documents of the case demonstrated that the counts were performed and the team had accounted for all instruments and sponges. It took eighteen months for physicians to determine the cause of the patient's health problems after surgery were the result of a sponge. Harrison Medical Center settled for \$400,000 and wrote off more than \$150,000 in medical bills.

Physician Testifies that Surgical Technologist's Employer Is Vicariously Liable for a Foreign Retained Object

In this case, a one-inch piece of plastic was found in a patient's knee. The plastic was discovered to the tip of a device used in knee arthroscopies. The patient brought a medical malpractice action against the orthopedic surgeon. Another surgeon, serving as an expert witness, stated that the surgical technologist deviated from the applicable standard of care by failing to inspect the device at the end of the operation. The plaintiff alleged that the defendant was vicariously liable for the negligence of the surgical technologist.

Surgeon and Surgical Technologist Testify to the Responsibility of the Surgical Technologist in Counting Objects

In this case, a patient brought a medical malpractice action against a surgeon and a hospital because a sponge was left in her body after a lap band surgery. (This is a surgical procedure that entails inserting an adjustable belt around the top portion of the stomach.)

The court record showed the surgical technologist performed the counts three times: once prior to the procedure, once during the procedure prior to closure and once after incisions are closed. The circulator's role during this case was to observe the surgical technologist's count for accuracy. The National Board of Surgical Technology and Surgical Assisting database demonstrates that the surgical technologist named in the court record is not a certified surgical technologist.

During this case, the physician specifically testified that the standard of care applicable to him as a surgeon does not require him to stand over the surgical technologist's shoulder and count the sponges along with the surgical technologist. The surgeon said his task is to perform the surgery, inserting and removing the sponges when necessary. During most of the laparoscopic surgery, the surgeon is looking through a camera into the field of surgery, and he relies on the other personnel to keep track of the sponges as he inserts and removes them. The surgical technologist testified that the surgeon does not participate in counting the sponges, and that the surgeon relies on the surgical technologist and the nurse to count correctly.

Higher Court Affirms Surgical Technologist Jointly Responsible for Assuring Objects Placed in Patient are Removed

In another case, a patient and her husband filed suit against a county hospital, after the patient experienced pain and swelling following a hysterectomy performed at a hospital. This resulted in the patient having to undergo another surgical procedure, during which a surgical towel was removed from her abdominal cavity. The court held that the hospital, through its employees, was responsible for the surgical towel that was left in patient's body. The documentation of the case explains: that the "hospital, through its employees, a surgical technologist and circulating nurse, used the surgical towel that was left in patient's body following surgery, as the hospital provided the towel for surgery, and the surgical technologist and circulating nurse who assisted in surgery." The case record notes that their roles involved both the physical handling of surgical instruments and other items during surgery and a shared responsibility, with the surgeon, of insuring that objects placed into patient during surgery were removed.

See response to question two for additional examples of patient harm.

Examples of Surgical Technologists Preventing Patient Harm

Surgical Technologists Correct Healthcare Industry Representatives in the O.R.

The issue of healthcare industry representatives' (HCIR) presence in the operating room frequently arises during patient safety discussions. WSA-AST has received many anecdotes from circulating nurses and surgical technologists about surgical technologists correcting HCIR's when they provide the surgical team with the wrong sterilization information and when the HCIR has opened a (formerly) sterile item improperly and handed it to a member of the surgical team not using sterile technique.

Detecting Asepsis

According to the US Food and Drug Administration's MAUDE Adverse Event Reporting system, in December 2011, during a standard hip hemi-arthroplasty, after determining appropriate size implant for the femur, the circulating nurse opened the implant and handed it to the surgical technologist. At this point, the surgical technologist realized the implant was not properly sealed and a different implant was used.

Certified Surgical Technologist Blows Whistle During Brain Surgery

A certified surgical technologist submitted this story to WSA-AST: Prior to the commencement of a neurocranial surgical procedure, a patient who had pins placed on his skull by the surgeon, needed to be rotated. The surgeon had temporarily left the room. The circulating nurse started to rotate the operating room table without a footboard or otherwise securing the patient's placement on the table. The certified surgical technologist spoke up stating the patient should be secured first to prevent the pins from shifting. The circulator ignored the surgical technologist's request, and instead, responded by rotating the table even faster. The patient visibly shifted. This can be a ruinous error, because the success of the brain surgery could be compromised if the pins move even slightly. The certified surgical technologist reported it the surgeon and the pins were replaced.

Certified Surgical Technologist Prevents Sepsis

In all major surgeries, a surgical technologist is present. In some surgical cases, more than one surgical technologist is present. In this reported case, a certified surgical technologist and a second, untrained surgical technologist, were setting up the operating room. The instrument tray arrived from the sterile supply department. The second surgical technologist found a pen in the instrument tray that did not belong. He had never been trained and said to the surgical technologist, "it's probably sterile." The first, certified, surgical technologist corrected him and told him to get a new tray. WSA-AST is in receipt of many stories when more than one surgical technologist is in the room, and the certified surgical technologist corrects the uneducated surgical technologist when he or she accidentally breaks sterile technique, such as adjusting the music or adjusts the lamp without using sterile technique. Many surgical cases require only one surgical technologist, thus breaks in asepsis may go unnoticed. In addition, surgeon's eyes are generally on the patient and the other personnel in the operating room, such as the anesthesiologist and the circulating nurse (who are not in the sterile field) have many responsibilities besides making sure the surgical technologist competently performs his or her responsibility for guarding the sterile field.

Certified Surgical Technologist Corrects Surgical Team Member

A certified surgical technologist wrote to WSA-AST: “I work at a Level 1 trauma center teaching hospital that does not value certification, or even training. It is a very intense and fast-paced environment. During an exploratory abdominal case, my fellow surgical technologist had only on-the-job training. During the surgery the anesthesiologist noted changes in the cardiac and respiratory trends. I noticed my fellow surgical technologist was leaning on the chest of the patient in an attempt to lean closer to see. I felt uncomfortable pointing out the error. However, it was important to the patient, so I spoke up. The surgeon resolved the situation, and it had indeed been the cause of the patient’s cardiac and respiratory instability. Patients are very vulnerable during surgery.”

Wrong Site/ Wrong Patient/ Wrong Surgical Procedure

Surgical technologists are members of the surgical team and responsible for speaking up when they see something wrong. This includes preventing wrong site surgery, wrong patient surgery and the wrong surgical procedure. In June 2012, the Minnesota Safe Surgery Coalition honored a certified surgical technologist, Tammy Jung, for preventing a wrong site surgery. Prior to a surgery, the surgical team was prepping the wrong limb the certified surgical technologist spoke up. While only 53% of facilities required to report have submitted reports, Washington hospitals reported experiencing 54 cases of wrong site surgeries, 4 wrong patient surgeries and 21 wrong surgical procedures between 2006 and 2009. The adverse event reporting law applies only to hospital licensed under chapter 70.41 RCW which does not include Washington ambulatory surgical facilities.

Surgical Site Infections

While it is nearly impossible to trace the exact source of a surgical site infection, preventing these adverse events are a team effort; however, it is very likely patients have been harmed by uneducated surgical technologists. Surgical technologists are guardians of the sterile field in the operating room, aiming to prevent surgical site infections. The sterile field refers to surfaces that sterile objects, such as surgical instruments, may contact and includes the area immediately around a patient that has been prepared for a surgical procedure. Protecting the sterile field involves carrying out specific procedures using sterile technique, including correcting breaks in asepsis. Seemingly minor lapses, such as adjusting an unsterile lamp, adjusting the music volume or using poor technique when receiving equipment during surgery from outside the sterile field results in sepsis. In addition, maintaining asepsis in relation to the non-sterile patient requires much technique. Accredited surgical technology programs promote ethics and encourage students to report breaks in technique even when it means they have to report their own mistakes. Certified surgical technologists receive education and training in the processes and techniques that aim to prevent these infections. Providing optimal surgical patient care is a team effort and every member of the surgical team should meet minimum education and certification requirements.

Human Resources and Training Issues

Awaiting Corporate Approval Indefinitely

WSA-AST has received accounts of instances when the operating room manager would like to start requiring certification for all surgical technologists, but the Human Resources Department disapproves the request or endlessly postpones approval, saying they need approval from “corporate.”

Practitioners as Educators during Surgical Procedures

WSA-AST also hears about the hospital’s risk management personnel asking certified surgical technologists to train the other surgical technologists without providing adequate or any resources. The certified surgical technologists feel overwhelmed and frustrated because the didactic and clinical training they received by attending an accredited one- to two-year program cannot be replicated without programmatic structure. Also, in these cases the surgical technologists have not been provided the time and resources to provide near adequate training. These certified surgical technologists say it is distracting and very stressful during fast-paced, high-risk cases to be training someone who should already know what to do. The certified surgical technologist said, “my attention and my eyes are supposed be on the surgeon, the instruments and the patient, and, instead my attention is split in many different directions: the surgery and training. At least when I’m precepting a student who is enrolled in a formal surgical technology program, they have education under their belt and observe surgeries before having to be a critical set of hands.”

No Training Provided

A hospital hired an interventional radiology technologist to perform the tasks and functions of a surgical technologist and provided no on-the-job training. During a surgery that started endoscopically, meaning a scope was used and the patient was not initially opened, an emergency occurred. The patient had to be opened. A surgical technologist with training was urgently needed and they borrowed a certified surgical technologist from another department for the procedure. The circulating nurse submitting the story write, “Luckily one was available.”

Receptionist/Office Manager/Surgical Technologist

WSA-AST is in receipt of cases in which the office manager or receptionist serves as both the surgical technologist and the office manager at ambulatory surgical centers. In one instance, the surgical technologist was referred to the receptionist for orientation and training in labor and delivery.

Personnel Borrowed from Other Departments

WSA-AST is in receipt of many reported instances when the hospitals borrow staff from other departments who have not received any training in the surgical technology role to perform the surgical technology duties during surgical cases to fill-up an employee's schedule.

Proper Training Saved the Day and the Patient

During a typical clinical rotation through labor and delivery, a senior surgical technologist student was following the lead of her preceptor, an on-the-job trained licensed practical nurse, in a routine cesarean section. After delivery of the baby, the surgeon announced that he had accidentally nicked the bowel. An accidental bowel perforation during a surgery is extremely serious and can cause sepsis, months of infection, infertility, even wrongful death. The on-the-job-trained preceptor became visibly shaken and told the surgeon she could not continue, because it was out of her area of expertise. The surgeon said, "Get someone in here that can ASAP." (In these situations, every second counts. Toxins are leaking into tissue that has been cut open and is extremely vulnerable to infection.) The senior surgical technologist student stepped up and said she felt confident in assisting the surgeon in completing the procedure. Correcting a nicked bowel requires surgical technologist expertise as a new, sterile instrument is used nearly every second. When bowel tissue has been nicked, the surgeon may only use each instrument once: when the instrument is removed, a new sterile instrument is used for each subsequent step. For example, when suturing a nicked bowel, a new needle is used for each stitch. It requires a great deal of skill to simultaneously prepare sutures, hand sutures and dispose of sutures using sterile technique at an extremely fast pace, while simultaneously preparing for the next step in the procedure. The student capably performed the surgical technologist role. The case was completed without further incident. Both the obstetrician and general surgeon complimented the student on her skill. The surgical technologist submitting the story wrote, "No patient should suffer due to lack of education of any member of the health care team. In surgery, it is imperative that all team members be formally educated."

Hospital Too Busy To Train

A surgical technologist wrote to WSA-AST, stating: "I love my job! However, it bothers me when I went to school and I work with people who have barely any training and no education. They are not taught current aseptic procedures and really do not keep up on new information, especially in terms of infection control. Right now, many best practices are established to prevent surgical site infections, but the uncertified surgical technologists are, frankly, ignorant about them, but everyone is too busy to notice. It puts patients at risk. I have spoken up about it and my O.R. manager keeps saying she will do something about it, but nothing ever happens to change it. The surgical technologist has an important role in the operating room."

Surgical Fires

Surgical fires are one of the most devastating and frightening experiences for everyone involved. Heat, fuel and oxygen must be present for a fire to start. Operating rooms carry a very high risk of fire because of the presence of many electrosurgical units and lasers, oxygen masks, and ready fuel sources, including alcohol-based skin preparation agents, the patient's own tissue, hair or skin and surgical drapes. According to the Food and Drug Administration, an estimated 600 surgical fires occur in the United States each year. Surgical fires can be devastating, causing disfiguring second- and third-degree burns to the patient. If the fire occurs in the patient's airway it can be fatal. Fires are preventable and the best way to prevent them is to make sure every member of the surgical team is trained appropriately. All surgical team members are responsible for responding to fires in the operating room and bear great responsibility in preventing them. For instance, the surgeon and anesthesiologists are responsible for controlling heat placement. Circulating nurses are responsible for patient preparation and surgical technologists need to carefully prepare and manage electrosurgical equipment, including practicing proper placement and grounding and keeping equipment that is not in use on standby.

This news article describes a Washington man whose face was burned last year while he was having a bump removed from his head: <http://www.q13fox.com/news/kcpq-washington-mans-face-catches-fire-during-routine-surgical-procedure-20111205,0,6254914.story>. In addition, a Washington man was burned at St. Joseph Hospital in Bellingham, Washington during an outpatient surgical procedure. The patient was to have a minor polyp removed from his vocal cords. It was benign, but doctors worried that the growth could become cancerous. During the procedure his throat caught on fire. It was devastating. He had a feeding tube to his stomach for a year after the surgery. He endured 18 surgeries to breathe without support. A plastic tube holds his throat open, but breathing is still difficult. His vocal cords are gone. He can whisper, but it is very painful. In the press release aimed to spread the word about the danger of surgical fires, he stated, "if only one member of the surgical team had acted appropriately, my life might be closer to the one I planned for myself, not one with limited ability to breathe and talk and swallow."

2. Describe further how a patient might suffer an allergic reaction from the actions or inactions of a surgical technologist?

Allergic reactions result from the actions or inactions of a surgical technologist when the surgical technologist fails to notice when the wrong solution enters the sterile field, when the surgical technologist incorrectly or incompletely labels the solution, or when the surgical technologist loads the wrong solution into syringes and passes it to the surgeon.

The registered nurse circulator is outside the sterile field and passes solutions to the surgical technologist. After the surgical technologist receives a solution from the registered nurse circulator, both the circulator and the surgical technology verify out loud the solution, its concentration and expiration date. The surgical technologist pours the solution into a sterile

container and labels it on the field. Then, the surgical technologist is responsible for passing sterile liquids to the surgeon.

At the Virginia Mason Medical Center, in Seattle, during a routine sterile surgical procedure in the radiology department for an aneurysm, the patient, Mary McClinton was injected with a syringe filled with cleaning fluid rather than harmless surgical contrast dye. The radiologic technician handed the physician a syringe filled with the wrong fluid. The Seattle Times quoted a Washington Department of Health spokesperson, Donn Moyer, “There is the question of who ultimately has responsibility. While the physician is in charge of what's going on — he did do the injection — the management of what was on the tray belongs to the technician.”

While this case was not about a surgical technologist, it does speak to the responsibility of technologists to be responsible for tray management. Surgical technologists are responsible for the trays of surgical instruments, solution and supplies during surgery. Liquids on the sterile back table must be correctly labeled and serious incidents can occur when they are not. Surgical technologists often bear the responsibility of pouring solution into sterile containers which are labeled on the sterile field. Surgical technologists also grab solutions for the surgeon.

In another case, a surgical technologist admitted to grabbing the wrong fluid. In this US District Court case, a patient brought a medical malpractice action against a plastic surgeon and a surgery center for injuries sustained when the patient was mistakenly injected with epinephrine following liposuction surgery. Immediately after the procedure, the surgeon ordered intravenous administration of an anti-nausea medication to prevent post-operative nausea or vomiting. However, the patient did not receive the proper medication. She instead received undiluted epinephrine. The case states the epinephrine caused “severe pulmonary and cardiac anomalies, including near death.” The court record states, the patient was not the first patient at the clinic to receive epinephrine in error that year, but the third. The other two incidents occurred on the same day before surgery when a “surgical technologist or nurse” mistakenly grabbed epinephrine. The two patients suffered their injuries on the same day, but the hospital and its employees did not discover that epinephrine was the cause of the first patient's reaction until the second patient presented similar symptoms. A surgical technologist admitted to defendants that he had mistakenly grabbed the epinephrine. This surgical technologist, who was named in the court record, is not a certified surgical technologist.

In another case, a patient was harmed by the surgical technologists' failure to notice that the circulator had prepared the wrong fluid. The circulator had passed a bubbly solution, which should not have been bubbling, and the surgical technologist failed to notice. In this case, the patient sued the surgeon, the hospital and a chemical company for bladder problems she experienced after the wrong solution was used during a bladder operation. Approximately five days after the surgery, she was still having bladder problems, which the surgery was supposed to fix immediately. In addition, she was in great pain and scans performed by her physician demonstrated her bladder had shrunk considerably.

The appeal record states, “The doctor was at a loss to understand what had happened. In carefully reviewing the procedure and returning to examine the operating room he was of the opinion that the probable cause of plaintiff’s problems was that betadine scrub, instead of betadine solution which he had called for, had been injected into plaintiff’s bladder, causing the irritation and the subsequent shrinking of plaintiff’s bladder capacity from a low-normal 275 cubic centimeters (ccs) to 60 ccs, or 2 ounces.” The betadine scrub also caused nerve damage inside her bladder.

Expert testimony from multiple surgeons determined the patient’s problems were caused by hospital personnel supplying the wrong solution during surgery. It was decided that the surgeon was not negligent, since the patient’s problems were caused when hospital personnel supplied the wrong solution during the operation. Surgical technologists and circulating nurses share the responsibility of managing solutions used during surgeries. Circulating nurses are outside the sterile field and surgical technologists are in the sterile field next to the surgeon and the patient. The trial court found the hospital was negligent and that the negligence of its employees, the surgical technologist and the circulating nurse, was a proximate cause of plaintiff’s injuries. The surgical technologists present during the case are listed in the court record and none of them are certified surgical technologists.

- 3. From the cited reference, “To Err is Human: Building a Safer Health System,” you describe information and numbers of patients who die of medical errors. The complete referenced book, in discussing surgical errors, appears to focus on anesthesia or medication errors that occur in the operating room. Please provide more information on the numbers of patients who are harmed or die from surgical errors related to tasks that may be performed by a surgical technologist.**

Please see question four, below.

- 4. Please provide data or information regarding surgical site infections and any relationship to tasks that may be performed by a surgical technologist.**

As discussed above, surgical technologists share responsibility in preventing errors and infections, including doing their part to prevent surgical fires, wrong-site surgeries, malfunctioning equipment, misidentification of fluid, foreign retained objects and maintaining asepsis and correcting breaks in the sterile field.

The surgical technologist is the guardian of the sterile field. Prior to surgery, the surgical technologist is the person responsible for helping the surgeon and other members of the surgical team to enter the sterile field. The surgical technologist is the only person during surgery in the sterile field besides the surgeon and, possibly, a surgical assistant. The surgical technologist must receive instruments, supplies and solutions from outside the sterile field from other personnel, such as the registered nurse circulator, set-up and pass instruments and supplies to the surgeon using sterile technique, and properly handle surgical supplies, instruments and solutions once their sterility has been compromised. These tasks require knowledge of sterile technique. Keep in mind, the surgical technologist is often multi-tasking and working at a very high pace.

Empirical data and studies concerning surgical technologists' positive contributions to patient outcomes are rare, due largely to the fact that the profession is unregulated at present. Moreover, most studies involving adverse medical and surgical events are not publicly available, making analysis more difficult. In addition, malpractice cases are readably searchable only if the case reaches the appeals court for a procedural matter.

However, data from a Virginia study discusses the cost of medical care related to extended hospital stays occasioned by a surgical site infection. Again, the data is not specific to surgical site infections directly caused by a surgical technologist (uncertified or otherwise), but the data reveals that facilities utilizing only credentialed personnel as surgical technologists (who are the practitioners primarily responsible for maintaining the sterile field and preventing breaks in aseptic technique) reduced by 11% the costs associated with extended stays due to surgical site infection.

Chart 1- Certified Surgical Technologists Study: Costs associated with extended stays due to surgical site infection reduced by 11% in facilities with Certified Surgical Technologists.

Source: vapricepoint.org, January 2007 – September 2007

	<u>Hospitals that require Certified Surgical Technologists (10 hospitals*)</u>	<u>Hospitals that do not require certification (37 hospitals*)</u>	<u>Both groups of hospitals (47 hospitals*)</u>
Average Number of Discharges for Post-traumatic and Post-operative Infection:	25.9	27.6	27.26
Average Length of Stay (days):	4.79	5.25	5.15
Average Charge Per Patient Stay:	\$14,712	\$17,118	\$16,606
Average Charge Per Day:	\$2,849	\$3,234	\$3,152
Median Charge Per Patient Stay	\$10,677	\$13,341	\$12,774

*Only hospitals that hire surgical technologists are included.

In addition, in the American Journal of Infection Control, the study *Effect of interventions in reducing the rate of infection after cesarean delivery*, analyzed the impact of training in aseptic and scrub techniques and antibiotics. According to the authors of a study, "Post-cesarean delivery surgical site infections can cause considerable maternal morbidity." The researchers aimed to estimate the efficacy of medical personnel education program in aseptic and scrub techniques and antibiotics on the rate of infectious morbidity after cesarean delivery.

The incidence of any infectious morbidity dropped from 6.4% in the control group to 2.5% in the second group. The incidence of any infectious morbidity in women undergoing elective cesarean delivery fell from 5.3% to 0.9%. Among women undergoing non-elective cesarean delivery, the difference between the control group and the study group was 7.5% versus 4.5%. The rate of surgical site infection fell significantly, from 4% in the control group to 1.5% the study group. The researchers concluded the interventions "led to a considerable decline in post-cesarean infectious morbidity." Full abstract: www.ncbi.nlm.nih.gov/pubmed/21835505.

Question about applicant report response (3)

- 5. You note that six states have implemented "entry-to-practice" legislation. Please provide a list of the six states and applicable statutes if known, and describe whether there have been any analyses, studies or information about the effectiveness of this legislation in assuring the qualifications of surgical staff in general or surgical technologists specifically.**

States that have minimum educational and certification standards for surgical technologists include Idaho, Indiana, New Jersey, South Carolina, Tennessee and Texas. The attachment, Surgical Technology Statutes and Regulations, includes the text all of the related laws. In addition, surgical technologist legislation has passed the New York legislature unanimously and is awaiting the Governor's signature.

No state has retrospectively studied the impact of the legislation. AST staff has discussed the implementation process with the respective state regulatory agencies responsible for enforcing the legislation. In these discussions, AST has learned the enforcement agencies very rarely receive complaints about non-compliance with the law. AST staff also frequently receives called from human resources personnel in these states and has yet to receive a complaint about the facilities' ability to comply. No studies have been done on the impact on patients after passage of these laws. The two main barriers to such studies are design and cost. It is very difficult to obtain data that includes root cause analyses and expensive to hire an objective organization to perform such a study.

Questions about applicant report response (4)

6. You state there is documented evidence from other states indicating surgical errors were reduced in facilities hiring only appropriately educated and credentialed. Please provide this documented evidence.

The Minnesota Adverse Health Events Reporting Act requires public dissemination by healthcare facilities of 28 adverse medical events. Further analysis of this data, by facility, reveals that adverse surgical events were 32% less in hospitals that require certification for all employed surgical technologists. Because of the confidentiality of root cause analyses of these events, attribution of fault in these cases cannot be ascertained. Nevertheless, the data decisively shows that healthcare facilities that value competency in their surgical staffs experienced better outcomes.

Chart 2- Certified Surgical Technologist Data- Never Events: Wrong Surgeries and Foreign Retained Objects

SOURCE: Minnesota Department of Health, Adverse Health Events Reporting, Report date: Jan. 2009

	<i>Hospitals that require certification (13 hospitals)</i>	<i>Hospitals that do not require certification (21 hospitals)</i>
Number of Surgeries and Invasive Procedures Performed	780,644	955,297
Incidents of Wrong Site, Patient, Type Surgery, Body Part or Wrong Surgery	25	43
	1 in 31,225 surgeries in hospitals that require certification is wrong site, wrong patient, wrong type, wrong body part or wrong surgery.	1 in 22,745 surgeries in hospitals that do not require certification is wrong site, wrong patient, wrong type, wrong body part or wrong surgery.
Hospitals that do <u>not</u> require certification experience 31.4% more occurrences of wrong site, wrong patient and wrong type surgery than hospitals requiring certification.		
Never Events: Retained Objects After Surgery	14	23
	1 in 55,750 surgeries in hospitals that require certification results in a foreign retained object.	1 in 43,000 surgeries in hospitals that do not require certification results in a foreign retained object.
Hospitals that do <u>not</u> require certification also experience 31.2% more occurrences of retained objects after surgery than hospitals that require certification.		

- 7. You also state that in Virginia, the cost of treating trauma and surgical site infections was reduced 11 percent in facilities only hiring certified surgical technologists. Please provide this report.**

Please see response to question four.

Questions about applicant report response (5)

- 8. Do you have data on how many currently practicing surgical technologists in Washington State have completed a formal training program or are nationally certified?**

WSA-AST does not have information on how many surgical technologists have graduated from accredited programs. However, WSA-AST can provide data that may be used to infer the number of graduates of accredited programs and certificate-eligible individuals working in Washington. Currently, 700 surgical technologists hold the Certified Surgical Technologist certification. In addition, 500 surgical technologists have allowed their certification to lapse within the last ten years. Graduates from accredited programs did not, until recently, take the certification exam as a part of the surgical technology program. Graduates of accredited programs are eligible to take the national certification exam, but not all graduates opt to seek certification. Thus, in addition to the 700 certificants and 500 former certificants, there are likely a few hundred individuals who graduated from accredited programs, but did not seek certification. Currently, accredited Washington surgical technology programs graduate more than 100 students per year. In addition, graduates of Army, Navy and Air Force surgical technology who meet the eligibility criteria established by the National Board of Surgical Technology and Surgical Assisting are also eligible for certification.

- 9. Do you have data on the numbers of registered surgical technologists in this state who have not completed an accredited surgical technology training program? Provide information on how these individuals are trained to perform surgical tasks.**

WSA-AST does not have data on how many registered surgical technologists have not completed an accredited surgical technology training program. On-the-job training varies greatly among hospitals and regions. On-the-job trained surgical technologists do not receive any didactic education related specifically to surgical technology. On-the-job trained surgical technologists frequently come from other departments and shadow a surgical technologist for a few hours, days or weeks. While a few hospitals claim to have comprehensive training programs, none have ever been able to furnish WSA-AST or AST an outline of a program. (This does not include accredited surgical technology programs provided in the hospital setting.) Also, newly-hired surgical technologists are sometimes responsible for seeking their own training, *e.g.*, “go ask someone in the surgery department to train you.”

Questions about language in HB 2414:

- 10. Does the current scope of practice in WAC 246-939-030 include all the tasks you would like surgical technologists to perform? Or is it your intent to broaden the scope of tasks they can do?**

The tasks enumerated in the scope of practice provisions of WAC 246-939-030 accurately describe the duties and functions of surgical technologists and HB 2414, particularly subsection (3), which summarizes these duties, is not intended to enlarge or broaden the scope of tasks or functions they perform.

- 11. HB 2414 (Sec. 3(3)(b)) includes the language “managing fluids, specimens, and supplies.” What does “managing” include for fluids, and specimens?**

In terms of liquids, registered nurse circulators pour solutions from outside the sterile field to the surgical technologist within the sterile field. Both the circulating nurse and the surgical technologist verify out loud what the liquid’s name, concentration and expiration date. The surgical technologist pours the solution into a sterile container using sterile technique that the surgical technologist labels on the field. Properly trained surgical technologists are taught not to use abbreviations, especially in the case that the person serving in the surgical technologist’s role switches mid-case. Surgical technologists are also responsible for loading syringes with surgical solutions, such as local anesthesia, sterile saline and dyes.

In addition managing large equipment and instruments, surgical technologists also manage surgical supplies such as sponges and sutures. Surgical technologists pass sponges to the surgeon and load sutures for the surgeon. To load sutures, a surgical technologist must know which size suture to select as well as the proper needle and needle holder.

Specimens commonly refer to soft tissues, boney tissue and fluids extracted from the patient. The specimens are often cancerous and need to be analyzed after surgery by the pathology department. Surgical technologists are responsible for labeling the specimens after they have been extracted from the patient. The Association of Surgical Technologist’s Standards of Practice on the Handling and Care of Surgical Specimens, attached, demonstrates how a task that seems simple actually involves considerable technique. Also attached to this response are references to standards of practice for surgical technology which illustrate many of the various tasks and functions, their complexity, and the need for assuring competency in performance of these duties.

- 12. Please explain further in Section 4(1)(b) how the grandfathering of individuals who practiced within six months of the bill’s effective date assures that non-certified surgical technologists are adequately trained.**

Grandfather provisions are widely accepted in connection with establishing licensing, certification or competency requirements. In Washington, RCW 18-120-020(3) recognizes the application of a grandfather clause with respect to practitioners in regulated health professions. For example, occupational therapists who presented evidence of practicing for

three years prior to the effective date of their licensure statute were grandfathered. Similarly, RCW 18-89-090(3) grandfathers licensed respiratory therapists provided they were certified as a respiratory care practitioners in good standing on the effective date of their licensure act, thus relieving them of the requirements of the licensure examination and the prerequisite two-year curriculum.

It is submitted that creating a grandfather period for surgical technologists is consistent with the statutory intent of RCW 18-120-020. Surgical technologist entry-to-practice regulations have adopted grandfather provisions ranging from practicing on the effective date of the Act (New Jersey, Texas, Indiana), one year prior to the effective date (South Carolina), eighteen months in the three years preceding the effective date (Tennessee). Analysis of entry-to-practice bills filed (but not yet passed) support the proposition of grandfathering currently practicing surgical technologists on these basic premises: (1) it should not be the intention or resultant effect of the legislation to deny or strip employment of current personnel deemed qualified by the health care facility, notwithstanding the value of requiring minimum standards of competency going forward; (2) deferring to the health care facility to appropriately place, train and educate currently employed but non-qualified surgical technologists as an interim step towards universal competency requirements is sound policy; (3) because the estimated turnover of surgical technologists in a health care facility's workforce is approximately 8-10 years, those grandfathered individuals will eventually leave their positions (either for more advanced ones, or for a different profession), to be replaced by statutorily qualified individuals.

13. Sec. 2(3)(d) “perform other surgical tasks as directed” is very broad. What is your intent for types of tasks that would be included in this subsection?

“Performing other surgical tasks as directed,” at Sec 2(3)(d), similar to WA 246-939-030 section (3) (“tasks that typically consist of, but are not limited to....”), recognizes the ability and of a licensed health care practitioner to delegate tasks and functions to unlicensed health care providers such as surgical technologists, subject to the delegatory authority of the licensed practitioner. A surgeon, or a registered nurse, may lawfully delegate other “non-medical” or “non-nursing” tasks to a surgical technologist. These tasks might include positioning the patient, application of dressings or cast material, selecting supplies for the procedure, and testing or validating the equipment used in the surgery.

14. The proposal, sec. 4(1)(b), includes a blanket grandfathering of individuals practicing surgical technology at any time during the six months immediately preceding the effective date of the bill. This seems to conflict with your assertion that educational requirements are necessary to protect the public. Please address this issue.

Please see response to question twelve.

Attachments:

- A. Entry-to-Practice Surgical Technology Statutes and Regulations**
- B. AST’s Standards of Practice on the Handling and Care of Surgical Specimens**
- C. Examples of Surgical Technology Standards of Practice Reference List**



Surgical Technology Statutes and Regulations – Minimum Education and Certification Requirements

Idaho

Idaho Administrative Code

Agency 16. Department of Health and Welfare

Title 03.

16.03.14 - Rules and Minimum Standards for Hospitals In Idaho

34. Operating Room Technician. A person who:

a. Has successfully completed a one (1) year education program for operating room technicians accredited by the Committee on Allied Health Education and Accreditation of the American Medical Association¹ in cooperation with the Joint Review Committee on Education for the Operating Room Technician,² or meets the requirements for certification by the Association of Surgical Technologists.³

Indiana

Indiana Code

Title 25. Professions and Occupations

Article 36.1. Certified Surgical Technologists

Chapter 2. Practicing Surgical Technology

ARTICLE 36.1. CERTIFIED SURGICAL TECHNOLOGISTS

Sec. 1. An individual may not:

- (1) profess to be a certified surgical technologist; or
- (2) use the initials "CST" or any other words, letters, abbreviations, or insignia indicating or implying that the individual is a certified surgical technologist; unless the individual holds and maintains the Certified Surgical Technologist Credential administered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

¹ Now the Commission on Accreditation of Allied Health Programs (CAAHEP).

² Now the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC-STSA).

³ The Certified Surgical Technologist credential is now administered by the National Board of Surgical Technology and Surgical Assisting.

Sec. 2. An individual who knowingly, recklessly, or intentionally violates this chapter commits a Class B misdemeanor.

25-36.1-2 Chapter 2. Practicing Surgical Technology

Sec. 1. As used in this chapter, "health care facility" means the following:

- (1) A hospital that is licensed under IC 16-21-2.
- (2) An ambulatory outpatient surgical center licensed under IC 16-21-2.
- (3) A birthing center licensed under IC 16-21-2.
- (4) An abortion clinic licensed under IC 16-21-2.

Sec. 2. As used in this chapter, "operating room circulator" means an individual who is:

- (1) licensed as a registered nurse under IC 25-23;
- (2) educated, trained, and experienced in perioperative nursing, as determined by the health care facility; and
- (3) responsible for coordinating all nursing care, patient safety needs, and needs of the surgical team in the operating room during a surgical procedure.

Sec. 3. As used in this chapter, "surgical technology" means intraoperative surgical patient care that involves the following:

- (1) Preparing the operating room for surgical procedures by:
 - (A) ensuring that surgical equipment is functioning properly and safely; and
 - (B) preparing sterile supplies, instruments, and equipment using sterile technique.
- (2) Anticipating the needs of the surgical team based on knowledge of human anatomy and pathophysiology relating to the surgical patient and the patient's surgical procedure.
- (3) Performing tasks in an operating room setting in the sterile field, including the following:
 - (A) Passing supplies, equipment, or instruments.
 - (B) Suctioning or sponging an operative site.
 - (C) Preparing and cutting suture material.
 - (D) Transferring and irrigating with fluids.
 - (E) Transferring, without administering, drugs within the sterile field.
 - (F) Handling specimens.
 - (G) Holding retractors.
 - (H) Assisting in counting sponges, needles, supplies, and instruments with an operating room circulator as allowed under section 6 of this chapter.

Sec. 4. This chapter does not prohibit a licensed practitioner from performing surgical technology functions if the practitioner is acting within the scope of the practitioner's license.

Sec. 5. (a.) Except as provided in section 4 of this chapter, an individual may not practice surgical technology in a health care facility unless the individual meets one (1) of the following requirements:

- (1) Is certified under IC 25-36.1-1.
- (2) Has completed a surgical technology program provided by the United States Army, Navy, Air Force, Marine Corps, or Coast Guard, or the commissioned corps of the United States Public Health Service.
- (3) Provides evidence to the health care facility that the individual was employed to practice surgical technology in a health care facility before July 1, 2009.
- (4) Is performing duties related to the individual's employment by the federal government.
- (5) Is practicing surgical technology during the twelve (12) month period immediately following the completion of a degree from an accredited school of surgical technology.
- (6) Has the appropriate abilities, as determined by the health care facility.

(b) An individual who is:

- (1) described in subsection (a)(1), (a)(2), or (a)(3); and
- (2) practicing surgical technology in a health care facility; annually shall complete fifteen (15) hours of continuing education concerning surgical technology in order to continue practicing surgical technology.

(c) An individual who wants to practice surgical technology in a health care facility is responsible for establishing to the satisfaction of the health care facility that the individual has complied with this section.

(d) An individual practicing surgical technology in a health care facility is responsible for immediately notifying in writing the governing body of the health care facility, or the governing body's designee, of any changes in the individual's compliance with this section.

(e) A health care facility shall maintain copies of any written documentation provided by the individual to the health care facility under subsection (c) or (d) to show compliance with this section.

(f) This chapter does not require a health care facility to permit an individual described in subsection (a) to perform surgical technology services at the health care facility.

New Jersey

New Jersey Statutes

Title 26. Health and Vital Statistics

Chapter 2H. Health Care Facilities

I. Health Care Facilities Planning Act

26:2H-12.63. Qualifications to practice surgical technology

"Health care facility" means a hospital or other health care facility licensed pursuant to P.L.1971, c.136 (C.26:2H-1 et seq.).

"Surgical technologist" means a person who is authorized to practice surgical technology pursuant to the provisions of this act.

"Surgical technology" means surgical patient care that includes, but is not limited to, the following tasks or functions:

1. preparing the operating room for surgical procedures by ensuring that surgical equipment is functioning properly and safely;
2. preparing the operating room and the sterile field for surgical procedures by preparing sterile supplies, instruments, and equipment using sterile technique;
3. anticipating the needs of the surgical team based on knowledge of human anatomy and pathophysiology and how they relate to the surgical patient and the patient's surgical procedure; and
4. as directed, performing tasks at the sterile field including: (a) passing supplies, equipment or instruments; (b) sponging or suctioning an operative site; (c) preparing and cutting suture material; (d) transferring and irrigating with fluids; (e) transferring and administering drugs within the sterile field, according to applicable law; (f) handling specimens; (g) holding retractors and other instruments; (h) applying electrocautery to clamps on bleeders; (i) connecting drains to suction apparatus; (j) applying dressings to closed wounds; and (k) performing sponge, needle, supply and instrument counts with the registered nurse circulator.

2. No person shall practice surgical technology in a health care facility unless that person:

a. has successfully completed a nationally or regionally accredited educational program for surgical technologists; or

b. holds and maintains a certified surgical technologist credential administered by the National Board of Surgical Technology and Surgical Assisting or its successor, or other nationally recognized credentialing organization; or

c. has completed an appropriate training program for surgical technology in the Army, Navy, Air Force, Marine Corps, or Coast Guard of the United States or in the United States Public Health Service Commissioned Corps; or

d. provides evidence that the person was employed to practice surgical technology in a health care facility on the effective date of this act; or

e. is in the service of the federal government, to the extent that individual is performing surgical technology duties related to that service.

3. A health care facility shall not employ or otherwise contract for the services of a surgical technologist unless the person employed or contracted meets the requirements of section 2 of this act.

4. A person who qualifies to practice surgical technology in a health care facility under section 2 of this act shall annually complete 15 hours of continuing education to remain qualified to practice as a surgical technologist in this State.

5. A health care facility that employs or contracts with a person to practice surgical technology shall verify that the person meets: (1) the continuing education requirements of section 4 of this act; and (2) the requirements of section 2 of this act.

6. Nothing in this act shall prohibit any person licensed under any other law from practicing surgical technology if the person is acting within the scope of practice of his license.

7. This act shall take effect immediately, except that section 4 shall take effect one year from the date of enactment.

South Carolina

§ 44-7-380

Title 44. Health

Chapter 7. Hospitals, Tuberculosis Camps and Health Services Districts

Article 3. State Certification of Need and Health Facility Licensure Act

§ 44-7-380. Surgical technology and operating room circulators; definitions; requirements to practice; exceptions.

(A) As used in this section, “surgical technology” means intraoperative surgical patient care that involves:

(1) preparing the operating room for surgical procedures by ensuring that surgical equipment is functioning properly and safely;

(2) preparing the operating room and the sterile field for surgical procedures by preparing sterile supplies, instruments, and equipment using sterile technique;

(3) anticipating the needs of the surgical team based on knowledge of human anatomy and pathophysiology and how they relate to the surgical patient and the patient's surgical procedure; and

(4) as directed within the sterile field in an operating room setting, performing tasks including:

(a) passing supplies, equipment, or instruments;

(b) sponging or suctioning an operative site;

- (c) preparing and cutting suture materials;
- (d) transferring fluids or drugs;
- (e) holding retractors; and
- (f) assisting in counting sponges, needles, supplies, and instruments.

(B)(1) A person may not practice surgical technology in a health care facility unless the person meets one of the following requirements:

(a) has successfully completed an accredited educational program for surgical technologists and holds and maintains the Surgical Technologist Certification administered by the National Board of Surgical Technology and Surgical Assisting, or its successor; however, upon completion of an accredited education program for surgical technologists, graduates may practice for up to three months before completing certification by the National Board of Surgical Technology and Surgical Assisting, or its successor;

(b) has completed an appropriate training program for surgical technology in the United States Army, Navy, Air Force, Marine Corps, or Coast Guard or in the United States Public Health Service;

(c) provides evidence that the person was employed to practice surgical technology in a health care facility in this State prior to January 1, 2008; or

(d) is in the service of the federal government, to the extent the person is performing duties related to that service.

(2) A person qualified to practice as a surgical technologist pursuant to subsection (B)(1) remains qualified to practice regardless of a break in practice provided the continuing education required in subsection (D) is current.

(C) A person who does not meet the requirements of this section, may practice surgical technology in a health care facility if:

(1) after a diligent and thorough effort has been made, the health care facility is unable to employ a sufficient number of persons who meet the requirements of this section; and

(2) the health care facility makes a written record of its efforts made pursuant to item (1) and retains the record at the health care facility.

(D) A person who qualifies to practice surgical technology in a health care facility pursuant to subsection (B)(1)(a), (b), or (c) annually must complete fifteen hours of continuing education to remain qualified for employment.

(E) A health care facility that employs a person to practice surgical technology shall verify that the person meets the continuing education requirements of subsection (D) or that the person has held and maintained the Surgical Technologist Certification as required in subsection (B)(1)(a).

(F) A health care facility shall supervise each person employed by the health care facility to practice surgical technology according to the health care facility's policies and procedures to ensure that the person competently performs delegated tasks intraoperatively according to this section or other applicable provisions of law.

(G) This section does not prohibit a person licensed under another provision of law from performing surgical technology tasks or functions if the person is acting within the scope of his or her license.

Tennessee

Title 68. Health, Safety and Environmental Protection

Chapter 57

Surgical Technologists

68-57-101. Qualifications for employment of surgical technologists.

(a.) Individuals employed as surgical technologists shall:

1. Hold current national certification established by the Liaison Council on Certification for the Surgical Technologist (LCC-ST)⁴;
2. Have completed a program for surgical technology accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP);
3. Have completed an appropriate training program for surgical technologists in the armed forces or at a CAAHEP-accredited hospital or CAAHEP-accredited ambulatory surgical treatment center program. For the purposes of this chapter, "armed forces" means the army, navy, air force, marine corps, coast guard or public health service of the United States; or
4. Successfully complete the surgical technologists LCC-ST certifying exam.

(b.) Any student who completes a surgical technology program that is in the process of becoming CAAHEP-accredited on July 1, 2006, shall be considered a graduate of a CAAHEP-accredited program.

68-57-102. Alternative qualifications for employment — Exemption of federal employees.

(a.) In addition to individuals identified in § 68-57-101, a person may be employed upon providing sufficient evidence that, prior to May 21, 2007, the person was at any time employed as a surgical technologist for not less than eighteen (18) months in the three (3) years preceding May 21, 2007, in a hospital, medical office, surgery center, or an accredited school of surgical technology, as

⁴ Now the National Board of Surgical Technology and Surgical Assisting.

defined by this chapter. An individual who has begun the appropriate training to be a surgical technologist as defined by this section, prior to May 21, 2007, shall be eligible for employment as a surgical technologist; provided, that the training is completed by May 21, 2010.

- (b.) Notwithstanding any provision of law to the contrary, a surgical technologist in the service of the federal government is exempt from the provisions of this chapter while performing duties related to such employment.

68-57-103. Penalties.

The license of a hospital, ambulatory surgical treatment center, or other such entity that violates any provision of this chapter may be subject to penalties imposed by the board for licensing healthcare facilities pursuant to § 68-11-207.

68-57-104. Waiver.

A hospital, ambulatory surgical treatment center, or other such entity may petition the director of health care facilities of the department for a waiver from the provisions of this chapter if such entity is unable to employ a sufficient number of surgical technologists who meet the requirements of this chapter. The hospital, ambulatory surgical treatment center, or other such entity must demonstrate to the director that a diligent and thorough effort has been made to employ surgical technologists who meet the requirements of this chapter. The director shall refuse to grant a waiver upon finding that a diligent and thorough effort has not been made. A waiver shall exempt a facility from the provisions of this chapter for not more than six (6) months. Additional waivers may be granted, but all exemptions greater than twelve (12) consecutive months must be approved by the board.

68-57-105. Scope of practice of surgical technologists.

For the purposes of this chapter, “surgical technologist” means one who works under supervision to facilitate the safe and effective conduct of invasive surgical procedures. This individual is usually employed by a hospital, medical office, or surgical center and supervised during the surgical procedure according to institutional policy and procedure to assist in providing a safe operating room environment that maximizes patient safety by performing certain tasks, including, but not limited to:

- (1.) Preparation of the operating room and the sterile field for surgical procedures by preparing sterile supplies, instruments, and equipment using sterile technique;
- (2.) Preparation of the operating room for surgical procedures by ensuring that surgical equipment is functioning properly and safely; and
- (3.) Passing instruments, equipment or supplies to a surgeon, sponging or suctioning an operative site, preparing and cutting suture material, holding retractors, transferring but not administering fluids or drugs, assisting in counting sponges, needles, supplies, and instruments, and performing other similar tasks as directed during a surgical procedure.

68-57-106. Health care providers' duties in surgical setting unaffected.

Nothing in this chapter shall limit or prevent health care providers licensed pursuant to title [63](#) from performing duties in a surgical setting.

Texas

SECTION 1. Subtitle B, Title 4, Health and Safety Code, is amended by adding Chapter 259 to read as follows:

CHAPTER 259. Surgical Technologists at Health Care Facilities

Sec. 259.001. DEFINITIONS. In this chapter:

- (1) "Department" means the Department of State Health Services.
- (2) "Surgical technologist" means a person who practices surgical technology.
- (3) "Surgical technology" means intraoperative surgical patient care that involves:
 - (A) preparing the operating room for surgical procedures by ensuring that surgical equipment is functioning properly and safely;
 - (B) preparing the operating room and the sterile field for surgical procedures by preparing sterile supplies, instruments, and equipment using sterile technique;
 - (C) anticipating the needs of the surgical team based on knowledge of human anatomy and pathophysiology and how they relate to the surgical patient and the patient's surgical procedure; and
 - (D) as directed in an operating room setting, performing tasks at the sterile field including:
 - (i) passing supplies, equipment, or instruments;
 - (ii) sponging or suctioning an operative site;
 - (iii) preparing and cutting suture material;
 - (iv) transferring and irrigating with fluids;
 - (v) transferring but not administering drugs within the sterile field;
 - (vi) handling specimens;
 - (vii) holding retractors; and
 - (viii) assisting in counting sponges, needles, supplies, and instruments with the registered nurse circulator.

Sec. 259.002. REQUIREMENTS FOR PRACTICING SURGICAL TECHNOLOGY.

(a) A health care facility licensed by the department under this subtitle may not employ a person to practice surgical technology in that health care facility unless that person provides evidence that the person:

- (1) has successfully completed an accredited educational program for surgical technologists and holds and maintains the Surgical Technologist Certification administered by the National Board of Surgical Technology and Surgical Assisting or its successor;

(2) has completed an appropriate training program for surgical technology in the army, navy, air force, marine corps, or coast guard of the United States or in the United States Public Health Service;

(3) was employed to practice surgical technology in a health care facility before September 1, 2009; or

(4) is in the service of the federal government, to the extent the person is performing duties related to that service.

(b) Notwithstanding Subsection (a), a health care facility may employ a person to practice surgical technology at that health care facility from the date the person graduates from an accredited school of surgical technology until the 180th day after the date of graduation. The person may not continue to practice surgical technology after the 180th day after the date of graduation without showing documentation to the health care facility that the person holds and maintains the surgical technologist certification required by Subsection (a)(1).

(c) Notwithstanding Subsection (a), a health care facility may employ a surgical technologist who does not meet the requirements of this section if:

(1) after a diligent and thorough effort has been made, the health care facility is unable to employ a sufficient number of surgical technologists who meet the requirements of this section; and

(2) the health care facility makes a written record of its efforts under Subdivision (1) and retains the record at the health care facility.

Sec. 259.003. SUPERVISION OF SURGICAL TECHNOLOGISTS. A health care facility that employs a surgical technologist shall supervise the surgical technologist according to the health care facility's policies and procedures to ensure that the surgical technologist competently performs delegated tasks intraoperatively in accordance with this chapter and other applicable law.

Sec. 259.004. OTHER LICENSED PRACTITIONERS. This chapter does not prohibit a licensed practitioner from performing a task or function within the scope of the practitioner's license.

Sec. 259.005. ENFORCEMENT.

(a) The department may adopt rules to administer and enforce this chapter.

(b) A health care facility that violates this chapter is subject to an administrative penalty, a civil penalty, or other disciplinary action, as applicable, in the same manner as if the facility violated the chapter under which the facility is licensed.

SECTION 2. Section 241.0262, Health and Safety Code, is repealed.

SECTION 3. A health care facility is not required to comply with Section 259.002, Health and Safety Code, as added by this Act, before September 1, 2010.

SECTION 4. This Act takes effect September 1, 2009.

Texas Administrative Code

Title 25. Health Services

Part 1. Department of State Health Services

Chapter 135. Ambulatory Surgical Centers

Subchapter A. Operating Requirements for Ambulatory Surgical Centers

§ 135.15. Facility Staffing and Training

(E) The facility shall adopt, implement and enforce policies and procedures to comply with Health and Safety Code, Chapter 259 (relating to Surgical Technologists at Health Care Facilities).

Examples of Surgical Technology Standards of Practice

1. Standards of Practice for Sharps Safety and Use of the Neutral Zone
http://www.ast.org/pdf/Standards_of_Practice/RSOP_Sharps_Safety_Neutral_Zone.pdf
2. Standards of Practice for Laser Safety
http://www.ast.org/pdf/Standards_of_Practice/RSOP_Laser_Safety.pdf
3. Standards of Practice for Patient Identification, Correct Surgery Site, and Correct Surgical Procedure
<http://www.ast.org/educators/documents/AST%20RSOP%20Patient%20Identification%20Correct%20Site%20Surgery%20Correct%20Surgical%20Procedure.pdf>
4. Standards of Practice for Ionizing Radiation Exposure in the Perioperative Setting
http://www.ast.org/pdf/Standards_of_Practice/RSOP_Ionizing_Radiation_Exposure_10%2013.pdf
5. Standards of Practice for Surgical Positioning
http://www.ast.org/pdf/Standards_of_Practice/RSOP_%20Surgical_Positioning%207.26.11.pdf
6. Standards of Practice for Patient Transportation
http://www.ast.org/pdf/Standards_of_Practice/RSOP_%20Patient_Transportation.pdf
7. Standards of Practice for the Decontamination of Surgical Instruments
http://www.ast.org/pdf/Standards_of_Practice/RSOP_Decontamination_%20Surgical%20Instruments_11.5.pdf
8. Standards of Practice for Packaging Material and Preparing Items for Sterilization
http://www.ast.org/pdf/Standards_of_Practice/RSOP_Packaging_Materials_Preparing_Items.pdf
9. Standards of Practice for Creating the Sterile Field
[http://www.ast.org/educators/documents/RSOP%20for%20Creating%20the%20Sterile%20Field%20\(2011%20Revision\).pdf](http://www.ast.org/educators/documents/RSOP%20for%20Creating%20the%20Sterile%20Field%20(2011%20Revision).pdf)
10. Standards of Practice for Surgical Drapes
http://www.ast.org/pdf/Standards_of_Practice/RSOP_Surgical_Drapes.pdf

11. Standards of Practice for Skin Prep of the Surgical Patient
http://www.ast.org/pdf/Standards_of_Practice/RSOP_Skin_Prep.pdf
12. Standards of Practice for Handling and Care of Surgical Specimens
http://www.ast.org/pdf/Standards_of_Practice/RSOP_%20Handling_Care_Surgical_Specimens.pdf
13. Standards of Practice for Breaking Down the Sterile Field
http://www.ast.org/pdf/Standards_of_Practice/RSOP_%20Breaking_Down_Sterile_Field.pdf
14. Standard of Practice for Counts
http://www.ast.org/pdf/Standards_of_Practice/RSOP_Counts.pdf
15. Standards of Practice for Monitoring Sterility
http://www.ast.org/pdf/Standards_of_Practice/RSOP_Monitoring_Sterility.pdf

A Sample Program for
SURGICAL TECHNOLOGY
12-Month Certificate Program

Introduction

The number of hours in this sample program is established to meet all current criteria for accreditation and to provide sufficient clinical experience to qualify the graduate for the NBSTSA certification exam and to begin employment with the capability of scrubbing alone on basic cases. The curriculum intends to provide the same foundation in surgical technology as an Associate Degree in surgical technology without the attendant academic courses or some elective elements.

Assumptions in Model

- The surgical technologist's primary education is focused on clinical preparedness in the scrub role.
- Surgical technologists are best prepared with a significant bioscience background
- A significant key to success as a practicing surgical technologist is knowledge of surgical procedures
- The *Core Curriculum for Surgical Technology* establishes the minimal content basis for a program in surgical technology
- The program director, clinical coordinator and didactic faculty must hold the Certified Surgical Technologist Credential

Surgical Technology Program: Curriculum Outline

(1) Didactic curriculum:

- (a) 150 hours, including 30 hours of laboratory experience, in basic anatomy and physiology;
- (b) 75 hours, including 30 hours of laboratory experience, in microbiology;
- (c) 15 hours of medical terminology;
- (d) 45 hours of pharmacology;
- (e) 45 hours related to the introduction and fundamentals of surgical technology;
- (f) 120 hours related to principles of the practice of surgical technology in the scrub role;
- (g) 60 hours related to principles of the practice of surgical technology in the circulator role;
- (h) 60 hours related to surgical procedures;
- (i) Practicum of 30 hours related to the introduction to the operating room, PACU, patient transportation and preparation, and sterile processing;

(2) Clinical curriculum: Performing in the surgical technologist role in a minimum of 120 surgical cases, under mentorship, divided as follows:

- (a) 30 general surgery cases, a minimum of 20 of which in the first scrub role;
- (b) 90 specialty surgery cases, a minimum of 60 of which in the first scrub role, in the following surgical specialties: cardiothoracic, ENT, eye, gastrointestinal and urinary, neurosurgery, obstetrics and gynecology, oral/maxillofacial, orthopedic, peripheral vascular, plastics, and procurement/transplant, provided that the cases are evenly distributed among at least five of the surgical specialties identified.

Surgical Technology Program: Curriculum Topics

1. Basic Science
 - (a) Anatomy and Physiology
 - Organization of the human body
 - Cells/tissues/organs/systems
 - Integumentary system
 - Musculoskeletal system
 - Nervous system
 - Sensory system
 - Circulatory system – blood
 - Circulatory system – cardiac
 - Circulatory system – vascular
 - Lymphatic system
 - Respiratory system
 - Digestive system
 - Urinary system
 - Female reproductive system
 - Male reproductive system
 - Endocrine system
 - (b) Pathophysiology
 - Cell pathology
 - Mechanism of disease
 - Tumors
 - Fluid and hemodynamic disorders
 - Inflammation and infection
 - Pathology of the integumentary system
 - Pathology of the musculoskeletal system
 - Pathology of the nervous system
 - Pathology of the sensory system
 - Pathology of the cardiovascular system
 - Pathology of the cardiovascular system
 - Pathology of the Respiratory system
 - Pathology of the digestive system
 - Pathology of the urinary system
 - Pathology of the endocrine system
 - Pathology of the female reproductive system

- Pathology of the male reproductive system

(c) Microbiology

- Introduction to microscope
- Cell structure
- Fluid movement concepts
- Microorganisms
- Immunologic defense mechanisms
- Hypersensitivity
- Process of infection
- Pathogenicity
- Inflammatory process

2. Related Science

(a) Pharmacology (including Anesthesia)

- Medication measurement
- Terminology
- Medications
- Care and handling of medications and solutions
- Medications used in surgery
- Anesthesia
 - Anesthesia administration – selection
 - Pre-operative medications
 - Types of anesthesia
 - Methods of administration
 - Anesthetic agents
 - Roles during administration
 - Phases/stages of general anesthesia
 - Adjuncts to anesthesia
 - Anesthesia equipment – monitoring devices and methods
 - Complications of anesthesia

(b) Medical Terminology

- Elements – prefix/word root/suffix/combining forms
- Word roots related to the digestive system
- Word roots related to the respiratory system
- Word roots related to the musculoskeletal system
- Word roots related to the Genitourinary/male reproductive systems
- Word roots related to the female reproductive system
- Word roots related to other systems

3. Fundamentals of surgical technology

(a) Elements: Preoperative

- Patient care concepts
 - Biopsychosocial needs of the patient
 - Preoperative routines
 - Patient identification
 - Transportation
 - Review of the chart
 - Consents
 - Transfer
 - Anesthesia concepts
 - Positioning
 - Urinary catheterization
 - Skin preparation
- Nonsterile responsibilities
 - Attire
 - Case selection
 - Equipment
 - Instrumentation
 - Room preparation
- Sterile Responsibilities
 - Asepsis and sterile technique
 - Scrubbing
 - Gowning and gloving
 - Preparation of the sterile field
 - Counts
 - Draping
 - Preoperative case management

(b) Elements: Intraoperative

- Patient care concepts
 - Homeostasis
 - Emergency procedures
 - Surgical wound classification
- Nonsterile responsibilities
 - Monitoring the sterile field
 - Documentation
 - Specimen care
- Sterile responsibilities

- Intraoperative case management
- Abdominal incisions
- Hemostasis
- Exposure
- Catheters and drains
- Tissue approximation
- Surgical dressings
- Wound healing

(c) Elements: Postoperative

- Patient care concepts
 - Death and dying
 - Discharge planning
 - Health and wellness
 - PACU
- Nonsterile responsibilities
 - Decontamination/disinfection
 - Reprocessing
 - Sterile storage and distribution
- Sterile responsibilities
 - Postoperative case management

4. Basic Surgical Interventions

(a) Core

- Endoscopic
 - General surgery
 - Choledochoscopy
 - Colonoscopy
 - ECRP
 - Esophagoscopy
 - Sigmoidoscopy
 - Obstetrics and Gynecology
 - Colposcopy
 - Hysteroscopy
 - Otorhinolaryngologic
 - Microlaryngoscopy
 - Triple endoscopy
 - Genitourinary
 - Cystoscopy
 - Nephroscopy
 - Ureteroscopy

- General Surgery
 - Colectomy
 - Colostomy
 - Endoscopic inguinal herniorrhaphy
 - Laparoscopic Appendectomy
 - Laparoscopic Cholecystectomy
 - Modified radical mastectomy with axillary node dissection
 - Open cholecystectomy with cholangiogram
- Obstetrics and Gynecology
 - Caesarean section
 - Laparoscopic-assisted vaginal hysterectomy (LAVH)
 - Laparoscopy
 - Operative laparoscopy with oophorectomy
 - Total abdominal hysterectomy with Bil S&O
 - Vaginal hysterectomy
- Otorhinolaryngologic
 - Myringotomy
 - Septoplasty
 - Sinuscopy
 - Temporomandibular joint (TMJ) arthroplasty
 - Thyroidectomy
 - Tonsillectomy and adenoidectomy (T&A)
- Genitourinary
 - Nephrectomy
 - Orchiopexy/orchidopexy
 - Suprapubic prostatectomy
 - Transurethral resection of the prostate (TUR-A)
- Orthopedic
 - Bunionectomy with hammer toe correction
 - Carpal tunnel release
 - Knee arthroscopy
 - Lumbar laminectomy
 - Open reduction internal fixation (ORIF) of the femur
 - Shoulder arthroscopy

(b) Specialty

- Endoscopic
 - Cardiothoracic
 - Bronchoscopy
 - Mediastinoscopy
 - Neurosurgical

- Ventriculoscopy
- Ophthalmic
 - Cataract extraction
 - Entropion/ectropion repair
 - Recession and resection (R&R)
- Oral and maxillofacial
 - LeForte I
- Plastic and reconstructive
 - Breast reconstruction
 - Rhytidectomy
 - Skin grafting
- Cardiothoracic
 - Thoracoscopy
 - Thoracostomy
 - Thoracotomy-pulmonary wedge resection
- Peripheral vascular
 - Angioscopy
 - Aortofemoral bypass
 - Arteriovenous (AV) fistula/shunt creation/insertion
 - Carotid endarterectomy
- Neurosurgical
 - Cervical discectomy
 - Craniotomy – aneurysm repair
 - Craniotomy – hematoma evacuation
 - Craniotomy – tumor excision
 - Lumbar discectomy
 - Lumbar discoscopy
 - Ventriculoperitoneal (V/P) shunt placement

5. Intermediate surgical interventions

(a) Core

- General surgery
 - Common bile duct exploration (CDBE)
 - Gastrectomy
 - Laparoscopic Nissen fundoplication
 - Lumpectomy (breast) with sentinel node biopsy
 - Vagotomy/pyloroplasty
- Obstetrics and gynecology
 - Cervical Cone Biopsy
 - Ectopic pregnancy resolution

- Endometrial ablation
- Vulvectomy
- Otorhinolaryngologic
 - Caldwell-Luc
 - Tracheotomy/tracheostomy
 - Tympanoplasty II
 - Uvulopalatopharyngoplasty
- Genitourinary
 - Cystectomy
 - Hypospadias repair
 - Marshall Marchetti Krantz procedure
 - Ureteropyelolithotomy
 - Urethrovesical angle repositioning
 - Vasovasostomy
- Orthopedic
 - Bipolar hip replacement
 - Femoral rodding
 - Lower extremity amputation (BKA/AKA)
 - Metacarpophalangeal joint (MPJ) arthroplasty
 - Tenorrhaphy
 - Triple arthrodesis

(b) Specialty

- Ophthalmic
 - Enucleation
 - Keratoplasty (corneal transplant)
 - Scleral buckle
- Oral and Maxillofacial
 - LeForte II
 - Odontectomy
 - Open Reduction Internal Fixation (ORIF) maxillary/mandibular
 - Orbital fracture reduction/stabilization
- Plastic and reconstructive
 - Abdominoplasty
 - Cleft lip/palate repair
 - Microvascular pedicle graft
- Cardiothoracic
 - Cervical rib resection
 - Coronary angioplasty
 - Decortication of the lung

- Pacemaker insertion
- Pericardectomy
- Peripheral vascular
 - Femoropopliteal bypass
 - Greenfield filter insertion
 - Popliteal in-situ graft
 - Venous access device implantation
- Neurosurgical
 - Cranioplasty
 - Rhizotomy

6. Advanced surgical Interventions

(a) Core

- General Surgery
 - Abdominoperineal resection (Miles resection)
 - Esophagectomy
 - Liver transplant
 - Whipple procedure
- Obstetrics and Gynecology
 - Micro-tubal reanastomosis
 - Uterine balloon therapy
 - Wertheim procedure (pelvic exenteration)
- Otorhinolaryngologic
 - Laryngectomy
 - Mastoidectomy
 - Radical neck dissection
 - Tympanoplasty
- Genitourinary
 - Adrenalectomy
 - Cystectomy with creation of ileal conduit
 - Insertion of penile implants
 - Kidney transplantation
 - Ureteral reimplantation
- Orthopedic
 - Anterior cruciate ligament (ACL) reconstruction
 - Limb reattachment
 - Open reduction internal fixation (ORIF) pelvic fracture
 - Total hip arthroplasty
 - Total knee arthroplasty

(b) Specialty

- Ophthalmic
 - Vitrectomy
- Oral and Maxillofacial
 - Craniofacial reconstruction
 - LaForte III
- Cardiothoracic
 - Aortic/mitral valve re placement
 - Batista procedure
 - Coronary artery bypass graft (CABG)
 - Lung transplantation
 - Lung volume reduction procedure
 - MID-CABG
 - Pneumonectomy
 - Aortic arch aneurysm repair
 - Transmyocardial revascularization
- Peripheral vascular
 - Abdominal aortic aneurysmectomy with graft insertion
- Neurosurgical
 - Acoustic neuroma resection
 - Anterior thoracic/lumbar discectomy
 - Arteriovenous malformations (AVM) repair
 - Posterior fossa craniectomy
 - Spinal fixation
 - Spinal tumor excision

7. Special considerations/populations

- Geriatric patient
- Immunocompromised patient
- Mentally-challenged patient
- Pediatric patient
- Physically impaired patient
- Trauma patient

8. Application: clinical case requirements

(a) Core

- General surgery procedures
- Obstetrics and gynecologic procedures
- Otorhinolaryngologic procedures
- Genitourinary procedures

- Orthopedic procedures
- (b) Specialty
 - Ophthalmic procedures
 - Oral and maxillofacial procedures
 - Plastic and reconstructive procedures
 - Cardiothoracic procedures
 - Peripheral vascular procedures
 - Neurosurgical procedures
- (c) No level
 - Endoscopic procedures
- (d) Scrub role – first scrub with assist
- (e) Scrub role – first scrub solo

9. Practice

- (a) Professional management
 - Information management
 - Professional credentialing
 - Professional organizations

10. Self-management

- (a) Communication
 - Group dynamics
 - Leadership
 - Teamwork
- (b) Professionalism
 - Affective behaviors
 - Critical thinking
 - Employability skills
- (c) Standards of conduct
 - Ethical and moral issues
 - Legal issues
 - Risk management
- (d) Workplace management
 - Hospital organization and management
 - Physical environment
 - Scope of practice

Hospital	City	Require graduation from an accredited program?	Require certification from the National Board of Surgical Technology and Surgical Assisting?
Over 400 beds			
Sacred Heart Medical Center 509.455.3226	Spokane	Graduation from an accredited program "preferred "	CST certification "preferred."
Swedish Medical Center/First Hill Campus	Seattle	Graduation from an accredited program "preferred "	CST certification "preferred."
University of Washington Medical Center: 206.598.3300	Seattle	Graduation from an accredited program "preferred "	CST certification "preferred."
PeaceHealth Southwest Medical Center	Vancouver	Graduation from an accredited program required.	CST certification required.
VA Hospital	Seattle	NA-Not impacted by state law	
Harborview Medical Center; 206.744.3246	Seattle	Graduation from an accredited program "preferred "	CST certification "preferred."
300 to 400 beds			
Tacoma General Hospital: 253.403.1000	Tacoma	Graduation from an accredited program "preferred "	CST certification "preferred."
Providence St. Peter Hospital	Olympia	Left a message with Laurie.	
Providence Regional Medical Center Everett	Everett	Graduation from an accredited program "preferred "	CST certification "preferred."
Overlake Hospital Medical Center	Bellevue	Graduation from an accredited program "preferred "	CST certification "preferred."
St. Joseph Medical Center	Tacoma	Graduation from an accredited program required. Because Franciscan Health consists of 5 hospitals, unable to provide number of CSTs currently employed.	CST certification "preferred."
Virginia Mason Hospital	Seattle	Left voice messages. Unable to reach a real person.	
Deaconess Medical Center	Spokane	Awaiting response	
200 to 300 beds			
Harrison Memorial Hospital	Bremerton	Graduation from an accredited program required. Eighteen CSTs employed. They've hired four this year alone.	CST certification required.
Northwest Hospital	Seattle	Graduation from an accredited program required. 15 CSTs (total, both L&D, O.R)	CST "preferred."

Evergreen Healthcare	Kirkland	Graduation from an accredited program required ; 22 CSTs (total, from both L&D, O.R.)	CST " preferred. "
Good Samaritan Community Healthcare	Puyallup	Does not require graduation from an accredited program. Part of Multicare - (4) hosp and few clinics; unable to give CST#s but total STs is 75; Guesses prob more than 1/2 are certified.	CST " preferred. "
Providence Holy Family Hospital	Spokane	Graduation from accredited program required ; 21 CSTs in Main O.R.; 3 in L&D	Certification must be obtained within the first year of employment
Valley Medical Center	Renton	Graduation from a program " preferred. "	CST " preferred. "
St. Joseph Medical Center	Bellingham	Graduation from an accredited program " preferred. "	CST " preferred. "
Central Washington Hospital	Wentachee	Graduation from an accredited program required.	Certification required.
Madigan Army Medical Center	Tacoma	NA-Not impacted by state law	
Swedish Medical Center/Edmonds Campus	Edmonds	"Certificate of completion of a surgical technician vocational program or documentation of equivalent training." Does not specify accreditation status.	"National certification by the Liaison Council on Certification for ST is preferred." (Liaison Council on Certification's name has changed to the National Board of Surgical Technology and Surgical Assisting.)
100 to 200 beds			
Swedish Medical Center/Cherry Hill Campus	Seattle	"Certificate of completion of a surgical technician vocational program or documentation of equivalent training." Does not specify accreditation status.	"National certification by the Liaison Council on Certification for ST is preferred." (Liaison Council on Certification's name has changed to the National Board of Surgical Technology and Surgical Assisting.)
Legacy Salmon Creek Hospital	Vancouver	"Graduate of an accredited Surgical Technologists course or two years of Surgical Tech experience in an Operating Room setting."	"Surgical Technologist certification preferred for state of Oregon." (This is not a typo. The posting was definitely for a position in Vancouver, Washington.)
St. John Medical Center	Longview	"Graduation from an approved school of surgical technology or those individuals whose training (i.e. military) qualifies them for certification eligibility."	"Qualified applicants must have current certification as a certified surgical technologist."

Swedish Medical Center/Ballard Campus	Seattle	"Certificate of completion of a surgical technician vocational program or documentation of equivalent training." Does not specify accreditation status.	"National certification by the Liaison Council on Certification for ST is preferred." (Liaison Council on Certification's name has changed to the National Board of Surgical Technology and Surgical Assisting.)
Capital Medical Center	Olympia	"Surgical Technician program from an accredited Vocational / Technical institution preferred"	"Certified Surgical Technician (preferred) and current Basic Life Safety course (required)"

Appendix D

Public Hearing Summary

And Participant List

Surgical Technologist Sunrise Hearing
August 14, 2012
Draft Summary

Andy Fernando called the hearing to order at 1:06 PM. He introduced staff, Sherry Thomas, sunrise review coordinator and the hearing panel who was there to help make sure the department has all the information needed to make a sound recommendation.

DOH panel members were:

- Dianna Staley, Compliance Manager in the Health Systems Quality Assurance Division;
- Kristin Peterson, Staff Attorney in the Health Systems Quality Assurance Division; and
- Terry Frazee, Special Assistant for Radiation Protection in the Environmental Public Health Division.

He stated the hearing was for proponents to make their presentation, and for opponents and other interested parties to comment on the proposal. He gave some next steps to the process which are listed at the end of the hearing summary and told participants that the recommendations in the report will be based in part on the hearing. The report is expected to go to the Secretary of Health for approval in October.

Mr. Fernando reminded participants to keep to the statutorily mandated criteria as much as possible. He explained it was not a legislative hearing, so factors outside the criteria would not help or hurt the proposal under review. He stated it is the legislature's job to take political arguments and other factors into account; but they have specifically asked the department to look at certain criteria. He told participants the hearing was being recorded and their testimony would be shared with interested parties.

Mr. Fernando introduced the applicants and asked them to present their proposal.

Catherine Sparkman, Director of Government and Public Affairs for the Association of Surgical Technologists (AST)

Ms. Sparkman presented the PowerPoint attached at the end of this hearing summary. She gave her background which included previously being a lawyer who worked with medical malpractice in hospitals. She stated when she began, 85% of those in the scrub role were nurses and now it is basically reversed.

She showed the growth of surgical technologists and their education, stating there were 1,500 candidates in the first certification hearing and there are now 55,000 certified surgical technologists nationally. This is one of the fastest growing medical professions according to the Bureau of Labor Statistics. Surgical technologist programs have grown from 58 to over 500 programs across the country, with programs lasting from 12-24 months in community colleges and technical schools. There are seven programs in Washington and about a dozen more in Idaho and Oregon, with additional opportunities for distance learning.

Ms. Sparkman stated her presentation was from a patient perspective, rather than a provider, and that she has no experience behind the "double doors." She has always assumed all members of the surgical team are competent and properly educated. She gave some background that the national association has many initiatives across the country to credential surgical technologists.

She presented history about the surgical technologist profession and a quick overview of the proposed changes in the proposal, which include a clearer definition of the profession, certification requirements, and exemptions to include military trained technologists, grandfathering, a grace period, student practice,

and other licensed practitioners (Slide 2 of her PowerPoint). She stated this does not expand the scope of practice and the current tasks should not change with this proposal. She also clarified their intent was not to have this apply to facilities outside hospitals and is only intended to apply to major surgical procedures. She said their intent was not for it to cover office based surgery or minor surgery performed in ambulatory surgical facilities.

There are only three states that build competency into the professional credential, Illinois, Virginia, and Washington. She invited participants to view an actual surgery and volunteered to arrange it at a Washington hospital if anyone was interested.

Ms. Sparkman went through slides showing roles in the surgical suite and who is inside and outside the sterile field. She explained the surgical team used to be very hierarchical with a “top dog” on down and she compared it to a plane’s cockpit. She said in 1977, two planes collided on a runway in the Canary Islands, with almost 600 people killed, which changed the “hierarchical cockpit” to more of a surgical team. She said surgery follows the “aviation model” in how surgery is performed, with the surgeon serving as the “captain of the ship in many respects” from a liability standpoint. That is still present in Washington but has been modified. She went over roles:

- Anesthesia providers can be physicians or certified registered nurse anesthetists, who are outside the sterile field and their role is to ensure the patient comes through the surgery comfortably.
- RN circulators are also outside the sterile field, help prepare the room for the procedure, and collaborate with the surgical technologist and other members of the team. During the intraoperative portion of the procedure they monitor the patient, document the patient’s surgical record, and assure the surgical team has all the necessary instruments and supplies to conduct the procedure efficiently and safely. In some complex procedures there may be two circulators, the RN circulator and the assistant circulator. Surgical technologists have also filled that role.
- Surgical assistants are licensed providers in Washington. Not all surgeries require a surgical assistant – they are an additional pair of hands for the surgeon and are intimately involved in the procedure. They do tasks like hemostasis, retracting, tying blood vessels, applying clamps, suturing, rongeurs, and harvest veins in cardiac procedures, etc. (See Slide 8 in PowerPoint).
- The American College of Surgeons has a list of the surgeries that require a surgical assistant, which are those of elevated complexity.

She compared surgical technologists to the “former Hotlips Houlihan and the duties she performed on the sow, Mash. She stated surgical technologists are now serving in that role almost exclusively. Washington Administrative Code lists the functions, not a scope of practice but an enumerated list. Surgical technologists start at the beginning of the room to prepare it. They participate in the intraoperative, as well as post-operative phases. They are supervised by licensed practitioners according to Washington law and WAC. They perform delegated functions during the surgical procedure. The list of tasks and functions is in 246-939-030. Surgical technologists are complete and integrated members of the surgical team. Ms. Sparkman gave an example of a surgical technologist in Minnesota who stopped a surgical procedure because she realized the wrong procedure was being performed, not the doctor, etc., but the surgical technologist. She said this is a tribute to the surgical team that this type of respect exists.

Ms. Sparkman showed some photos of what surgical technologists do. She said they set up the room in collaboration with the RN circulator. They scrub in making sure they follow all aseptic techniques. They create the “sterile field,” which is terminology in Washington’s rules and regulations. They prepare the instrument field and check equipment for functionality. They help the surgical members inside the sterile field to scrub in, using the same attention to asepsis. They monitor and facilitate instrumentation. She showed some pictures of the types of instruments used in surgeries. She said when she started practicing law in the seventies, the average surgery had 22-26 instruments used. In the total knee replacement mock

surgery she watched, she was told there were 1,146 instruments on the trays. She showed photos on a slide of how small some of the instruments are.

Surgical technologists pass instruments, sponge and suction, transfer and irrigate with fluids, transfer drugs but don't administer them, handle specimens and chart them for use, hold retractors, apply electrocautery, cut suture materials (See slide 16). She stated that one surgeon told her, "the surgical technologist is my left hand." They are completely involved in the procedure.

A professional surgical technologist told her that a perfect surgery usually occurs in silence because the surgical technologist anticipates the surgeon's requirements. It is seamless, with the communication happening effortlessly in and outside the surgical field. It is efficient and effective. A Wisconsin surgeon testified before their legislative health care committee that every second a patient is under anesthesia, it gets worse for them, so the procedure needs to be efficient, effective, and fast.

Ms. Sparkman showed photos showing technology, such as robotic surgery. She pointed out that everyone was huddled around the patient except the surgeon who was off looking like he was playing a video game. The surgical team is managing the robotics and the surgeon has his back to the patient during the procedure. The communication and correspondence and expertise necessary to make this successful is a critical aspect of the surgical technologist's training.

The collaboration of the surgical technologist and RN circulator results in a final count to reduce, minimize, and ideally eliminate retained objects. In the surgery she observed, the surgeon dropped a screw while putting a plate in a broken collarbone. Everyone heard it ping, but it was the responsibility of the RN circulator and the surgical technologist to account for every instrument, tool, sponge, and screw used during the procedure. She pointed to a slide showing an ex-ray where a sponge had been left in.

She stated the surgical technologist assists the surgeon in closing, preparing sutures, cutting them, and providing them to the surgeon seamlessly. It is an amazing dance, the interaction between these medical professionals.

The AST public policy is based on appropriate education and objective measure of competency through a national certification exam administered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA). Programs are accredited through the Commission on Accrediting Allied Health Education Programs (CAAHEP), Accrediting Bureau of Health Education Schools (ABHES), and ARC/STSA, which is an independent organization that provides the recommendation for accreditation of surgical technology programs. There are 500 accredited programs in the U.S. and seven in Washington along with several near Washington.

Certification is administered through the NBSTSA. It is a separate and independent organization accredited by the National Commission for Certifying Agencies (NCCA) which is the certifying body of the Institute for Credentialing Excellence. The NBSTSA is the only surgical technology credential that is recognized by this esteemed national organization. There are no requirements for membership in the AST to attend a program or sit for the certification exam. They are separate organizations distinct from one another. The renewal of the NBSTSA credential renewal requires 15 hours of continuing education. Hospital in-service qualifies for the CE credits so costs can be very minimal for these classes.

Ms. Sparkman stated she was previously the executive director for the Association of Perioperative Nurses (AORN) and has been active in the operating room, though not a resident of it, for a number of years. Right now there are 6 states that require education and certification of surgical technologists. (See slide 24 of PowerPoint for list of states.) She said she is not seeing results of the required competency in

those states. There are 14 states where legislation is pending, where members have been very active in seeking competency in the operating room. New York and Massachusetts have bills pending approval.

Virginia had a sunrise review on a bill similar to the proposal under review here in Washington. (The list of states with bills pending or introduced are listed on slide 24 of the PowerPoint.) Illinois has professional regulation for surgical technologists that is voluntary and there is a sunset clause for 2013, with a bill proposed to extend this regulation and require certification.

Ms. Sparkman concluded with the reasons and rationale why AST has moved forward with this proposal. She said it is to protect patients from life-threatening surgical site infections, malfunctioning equipment and unneeded delays during surgical procedures. She said 290,000 hospital acquired infections have been identified by the CDC as occurring in the operating room. Competent technologists help the procedure to go faster and more efficiently. They respond appropriately and meet the needs of the surgeon and surgical team members because they have the didactic and clinical training necessary. They also assure that the integrity of the surgical procedure allows patients the optimal outcomes they deserve and expect.

Ms. Sparkman said the motto of surgical technologists is *Aegar primo*, which is Latin for “patient first.” This motto was passed in 1978. She said she is often asked what is in it for surgical technologists. It’s not money, (she has seen that salary and benefits are the same in those states that require certification as in the states that don’t). She said 55,000 surgical technologists continue to practice in this ever-evolving industry and it’s not the power. Surgical technologists work under supervision and delegation by law of a licensed health care practitioner. She said that everybody is the boss of them. It’s not the ego. The functions that exist today are the same tasks and functions that will be extant once there are objectively smarter, more competent credentialed people performing them. She stated it is the patient, their family, their loved ones, and friends. She said that patients are asleep and vulnerable and count on them and the assurance that every member of the surgical team can show objective competency in the operating room.

Panel Questions

Dianna Staley asked about the timeframe for programs being 12-24 months long and what makes up the difference in time between different programs.

Ms. Sparkman responded that she probably shortened the 12 months because the minimum is around 14 months, and the 24 month program is an associate’s degree that requires some general education subjects not specifically focused on didactic and clinical curriculum.

Terry Frazee asked about the statement that the NBSTSA is the only certifying body recognized, but he heard a comment about someone who was certified by another board. Are there others?

Ms. Sparkman stated there is one other, the NCCT that she is aware of. It is not accredited by the NCCA because the examination has never been validated as meeting their requirements.

Ms. Peterson asked her to speak more to the certification process and the exam.

Ms. Sparkman responded since it isn’t public she can’t really speak to it, but it’s developed by a committee from the NBSTSA and not by AST or its education accrediting group. It is an internal committee that tests clinical and didactic knowledge of anatomy, physiology, the sterile field, instrumentation, problem-solving, all the things that would go along with assuring competence. She stated Janice Olmstead can probably answer more of these questions since she is certified and the former president of AST. She assured us the exam is psychometrically validated by external organizations to

assure it represents the core curriculum, which is several pages long. There are about 27 pages of didactic information that is covered.

Ms. Peterson asked if the only avenue of taking the exam involves a formal program or does on-the-job training qualify?

Ms. Sparkman responded that yes, the formal training program is required. With the addition of 500 programs, the educational portion of the exam is even more important.

Ms. Staley said she saw somewhere the program can cost up to \$20,000. She asked if Ms. Sparkman could speak to the cost of the program and also the cost to sit the certification examination.

Ms. Sparkman replied that GAO just did a study on proprietary programs and she assumes a student who wants to enroll in an exam could pay as much as \$20,000 for a private, proprietary, for-profit exam (though she stated she didn't have specific data with her). The range extends from the high end of a private, for-profit proprietary school all the way down to community access where the accredited education can be reasonable. She said she wasn't speaking on behalf of the board. She said she thinks the administration of the certification exam for students graduating from the program is \$240-250. Recertification is 60 hours of continuing education in 4 years, and the cost to monitor and verify 60 hours is \$400 spread over 4 years. The AST has agreed to defray part of the cost of re-certification to members by \$80. She said this is a member benefit that goes along with the journal, practicum, etc. that associations offer to members.

Mr. Frazee asked about board certification and accreditation. He asked for the one board that exists, is there oversight, by maybe the NBSTSA, that is not connected to the schools. Is it a separate entity? You pass the program and then sit the exam and if you pass you are certified? He also asked if there is someone who verifies the exam.

Ms. Sparkman replied that the NCCA assures the test is valid, and part of maintaining that assurance is proving the test is psychometrically valid and pure and has been externally validated and is appropriate to the goals of the profession. That's what the NCCA does for a variety of medical professions including surgical technologists.

Mr. Frazee tried to clarify whether the applicant is only looking for certification in the hospital setting.

Ms. Sparkman stated that they intended it to apply to hospitals, not minor surgery, ophthalmology surgeries, or those in ambulatory surgery facilities. That was their intent and the other entry to practice bills in other states they introduced had an exemption for these types of surgeries.

Mr. Frazee then asked how many Washington hospitals require certification for surgical technologists.

Ms. Sparkman replied they tried to get some data but they don't have access to a lot because of HIPAA and other laws. For example in Virginia they looked for whether surgical site infections were impacted in hospitals that required certification of technologists. She said they tried to do the same in Minnesota where seven or eight of their reportable events happen in the operating room and there is public data they could use. She said she tried to hone in on something she thought could at least be helpful if not verifiable. They don't study surgical technologists because they are not licensed or regulated. She said root cause analyses aren't available.

She stated in Virginia they separated costs out by hospitals because it's public information about the cost of surgical site infections. She said they called every hospital that had reported and asked them if they

required certification of surgical technologists. They then separated that data into hospitals that do and don't require certification, and that's where they came up with an 11% decline in costs of treating surgical site infections. She said they also found out how much they cost by the day and factored it in, a true layman's way of doing that. She asked, can she say that surgical technologist certification stopped infections in that instance? She said she knows personally that hospitals are doing something different. Are they better because they hire certified surgical technologists? She stated in Minnesota, they found that the incidence of adverse surgical conditions declined 31% in hospitals that require certification for all surgical technologists (they called every single hospital). She asked, can she tie that back, no and it would be disingenuous for her to do that. But she stated that something was happening with this 31%. She asked was it because these were the best hospitals or hospitals that paid attention to surgical patient safety and required certification. She said she thinks the application of common sense underscores the validity of more competent people performing more complex things. She said, to answer Mr. Frazee's question, they will call every hospital and ask them and if they will tell them, and be happy to report that back.

Janice Olmstead

She stated she is a certified surgical technologist, retired physician's assistant surgical assistant and past president of the AST. She said she is currently serving as the assistant to the legislation of Washington State Assembly and serves as an ARC site visitor for the accreditation of surgical technology programs in the United States. She said she is passionate about this profession which she's been in for over five decades. She said she has seen a lot of evolution in this profession. She started as an operating room technician in 1961 and held the credential of an LPN since she had attended Sacred Heart School of Nursing. But her designation was operating room tech. One of the reasons they put her in that position was because she had an identifiable didactic background to be trained in the skills of surgical technology and had done a 6-week rotation in the operating room as a student. She said the evolution of surgery from when she started is mind-boggling. Ms. Olmstead gave some examples of techniques used when she started to illustrate how critical formal training and background is for these newer surgical procedures. She said they are now using robotics so they knew they had to change their curriculum for surgical technologists if they were going to be working with robotics and to give them an instinct for sterile conscience which requires critical thinking skills.

There are approximately 100 graduates per year from the seven Washington programs and they all graduate with the ability to sit for the national exam. She said there are also many military people who are eligible to sit for the credential. They bring a professional conscience if they keep their certification current that leads to an attitude of professionalism and how to deal with ever changing procedures. She said the panel's notebooks include a new report that identifies the difference in outcome between formal education and on-the-job training in performance, done by a neuroscience professor in Chicago. She said this certification is an entry level just as the new medical assistant certification is entry level. Some licensed professions use the certification as a professional career ladder designation such as certified operating room nurse. Ms. Olmstead said that is not what they are doing. They are creating an entry level certification for surgical technologists. She said if they want to have recognition for going further in their career field, the AST has a designation called FAST Fellow Association of Surgical Technologist.

She stated she can't emphasize enough how much surgery is always changing and how important clinical training is in successful outcomes of these complex procedures. The computer chip has revolutionized everything. It's exciting while challenging and demands formal education to provide quality, cost-effective care.

Ms. Peterson asked if programs are able to keep up with the changes in technology and whether the programs are specialized or more generalized.

Ms. Olmstead responded the CAAHEP requires clinical rotations in all of the traditional and current surgical procedure needs. They may observe some of the “sexier” procedures but the requirement is in the traditional procedures. In order to graduate they must observe a wide variety of procedures, between 88 and 128 various surgeries in ENT, orthopedics, thoracic, vascular, etc. As of this year one of the outcome measurement tools is the CST exam.

In response to the earlier question about the programs being between 12-4 months, proprietary schools aren’t very active in our state. The seven accredited schools are all community colleges. They graduate 100 students per year.

Ms. Staley asked for a general idea of how much of the training is devoted to clinical training versus classroom training.

Mr. Fernando asked for the question to be tabled until the appropriate person is at the podium to respond.

Mr. Frazee asked for people in the sterile field, surgeon, scrub nurse, surgical tech, when you introduce a new technology such as robotics, does that alter the number of people involved? Does it make the role of the surgical tech role greater?

Ms. Olmstead clarified that you sometimes also have a surgical assistant depending on the procedure, and there is always a circulating nurse. She doesn’t know the answer to the question because she hasn’t participated in robotics.

Ms. Staley asked to clarify if the old operating room nurse isn’t the same as it used to be. It’s now a circulating nurse and the surgical technologist is now taking on part of the duties of the previous operating room nurse?

Ms. Olmstead responded that part of the evolution of the surgical technologist was the military “mash units” realizing they could use surgical technologists in the scrub roles because they have these skills.

Mr. Frazee asked how much experience should be required for grandfathering. He stated the proposed bill seems to allow a surgical tech with one day of experience to be grandfathered.

Ms. Olmstead stated they must be currently employed. She feels the experience should be employer-verified that they are qualified if coming from a non-certified background.

Mr. Frazee asked how many hospitals require certification.

Ms. Olmstead responded there are many who recognize it and reward it through pay-differential but may not require it.

Ms. Staley asked about the applicant stating earlier that their intent is for it to apply to only hospitals. She stated there was some confusion in the applicant report about adverse event laws, which apply to many different types of facilities. Only full, large hospitals like Harborview? Or what about ASCs or childbirth centers? Not the smaller outpatient facilities? She said she knows some of the ASCs can be pretty large.

Ms. Sparkman stated that in other states the goal has been to capture those facilities performing significant surgery with risk of sepsis, complicated instrumentation, and complexity of procedure, etc. She said she is not expert in the laws of all the states so the issues with the language are due to her drafting it. The laws in Washington are a bit different than some other states in how ASFs are treated. She said they will defer to our expertise on this issue, but their intent is for this to apply to hospitals and

hospital-associated surgery centers, those major surgeries they are attempting to capture because they have the highest risk to patients in regard to sterile technique and asepsis.

Ms. Sparkman stated she is sensitive to the grandfathering issue with someone only practicing for one day. She said there are a variety of grandfathering schemes across the states and they are open to having grandfathering language that is appropriate. In response to Mr. Frazee's question about what is an appropriate length of time to have been practicing, Ms. Sparkman replied two out of the last five years.

Sandra Manwiller

She supports this legislation. She is a member of the Washington State Assembly of the Association of Surgical Technologists and has been certified since 1992. Their mission is to deliver safe, quality surgical patient care. She stated some feel certification places unnecessary staffing mandates and regulatory burdens on hospitals because the pool of candidates dwindles, but with seven schools across Washington and 500 across the U.S. there will always be new pools of candidates ready for employment. Also, the grandfathering of currently practicing surgical technologists and military trained technologists will add to the pool. Patients are more knowledgeable these days, but those under anesthesia cannot make informed decisions and assume operating room staff are properly educated and trained.

Ms. Manwiller stated that certification differs from licensure, which is not what they seek because it's portable and can be carried across state lines, as long as the credential remains current. She said some may argue certification as a condition is unnecessary because there is no conclusive data that doing so improves patient outcomes. She said while this data is hard to come by, she wanted to draw our attention to doctors. According to the American Board of Medical Specialties, 85% of medical doctors in the U.S. are board certified. There are a few published studies, approximately 5%, looking at whether board certification improves the care provided by doctors. Of the published studies, more than half support the relationship between board certification and patient outcomes.

In a 2004 article by the American Medical Association, they wrote that the public perceives certification as the gold standard and if the provider possesses this certification he or she has the knowledge and skills to be competent. Many hospitals proudly acknowledge board certified physicians. Retaining this certification shows a commitment to lifelong learning and ongoing improvement in skills. She said she there is a statement in the panel's binders from the American College of Surgeons about the value of surgical technologist education and credential. Nurses have long understood certification has merit with initiatives such as Magnet Hospital designation, which values a highly educated workforce and evidence based practices. Nurses seek certification in their own clinical specialties.

Ms. Manwiller stated that surgical technologists have a unique field of focus in their education, knowledge base, and credential compared to a nurse or physician. She asked for the same consideration for surgical technologists from their medical partners. She also stated that Washington State Medical Association recently endorsed the credentialing of medical assistants.

She told a story about when she was hired in labor and delivery, that the person who trained her was trained on-the-job. She said she did a fine job, but she often wondered and even resented a hospital hiring someone from off the street to work in surgery when she herself spent three years earning her associate degree and when she graduated and took a national exam. She began to wonder about the value of a degree and if on the job training was enough. Could just enough training carry a person through an emergency when they haven't had didactic instruction or clinical instruction in a variety of procedures or maintained professional development? She said you can train somebody to do just about anything but understanding why you are doing it takes a further body of knowledge than simple training. She said she received her bachelors degree in 2003 and left health care. She said she maintained her credential through CE credits. In 2009 she returned to the health care field and on her second day back as a surgical

technologist, after seven years of not doing surgery, she had to do an emergency hysterectomy on a patient who wouldn't stop bleeding after her vaginal delivery. Her preceptor who was formally trained but not certified told her to do the surgery, so she did and tapped into what she remembered. She said she was terrified and fumbled a bit but got through it. It took a team of doctors and nurses and techs that day to save that patient's life, but she has a healthy baby and is doing well. Ms. Manwiller said that experience answered her questions about whether formal education has value and whether maintaining the certification make a difference. She was able to act quickly to save a life even after all the years of not lifting a single instrument. Surgical technology programs develop critical thinking skills that helped. They are in the business of professional accountability.

Mr. Frazee asked the question about the criterion regarding harm. He asked if she could show us that harm has been done through her personal experience.

Ms. Manwiller reiterated that since there hasn't been regulation, she doesn't know about specific data that she can show. But she said they need to show that they are at a competent level to do their jobs and maintaining CE can validate to their employers and team members they are competent in what they are doing in the operating room.

Mr. Fernando called the other applicants back for further questions.

Ms. Peterson asked about the legislation. She asked about the definition of surgical technologist, which includes other surgical tasks as directed and asked what is intended by this statement.

Ms. Sparkman said it was just rewording what is in the regulations now. It was meant to be descriptive, not scope, and surgical tasks as directed depends on the authority of the person doing the delegating. The law requires the delegator to verify the competence of the person they are delegating to, their ability to perform the task and that the task doesn't impinge on the scope of medicine or nursing. She said it's in all the bills they have passed around the country.

Ms. Peterson also asked about section four, where the original law refers to "registered" and was changed in the proposed bill to "licensed" providers being exempt from certification. She asked whether there was a specific intent behind that.

Ms. Sparkman said they were trying to ensure, for example nurses who still like to scrub, would not be prohibited from doing so. She stated they were trying to protect the others' scopes of practice. She also added that there are other anecdotal instances of harm they have provided but they are difficult to find data on. They collect the stories when they have the opportunity.

Public Testimony

Rebecca (Becky) Davis

She stated she is a registered nurse, and has been certified in the operating room since 1988. She works in a large medical center and has been working the past nine years more in quality improvement and patient safety arenas. She has had the opportunity to continue educational processes with the surgical team. This is about a team that functions well together. The certification process more or less ensures there is ongoing lifelong learning. The folks currently certified have shown this is important to them and they continue to keep up with the rapidly changing environment.

She started out almost 48 years ago in health care as a surgical technologist for a brief time and went on to get her LPN and RN. She has seen the evolution of the attempts to rid them of the hierarchical

establishment so the team, physician, RN, surgical technologist work together and are accountable. The RN as circulator, or scrub nurse oversees the care and safety of the patient from a broad perspective through the use of the nursing process. They are assessing continuously throughout the procedure and post-surgery, planning and implementing as well. They work together with the excellent performance of the physician, surgical technologist, anesthesiologist and the rest of the team to care for the patient. She said she is the Washington state chair of the Association of Perioperative Nurses (AORN) and the president of the Washington State Association of Perioperative Nurses, etc., so she is very involved in patient safety and quality of care in the operating room.

AORN supports this certification bill and wants to recognize that education is the key, not just to be certified. AORN also wants to make sure with any bill regarding surgical technologists that they are under the registered perioperative nurse.

Ms. Staley asked on average in the O.R. setting, how many cases or procedures might a surgical technologist be involved in on a given day, and what kind of variety would they participate in.

Ms. Davis replied that it depends on the organization. Some organizations have teams focused on specialties and some mandate that everyone can do everything. She is often expected to know ortho even though it's not her favorite. That's why surgical technology training is global so they have the opportunity to work in all areas. There could be anywhere between two and fifteen surgeries and they could be all hearts, all hernias, depending on the scheduling, etc. and also whether a tech is assigned to a specific room.

Mr. Frazee asked her about harm she has witnessed.

Ms. Davis responded that's why the team concept is so important. There are a lot of near-misses, not just with surgical technologists. If you devote yourself to lifelong learning you learn every time there is a near-miss or something bad happens. She said she can't think of any stories off the top of her head. It's not about the individual or blame. It's about the process and the system and what is not working in that system that allowed the error to slip through. Was it a new nurse circulator who didn't pick up on something? Was it a surgical tech tired of being yelled at by the surgeon because they are too slow? It can be many things.

Aaron Weingeist was called up but asked to defer until after more testimony has been given. He was warned there may not be time, but still wanted to wait.

Carl Nelson, WSMA

He wanted to emphasize a couple of things from their letter. WSMA agreed with the first speaker that the delegator is responsible for verifying the competency of the delegates. There is nothing they see in the proposal that meets the sunrise criteria; more specifically that unregulated practice can clearly harm or endanger patient safety. He said they know there is no empirical data that fits the criteria in the sunrise review. The proposal doesn't benefit patients and fails to demonstrate the need for mandatory certification of surgical technologists. The leading malpractice insurers in the state have determined surgical technologists in Washington are adequately supervised and not responsible for patient injury in this state. An ophthalmological insurance company which provides medical malpractice insurance to ophthalmologists has come to a similar conclusion that mandatory certification is not supported by reliable data and is unnecessary from the standpoint of professional liability. They also believe the bill is overly broad and what it really does is confer licensure. They don't see justification for this. The current level of regulation which is proper according to the sunrise review provides adequate regulation.

Ms. Staley asked since it's hard to find hard data that is current, with some of the case information and statements made, it's hard to figure out what has happened in a specific case, if the issues were systemic, or training issues. Does WSMA have any information or data that would fit this?

Mr. Nelson said he is not aware of any data that says higher levels of education would do that. He said he knows there were 11 disciplinary cases last year for surgical technologists and most of those were not practice-related. There doesn't seem to be any justification for this proposal.

Mr. Frazee asked Mr. Nelson what in his mind ensures competency. Is it training, experience?

Mr. Nelson replied the physician is on the hook financially for those to whom he or she has delegated tasks. The "bean counters" who insure them are saying they don't see an issue. That's not to say bad outcomes don't occur from time to time, but there is no quantifiable data that shows the existing regulation doesn't work. He stated they see value in certification when it's necessary for patient protection. In this case the current level of regulation is adequate. He said they believe the minimal level to ensure patient safety should be enacted which is consistent with the sunrise statute. Were there a problem WSMA would support it and they have supported regulation where necessary, whether it be substance abuse, higher levels of regulation; where physicians have felt there was a safety issue they have stepped up and supported it but they don't see this as necessary.

Mr. Frazee asked Mr. Nelson at what number of problems does the association say it rises to the level to require something be done. Mr. Nelson replied there is no magic number but if they saw higher levels of problems they may rethink this. He also reminded us that certification is supposed to be voluntary and the proposal is really at the level of licensure. He said if there was empirical data showing a problem, they would be here supporting the proposal.

Mr. Fernando asked Mr. Nelson about the fact that certification is voluntary under the law but the trend has been for it to be required. He asked what he thinks about that.

Mr. Nelson said he thinks there is a growing opinion that the issue of health care regulation in general needs to be re-visited and the policy makers in the legislature may do something to address this issue. It's confusing, especially to the public who doesn't know the difference. He thinks ultimately there will be a critical mass to review what licensure is, the definitions, how we approach it, particularly as we move into more team medicine to deliver more efficient health care. There are trends in terms of surgeries and he sees this coming.

Mr. Fernando asked Mr. Nelson why some hospitals would require certification while others do not.

Mr. Nelson replied not all hospitals or clinics allow providers to practice to the full scope of practice. For example if you look at the large clinics in Seattle, you will get different answers with each of them on what they do. Whether health care assistant or nurses, for example Group Health allows providers to do different things than Virginia Mason or Swedish.

Mr. Fernando asked whether he's saying a hospital that requires certified surgical technologists would have a different level of practice.

Mr. Nelson said they probably have decided they are going to set a different standard than that required by law, which may or may not be certification. They also may state that regardless of certification, the surgical technologist must practice at a lower level than that allowed in law. It's just different philosophies and management styles.

Tracy Vandergan Jones

She stated she is transitioning out of an educational role at Virginia Mason and is the assistant nurse manager in the operating room. She is also president of the Seattle chapter of AORN. She agrees with many speaking today that certification and education are needed. MAs and PCTs are gaining informal education in aseptic technique training, learning how to move around a sterile field, so they can work in clinics and open up “little mini trays.” They are attaining surgical technologist registration from the state. They are concerned about where this will go and would like standardized, recognizable, accredited training.

Certification for nursing is not required for licensure in the state. Education should be the priority first. Certification is a privilege for nurses, a sign of professional growth. As a new graduate, it is difficult to have the critical thinking and knowledge in play to gain certification. Asking a surgical technologist to have the critical thinking and experience right from graduation is a big step.

They are also concerned with grandfathering. She said they have surgical technologists who have been working for 30 years and it would be hard for them to go back to school. Also “other surgical tasks” in bill needs to be defined. Do we want surgical technologists suturing or administering meds? It’s very, very, broad and it is currently specified what they can do. Also surgical technologists transferring from other states need to be addressed, what requirements they will have. Please look at formal education first and foremost and then look at certification.

Mr. Frazee asked if she has any examples of harm tied to surgical technologists.

Ms. Jones said it is the person as well as the training. She has seen instances of surgical technologists making errors similar to nurses making errors. It doesn’t matter whether they are certified. She has seen good technologists who are not certified and she has seen poor technologists who are certified. She doesn’t have any specific stories.

Ms. Staley asked about her concern with grandfathering, where the concern comes from with her techs who have been working for 30 years if the grandfathering only requires six months.

Ms. Jones stated she is concerned whether they will need additional courses or requirements to get the AST certification. She clarified she is concerned about them attaining the national certification.

Dan Simonson

Mr. Simonson came from Spokane because this is a very important issue for him. He is a registered nurse, a certified nurse anesthetist, and manager of an ambulatory surgery center where they do ophthalmic procedures. They do over 5,000 surgeries per year in the Spokane Eye Surgery Center where he’s been the manager for 26 years. He has hired numerous surgical technologists. It has been their preference to hire ophthalmic assistants who have trained with ophthalmologists and brought them into the operating room where they have done an outstanding job assisting the surgeon. He said he has on occasion hired CSTs and have one working for him now. She had experience in ophthalmology before he hired her. The problem is when he hires CSTs they don’t want to work in ophthalmology. As you’ve heard they want to work in hospitals and not clinics like his. It’s not as exciting as working with bowels and hearts and robotics. Working with cataracts and those types of surgeries with tiny instruments is difficult, and their training is not the same. Ophthalmology is very different as he imagines is dermatology.

The last CST he hired worked for only six months after Mr. Simonson completely retrained him to work in his clinic. He cannot support the proposal because it would force him to hire CSTs and he can’t find ones to do the job. The Joint Commission on Allied Health Personnel in Ophthalmology has a pathway for surgical assisting in ophthalmology. They have their own credentialing which he can use. He’s all in

favor of education, but many of those he hires are working mothers who cannot get out of the occupation for a year or two to go to community college.

He is a specialist in data and he published an article in 2007 in Premier Nursing Research Journal (data-driven using the CHARS data set) where he studied 130,000 C-sections. He said you will never find data to satisfy the need. If there was any data at all, we would only have certified techs. Certification is wonderful and the folks getting certification will be grabbed by hospitals, but they don't want to work for him. Also, of the seven states that were mentioned, five of them have a clause in them that allows hiring of non-certified technologists if you cannot find a suitable certified one. Indiana's clause states if one of a list of conditions is met, you don't have to hire a certified technologist. One of the conditions is "has the appropriate abilities as determined by the health care facility." South Carolina states you don't have to do this if after a diligent and thorough effort is made, the facility is unable to employ a sufficient number. Does he have to do this now when hiring for an ASC? his bill will strangle not only his business but will harm CSTs because it will force him to hire RNs rather than trying to find a CST. There is no compelling evidence for this proposal.

Ms. Peterson asked Mr. Simonson to explain what on-the-job training looks like in his facility and how he verifies competency.

Mr. Simonson responded they are a Medicaid-certified facility so they have job descriptions. They have a skills checklist. They hire as HCAs and then apply for the RST credential. Once they have this, it is typically six months of training to include sterile technique. He is also an operating room nurse. He started out his career in the army as an operating room nurse. When training techs, he uses the AST resources on their website. They are under close supervision of an RN. After they have done their skills checklist they are credentialed as technicians. In his operating room there are already three licensed people, an RN, physician, and CRNA. He is concerned this proposal adds one more "effectively" licensed person. He agrees with Mr. Nelson that this really creates licensure. He is worried about conflicts this may cause.

Ms. Staley asked about the six month on-the-job training, and whether he also pays for the registration.

He replied they do and relayed they had someone they couldn't get registered because of a previous infraction which was challenging. Registration is a good idea.

Mr. Frazee asked what Mr. Simonson meant about conflict.

Mr. Simonson responded he makes it very clear the RN is in charge of the surgical technologist, the operating room and patient. He gave an example of an RN that asks the CST to transfer medications in a certain way. The CST says they weren't trained that way and the nurse says it needs to be done that way. The CST replies that they can't because it's their license on the line. They don't want disputes between these individuals. It adds a layer of dispute to the environment that adversely affects teamwork.

Mr. Frazee stated we can all agree this type of surgery is not major surgery and Mr. Simonson agreed. Mr. Frazee asked where the line is that should be drawn to draw.

Mr. Simonson said he just heard this was only meant for major surgery and wouldn't impact his practice or podiatry practice, but asked where in the bill it makes that distinction. He asked if there is a means to address that. Sometimes his surgeries mean the difference between blindness and sight so there needs to be a distinction.

Emily Studebaker, Washington Ambulatory Surgery Center Association (WASCA)

Ms. Studebaker is general counsel and executive director of WASCA. They oppose the proposal for a number of reasons. The proposal fails to demonstrate the current level of regulation in Washington is inadequate. It also fails to demonstrate the proposed increased regulation would promote quality of care within the health care delivery system. This would place a burden on the system without providing meaningful benefit.

WASCA is a nonprofit association representing the interests of those who own, operate and seek the services of ambulatory surgical facilities (ASFs) in Washington State. Its membership includes licensed and unlicensed facilities. WASCA is dedicated to promoting the well-being of Washington residents and ensuring they have access to affordable quality care. A majority of the ASFs in the state, including their members rely on the state's registered surgical technologists. WASCA is concerned the proposal would increase regulation in a way that is unnecessary and will adversely affect the ability of its members to staff their facilities.

She went back to the sunrise review law to show some relevance. She read the part that states all individuals should be permitted to enter into a health profession unless there is an overwhelming need for the state to protect the interests of the public by restricting entry. It also states a regulation restricting entry may only be adopted where such a need is identified, and even then must be set at the least restrictive level consistent with the public interest being protected. What was obvious from the proposal and is even more obvious today, is that the applicants failed to explain the nature of potential harm the registered technologists represent to Washington residents. In the application, they describe certain potential medical errors, including surgical site infections and foreign retain objects in a patient after surgery. Of course everyone agrees these are serious issues. But the applicant asks us to assume registered surgical technologists cause those errors, and that requiring certification will address those issues. That has not been shown.

Ms. Studebaker wanted to address statements made by the first presenter. She said the statement was made that they cannot tie back certification of surgical technologists to improvement in patient care. That is quite an admission. The applicant representative admitted it would be disingenuous to say that she could. The third presenter in support of the proposal said we do not know the exact data or of any data. The data is anecdotal. Those are very relevant admissions, especially when you align them with what the law requires in order to increase the level of regulation. She stated she doesn't know that any information has been presented to address how surgical technologists are trained but we are expected to assume it is bad. The application says no objective requirements of education, skill or competency are required of these individuals. We should not assume from this, that our surgical technologists are uneducated, unskilled, or incompetent. There has been no evidence to suggest that and it is inappropriate to assume it.

WASCA also has significant concern with some of the information provided in the responses to the department's questions to the applicant. She said it was referred to as a misstatement but she thinks it is euphemistic. They state two times the adverse event reporting laws only apply to hospitals licensed under chapter 70.41 RCW, which does not include ambulatory surgery facilities. That is a misstatement or misrepresentation and is important. She feels the intent is to say the ambulatory surgical facility industry, which engages surgical technologists, is under-regulated and unsafe, but that is false. She thinks it calls into question the veracity of the application and the veracity of the information provided. In fact, ASFs are subject to the adverse event reporting laws. This causes great concern that we could increase regulation based on a group of providers based on no data and false information. The sunrise review law requires more than that.

She also went back to clarification provided at the hearing by the applicant on what their intent is with the proposal. If their intent is only to regulate surgical technologists in hospitals and not in any other type of

facility, then their application is defective. Even though it was developed in Colorado, for those who understand Washington health care laws, you see that the application is inappropriate as it aligns with the facility licensing laws in this state. She stated she is not aware of any definition of a minor or major procedure, but states the applicant apparently intends this new requirement to only apply where there are major procedures. She doesn't know how this could be implemented since there is no framework in Washington law to provide for that. In addition to not being supported by any data, and by misrepresentations or misunderstanding of what Washington law is, it is defective and really unworkable with the laws around health care facilities. For those reasons WASCA is opposed to the proposal and asks that the department not support it.

Mr. Frazee asked how long ASCs have been reporting.

Ms. Studebaker replied they have been reporting since July 1, 2009. The requirement is in the licensing law for ASFs which is in chapter 70.230 RCW and the adverse event reporting law, RCW 70.56.

Mr. Frazee asked whether there have been cases reported.

Mr. Studebaker responded there have been some. There were some anecdotes provided by the applicant that were inexplicable because the adverse events occurred in bariatric and cosmetic surgeries and as she reviewed the adverse event reports on the DOH website, she couldn't find a single report by an ASF or ASC that was bariatric or cosmetic. Also, there was some reference to something unseemly happening in an ASC outpatient facility that provides birthing services. She stated she doesn't believe that couldn't happen in ASCs in Washington, but must occur only in birthing centers. That anecdote must have happened in another state.

Mr. Frazee stated he is not familiar with the adverse event reporting laws and asked what types of things ASFs are required to report.

Ms. Studebaker replied wrong site surgeries. But she reviewed the contextual information submitted to DOH and she could not find any reference to a surgical technologist being involved in any of the adverse events, or an event that would not have occurred if a surgical technologist had been certified.

Mr. Frazee asked whether there is a root cause analysis done on these events.

Ms. Studebaker responded there is a root cause analysis and there is contextual information available on the DOH web site.

Robin Fleming

Ms. Fleming is a nursing practice and education specialist at the Washington State Nurses Association (WSNA). She has background as a researcher and has published articles in nursing and public health journals. She has also worked in ambulatory surgery at Harborview. She wants to highlight the main points in WSNA's written comments they submitted. WSNA supports certification of surgical technologists because there has been "an abundance of research evidence" that shows health outcomes are improved and patient safety is better protected when educational standards and certification of perioperative allied health professionals are consistent.

The surgical technologist is the only one in the operating room who does not have to meet that standard. Everyone else does, so it's about standardization of practice among other things. RNs and surgical technologists have overlapping scopes of practice and WSNA would appreciate proposed language assuring registered nursing practice is not impeded. Because the surgical technologist's scope of practice would not change under this bill, she stated the requirement for RN circulator should not change for

surgical facilities. The language should specify the tasks a surgical technologist is allowed to do, but should also include tasks they should not do. The WSNA's major concern is with the grandfathering language, which should include a more defined period of practice. Anyone practicing within six months could mean practicing for one day. That is important to address for public safety.

Also, the language should include registered nurses and advanced registered nurse practitioners as licensed health care practitioners with the ability to delegate tasks to surgical technologists. It should also include a list of tasks surgical technologists should not be allowed to do, with their limited education and training. After hearing some of your questions today, she stated she anticipated she would be asked for examples of harm. Most hospitals and health systems frame harm in systems rather than individual terms. In reality errors usually occur at the individual level even though systemic elements may have caused or contributed to the error.

With that in mind, she asks, is an individual less likely to make an error when they have more knowledge and training? She states she thinks not, and she doesn't think anyone could argue with that. If training and education are not important to patient safety, then why is education and training, licensure and certification required for nurses and doctors? It is pertinent for everyone in the operating room, so if your family member was on the operating table, and was completely vulnerable, you must rely on the people in that room to keep them safe. She stated competency through higher standards of education and knowledge should be something everyone in the O.R. has, not with the exception of one person.

Mr. Frazee asked as a researcher, whether she was saying if they are all equally trained and equally competent, that is better than not.

Ms. Fleming responded that what she was saying is that standardization is important to practice.

Mr. Frazee asked whether the standardization of practice research has been published.

Ms. Fleming stated it has not been for surgical technologists but for registered nurses and other providers. Standardization is important for everyone in the operating room, showing they have met a minimum level of education and training.

Mr. Frazee asked whether that was in a peer reviewed journal.

Ms. Fleming said yes, the ones she has looked at for nurses, doctors, etc., standardization is a very common indicator for quality.

Libby McRae

Ms. McRae is a CST. She wanted to speak as an educator and surgical technology coordinator at Yakima Valley Community College. She has been there for seven years and has been a CST since 2000 and a surgical technologist since 1992. They are an integral part of the surgical team. The responsibilities that have been laid out are clear; however they are also responsible for possession of the theoretical knowledge needed to understand what they are doing. Some of the theory learned in the program includes anatomy and physiology, like registered nurses. The microbiology required to understand creating a sterile field and asepsis what happens when it is breached. The pharmacology of how medications interact with the body is very important. Surgical technologists also interact with patients of all developmental ages and must understand and have the psychological theory behind them to interact with them in any situation. Surgical technologist programs have a core curriculum and everything that is taught to a surgical technologist student must be taught in three domains, affective, cognitive, and the psychomotor domain. The student is not just learning how to pass a scalpel but the why's and how's of everything related to each skill they are learning. Passing the scalpel does not require great knowledge. A trained

monkey can pass an instrument, but knowing the 1,000s of instruments and their applications along with anticipating what the surgeon needs takes extensive skills and knowledge.

In regard to the harm question, she said she can provide an anecdotal example from her experience. She stated the length of the operation can be greatly affected by a surgical technologist that has education versus someone who doesn't. It was stated that each minute a patient is under anesthesia is adverse for the patient, that it is poison going into the patient's body and someone without the background to anticipate the next step in the procedure can add time to the procedure. It was likened to a dance. She said she would assume a dancer would need to know the steps to anticipate what was coming next and if they didn't, they might step on toes, stumble, or even fall, making the dance look pretty nasty and add time to get back to resume the dance. She thinks the procedure is similar when all partners know what they are doing.

She gave an example of an on-the-job trained surgical technologist who all the doctors loved. She had a great personality and showed great potential and aptitude for learning the instruments. A surgical technologist with education is taught to check everything before the procedure, to look through the instrument pan to ensure everything is in its place, and to check the sizes. This surgical technologist learned on the job that things should be in the right place. She handed the wrong size instrument for a total hip procedure which took the "cup" part of the hip up to five sizes larger than what the surgeon intended to put in, adding one hour to the surgery. The doctor trusted the surgical technologist to know the steps and said, "hand me the fifty," and she handed him the fifty-five without checking to ensure it was in the proper place. That was specific harm she states she saw happen to a patient.

What goes along with the theory behind what they are doing? Students have to learn pharmacology and the interactions that happen with certain medications. One of the local anesthetic drugs they use is marcaine and they were putting in a post-operative pain pump at the incisional site that helps keep pain to a minimum. Only marcaine without epinephrine can be used. Epinephrine restricts the blood supply and keeps the wound from healing. This person who had learned on the job asked for .25 percent marcaine with epinephrine. The nurse grabbed it and poured it because that's what the surgical technologist had asked for and it was put into the pain pump of a patient that had just had a total knee arthroplasty. That patient ended up with the wound not healing, tissue dying, and in need of many operations and skin grafts, because the surgical technologist didn't understand what the difference was in the medications. That's another example of harm.

Not everyone who starts in a surgical technology program makes it to graduation. The same can be said for nursing programs and medical schools. It's a rigorous, in-depth program. Her program requires an AST exam at the end as an indicator and a standard for her students going out in the field. She wanted to reiterate they demand each person involved in a procedure have the appropriate school, training and certification within their profession to act appropriately. The same should be said for surgical technologists. She said the public doesn't understand what a surgical technologist is. She worked in the field for 10 years before her family understood what she did.

Ms. Staley asked since she works at the community college, could she estimate how many who finish the program obtain the certification exam.

Ms. McRae responded she has been there seven years and the last three years she has required the certification exam to graduate from the program. She can require they sit for the exam, but not that they pass it. They remain above 70% pass rate, with 100% sitting the exam.

Mr. Frazee thanked Ms. McRae for giving examples but asked for context. What is the level where she thinks there is a problem.

Ms. McRae said on a personal level, of course just one would be unacceptable. She said this has not been studied very much. She thinks that's one reason you don't see an adverse event being a never event like an object being retained or wrong-site surgery. Those are things she doesn't hear about. She said we don't hear about an additional 45 minutes to a surgery. Those are not adverse events reported. She's been out of surgery for seven years. About a year ago she went back on a part-time status when they needed her. A month ago she went in on a spine procedure which she had never done. She enjoyed being back in the O.R. The surgeon asked if she could come back to do the same procedure. She told him she was really busy and he said he would really like to have her. She said with all the people they have trained, is it the fact that the surgeon recognizes she has the theory and background to pick it right up and do it.

Mr. Frazee asked whether the other surgical technologists at that facility are certified.

Ms. McRae stated the hospital doesn't require certification or any education to work there. They train people on the job. They will take an NAC, nursing assistant, which does require certification, to train to work in the operating room. They have taken a phlebotomist when they were short-staffed. She said she appreciates their willingness to look in-house but the theory behind that is far different than working in surgery.

Ms. Peterson asked if Ms. McRae could describe the YVCC program.

Ms. McRae responded that their program is a 24-month program where students graduate with an associate in applied science degree. The first year is general knowledge. The second is surgical technology training. There is about six months of theory and in-lab practice and the last six months is clinical where they are out in the clinic doing surgery in many different specialties. They need 120 surgeries in all the specialties to graduate with an entry-level proficiency. That's about how much time they spend doing each. They have to pass certain lab skills testing in order to progress into the clinical rounds.

Ms. Peterson asked whether they have associations with hospitals for this.

Ms. McRae stated they have clinical affiliations with hospitals and she must show them her students have passed lab skills testing before they can progress to the clinical rounds at their facilities.

Aaron Weingeist

Dr. Weingeist is an ophthalmologist and legislative chair of the Washington Academy of Eye Surgeons and Physicians (WAEPS) and is here representing ophthalmologists. He said they do a large number of outpatient surgeries, many in small ambulatory surgical facilities. He said he agrees with what Carl Nelson and Emily Studebaker have already mentioned. Specifically in the practice of ophthalmology and in small surgery centers they don't have the ability to hire certified staff. That's not because they don't want to but because they aren't available. Many of their surgery centers are small one-room facilities. Some do a pretty high volume of surgeries but only a few days per month. Certified staff are people much more interested in regular surgeries and are typically employed by hospitals or large centers where they can be used on a regular basis. The majority of ophthalmic surgical technologists don't stay because they're looking for more regular employment and aren't interested in providing the other services he needs, like administrative functions. They are dedicated to providing care in the operating room. It makes it very difficult for him and he's not willing to pay what it takes. He simply can't find people to take the role and he is in Seattle proper. He knows that's the case in many other facilities.

He provides on the job training for his employees. It takes months under supervision of nurses and doctors and he is dedicated to having excellent results. He said aseptic technique needs to be adhered to because infection in the eye is blinding in many cases. Their outcomes are dependent upon the technique

and ability of his staff. He makes sure they are trained and their outcomes are very good. The WAEPS is opposed to the bill as it stands.

Mr. Frazee asked what he considers major versus minor.

Dr. Weingeist replied it depends on how you define it. Medicare defines a major surgical procedure, he believes, as one with a 90-day post-operative period. Almost everything he does in a surgery center that involves a scalpel, such as cataract or glaucoma surgery or retina lasers would all be considered by Medicare as major procedures, despite the intent that these might not need to be included in the proposal. It's concerning to them how it was presented.

Mr. Fernando wrapped up the hearing and gave next steps:

- There is an additional 10-day written comment period starting today through August 24 at 5:00 for anything you feel has not been addressed.
- We will share an initial draft report with interested parties in September for rebuttal comments. Those of you participating today will receive the draft as long as we have contact information for you.
- We will incorporate rebuttal comments into the report and submit it to the Secretary of the department for approval in October.
- Once the Secretary approves the report, it is submitted to the Office of Financial Management for approval to be released to the legislature. OFM provides policy and fiscal support to the Governor, legislature, and state agencies.
- It will be released to the legislature prior to legislative session, and will be posted to our Web site once the legislature receives it.

Hearing Participant List

Applicants

Catherine Sparkman, Association of Surgical Technologists (AST)
Janice Olmstead, Washington Assembly of the AST
Sandra Manwiller, Washington Assembly of the AST

Public Participation

Pro

Rebecca J. Davis, Association of periOperative Registered Nurses (AORN)
Mark Gjurasic, AST
Melanie Burton, AORN
Shannon Britton, AST
Maureen Keidlich, Student
Wendy Hackman, Student
Shirley Leano, Student
Tracey Vanderaegen-Jones, AORN/Virginia Mason Medical Center
Dave Freeman, AST
Robin Fleming, Washington State Nurses Association, (WSNA)
Maryellen Grevstad, Confluence Health/Washington State Assembly of AST
Angela M. Harold, Olympia Orthopaedic Associates
Libby McRae, Yakima Valley Community College

Con

Aaron Weingeist, Washington Academy of Eye Physicians and Surgeons (WAEPS)
Carl Nelson, Washington State Medical Association

Dan Simonson, Spokane Eye Surgery Center
Emily Studebaker, Washington Ambulatory Surgery Center Association (WASCA)
Susie Tracy, WSMA, WASCA, WAEPS

Neutral or No Position

Mickey Wardell, DOH
Cody Arledge, UFCW 21



HB 2414: DOH Sunrise Hearing August 14, 2012

**Catherine A.G. Sparkman, JD
Director, Government and Public Affairs
1-800-637-7433
303-325-2504
catherine.sparkman@ast.org**

HB 2414

History:

- RCW 18.215.005

Proposed changes:

- Clearer definition of the profession
- Certification requirement
- Exemptions
 - Military trained
 - Grandfathered practitioners
 - Grace period
 - Student practice
 - Licensed practitioners





Surgical Team Members





Surgeon

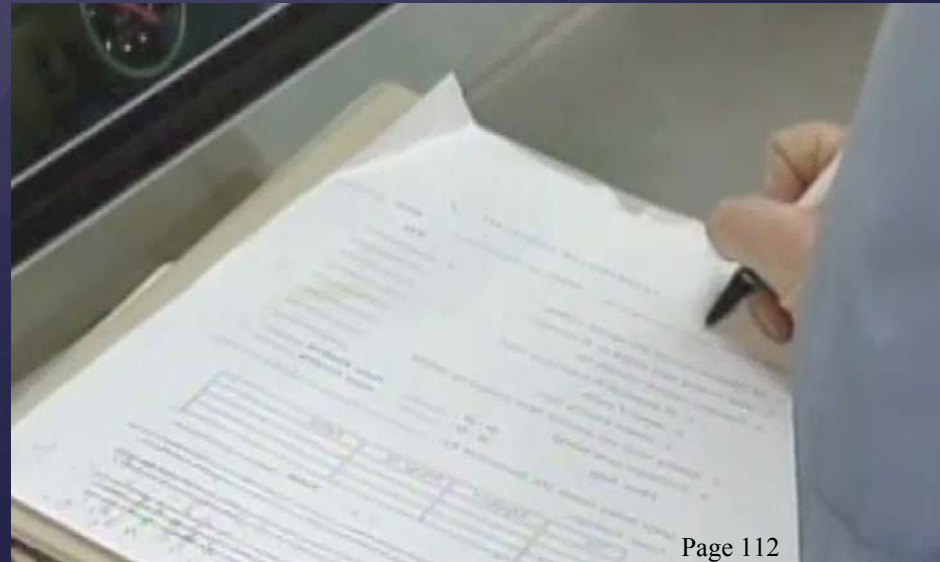




Anesthesia Provider



Surgical Technologist Sunrise





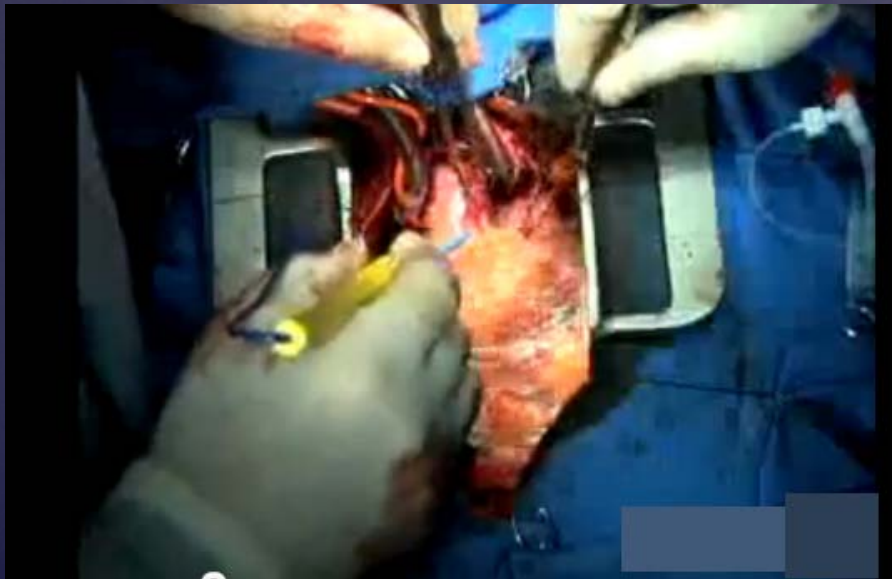
Circulator





Surgical Assistant

- Assist with hemostasis
- Retracting
- Tying blood vessels
- Applying clamps
- Using rongeurs
- Suturing





Surgical Technologist

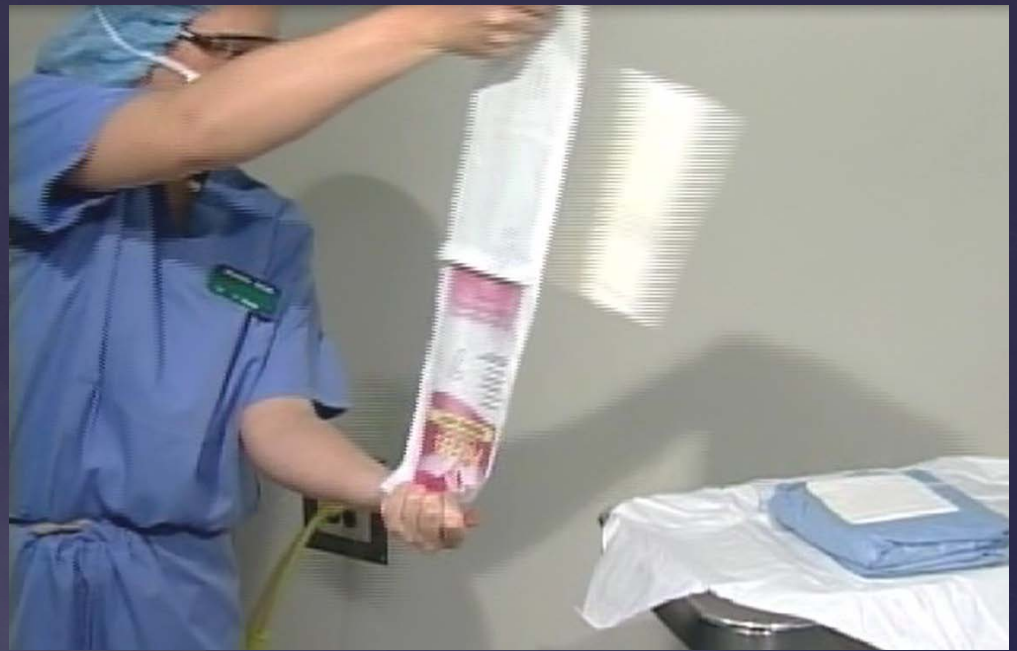


The Operative Procedure: Setting the Stage



Scrubbing In





Creating the Sterile Field



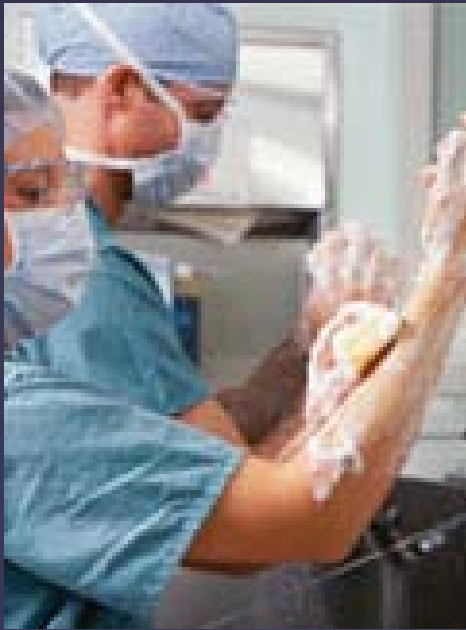


Checking Equipment Functionality



Surgical Technologist Sunrise

Scrubbing In the Surgical Team



Instrumentation



Intra-operative tasks and functions

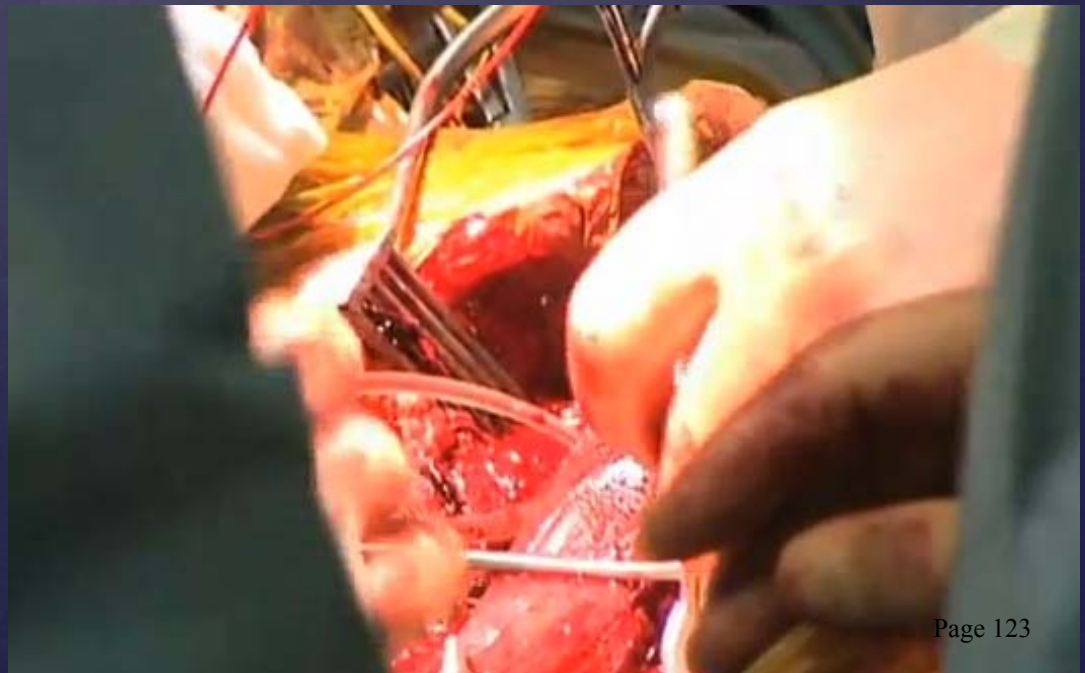
- Passing supplies, equipment and instruments
- Sponging and suctioning of the operative site
- Transferring and irrigating with fluids
- Transferring drugs
- Handling specimens
- Holding retractors
- Applying electrocautery to clamps
- Preparing and cutting suture material





Dr. Meade's Biceps Tendon Repair performed by Dr. Jim Bradley

Involvement in the procedure

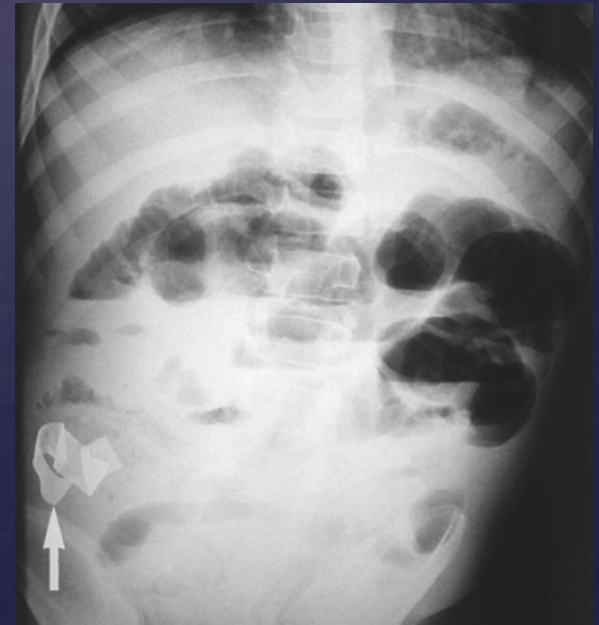


Robotic surgery

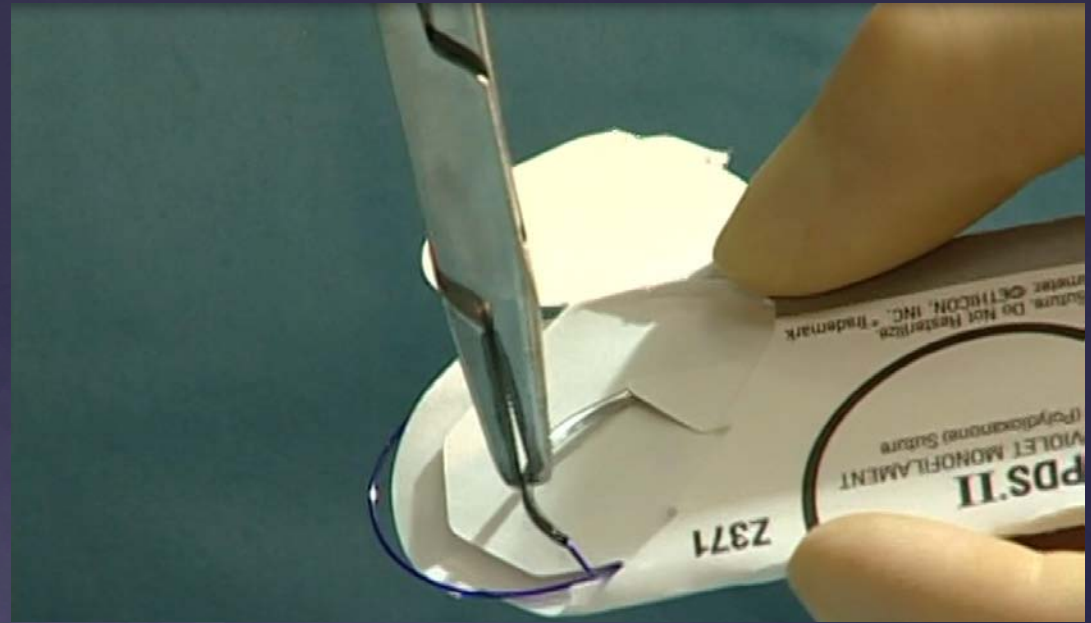




Performing the counts



Closing



AST Public Policy:

Every surgical patient is entitled to a competent surgical technologist who is a graduate of a nationally accredited surgical technology program and who is duly certified by the National Board for Surgical Technology and Surgical Assisting (NBSTSA).

-- AST Board of Directors 2006 et seq.

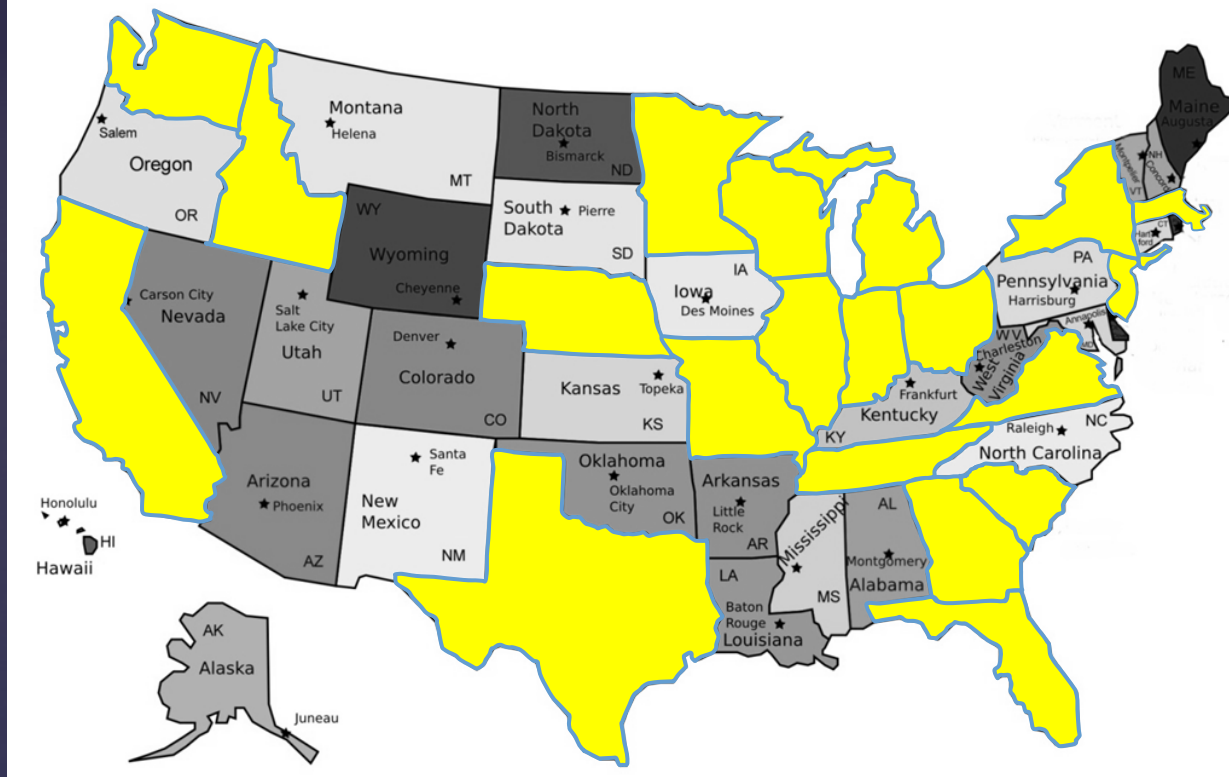


Accredited Programs



Certification





Other States:

Education/Certification:

- Idaho
- Indiana
- New Jersey
- South Carolina
- Tennessee
- Texas

Surgical Technologist Legislation Pending:

- | | | |
|----------------|------------|-------------|
| -California | -Michigan | -Ohio |
| -Florida | -Minnesota | -Virginia |
| -Georgia | -Missouri | -Washington |
| -Illinois | -Nebraska | -Wisconsin |
| -Massachusetts | -New York | |

Competent and Qualified Surgical Technologists:

- **Protect patients from life-threatening surgical site infections, malfunctioning equipment and unneeded delays during surgical procedures**
- **Anticipate and meet the needs of the surgeon and surgical team members, and respond swiftly and appropriately to the complexity of the procedure**
- **Assure that the integrity of the surgical procedure allows patients the optimal outcomes they deserve and expect**

Appendix E

Written Comments

Surgical Technologist Sunrise Written Comments August 27, 2012

I am interested to know the future of Surgical Technologist and what requirements will take place. As of now Surgical Techs do not have to be certified for the state of Washington. However when we do become a C.S.T state what will happen with the employees that have never been to an accredited school and was on the job trained only in Labor and Delivery? Will these employees be required to go to an accredited school and become certified. Or will they get "grandfathered" in and have to just take the certification test? I feel that people that are in a specialized field should have to go to an accredited school to become aware of general surgeries and the over all concept of Surgical Technologist. After all it is Patient First. Being a C.S.T my self there would be no way I would have understood the job with out going to school.
Tamme M. Russell, C.S.T

This proposal would single out Surgical Techs unfairly as a group. What about anesthesia techs? How about R.N's. do they have to become C.N.O.R. certified to work in the O.R.? The A.S.T. is an organization one chooses to join. Will R.N's. be forced to join an organization such as A.O.R.N. and if so what about all the nurses that work outside of the O.R.? Will all the associates trained nurses be forced to get a bachelors degree?

The only ones benefiting from this would be A.S.T., and the community college surgical tech programs that are requiring this test upon graduation without even working in the field yet. This proposal threatens to displace the experienced workers and replace them with new grads. This would be dangerous! The A.S.T. should be a personal goal for someone who works in the field a few years not a graduation test or a state requirement.

Before this is even considered I would suggest 1) that we look at how many other states have this in place (this is the only state I know of that even has a registry). 2) Show real data on complications in surgery from having an independent organization certified tech as opposed to a non club member. 3) Consider the cost on individuals, healthcare and the state. This doesn't sound like healthcare reform to me... its more like a bureaucratic big government.

The unions would leverage this move and gain even more power comparatively like the nurses unions this extra burden on providers is already not sustainable.

Finally if this is to pass it would be unreasonable and undoable for all those non A.S.T. eligible to get into a program within 12 months. We don't have enough programs to accommodate.

At the very least grant all of our military trained medical veterans and hospital trained valuable skilled experienced workers who have five or more working year's reciprocity. Make them be exempt from going back to school and let A.S.T. grandfather them in to be able take the test.

These people are our most valuable skilled workers and it would be a shame if we single them out displace and burdened them, the families and our communities.

William Richmond

In my 15 years of experience as a surgical technician I have met and worked with both A.S.T certified techs and non-certified techs and have found that certification means nothing other than you can pass a basic test. As a supervisor who hires techs I have worked with military trained, hospital trained, and program trained techs.

The main issue I have with community college certified programs is that they mill out under qualified people with no experience and require them to join an association, and take their test. Few of the students get positions because most places want experienced proven personnel.

These people are certified (because they can pass a basic test) but they can't do anything.

What you are left with is a group of people who now have student loans, no jobs, and are in the

same or worse off situation than when they started. If you want good safe surgical techs let the hospitals decide who is best not a ridiculous requirement.

This proposal if instated would replace experience with non-experience under the false claim of safety. The real problem is the A.S.T. organization wants mandatory participation and the certification programs want to keep unjustifiably taking money by making false promises of jobs that are not available.

Below I have included interesting excerpts from a blog I goggled. I encourage you all to do the same.

I graduated 5-months ago and recently pass the CST.I have applied online and applied going to the diff hospitals in my area like and many others. The problem is most hospitals required or preferred a min 1 yr exp. My only experience is externship which is very limited. How can a fresh surgical tech grad gain a year experience if hospitals will not hire them.

I got offered a job interview when I tried to get it schedule. Come to find out that the position was offered to someone who has more experience. I was so upset I did everything your suppose to do and come to find out I didn't even get a chance.

I think we face the same problems from coast to coast with issue that hospitals require one year experience to be able to get a job. I think AST should do something. They should fight for us. There is something wrong with the curriculum then, there is no one like to have new grad. I actually call them up and told them what I think, even asked them," so why do we have this organization for then if you don't fight for us"

I agree with you. It is so sad that the school said that there grads get hired by hospitals but really not you can't even get an externship. They also they said that they will help you get a job ha! ha! I was lucky that I knew someone in the hospital just helped me get a job in the OR but not surgical tech job instrument job.

Ha! i have 2 months in liver transplants and vascular surgery and I still cant get hired! The one place that hired me expected me to be able to work alone with vascular surgery in 12 weeks! give me a break! now, getting hired is hellish! its ridiculous! they want experienced only but they wont hire you to give you the chance! why did i ever go to school? now i have to pay back 20 grand in student loans but I cant get a job!!! I'm so frustrated! if i were a nurse it'd be so much easier!

I have my associates' degree specializing in surgical technology but it's not so easy finding open positions for this particular field.

William Richmond

I want to start off by saying that I am for receiving and maintaining Certification for Surgical Technologists. I do have a question concerning the requirements of the certification to be from the NBSTSA. I am currently working as a Surgical Technologist and am certified but through a different certification company. The National Center for Competency Testing (NCCT) the reason for this is because after I completed my program I found out that it did not have the right credentialing for me to take the CST exam. If you require certification from the NBSTSA will there be some kind of exemption that will allow me to take the CST exam without having to go through some additional schooling? For some who have been out of school for a while or in my instance where at the time I didn't know any better I don't think it would be fair for us to have to take additional classes. It looks like this proposal would affect future graduates that would like to practice but I would like to be given the opportunity to be able to certify under the

correct/required body and would hope that if this is something that is offered to future students that current Tech's would be given the same opportunity to certify. Thanks
Brian Eric Cerdenola

I would like to respond to this new proposal. There is no discussion of the reasons for making certification of surgical technologist by their national board a requirement. If the purpose is to raise the level of competency of surgical technologist then a state or national exam, at the end of their training/schooling, would be appropriate. The school's that surgical technologist attend should also met certain didactic and clinical standards. This is now done for other health professionals as pharmacy, nursing, and medicine. The state does not at this time require certification by these professionals. I am a registered nurse in the state of Washington, and while I am also certified in my specialty it was never made a requirement by the state. Certification is a sign of professional growth, not a basic requirement.

The department of health needs to do more research into this proposal. It seems to be adding more bureaucratic layers and not increasing competency.

A concerned professional,
Elizabeth White, RN, CNOR, BA, MA

My name is Dan Simonson. For the past 26 years I have been the manager of the Spokane Eye Surgery Center, an ophthalmic surgery center owned by the Spokane Eye Clinic. I am representing myself and the 12 surgeons I work with.

We do not support mandatory licensure for Certified surgical technicians. We strongly believe that implementation of this project will be detrimental to cost, quality, and access to healthcare in Washington.

Here are the points I want to make in support of our position.

1. I have been training certified ophthalmic technicians to assist in surgery for 26 years. We now train them and make them Registered Surgical Technologists, as is required in Washington. We have developed a system works, and works well. If this idea takes hold and becomes law, it will put an end to a very useful practice and close the door on a rewarding career for many of my Clinic staff.
2. Ophthalmic surgery is, for the vast majority of cases, now performed outside of the hospital. Certified Surgical Technologist (CST) programs focus on in-hospital settings. When I have hired conventionally trained CSTs I have found that they are often not a good fit in my ASC. Ophthalmic surgical assisting is vastly different in many respects from conventional surgical assisting. They usually leave within a short period because of their expectations of a traditional hospital-based surgical practice.
3. There is currently only one program available for training CSTs in Spokane, at the local community college. It generally requires a 2-year commitment, and because classes take place during the day, students would have to leave the work force to attend. I am not aware of an equivalent method to obtain the degree online or through non-traditional means. This places an uncrossable hurdle for me as an employer and my staff. Currently we are able to train our ophthalmic technicians, who have in most cases already qualified for the Certified Ophthalmic Assistant or Technician certificate, by putting them through a 6-month on-the-job program we have developed at our facility.

Many of our Clinic staff appropriate for this additional training to become ophthalmic surgical technicians are mothers with small children. They are not able to leave the workforce for two years to obtain this degree. As an employer, I cannot afford to send them.

4. Enacting legislation requiring licensure of CSTs will make it very difficult for me to hire and train surgical assistants for our surgery center. The current system works. Please don't break it.

Dan Simonson, CRNA, MHPA, Manager, The Spokane Eye Surgery Center

Yes , as a practicing Dentist for the past 55 years, certificate DE00002671, it is my opinion that anyone who is licensed to break the epithelium, or cutaneous tissue with any instrument need to be credentialed.

I am in the process of renewing my Dental license. Being 81 years of age, I am still able to function, and it is a big decision to give it up.

Glenn Miller

I have been an operating room nurse for more than thirty years, working in three states and have worked in seven hospital's ORs. I have had the blessing of working with some very talented and professional Surgical Techs (STs) over these years. I've just read about the proposal put before our state legislature that STs be required to have their specialty certification. I feel strongly that this would be a positive change. Of all the STs I've worked with, those with the highest of standards have obtained and maintained their certification. It is a higher standard of practice that supports patient safety. Unfortunately too many STs have acquired their knowledge simply from on the job experience. Current technologies in the OR have grown so complex and our patient acuity has also increased. We are seeing sicker patients in the hospital setting and it is ever more crucial that the surgical team have the best skills and training as possible. I strongly feel that STs should be required to have their certification, to advance their profession to deliver on higher standards.

Currently, all that is required for the ST is to fill out some very basic information for a registration and pay their fee. Anyone can do this and there is no delineation of the person who "scrubs" in an eye clinic, doing minor cosmetic procedures or even "scrubbing" in a dental clinic vs. someone who is scrubbing on open heart procedures or brain surgery.

One may ask the question: Why require the ST to have their certification when an RN does not? I personally have had my specialty certification in the OR for more than 20 years. That being said, the level of education of every RN greatly differs from that of the ST. Surgical Techs go through a crash course on the technical aspects of their job. There is much to learn about anatomy and physiology, sterilization and instrumentation, procedural steps for the multitude of surgeries they will be scrubbing. When we host STs from formal training programs they really just have the very basics down and the average of one year for their training, just covers the fundamentals of their role. The preparation for certification is what prepares them for the professional level of performance that is needed in every OR. Something that is lacking amongst many of the STs I have worked with over the years, is the desire to continue their learning process. As an RN, it is imperative to continue ongoing education and pleasantly, Washington state now requires the RN to complete continuing education. This would be a major advantage for the ST role, because continuing education would be an expectation. Many STs have never attended a conference, gone to a class beyond their original training and for some, that could be decades in the past. This is very unfortunate.

Surgical Tech certification could be the solution to this. I feel that with today's growing complexity of our patients and what is at risk for their safety, we must set regulations in place that increase ST competency. They are an invaluable member of the OR team. As is documented in the Sunrise document on the DOH website, surgeons and nurses rely on them to uphold safety standards and in order for them to rise to the occasion, certification would be a solution. I have always governed my practice with the golden rule: what would I want for my loved one, what level of training would I want the surgical team to have if it were my child, parent or significant other on the OR table? I would want the standard to be that the ST has their certification and has to keep current with ongoing education.

Lorie Khorsand BSN RN CNOR (Certified Nurse in the Operating Room)

Surgical Technology in WA State is very "loose" regarding educational requirements for registration. I have seen where PCTs or MA.s receiving minimal training to attain a Surgical Tech registration so they can open and maintain smaller sterile fields in the clinic setting. This registration allows them to perform this task within their ST scope of practice. This potentially exposes operating rooms to dishonest PCT/MA applying for a role as a Surgical Tech.

I believe the state should not pass legislation requiring Surgical Technologists to attain their certification in order to work in a hospital setting or as a Surgical Tech within the state. Certification is an advancement of experience within one's position and should not be mandated. This is an inappropriate response to an unclear job requirement for surgical techs on behalf of the Washington State DOH.

We do not require registered nurses to have their specialty certification in order to practice in WA State.

WA State DOH states the following for RNs:

"Professional Education: List your current or completed nurse program. Indicate degree/certificate/diploma earned. List graduation or anticipated graduation date."

The state needs to require professional education and a certificate of graduation from an accredited college/university program for Surgical Technology, similar to the nurse's listed above; not a certification (CST) from the surgical technician's national organization, AST. Certification is a personal, professional achievement and should be requested by independent facilities, such as it is for other healthcare professionals. An accredited certificate from a college will show proof of completion of an appropriate training course.

Tracey V. Jones, Assistant Nurse Manager GYN, Urology, da Vinci program & ENT
Virginia Mason Medical Center

I am writing regarding support in the submission for requiring Certification for Surgical Technologists in Washington State. The medical and surgical climate is always evolving and certification solidifies each of our commitments to staying updated with new technology. I, as a Certified Surgical Technologist, agree that a certification requirement is what is best for our patients, our work places, and our profession.

Kira EmmaLee Bodnar, CST, Harborview Medical Center

Physicians Insurance A Mutual Company is the endorsed medical professional liability insurer of the Washington State Medical Association. Operating since 1982, the company is the largest insurer of physicians in Washington, providing protection to more than 6000 Washington physicians, clinics, and hospitals, including more than 1000 surgeons. A key component of the company's mission is to improve the quality of patient care and patient safety.

Our professional claims and risk management staff and the physicians on our board of directors and claims and risk management committees analyze the causes of patient injury on a monthly basis and create many new educational training programs every year to address the latest risks in the delivery of health care services. In our experience, surgical technologists are adequately trained and supervised and are simply not the cause of patient injury. The proposal to mandate certification of surgical technologists is a proposal that, in our opinion, has the potential to increase the cost of health care delivery without improving patient safety and the quality of patient care in Washington.

Please feel free to contact me with any questions.
Gary Morse, Senior Vice President, General Counsel, and Secretary
Physicians Insurance A Mutual Company, Seattle, WA



August 9, 2012

Sherry Thomas
PO Box 47850
Olympia, WA 98504-7850

Dear Ms. Thomas:

Thank you for the opportunity to comment on the Surgical Technologist Application for Sunrise Review for House Bill 2414, dated June 1, 2012.

The Washington State Nurses Association supports requiring certification of surgical technologists. Evidence shows that health outcomes are improved and patient safety is better protected when educational standards and certification of perioperative allied health professionals are consistent. We share the concern that surgical technologists are the only direct care providers working in perioperative settings not required to have objective requirements of education, skill, or competency.

Surgical technologists interact with two types of perioperative registered nurses: the scrub nurse and the circulating nurse. The scrub nurse works directly with the surgeon within the sterile field by passing instruments, sponges, and other items needed during the surgical procedure. This functions of this role overlaps with the role of surgical technologists. The circulating registered nurse is responsible for managing patient care within the operating room, observing the surgical team from a broad perspective, and assisting the team to create and maintain a safe, comfortable environment for the patient's surgery. Through professional nursing education and expertise, the RN circulator is the primary patient advocate in the operating room. Supervision of allied health care providers such as surgical technologists is also the responsibility of the circulating RN. Given the overlapping scope of practice between registered nurses and surgical technologists, we appreciate proposed language in House Bill 2414 clarifying that nothing in the proposed legislation prohibits a licensed practitioner from engaging in the full scope of practice for which he or she is licensed. This assures registered nursing practice is not impeded by this legislation.

Because the sunrise review does not change the surgical technologist's current scope of practice, we understand that one may not serve in the circulator role in the operating room and that the requirement for an RN circulator will remain for surgical facilities.

Language to grandfather current surgical technologists needs to be clarified. A person under HB 2414 may be exempted from certification requirement if, in accordance with Sec 4 line 12, "Provide evidence that the individual was practicing surgical technology in a health care facility **at any time during the six months** immediately preceding the effective date of this section." "At any time" is a vague period of time ranging from less than a day to the entire six month period. Like other states cited in the sunrise

review materials, a more defined period of actual practice for the purposes of grandfathering must be required.

We acknowledge that current regulations for surgical technologists in 246-939 WAC must be revised to reflect a new requirement of certification. However, the new rules should maintain registered nurses and advanced registered nurse practitioners as licensed health care practitioners with the ability to delegate tasks to surgical technologists. In addition, a list of tasks that surgical technologists should not be able to do should also remain in regulation.

The increasing demands of health care and the rising acuity of surgical patients require a better trained and educated workforce. Surgical technologists, who are responsible for carrying out functions limited to their scope of practice, as well as delegated duties by the supervising registered nurse circulator, are charged with important functions pertaining to patient safety. This bill potentially improves the potential outcomes for patient safety related to the role.

Thank you for the opportunity to comment. We also urge the Department to support comments submitted by the Association of periOperative Registered Nurses. We look forward to working with the Association of Surgical Technologists, the Department of Health, and other key stakeholders on the completion of this sunrise review.

Sincerely,

Sofia Aragon, JD, RN
Senior Governmental Affairs Advisor
Washington State Nurses Association



OPHTHALMIC MUTUAL
INSURANCE COMPANY
(A Risk Retention Group)

655 Beach Street
San Francisco, CA 94109-1336
PO Box 880610
San Francisco, CA 94188-0610

P 800.562.6642
415.771.1002
F 415.771.7087
omic@omic.com
www.omic.com

August 7, 2012

Sent via e-mail

Sherry Thomas, Policy Coordinator
Health Systems and Quality Assurance
Washington State Department of Health
P.O. Box 47850
Olympia, WA 98504-7850

Re: Surgical Technologist Application for Sunrise Review (Sunrise Review)

Dear Ms. Thomas:

The Ophthalmic Mutual Insurance Company (OMIC) is the sponsored medical professional liability carrier of the American Academy of Ophthalmology. OMIC has been in business since 1987 and currently insures over 4,400 ophthalmologists nationwide, 73 in the state of Washington. OMIC also insures approximately 194 surgery centers, 12 in the state of Washington. Because of our extensive claims and risk management experience pertaining to ophthalmic outpatient surgery facilities (OSF), we wish to comment on the proposed Surgical Technologist Application for Sunrise Review (Sunrise Review).

OMIC has carefully analyzed claims, suits, and settlements involving OSFs. As a result of this process, underwriting requirements and risk management guidelines pertaining to patient selection, type of anesthesia/sedation, pre- and postoperative assessments and monitoring, and emergency response and equipment were developed. These requirements were extensively reviewed and refined by consultants and practicing ophthalmologists, and the anesthesia, monitoring, and emergency response requirements were reviewed by an anesthesiologist.

There are eight (8) pages of underwriting and risk management requirements that our insureds must agree to before the company will insure the OSF. There is no requirement that surgical technologists be certified. That being said, OMIC does address appropriate training of allied health personnel and requires verification of competency. Our insureds must agree:

“The training, licensure (if applicable), claims experience (if applicable), and current competency of all allied health care personnel (e.g., technicians, first assistants, CRNAs, etc.), whether employees of the facility or not, must be verified initially and on a regular basis.”

OMIC does *not* require “certification” for allied health personnel for the simple reason there is no compelling data indicating that certification is warranted. Since 1987, only about 1% (#56) of our closed claims has been against surgery centers. We have only 2 claims against surgery centers in Washington. Both of those claims were unrelated to the surgical care of the patients.

It appears that OMIC’s approach to managing risk related to surgical technologists is well within current nationwide standards. In documentation provided by the Washington Association of Surgical Technologists (AST), in relation to the proposed Sunrise Review we learned that only 6 states have minimum educational and certification standards:

"....States that have minimum educational and certification standards for surgical technologists include Idaho, Indiana, New Jersey, South Carolina, Tennessee and Texas"

OMIC and the ophthalmologists it insures in the state of Washington share in the goals of minimizing errors and improving the surgical care of patients. However, it does not support mandating certification of surgical technologists in the absence of evidence supporting such a change.

Sincerely,



Paul Weber, JD, ARM
Vice President OMIC Risk Management Legal

Copy: Aaron P. Weingeist, MD
Trustee, Washington Academy of Eye Physicians and Surgeons

August 9, 2012

Washington Department of Health
Sherry Thomas
PO Box 47850
Olympia, WA 98504-7850

Re: AORN Comments on Certification of Surgical Technologists

Dear Ms. Thomas,

The Association of periOperative Registered Nurses (AORN) represents the interests of more than 160,000 perioperative nurses by providing nursing education, standards, and clinical practice resources to enable optimal outcomes for patients undergoing operative and other invasive procedures. AORN's 41,000 registered nurse members, including approximately 1,000 in Washington, manage, teach, and practice perioperative nursing, are enrolled in nursing education, or are engaged in perioperative research.

Perioperative RN circulators are responsible for managing patient care within the operating room, observing the surgical team from a broad perspective, and assisting the team to create and maintain a safe, comfortable environment for the patient's surgery. Through his or her professional and patient-centered nursing education and expertise, the RN circulator is the primary patient advocate in the operating room. Supervision of allied health care providers such as surgical technologists is also the responsibility of the perioperative RN.

AORN's Patient Safety Concerns – Registered Nurse Supervision

AORN and the Association of Surgical Technologists (AST) disagree on the independence of surgical technologists and the need for the surgical technologist to be supervised by the RN. AORN policy is consistent with the Medicare Conditions of Participation for Hospitals, which provide that surgical technologists serving in the scrub role as a scrub nurse do so under the delegated authority and supervision of a registered nurse. (42 C.F.R. §482.51(a)(2)). The perioperative RN is responsible for coordinating care, including delegating technical functions under his or her direct supervision to individuals who are not licensed to practice as a RN based on the individual's level of training and competency. Washington requires hospitals to have a registered nurse circulator in every operating room during surgical procedures (Wash. Adm. Code §246-320-336). Washington ASCs must have a registered nurse circulator in every operating room whenever deep sedation or general anesthesia are used (Wash. Adm. Code §246-330-210).

Washington's current registration requirement for surgical technologists provides that surgical technologists function under the delegation of authority of a healthcare practitioner acting within the scope of his or her license. AORN believes that any further codification of the surgical technologist

AORN
August 9, 2012

functions under Washington law should be clear that in Washington hospitals and ASCs using general anesthesia or deep sedation, the surgical technologist functions under the delegated authority and under the direct supervision of the registered nurse circulator in the room.

This is a very important element in how operating rooms are organized. The RN circulator serves as the patient advocate while the patient is least able to care for him or herself in the operating room. The RN circulator is responsible for ensuring that all members of the surgical team perform in a united effort. The RN circulator is also responsible for supervising appropriate performance and completion of delegated nursing tasks, including the scrub role. As the surgical technologist prepares the operating room and sterile supplies and instruments, and performs in the scrub role during the procedure, he or she is doing so under the supervision of the registered nurse circulator who is present for the duration of the procedure.

Why Not Defer to Facility Policy on Supervision?

Specific hospital and ASC policies and procedures are not mandated by state law. Facility policies and procedures are open to interpretation by the facility and may not necessarily ensure the RN circulator's supervisory authority over the surgical technologist during the surgical procedure. Policies and procedures may change from one administration to another which could jeopardize consistency and patient safety protections in individual operating rooms.

In summary, surgical technology falls within perioperative nursing practice and therefore, the surgical technologist functions under RN delegations and must be supervised by a registered nurse. While AORN is supportive of legislative efforts to require certification and continuing education for surgical technologists, such legislation must ensure that the surgical technologist continues to work under the supervision of an RN.

Thank you for your consideration. AORN also urges the Department to support comments submitted by the Washington State Nurses Association and give full consideration to testimony you may hear from all registered nurses during the hearing on August 14. Please let us know if you have any questions.

Sincerely,



Amy L. Hader, JD

AORN, Director of Legal and Government Affairs

cc: Rebecca Davis, RN, MN, CNOR

Resources

* *AORN Position Statement on Allied Health Care Providers and Support Personnel in the Perioperative Practice Setting*

* *AORN Position Statement on Orientation of the Registered Nurse and Certified Surgical Technologist to the Perioperative Setting*

The AORN Position Statements referred to in the above letter are available online at www.aorn.org under the Clinical Practice tab.



WASHINGTON STATE PODIATRIC MEDICAL ASSOCIATION

PO BOX 22368

Seattle WA 98122

phone 206 922 3587 fax (425) 642 8372

nwpodiatry@aol.com

Sent via e-mail

August 10, 2012

Sherry Thomas, Policy Coordinator
Health Systems and Quality Assurance
Washington State Department of Health
P.O. Box 47850
Olympia, WA 98504-7850

Re: Surgical technologist sunrise

Dear Ms. Thomas,

The following comments are submitted on behalf of the Washington State Podiatric Medical Association (WSPMA), a statewide organization representing licensed podiatric physicians. WSPMA believes that the applicant group has failed to demonstrate that mandatory certification of surgical technologists is in the best interests of the State of Washington.

House Bill 2414, as written, would in essence require licensure of surgical technologists. It does this through mandatory certification and the creation of a scope of practice. WSPMA acknowledges that there has been a trend toward making certification mandatory, thereby creating licensure. A review of the definitions on the DOH web page illustrate that mandatory certification equates to licensure regardless of the specific words used.

Certification is defined on the Department of Health's sunrise web page as: "A voluntary process by which the state grants recognition to an individual who has met certain qualifications. A non-certified person may perform the same tasks, but may not use "certified" in the title. A certified person is subject to the Uniform Disciplinary Act ([Chapter 18.130 RCW](#)). (emphasis added)

Licensure is defined on the DOH sunrise web page as: "A method of regulation by which the state grants permission to persons who meet predetermined qualification to engage in a health profession which would otherwise be unlawful in the absence of permission. Licensure protects the scope of practice and the title."

Licensure is the highest level of regulation and should be used only when registration or voluntary certification is inadequate to protect the public. The applicants have not demonstrated that the current regulatory framework of registration is inadequate to protect the public. Very low numbers of complaints (17 in 2011 and 11, thus far in 2012) are illustrative. Should the applicants want to increase regulation of surgical technologists, the next logical step is voluntary, not mandatory, certification.

Additionally, WSPMA has the following concerns:

1. The legislation is very broad and would potentially apply to any setting where surgery is performed from physician offices to ASCs/ASFs to hospitals. In addition, the language of the legislation is so broad that it applies to both minor and major surgical procedures. There are numerous minor procedures conducted in physicians' offices that are categorized as surgery. To require that virtually

all physician offices hire a surgical technologist in order to comply with HB 2414 is not evidence based and would unnecessarily add to health care costs. Currently, there are state and federal statutes and rules in place for surgeries performed in physician offices, ASCs, ASFs, and hospitals that are sufficient to protect the public.

2. The applicant has provided no meaningful data to support an increase in regulation to the licensure level for surgical technologists. Complaint data from Washington State shows very few complaints, as noted above. In addition, many of the examples provided in the sunrise submission are from out of state. It seems likely that most are from states that have no regulation of surgical technologists, as fewer than 10 states have any regulation. Washington is in the minority of states that do regulate.
3. The applicant's sunrise report speaks to the need for education and training in order to assure the public's safety in any surgical setting. The report states: "This legislation will ensure that all personnel caring for surgical patients are qualified and meet minimum continuing education standards." (emphasis added) This statement is negated by the broad grandfathering language of HB 2414. In the applicant's report, they note that there are almost 3,000 registered surgical technologists, with approximately 500 being members of the applicant group. Logically, one could assume that most of the members of the applicant group have the increased levels of training and education, while most who are not members don't. Of course, there would be exceptions. The bottom line is that the very broad grandfathering provisions negate the applicant's stated goal, and illustrate that further regulation is not warranted. If the public is safe with a 1,000 or more (conservative estimate) registered surgical technologists being grandfathered without showing that they have met the education and training required for certification, why is any additional education or training needed for any surgical technologist?

In addition to these points, WSPMA also affirms and supports the letter submitted by the Washington State Medical Association (WSMA).

WSPMA shares in the goals of minimizing errors and improving the surgical care of patients. However, WSPMA does not support an increase in regulation for surgical technologists from registration to mandatory certification (licensure) in the absence of evidence supporting such a change.

Sincerely,



Susan K. Scanlan DPM
Executive Director, WSPMA

Douglas R. Myers, MD
President

Nicholas Rajacich, MD
President-Elect

Dean Martz, MD
Past President

Ray Hsiao, MD
1st Vice President

Dale P. Reisner, MD
2nd Vice President

Brian J. Seppi, MD
Secretary-Treasurer

Bruce J. Andison, MD
Assistant Secretary-Treasurer

Thomas J. Curry
Executive Director/CEO

August 10, 2012

Sherry Thomas, Policy Coordinator
Health Systems and Quality Assurance
Washington State Department of Health
P.O. Box 47850
Olympia, WA 98504-7850

Sent via e-mail

Re: Surgical Technologist Sunrise Review

Dear Ms. Thomas:

On behalf of the Washington State Medical Association (WSMA) and its over 9,800 physician and physician assistant members we submit the following comments regarding the surgical technologist sunrise review requested by Representative Eileen Cody, and the application submitted by the Washington State Assembly of the Association of Surgical Technologists (WSA-AST). The WSMA opposes the mandatory certification of surgical technologists called for in the application and in HB 2414. Part of the WSMA's mission is to provide strong advocacy that is patient focused. We believe the WSA-AST proposal does not benefit patients. Our review suggests the proposal is unnecessary, unsupported by the best available evidence, will adversely affect small medical practices and ambulatory surgical facilities and centers (ASCs), and most importantly, will likely increase the cost of health care without improving quality or patient access to care.

The application for sunrise review submitted by the WSA-AST fails to demonstrate that mandatory certification of surgical technologists is necessary to protect the public safety and welfare, or is in the best interests of the State of Washington. Merely stating the obvious – that surgery is inherently invasive, errors do occur, and that hospital-acquired infections are a serious problem – does not make the case that problems related to those issues are the direct result of surgical technologists being registered rather than certified. The cause of problems related to surgery most commonly are multifactorial, and often are due to systemic problems rather than the fault of a single individual. Similarly, improvements in the rate of complications and/or infections is also multifactorial, and often due to improvement in the health care delivery system. The WSA-AST use of data from a study in Virginia to suggest that reduced infection rates in

Virginia hospitals which utilize certified surgical technologists is because the surgical technologists are certified is disingenuous, especially since the WSA-AST clearly states that the data is not specifically related to surgical infections caused by surgical technologists. Washington State should not make a major change in the way it regulates surgical technologists based on incomplete and inappropriate data.

The anecdotes the WSA-AST uses to support the notion that non-certified surgical technologists increase the risks of patient harm and medical malpractice liability are just that – anecdotes. Their assertions are not supported by major medical malpractice insurance companies. Physicians Insurance A Mutual Company, the largest insurer of physicians in Washington State, has determined that surgical technologists in Washington are adequately trained and supervised, and are not the cause of patient injury in our state. The Ophthalmic Mutual Insurance Company, which provides medical professional liability insurance for ophthalmologists and ambulatory surgery centers in Washington State and nationwide, does not require certification of surgical technologists because there is no data to support a need for certification. The imposition of mandatory certification of surgical technologists is simply not supported by reliable data, and is unnecessary from the standpoint of professional liability.

The imposition of mandatory certification will create an unfair and unnecessary burden on small medical practices and ASCs. The definition of surgical technologist in Section 2 of HB 2414 is so broad that it conceivably encompasses any surgical procedure in any practice setting, from minor procedures in physicians' offices to procedures performed in ASCs to major operations performed in hospitals. This may lead to problems with access to care if physicians cannot perform simple procedures in their offices without hiring certified surgical technologists. ASCs would not be able to continue hiring and training highly competent, yet non-certified, surgical technologists to assist with specialized procedures performed by the surgeons which utilize the facilities under the terms of HB 2414, which could also affect access to care.

Not only could there be a shortage of certified surgical technologists going forward, but physicians' offices and ASCs may have to bear new financial burdens if they are required to hire certified surgical technologists rather than competently trained and supervise non-certified surgical technologists who are more appropriate to the care and treatment rendered. In addition, requiring certification of surgical technologists will place a greater financial burden on the individuals seeking to work in the field at a time where personal finances are already under great strain. Finally, there likely will be an increased cost to the state to supervise and regulate surgical technologists if mandatory certification is approved.

In conclusion, the WSMA opposes mandatory certification of surgical technologists because there are no known problems with surgical technologists under the current system of registration in Washington State, there is no valid data to support either harm resulting from the lack of mandatory certification or improvement in patient safety resulting from such mandatory certification. Mandatory certification will increase the costs of health care without improving the quality of care and patient safety, and could have an adverse effect on access to care in Washington. For these reasons the WSMA respectfully requests that the Department of Health does not adopt mandatory certification of surgical technologists.

The WSMA will be happy to discuss this with you and participate in the sunrise review process to the fullest extent possible.

Sincerely,

A handwritten signature in black ink, appearing to read "Tim Layton". The signature is fluid and cursive, with a long horizontal stroke at the end.

Tim Layton
Washington State Medical Association (WSMA)
Senior Director of Legislative, Regulatory & Legal Affairs

Cc: WSMA Executive Committee
WSMA Senior Staff



SEATTLE OFFICE
eighteenth floor
second & seneca building
1191 second avenue
seattle, washington 98101-2939
TEL 206 464 3939 FAX 206 464 0125

OTHER OFFICES
beijing, china
new york, new york
portland, oregon
washington, d.c.
GSBLAW.COM

GARVEY SCHUBERT BARER

A PARTNERSHIP OF PROFESSIONAL CORPORATIONS

Please reply to EMILY R. STUDEBAKER
estudebaker@gsblaw.com TEL EXT 1417

August 10, 2012

Ms. Sherry Thomas
Washington State Department of Health
P.O. Box 47850
Olympia, WA 98504-7850

Also sent via email: sunrise@doh.wa.gov

Re: Surgical Technologist Application for Sunrise Review
Washington Ambulatory Surgery Center Association Comments

Dear Ms. Thomas:

On behalf of the Washington Ambulatory Surgery Center Association (“WASCA”), please find below comments regarding the Surgical Technologist Application for Sunrise Review (the “Sunrise Review Proposal”) submitted by the Washington State Assembly of the Association of Surgical Technologists (the “WSA-AST”). The Sunrise Review Proposal would increase the level of credential required for surgical technologists in Washington from registered to certified, adding a new requirement that surgical technologists receive and maintain national certification from the National Board of Surgical Technology and Surgical Assisting prior to providing care in the state. The Sunrise Review Proposal fails to demonstrate that the current level of regulation of surgical technologists in Washington is inadequate. It also fails to demonstrate that the proposed increase in regulation would promote quality of care within the state’s health care delivery system. As discussed below, WASCA is concerned that this increase in regulation would impose a burden on the system without providing any meaningful benefit.

A. WASCA’s Interest in the Sunrise Review Proposal

WASCA is a nonprofit association representing the interests of those who own, operate and seek the services of ambulatory surgical facilities (“ASFs”) in Washington State. Since their inception, ASFs have provided quality health care, while reducing health care costs. Recognized as an alternative to inpatient hospital care for certain surgical services, ASFs play a central role in creating a modern, innovative health care delivery system by offering efficient and effective health care. ASFs are a critical point of access for important, nondiscretionary services.



WASCA is dedicated to promoting the well-being of Washington's residents and preserving their access to affordable quality care. To that end, WASCA supported licensure of ASFs by the Department and worked cooperatively with the Department to ensure the licensing requirements appropriately regulated the industry without endangering the viability of ASFs or the availability of the services ASFs offer.¹ Many ASFs in the state rely on the services of the state's registered surgical technologists. Accordingly, while WASCA is interested in the appropriate and necessary regulation of health care practitioners, it is concerned that the proposed increase in regulation is inappropriate and unnecessary and will adversely affect the ability of its members to staff their facilities.

B. WASCA's Specific Concerns Regarding the Sunrise Review Proposal

WASCA is concerned that the Sunrise Review Proposal is inconsistent with RCW 18.120.010(1), which provides that all individuals should be permitted to enter into a health profession "unless there is an overwhelming need for the state to protect the interests of the public by restricting entry into the profession." (Emphasis added.) A regulation restricting entry into a profession may be adopted only where such a need is identified, and, even then, it must be set "at the least restrictive level consistent with the public interest to be protected." RCW 18.120.010(1). *See also* RCW 18.120.010(2) ("[N]o regulation shall ... be imposed upon any health profession except for the exclusive purpose of protecting the public interest").

WASCA is committed to quality care and patient safety in the ambulatory surgery setting. However, as discussed below, in the absence of accurate, verifiable data indicating that the Sunrise Review Proposal will further these priorities, the burden of the proposal simply cannot be justified.

1. Applicant's Lack Verifiable Data

WASCA has considerable concern regarding the lack of verifiable data on which WSA-AST relies for its proposal. Importantly, the legislature requires an applicant to explain specific enumerated factors when proposing that a health professional group be regulated. *See* RCW 18.120.030. WSA-AST has not satisfied this requirement.

Among other things, WSA-AST has failed to explain "[t]he nature of the potential harm to the public if the health profession is not regulated, and the extent to which there is a threat to public health and safety". *See* RCW 18.120.030(1)(a). Instead, WSA-AST generally describes certain potential medical errors and then asks that the Department assume – absent any verifiable data – that *registered* surgical technologists cause these errors and that *certified* surgical technologists will prevent them.

¹ All of WASCA's member ASFs are certified by the Centers for Medicare and Medicaid Services or accredited by The Joint Commission, the Accreditation Association for Ambulatory Health Care or the American Association for Accreditation of Ambulatory Surgery Facilities. Most of WASCA's member ASFs are both certified and accredited. As such, these ASFs are regulated by the federal and state governments and also by a voluntary accreditation organizations recognized by the Department has having standards substantially equivalent to those of the Department. *See* WAC 246-330-020; WAC 246-330-025.



WAC 246-330-130 states:

Adverse events.

(1) As found in the list of serious reportable events adopted by the National Quality Forum in 2002 (and as updated), in its consensus report on serious reportable events in health care, “serious disability” means a physical or mental impairment that substantially limits the major life activities of a patient.

(2) Ambulatory surgical facilities must:

(a) Notify the department according to RCW 70.56.020 whenever an adverse event is confirmed in the facility; and

(b) Send the department a report regarding the event according to RCW 70.56.020.

(3) The department will assure all notifications and reports submitted to the department are maintained confidentially according to RCW 70.56.050.

Similarly, RCW 70.56.020(2) states that, “[w]hen a medical facility confirms that an adverse event has occurred, it shall submit to the department of health ... [n]otification of the event, with the date, type of adverse event, and any additional contextual information the facility chooses to provide, within forty-eight hours” The term medical facility includes:

[A] childbirth center, hospital, psychiatric hospital, or correctional medical facility. An ambulatory surgical facility shall be considered a medical facility for purposes of this chapter upon the effective date of any requirement for state registration or licensure of ambulatory surgical facilities.

RCW 70.56.020(10) (emphasis added).

As indicated above, contrary to WSA-AST’s statements, the state adverse event reporting law does apply to ASFs. That WSA-AST misunderstands or misrepresents the law raises questions regarding the reliability of the information – most of which is anecdotal and unverifiable – which WSA-AST presents in advocating for its proposal.

WSA-AST states that it “has received reports from members about flagrant disregard for sterile technique” and “[m]ost of these reports come from small ambulatory surgical centers that perform elective surgical procedures such as cosmetic procedures and bariatric surgery.” See Applicant Response at 4. An examination of the Department’s information on adverse events shows no adverse event reports for any cosmetic or bariatric ASF.



First, WSA-AST's application states that there exist "no objective requirements of education, skill or competency" for Washington's surgical technologists. However, it does not necessarily follow that the state's registered surgical technologists are uneducated, unskilled or incompetent. WSA-AST offers no evidence of that fact, and WASCA is aware of none.

WSA-AST's application describes certain "potential medical errors" and states that these errors may be caused by "unregulated" health care professionals. However, it does not necessarily follow that the state's registered surgical technologists cause these types of medical errors. WSA-AST offers no evidence of that fact, and WASCA is aware of none. Rather than providing data demonstrating that Washington's surgical technologists are causing such errors, WSA-AST instead suggests that the surgical technologists are generally responsible for post-surgical infections and unintended retention of a foreign object in a patient after surgery. Surely something more than WSA-AST's mere speculation regarding the impact of surgical technologists' education, skill or competency on potential medical errors is required to support an increased regulatory burden.

In summary, there is a complete absence of verifiable data demonstrating any potential harm to the public caused by Washington's registered surgical technologists. There is similarly a complete absence of verifiable data demonstrating that certification, rather than registration, would avoid the potential harm WSA-AST speculates that surgical technologists are causing. In the absence of such data, the proposed increase in regulation is unnecessary. Moreover, when coupled with the increased cost of health care services and the shortage of personnel that would result from requiring certification of surgical technologists, the proposal would represent a burden, and not a benefit, to the system.

2. *Applicant's Inaccurate Legal Conclusions*

WASCA has further concerns regarding the accuracy of the information presented in the Applicant's Response to the Department Follow-Up Questions to the Applicant Report dated June 12, 2012 (the "Response"). The Response, which contains inaccurate information, cannot be relied upon in assessing the Sunrise Review Proposal.

For example, repeatedly the Response states, "[t]he adverse event reporting law applies only to hospital[s] licensed under chapter 70.41 RCW which does not include Washington ambulatory surgical facilities." *See* Response at 5 (emphasis added). *See also* Response at 8 (same). WSA-AST's statements are intended to create an impression that the ambulatory surgical industry, which engages surgical technologists, is under-regulated and unsafe. However, these statements are erroneous. In fact, pursuant to the ASF licensing law (chapter 70.230 RCW) ASFs are expressly required to comply with Washington's Adverse Event and Incident Reporting Law (chapter 70.56 RCW).




WSA-AST also states that it “is in receipt of cases in which the office manager or receptionist serves as both the surgical technologist and the office manager at ambulatory surgical centers. In one instance, the surgical technologist was referred to the receptionist for orientation and training in labor and delivery.” Applicant Response at 9. This example is inexplicable, since ASFs in Washington do not offer labor and delivery services. Instead, such services in this state are provided on an outpatient basis only in childbirth centers. *See* RCW 18.46.010(1); RCW 18.46.020.

In support of its proposed increase in regulation, WSA-AST fails to provide any verifiable data and offers inaccurate legal conclusions. It also asks the Department to speculate on whether and how registered surgical technologists influence medical errors in the state and to further speculate on the impact of increasing their level of credential. WASCA supports necessary and reasonable regulation designed to promote safe and quality care. It cannot support a proposal to increase regulation based on speculation alone, especially where the proposal would represent a burden to its members and a cost to the state’s health care delivery system.

Sincerely,

GARVEY SCHUBERT BARER

By 
Emily R. Studebaker

cc: Board of Directors, Washington Ambulatory Surgery Center Association



WASHINGTON
ACADEMY OF
EYE PHYSICIANS
& SURGEONS

2033 Sixth Avenue, Suite 1100, Seattle, WA 98121

August 10, 2012

Sherry Thomas, Policy Coordinator
Health Systems Quality Assurance
Office of the Assistant Secretary
Washington State Department of Health
310 Israel Road
Tumwater, WA 98504-7850

Also Provided Via Email: sunrise@doh.wa.gov

RE: Health Professions Sunrise Review: Certification of Surgical Technologists

Dear Ms. Thomas:

The Washington Academy of Eye Physicians and Surgeons (WAEPS) is respectfully responding to the Department of Health's announcement of a Sunrise Review proposal by the Washington State Assembly of the Association of Surgical Technologists (WSA-AST) to change credentialing requirements for surgical technologists. Our comments will address both the bill draft forwarded by Representative Eileen Cody (HB2414) in her request for a Sunrise Review, as well as the WSA-AST's application to the DOH for a review of this issue.

WAEPS is the professional society of ophthalmologists (Eye MDs) in Washington State. It represents the vast majority of ophthalmologists practicing in this State and our members have deep concerns about the WSA-AST's proposal.

Ophthalmologists are typically small business owners whose existence depends on the delivery of high quality medical and surgical health care. WAEPS works with the American Academy of Ophthalmology (AAO), the Washington State Medical Association (WSMA), the American Medical Association (AMA), and others to ensure that EyeMDs are up-to-date and practicing at the highest levels. Our members have clinics and ambulatory surgery centers (ASCs) staffed with intelligent, capable individuals who are most often trained on-the-job. While some larger ASCs, which perform more surgeries, use certified surgical technologists (CSTs), most smaller practices are not able, and do not need, to utilize certified personnel. These smaller surgery centers train staff in microsurgery skills that are quite specialized and unique to ophthalmic surgery. Certainly the ultimate qualification criteria for surgical technologists is that of continued employment, as no ophthalmologist would continue to employ substandard personnel.

The reason CSTs may not be used is not because EyeMDs enjoy the added responsibility of training their own staff, nor because non-certified assistants are cheaper, but rather that formally trained CSTs are simply not available to them at any cost. Several ophthalmic ASCs commented that they only perform surgeries a few days per month, and that CSTs are generally not interested in working at other office positions to create full-time employment. CSTs typically prefer to work in the OR, so they frequently become busy working for others that utilize their services daily, and then become totally unavailable to other smaller facilities. This Sunrise proposal would force eye surgeries to be performed only in larger urban centers, effectively reducing convenient access to care in more rural areas.

Ophthalmologists are data driven micro-surgeons who are known to be very detail oriented. As a profession, EyeMDs are interested in delivering the highest quality care in a cost effective and efficient manner. To do that, ophthalmologists ensure that their surgical assistants are trained to exceptionally high standards. To our knowledge, there

has never been a medical liability claim in Washington State related to the actions of a surgical assistant during an ophthalmic surgery.

Requiring the use of CSTs would cripple the practices of ophthalmologists across the state by denying access to qualified staff, increasing the cost of the care that is delivered, and reducing patient access to care. There has been no public outcry for the proposed regulatory change. There have been no documented cases of on-the-job trained surgical technicians causing harm to patients in ophthalmic practices. Infections in the ophthalmic surgical environment are devastating, and when they occur, may lead to blindness or loss of the eye. If our specialty were experiencing increased surgical complications related to staffing, we would be the first to demand changes in training and certification criteria. We cannot tolerate results that have an increased risk of blindness. Our non-certified personnel do not afford such a risk.

WAEPS is appreciative of the opportunity to review and comment upon WST-AST's Sunrise Review proposal. Our leadership and membership will continue to be available to the DOH for additional information, or clarification of the information provided in this letter. We look forward to working with DOH as this review progresses.

Respectfully,

Denise F. Dudley, MD

President, Washington Academy of Eye Physicians & Surgeons (WAEPS)

Comments Submitted After Public Hearing

I am a Certified Perioperative Registered Nurse. I have been an OR Nurse for 42 years. I would like to tell you my concerns and experience with surgical technologists in Washington operating rooms.

I graduated the University of Washington with a BSN in 1970 and sat the Certification Exam in 1985. I have maintained my certification since that date.

When I worked as a surgery nurse in the 1970's, about 85% of the scrub role was done by a registered nurse. RN employment issues in 1976 changed the operating room composition. Now 85% of the scrub role is filled by a surgical technologist who works under the Registered Nurse Circulator's license.

As the surgical technologist prepares the operating room, sterile supplies, instruments, and performs in the scrub role during the procedure he or she is doing so under my supervision. The Registered Nurse Circulator directs the nursing care of the patient, which includes the delegated functions performed by a surgical technologist in the scrub role.

There have been published studies done demonstrating the increase in patient safety of fewer errors, fewer wrong site surgeries, fewer surgically acquired infections, and fewer medication errors when comparing a Certified Registered Nurse compared to non-certified Registered Nurse. You can hypothesize that requiring Certification of Surgical Technologists will measurably increase patient safety and reduce the cost and length of hospital stay.
Melanie A Burton RN BSN CNOR MLSO

Virginia Mason Medical Center (VM) is pleased to submit the following comments concerning the surgical technologist sunrise review and the application submitted by the Washington State Assembly of the Association of Surgical Technologists (WSA-AST). Last year, Virginia Mason performed nearly 18,000 surgical procedures at its facilities located on Seattle's First Hill and in the Puget Sound region.

In response to the proposal for mandatory certification of surgical technologists proposed by WSA-AST's application and in House Bill 2414:

- 1) VM opposes the mandatory certification of surgical technologists as proposed by the application and House Bill 2414;
- 2) VM urges the state to adopt a requirement that surgical technologists must demonstrate that they have completed a course of education from either an accredited school of surgical technology or a recognized program; and
- 3) VM urges the state to adopt a requirement that surgical technologists must work under the supervision of a registered nurse (RN) or other licensed provider during a surgical procedure in the surgical suite environment.

VM's experience indicates that patients receive the highest quality health care when surgical technologists have received appropriate education and training to safely, knowledgeably and efficiently provide surgical assistance in coordination with other health professionals.

Virginia Mason agrees with the conclusions and rationale expressed by the Washington State Medical Association in its letter of August 10, 2012 on this matter. We particularly concur with the statement that:

The application ... submitted by the WSA-AST fails to demonstrate that mandatory certification of surgical technologists is necessary to protect the public safety and welfare, or in the best interests of the State of Washington. Merely stating the obvious -- that surgery is inherently invasive, errors do occur, and that hospital-acquired infections are a serious problem -- does not make the case that problems related to those issues are the direct result of surgical technologists being registered rather than certified.

Our experience at VM is that surgical technologists in this state currently are adequately trained and educated and perform well, providing beneficial health care to their patients, when properly supervised. The imposition of mandatory certification will not serve to improve patients' health care.

Mandatory certification is likely to increase the costs of health care without improving quality of care and patient safety. Additionally, a requirement for certification would be inconsistent, since the state does not require certification for surgical operating room (OR) nurses.

For these reasons, VM requests that the Department of Health not adopt a proposal for mandatory certification of surgical technologists, but rather adopt the two requirements outlined in items 2 and 3 above. We would be pleased to further discuss this issue with you. Please do not hesitate to contact us to discuss this matter.

VIRGINIA MASON MEDICAL CENTER

Stephen W. Graham, MBA, BSN, CNOR, Director of Surgery

My experience in the Army and at GHC was with trained and certified surgical technologists and as you know that experience was good. I do think certification is important in care, and for surgeons who are hiring, to know they are getting trained certified people. There is specific training that all surgeons need on how to handle tissue, control bleeding, OR procedure and the many safety requirements like time outs etc. and each team member needs to know how to carry out procedures, check lists, how to bring up problems in the OR. Definite support from me.

Dr. John Howe

Just for the record, I am very much in favor of having all Surg. Techs. Certified. It raises the standard and provides for the training needed to enhance patient safety in the OR.

Lynda Rider RN, Clinical Manager ASC, Pacific NW Eye Assoc.

In addition, the applicant submitted the documents on the following pages after the hearing:

Alternative Grandfathering Provision Suggestions

CURRENT GRANDFATHERING PROVISION IN HB 2414

(1) In lieu of the credentialing requirements in RCW 18.215,020, applicants for certification as a surgical technologist may:

...

(b) Provide evidence that the individual was practicing surgical technology in a health care facility at any time during the six months immediately preceding the effective date of this section.

ALTERNATIVE GRANDFATHER PROVISION SUGGESTIONS:

(based on current HB 2414)

(1) In lieu of the credentialing requirements in RCW 18.215,020, applicants for certification as a surgical technologist may:

(b) Provide evidence that the individual has practiced surgical technology in a health care facility, ambulatory health care facility or facility providing similar surgical services for a period of two years in the five (5) years immediately preceding the effective date of this section.

OR

(b) Provide evidence that the individual was at any time employed as a surgical technologist in a hospitals, ambulatory surgery facility or similar health care facility for not less than eighteen (18) months in the three (3) years preceding the effective date of this section.

OTHER STATES' GRANDFATHERING PROVISIONS FOR SURGICAL TECHNOLOGISTS

South Carolina:

(c) provides evidence that the person was employed to practice surgical technology in a health care facility in this State prior to January 1, 2008;

Texas:

(3) was employed to practice surgical technology in a health care facility before September 1, 2009;

Indiana:

(3) Provides evidence to the health care facility that the individual was employed to practice surgical technology in a health care facility before July 1, 2009.

Tennessee:

(a) In addition to individuals identified in § 68-57-101, a person may be employed upon providing sufficient evidence that, prior to May 21, 2007, the person was at any time employed as a surgical technologist for not less than eighteen (18) months in the three (3) years preceding May 21, 2007;

New York (legislation pending):

(C) provides evidence that the person was employed as a surgical technologist in a health care facility on or in the two years immediately prior to the effective date of this section.

Massachusetts (legislation pending):

(3) was employed as a surgical technologist in a surgical facility on or before July 1, 2012;

Hospital	City	Require graduation from an accredited program?	Require certification from the National Board of Surgical Technology and Surgical Assisting?
Over 400 beds			
Sacred Heart Medical Center 509.455.3226	Spokane	Graduation from an accredited program "preferred "	CST certification "preferred."
Swedish Medical Center/First Hill Campus	Seattle	Graduation from an accredited program "preferred "	CST certification "preferred."
University of Washington Medical Center: 206.598.3300	Seattle	Graduation from an accredited program "preferred "	CST certification "preferred."
PeaceHealth Southwest Medical Center	Vancouver	Graduation from an accredited program required.	CST certification required.
VA Hospital	Seattle	NA-Not impacted by state law	
Harborview Medical Center; 206.744.3246	Seattle	Graduation from an accredited program "preferred "	CST certification "preferred."
300 to 400 beds			
Tacoma General Hospital: 253.403.1000	Tacoma	Graduation from an accredited program "preferred "	CST certification "preferred."
Providence St. Peter Hospital	Olympia	Left a message with Laurie.	
Providence Regional Medical Center Everett	Everett	Graduation from an accredited program "preferred "	CST certification "preferred."
Overlake Hospital Medical Center	Bellevue	Graduation from an accredited program "preferred "	CST certification "preferred."
St. Joseph Medical Center	Tacoma	Graduation from an accredited program required. Because Franciscan Health consists of 5 hospitals, unable to provide number of CSTs currently employed.	CST certification "preferred."
Virginia Mason Hospital	Seattle	Left voice messages. Unable to reach a real person.	
Deaconess Medical Center	Spokane	Awaiting response	
200 to 300 beds			
Harrison Memorial Hospital	Bremerton	Graduation from an accredited program required. Eighteen CSTs employed. They've hired four this year alone.	CST certification required.
Northwest Hospital	Seattle	Graduation from an accredited program required. 15 CSTs (total, both L&D, O.R)	CST "preferred."

Evergreen Healthcare	Kirkland	Graduation from an accredited program required ; 22 CSTs (total, from both L&D, O.R.)	CST " preferred. "
Good Samaritan Community Healthcare	Puyallup	Does not require graduation from an accredited program. Part of Multicare - (4) hosp and few clinics; unable to give CST#s but total STs is 75; Guesses prob more than 1/2 are certified.	CST " preferred. "
Providence Holy Family Hospital	Spokane	Graduation from accredited program required ; 21 CSTs in Main O.R.; 3 in L&D	Certification must be obtained within the first year of employment
Valley Medical Center	Renton	Graduation from a program " preferred. "	CST " preferred. "
St. Joseph Medical Center	Bellingham	Graduation from an accredited program " preferred. "	CST " preferred. "
Central Washington Hospital	Wentachee	Graduation from an accredited program required.	Certification required.
Madigan Army Medical Center	Tacoma	NA-Not impacted by state law	
Swedish Medical Center/Edmonds Campus	Edmonds	"Certificate of completion of a surgical technician vocational program or documentation of equivalent training." Does not specify accreditation status.	"National certification by the Liaison Council on Certification for ST is preferred." (Liaison Council on Certification's name has changed to the National Board of Surgical Technology and Surgical Assisting.)
100 to 200 beds			
Swedish Medical Center/Cherry Hill Campus	Seattle	"Certificate of completion of a surgical technician vocational program or documentation of equivalent training." Does not specify accreditation status.	"National certification by the Liaison Council on Certification for ST is preferred." (Liaison Council on Certification's name has changed to the National Board of Surgical Technology and Surgical Assisting.)
Legacy Salmon Creek Hospital	Vancouver	"Graduate of an accredited Surgical Technologists course or two years of Surgical Tech experience in an Operating Room setting."	"Surgical Technologist certification preferred for state of Oregon." (This is not a typo. The posting was definitely for a position in Vancouver, Washington.)
St. John Medical Center	Longview	"Graduation from an approved school of surgical technology or those individuals whose training (i.e. military) qualifies them for certification eligibility."	"Qualified applicants must have current certification as a certified surgical technologist."

Swedish Medical Center/Ballard Campus	Seattle	"Certificate of completion of a surgical technician vocational program or documentation of equivalent training." Does not specify accreditation status.	"National certification by the Liaison Council on Certification for ST is preferred." (Liaison Council on Certification's name has changed to the National Board of Surgical Technology and Surgical Assisting.)
Capital Medical Center	Olympia	"Surgical Technician program from an accredited Vocational / Technical institution preferred"	"Certified Surgical Technician (preferred) and current Basic Life Safety course (required)"

Examples of Patient Harm, Uncertified Surgical Technologists

In response to a request from the Washington State Department of Health Sunrise Review Committee, WA-AST collected more examples of patient harm that can be caused by uncertified surgical technologists, in addition to those provided in the follow-up response from [WA-AST to the Department of Health dated July 12, 2012](#).

On Wednesday, August 15, the day following the hearing, WA-AST sent an email to AST members asking for examples of patient harm in response to a request from the Washington Department of Health.

The following responses were received between Wednesday, August 15 and Wednesday, August 22, 2012. The examples have been minimally edited for clarity and spelling. Underlining has also been added for emphasis. Otherwise, they are printed as they were submitted by the AST members.

The following terms are frequently used in these examples: 1.) OJT; 2.) tech; and 3.) scrub. "OJT" stands for on-the-job trained or on-the-job trained. In these examples, "tech" is generally short for surgical technologist. Finally, "scrub" is used two ways. The role of the surgical technologist is referred to as "the scrub role." When a person "scrubs" the case, he or she is performing the role of the surgical technologist, the scrub role.

Wendy, CST

I work in a small hospital where LPNs are hired as surgical technologists. No previous O.R. experience is required. The LPN enters and exits the operating room during surgery without re-scrubbing in upon entry. This violates sterile technique. This LPN does not take instruments apart to clean them, which also violates sterile technique. One day when I had my backtable set up, was scrubbed, gowned, and gloved and proceeded to open and put my lap instruments together when I noticed the lap instruments were contaminated! **The reusable Hasson trocar still had blood in it.** I broke everything down, there was no way I would of used that set up on my family let alone this patient that could not speak up for their self. I am that patients advocate when they are unconscious and cannot speak. The LPN is still scrubbing at my hospital and still has not been trained in sterile technique.

Seth, CST, RN, BSN

I have been practicing for approximately eight years and can give many examples of incidences occurring in the operating room due to untrained or poorly, improperly trained staff members. Nevertheless, I will focus on one occasion in particular.

This horrific incident is attributed to an uncertified surgical technologist that never used the electrocautery surgical unit's safety holster, but rather had a habit of disposing of it before the beginning of every case they scrubbed. The incident occurred when a female patient was in the lithotomy and totally asleep for a procedure, thus, unable to feel pain or have any awareness of her surroundings. As the surgeon continually used the electrocautery surgical unit, the tip naturally became very hot. The electrocautery surgical unit tip, without the benefit of a plastic holster available in which to place it, was laid directly on the drapes. **The electrocautery surgical unit tip subsequently melted its way through the drapes and into the area where the patient's thigh joins her pelvis, causing a severe, deep burn.** The burn developed an infection requiring the patient to be hospitalized. The area was debrided numerous times and the patient continues to suffer ill effects from this incident. The surgical technologist in question had never been to school nor were they certified, instead they were trained on the job. When asked why they did not have the plastic holster available for use during surgery, they replied they had "never been trained to use it." This type of incident is totally preventable by the use of safety measures already in place. The certified surgical technologist is trained in the use of safety equipment required in the operating room and is aware of the importance of the use of said equipment. The certified surgical technologist is also aware of the significant injuries that can occur unless the equipment is utilized properly. While this case is indeed unfortunate it is by no means singular or solitary. The training (or lack thereof) that on-the-job surgical technologists receive is not verified by nationally accepted standards; therefore they are let loose on the public.

Dorothy, CST

I have seen too many incidences to name from on-the-job trained surgical technologist. **I've seen surgical technologists leave the room and come back in without re-gowning and re-gloving. I've seen reused, contaminated instruments during a cancer case. I've seen two different specimens placed in the same container. I seen a wet sponge used on the scrub sink later used to wipe the incision at the end of the case. One time a surgical technologist gave the surgeon lidocaine with epinephrine instead of plain epinephrine which had a devastating outcome. I've seen h2o used to irrigate during a cardiac case instead of sterile saline. I've seen a case where neither the surgical technologist nor the nurse draped the patient on the wrong side and the surgeon operated on the left carotid artery rather than the right carotid artery.**

Charlie, CST, CSFA

I've been practicing as a surgical technologist for 15 years and as a surgical assistant for 4 years. I have seen my share of uncertified surgical technologists. I trained in the military. I have seen patients die not solely due to a surgical technologist, but because the level of anticipation wasn't there. Maybe if the ST would have had more experience and training they may have been able to anticipate the next step, even though it was not their fault in my opinion there is still a level of responsibility that everyone must share in an emergency situation. Here are the details of the story:

There was a patient that had appendicitis. They were brought to the operating room for a laparoscopic appendectomy. The patient was morbidly obese and there were questions about the best way to handle the induction and intubation. It was decided to proceed normally. **However, once the anesthesiologist anesthetized the patient and tried to intubate they realized they were in trouble. They then began asking for a tracheotomy set-up. There were instruments already set-up for the lap appendectomy. However, they weren't used and the surgical technologist broke sterility to find the trach tray. The anesthesiologist continued trying to intubate without success, once the surgical technologist got back with the tracheotomy tray. They proceeded to do the tracheotomy. It went quickly. However, once the hole was made into the trachea and they asked for the shiley tracheostomy tubes, the surgical technologist said one had not been procured. It was the surgical technologist's job to make sure that was ready. Any certified surgical technologist knows if you run to get the "trach tray," you should grab the tubes too. Since time was of the essence, the decision was made to use an endotracheal tube instead and the endotracheal tube was placed through the tracheotomy and the cuff was blown up. However, no trace of CO2 was coming back, very poor ventilation, coupled with low O2 sat's, CPR for 20 minutes and blood in the ET/Trach tube it was decided to get a chest x-ray to confirm placement. Turns out, the anesthesiologist placed the endotracheal tube as if they were doing a regular intubation rather than a tracheotomy intubation. They placed it not only into right main stem but then through the wall of the bronchus. At that time the patient was pronounced dead.**

Now there were many things that went wrong with this case. However when I look at what the surgical technologist did and did not do, it immediately left me to think what if they would have been skilled enough to know what instruments you need for a tracheostomy, once there is an opening is the tracheostomy itself ready. This patient was receiving CPR (chest compressions) everyone's mind was on what they were supposed to be doing and there wasn't a lot of direction given in order to get things prepared for this emergency. Having a poorly trained or on-the-job trained type surgical technologist who is not competent with anatomy/physiology, pharmacological, instrument preparation, or surgical conscious, they are just as dangerous as having a nurse or physician that is untrained. I believe that it is important that all ST's are trained through a CAAHEP-accredited program and that all of these fly by night programs are shut down and no longer allowed put sub-par surgical technologists into the pool.

Glen, CST, CTBS, CEBT

Good morning, I have several examples of poorly trained or uneducated employees working in the surgical technologist role over my 24 years as a Certified Surgical Technologist but this one stands out the most in my mind.

I was working for a group of orthopedic surgeons as their personal surgical technologist. One of the surgeons I worked with was being asked to travel to a small regional hospital to operate on orthopedic patients instead of the patients having to travel to him. After his first surgery at the regional hospital he

told me that he wanted me to go with him on the next week because he had scheduled three total knees and was afraid that they would be overwhelmed.

The first case went fairly well and the second case was progressing when the surgical technologist in charge of set-up asked the doctor if the turn over time had been fast enough for him. The doctor stated that it was fine. I turned to the surgical technologist and asked if he had received another set of instruments from the company representative to insure such a quick turnaround. He looked at me like I had lost my mind and said, **“No, these are the same instruments we used on the first case.” He stated that he had soaked them and then flashed them for three minutes. I told him that this was unacceptable if he had not cleaned them and then sterilized them for the proper amount of time. I then advised the doctor to stop the case and used a syringe to flush bioburden from an instrument that had not been used on the second case yet. I told the tech that our second case was contaminated by his lack of cleaning and that we could have introduced possible hazards to this patient. He stated "sorry I didn't know.. I was in housekeeping till about two months ago".** We followed that patient closely after the surgery to check for possible infections and rejections.

Linda, RN, BSN, CST

Wow, do I have a few examples of why we need competently trained surgical technologists in the operating room. Here is one story:

On a Saturday morning at a local hospital a patient was being brought in from ICU to have a percutaneous tracheostomy placed along with a gastrostomy tube. This patient was critically ill. The surgical technologist that was assigned to scrub and do the case was an on-the-job trained scrub that had previously been a transporter, but because she had been working for the hospital for several years and wanted to learn how to scrub, the nurse manager had her trained. **One of the nurse aides who had no formal scrub training, but had also learned on-the-job. The nurse aide trained her for several months.** When this case was scheduled we knew that we only had one percutaneous tracheostomy kit in the department, so it was imperative that it was not dropped or contaminated. The circulator was helping this scrub open for the case and the scrub went to flip the tracheostomy kit on the back table and the dilators fell out of the kit and on to the floor. This concerned everyone because being disposable you couldn't flash them. The circulator went out to inform the surgeon of what happened and possibly having one brought in from another hospital close by. At this time another scrub comes in to relieve the first scrub to go home. The second scrub asks if everything was opened and ready for the case. The first scrub states “Yes everything is opened and the tracheostomy kit is on the back table ready to be used.” She left and the second scrub scrubbed and proceeded to set up the sterile back table. The circulator walks into the room and informs the new scrub that the case was being delayed because they had to send to the other hospital for the tracheostomy kit is and the scrub was surprised because she had the tracheostomy kit on the back table. **This alarmed the circulator and she asked how did it end up on the back table when it was dropped on the floor? The first scrub had picked up the dilators off the floor and placed them on the sterile back table thinking that it didn't matter because the trachea**

was not considered clean and it wouldn't harm the patient. Everything on the back table was considered contaminated and had to be discarded. This would not have happened if that scrub had gone through an accredited program and received the proper training.

Marsha, CST

I was working at St. Thomas Hospital in Nashville. When I went to document that a tray of flashed instruments had been sterilized in the log book when I noticed the tray was never actually was run. I went in the OR to see if indicator was in the pan on the table and it was and had never turned. **When I asked the on-the-job trained surgical technologist, she said she knew the instruments had not been autoclaved.** The procedure was a graft being put in and when I told the nurse in the room that the tray on the table was not sterile, the nurse told the surgeon who then cancelled the case and closed patient to bring back at a later date. This surgical technologist had done other things before and she is still working there. When asked why she put the instruments on her back table she had no answer.

Lisa, CST, CSFA

The facility that I work in now does not have requirement for certification, although 90% of our staff surgical technologists now have it. However, when my facility opened a new birthing center, cesarean sections were moved from the operating room and were to be done in an operating room that was managed and staffed by the OB department. That meant that the hiring of technologists and circulating nurses were no longer overseen by Surgical Services. These surgical technologists were basically hired "off the street" and were given in house classes on sterile and surgical techniques by two Operating Room nurses, only one of which was experienced in the surgical technologist's role. These "courses" were only a couple of weeks long. Then the education of any further hires was handed off to the OB department to follow through. I will share a few of the situations that I have personally been in that are a genuine safety concern for me.

I was called to the OB unit to assist on an urgent cesarean section. The surgical technologist that was scrubbing was "experienced," yet had no formal training or certification. I arrived after the initial counting was performed, so I can only assume that it was done according the standards. The procedure had started in normal fashion as best as I could tell. Things were moving pretty swiftly. **Once the baby was delivered from the uterus, the uncertified surgical technologist gave the doctor the bulb syringe to aspirate the mouth and nose. The doctor noticed the bulb syringe felt "heavy" and asked about it. The surgical technologist had filled the syringe with saline, which would have meant that instead of the surgeon sucking mucous and fluid from the infants mouth and nose, she would have forced saline up into the nose and down the throat, quite possibly "drown" the infant.** Luckily, in the heat of the tense moment, the surgeon identified that the bulb syringe was not right, and it was removed from the field (quite forcibly I might add) and the pediatrician standing by was able to suction the baby appropriately. After the procedure, when questioned why she

would have filled a bulb syringe meant for aspiration full of saline, the woman replied that she was never taught any different. This was a frightening situation that could have potentially been life threatening for the infant. The lack of education was the clear blame for this incident.

Another incident that I was personally involved in involved a needle stick injury. Again, I was first assisting on a cesarean section with a different on-the-job trained surgical technologist and surgeon on a very large patient. Visualization was difficult and it required my hand to be closer to the area than normal. The surgeon was suturing the uterus, I was retracting, and the surgeon stuck my right thumb with the needle that she was using, drawing blood. I announced that I had been stuck, turned away from the field to have my glove removed, thumb bathed in alcohol, and to be re-gloved to proceed with assisting until I could break scrub. **Once I returned to the field, I found that the uncertified surgical technologist had given the same needle that had pricked me back to the surgeon to finish with the closing of the uterus.** This meant that not only I had been stuck with a dirty needle, but now the patient had been exposed also. Again, this was a surgical technologist that had been cross-trained to scrub in the operating room, and no formal training or certification to do so. She was not aware of the procedures to follow following a break in technique, nor was she aware of the consequences of not removing that needle from her field. Her response was that she didn't know what to do. She said the circulating nurse that was also not "trained" in the operating room. Again, lack of education and knowledge of basic standardization of care was the cause of a very serious situation that jeopardized patient safety.

These are just a couple of many of the very concerning incidents that I have witnessed through the recent past. My state, as well as facility still does not require certification for employment, and I am hoping that that will change in the near future. In the meantime, I can only be diligent in my own practice and in the helping of educating of those who do not feel that formal education and certification is important to create the best possible outcome for our patients.

Maria, CST

I am a traveling surgical technologist and I see poor technique all the time, including in Washington State. It is sad to say that when I give lunch relief to a surgical technologist, the sterility and set-up of a table is shambled and frail. There is cross contamination, soiled instruments, sponges and draping off either the mayo stand or the back table or baskets. Irrigation to be used on patient is crossed with many other. Bovie or any other electrical powered items are left unattended and strike through or burn spots have been known. Returned sharps are thrown on the Mayo that result in a strike through or flying of object whether it is a needle or a blade.

Surgical technologists that I have worked with have no or any sterile techniques. They allow the surgical team to handle instrumentation on their own and has occurred or lead into needle sticks or cuts with blades. The draping of a patient has been contaminated too many times and they overlook it or just keep going. Bottles of saline have been opened capped and reopened and re-poured onto the sterile field. Suctions or bovies that hang by slipping at the non sterile length has been re-used against sterilization.

Bio burden has been found on all types of instrumentation and few acknowledge and uses as is. Anesthesia hanging over the ether screen with hands wrapped on edges or walking into rooms without masks or drinking and eating while procedure is going on. Surgeons or fellow surgeons, residents walking into an open case and standing up on sterile field without scrubbing in. Positioning of patients is crazy. I see it and question it because the surgical technologist or nurse would not step up to acknowledge damages that can arise. Nurses do not have a say or surgical technologists are not acknowledged when a concern arises. New people are hired from housekeeping and trained to be “surgical technologists” in very little time, often by people who had bad training themselves. However, in my presence or assigned room, this will never take place.

Kelly, CST, RN, CNOR

While functioning in the role of OR Charge Nurse at our local, rural hospital I was involved in hiring a surgical technologist that had graduated from a non-accredited surgical technology program. Because of our location, and (at that time) the lack of accredited programs in the area, we were glad to get someone that at least had some education. That is a decision that I lived to regret, and still do. I will never make that mistake again.

At first, the employee’s actions, or lack thereof was attributed to being a new graduate in a new position and facility. We kept her with a preceptor constantly. There were many insufficiencies including improper counts, unrecognized breaks in sterile technique, and unprofessional behavior. On the final event, the employee was asked to flash sterilize an orthopedic instrument that was required, but had been contaminated. She did so, and returned the item to the sterile field validating that the indicator and strip had been checked. It wasn’t until later that **we realized upon checking the autoclave reading that it had not met the temperature or time requirement for sterilization. The case was already finished, and the item had been used in the case. The patient was treated with additional post-op antibiotics, but the patient still acquired a post-op infection that could have cost her a leg.** She had to be admitted to the hospital and given IV antibiotics for seven days. It was a huge expense for the hospital, but more importantly it directly affected this patient’s outcome and wellbeing.

The employee was let go, but the mark that she left was unforgettable. Surgical technologists are independent members of the OR team, and the surgeons and patients rely on their ability to make decisions that are based on specialized, thorough education. They have a direct effect on the patient’s outcome, no less than the Registered Nurse assigned to the case.

Don, CST, FAST

I saw an on the job trained (OJT) scrub person tell one of my students it was okay to put sterile supplies on an instrument set wrapper after the wrapper was touched to lift it high up into the air and checked for holes by the circulating nurse. The nurse put the wrapper back down on a mayo stand and left the room.

The OJT surgical technologist told my student to stack sterile gowns and gloves on that wrapper after she watched the unsterile nurse pick it up and look at it. **The student objected but was told to do it anyway.** I saw this and told the OJT scrub that all those gowns and gloves were contaminated. She said they were not because the nurse had only touched the backside and edges of the wrapper. I said they were because that had violated all of the parameters of sterile technique. I then took the wrapper and contaminated supplies away and opened new ones. I reported her to her supervisor. She was reprimanded and later terminated for other violations of sterile technique. I wonder how many of these instances go unnoticed.

Tina, CST

Many years ago, I met an LPN who had been trained on-the-job to function as a surgical technologist in the operating room. The LPN did not have formal training as a surgical technologist and was not certified. The LPN was hired for the position as she possessed a license in practical nursing. The role of a Certified Surgical Technologists is highly skilled and specialized field. LPNs are not trained on the uses of instruments or detailed surgical asepsis. I witnessed the LPN struggle to set up her sterile table for a TURP (Transurethral Resection of the Prostate). This particular procedure has relatively few instruments and is less time consuming to set-up and maintain. The LPN had formalin on her table to preserve the specimen being removed and had not labeled it as formalin. Saline was also on her table and was not labeled. **The surgeon asked for saline to flush the ureter and the LPN accidentally handed him formalin. The surgeon unknowingly injected formalin into the ureter which could have been detrimental to the patient. This incident was caught immediately after the formalin had been injected and the surgeon began to flush the ureter.** The patient did not have any adverse effects however, it could have ended horribly. If the LPN had formal training and certification this may not have occurred.

Rebecca, CST, CSFA

I personally have seen an on-the-job trained surgical technologist prepare an ACL graft with no working knowledge of knot tying or proper suturing techniques, also have had to intervene on a procedure where **the uncertified surgical technologist was going to allow the instruments that had been used vaginally to brush on the abdomen.** Both times I was met with resistance but stood my ground. OJTs simply do not possess the fundamental knowledge needed to be in the OR. No knowledge of where nerve branches are means there is a potential for permanent damage. No knowledge of basic anatomy means they cannot anticipate what may be needed next this causing unnecessary delays and often unnecessary loss of blood. There tends to be a breakdown in the overall team approach to patient care. The surgeons are frustrated and the trained and certified personnel are left fielding the extra responsibility. There are times that I personally would go room to room checking setups and giving instruction on specific procedures all while still doing my own job. If I was assisting I would have to divide my time between assisting and anticipating and asking for the next thing needed so the surgeon would not have to redirect his focus.

Donna, CST, CSFA, FAST

Surgery is a scary time for the patient and all family members involved. The last thing anyone wants is to have something go wrong in the operating room. The only way to insure patient safety is to require education as the entry level for hire. With education comes certification and with certification comes competencies.

Making sure we have the right patient with the right doctor and the right procedure is paramount to patient outcomes. Recently I was assigned to be the surgical technologist for a spinal fusion on a 56-year old patient. With 40 years of scrubbing experience I knew not only what we needed but why we needed it. I gathered my supplies and instrumentation of 12 trays and began to open and set-up for the case. It was identified during setup that one of the trays with implants had a hole in the wrapper resulting in contamination. WHAT to do? The patient is in the room and being put under anesthesia. The uneducated person would not know to remove the tray, but the graduate of an accredited program with certification will be able to critical think through knowing to change gown and glove if necessary, take implants to the sterile processing department to be reprocessed with the appropriate biological sterilization indicators and have the knowledge to know how long this process will take in order to communicate it to the surgeon. The untrained scrub in the OR may know how to do something but the Certified Surgical Technologist knows how and why. Paramount to patient outcomes!

Two years ago my husband had a lung infection and had a thoracotomy with decortication and was in ICU for 2 weeks. **I was able to pick the surgeon, the anesthesia provider, the surgical technologist and the assistant. If you had the same procedure you would NOT have that luxury. You would be forced to trust that the best qualified trained staff was hired by the hospitals to protect you from harm. This is not so!**

I suggest you think of the possibility of being taken to the operating room and who you want by your side, someone with an education or someone without. Without education as a condition of employment hospitals are going to cut corners. Please do not allow them to cut corners on you or your family member. The only cutting in the operating room should be done by a surgeon.

Susan, CST

Examples of harm by uncertified techs:

- On-the-job trained surgical technologist had two medicine cups on surgical field that were not labeled. Surgeon injected Peroxide instead of Xylocaine.
- Lap sponge left in patient undergoing a hysterectomy. Uncertified surgical technologist said count was correct.
- Raytec sponge left in patient having an inguinal hernia.

- Instrument pan on spinal procedure that was used was not sterile. The on-the-job trained surgical technologist was relieved for lunch by a Certified Surgical Technologist who figured it out mid-way through the case.
- Malleable retractor left in patient.

Anca, CST

I have been a certified surgical technologist for more than six years and a certified surgical assistant for almost two years. All these time I had trained many surgical technologist to become "the best" in our profession. I worked at MD Anderson Cancer Center for over five years. I have set up rooms with three or four back tables in over an hour for very complex cancer removal and reconstruction procedures, as well as one table, in less than three minutes, for gunshot wounds or motor vehicle accidents patients. I currently assist a spine surgeon. I can honestly say I've done it all.

There is no one single day to pass by and think how grateful I am for not being "on that table." And how blessed the patients are for having "that team" in the room. The first thing I always say to the students assigned in my room is: to have surgical consciousness and patient's safety in their mind. If either one of these is missing. They do not belong in this field. Don't be afraid to say "I don't know," rather than harming the patient. Admit a mistake before it costs the patient's life.

Why does everybody think less at this profession as it should be? We are the ones who make everything happen. We are the ones knowing what to pull from that case cart and start opening the room, we drape, **we look inside a body to anticipate the surgeon's needs, we think like surgeons, we put instruments in their hands and often save the moment, we cut, ligate, cauterize, suction, pass instruments and ask for more supplies, and we do it all in the split of a second while one hand is stuck on the retractor and the other one is passing a bleeding stitch for repairing what cancer ate up or what a crash destroyed.** WE are doing all that, while the rest of the room is on standby for us. Not having an education, not knowing anatomy, not having a knowledge based and not thinking as a surgeon, without being one, how could we be trusted by the operating room team, by the patients and ultimately, not endangering all of them?

The more we know, the better we are, the more patients we can save along with our operating room team! And to conclude my letter, I would like to do an exercise with you. For one second, imagine that your child is sick and needs surgery. You have two doors in front of you. Each door opens up an operating room, with the greatest level of expertise personnel. The only difference is among the surgical technologists: one is educated, one is not. Which room would you take your child into?

Melissa, CST

I am a certified surgical technician. I have three examples of poor patient care with OJT techs just in the last 12 months.

1. Wrong site surgery:

The patient was placed prone for a hip fracture procedure. There were several staff members in the room. The tech was busy setting up the case, a lot of talking and movement. During the mandatory time-out, the patient information was called out, and no one looked. The surgical technologist never stopped at the back table to acknowledge the patient information board. The nursing staff didn't visually look. The surgeon said ok and the wrong side was incised. It was noticed quickly that it was the wrong side, but it no longer mattered. The patient had been draped and cut on the wrong side.

2. Retained Sponge:

During an abdominal procedure that required two separate incisions, the required counts were only performed for one incision. **No counts performed for the second. A sponge was retained.**

3. Un-sterile instruments:

During an ACL reconstruction procedure, instruments that had been brought from another facility from the vendor, were never sterilized or checked for proper indicators. The instruments had been brought the night before, run through the cleaners, wrapped in kimguard and placed by the sterilizers. It was missed by the morning central processing department. The surgical technologist scrubbing the case walked into the central processing department, saw the blue wrapping and proceeded with her set up. The outer tape on the instruments was not checked, the indicators in the pan was not checked. It was noticed by the central processing department later in the morning and not reported until late in the afternoon. **The surgical technologist should have realized the instruments had not been sterilized. The patient the instruments were used on at the other facility had MRSA.**

Melinda, CST

After graduating from an accredited program, **I was hired in labor and delivery along with another girl from housekeeping at a fancy, new hospital.** I noticed that even the employees who had been working for years scrubbed their hands differently. I was not involved in the training of the new housekeeper, but wondered just how well she was being trained. **Sterile technique was extremely poor in the operating room, probably due to the fact the techs were not required to have formal training.** I remember thinking what a shame it was to have such a nice facility where many community members praised the hospital and commented on how nice it was only to find out what really went on. Needless to say, I am no longer there. I will not go to this hospital to have a baby. I believe sterility is vital.

Rebecca, CST, CSFA

I have actually left my job at a facility I spent more than thirteen years at due to the frustration of the hiring practices. They became short staffed and were hiring off the street. These people had no knowledge of the anatomy they were working on. They had very limited training in sterile technique. **I felt an overwhelming sense of responsibility to constantly oversee them and since I couldn't possibly oversee everyone I felt great concern for the patients.** The surgeons were often requesting me in their rooms and this became a problem when major cases overlapped. I brought all of these concerns to my supervisor but they were ignored. I hope this is helpful.

Steven, CST, CSFA

At one facility where I worked, to save money, they would put housekeeping personnel in the O.R. in the scrub position, with NO operating room experience, the MD would gown and glove them, and have them hold a retractor while he did the entire C-section. No knowledge of sterile technique, passing other members front to back, grab a clean towel and wipe off their own brows during surgery with their sterile gloves on. I witnessed several incorrect counts while working as a CSFA there, I ended up trying to train a lot of them just to try for a modicum of patient care, as the staff sure didn't have any training.

At another facility the surgical team had to clean their own OR after each case, often bloody and fluid covered floors, and their method was to throw sheets on the floor before the case, then collect them afterwards and discard them, then lightly mop the floor, without moving any equipment or the table, with the same mop they used over and over again for sometimes 5-6 days in a row. Every day I worked I spent a good amount of time changing mop water, buckets, mop heads, cleaning the OR the best I could when I could. After several times of going to administration, I was finally labeled as a "trouble maker" because I wouldn't leave things alone, the way things used to be. Needless to say these are 2 facilities I no longer work at. Untrained staff (on the job taught housekeeper) never counted correctly, she would say to the circulator "I've got 16 laps, 7 needles and all my instruments, do you have the rest?" **I constantly tried to get them to count correctly, item by item, to no avail, until one day, on my day off, they left a sponge in a young lady, requiring later laparotomy, bowel resection and a colostomy on a 20-year old!** Now they count correctly, and are replacing the non-trained surgical techs with ones from accredited programs. Those of us who were CST's and CSFA's tried constantly to correct things, we wrote reports, brought these issues up at staff meetings every time we had one, wrote up the offenders, went to our managers and director, and then to the Director of Nursing, all to no avail, needless to say, none of the CST's I used to work with at those two hospitals work there anymore, we have all moved on to facilities that do things properly. **I've seen hospital transporters, people with no clue of asepsis, put on a mask, gown and gloves and hold retractors on large patients during abdominal cases, a doctor who would bring his secretaries in to scrub in on hysterectomies, so he could "teach them anatomy" (show off to them), male transporters used to position patients in the OR for spine surgeries, etc. I could write a book on bad techniques practiced by staff and facilities that are not trained properly.**

Sandra, CST

I left retail sales and management to go back to school at 44 so no one else would die from errors in the operating room.

The big problem is STERILE TECHNIQUE. If you know it and understand it, you can help a patient improve his/her life. If you don't, you can hinder or even take their life away because you don't understand it or were not focused enough to care. These folks need to get out of my way and find another career.

My father-in-law and several other patients received a fatal infection that was tracked to a previous surgical patient that was done by the same team of surgeons. His chest wound kept oozing and would not close. Again and again he went back to the doctor and after several rounds of antibiotics, an x-ray was taken and there was a Raytec in between the layers. This is not even the worst part of this case. During the deposition process the nurse said all counts were good and there were no breaks in technique. When the uncertified surgical technologist was giving her side of what was going on in the room, it was noted that the cases were rushed, and sterile supply department was told to get the instrumentation in the autoclave and flashed. The central supply tech said they were rinsed, and flashed. Rinsed and flashed!

Out of eleven people who contracted infections, and that includes my father-in-law, within days seven patients were still alive, then at deposition time, three were still alive. The instruments were not cleaned properly by decontamination and proper sterilization. Since all tested positive for the same infection from the previous patient before them, it concluded that due to testimony given under oath, that there was a big break in technique. No one there thought about the patient. Needless to say, the case was settled out of court with the three remaining surgical patients. Since then, my goal in life is to make sure I do all I can to enhance and improve life, not hinder it by my actions, or give in to the "rush" of a surgeon or OR.

We are more technologically advanced than the on the job training OR these days. Now we need to be ACCOUNTABLE with no excuses.

I am certified as a CST and as a Certified Supervisor in SPD. I hope to stay in healthcare until I fully retire. I consider myself a helper to mankind and that is exactly what ANY healthcare provider is, a helper to mankind.

Zachary, CST

I have two stories. First, I now work in a small hospital and about five years ago there were no CST's working there. Only on the job training existed to the people at this hospital. In 2005, this hospital hired their first CST, Kelly, who changed the entire OR. Kelly graduated from an accredited Associate Degree program. The staff in the OR could not believe the knowledge that Kelly had. Not only the knowledge, but also her technique. All of the doctors wanted to work with her and it wasn't long that she was retraining to the on the job trained surgical technologists. One on the job trained technologists soon after quit because she could not take the pressure of doctors wanting her to be like Kelly.

I graduated with my Associates degree in 2010. I left school ready to work and had no problem finding a position. **My preceptor at my first job was on-the-job trained, as were the rest of the techs in the hospital. I could not believe how bad her aseptic technique was. I watched her do so many things wrong, she contaminated herself five times and did not even know that she did.** She did not know much of the case and the doctor got very frustrated with her and it seemed that it took a long time to do a simple case.

The major issue that happened at the hospital was when my preceptor took mixed up her heparin and her lidocaine during a mediport. When I told her that it was very dangerous and could have really be harmful to the patient, she responded, "Well I don't really need this job anyway because they don't pay me enough". She had also told me that she had made that mistake before and nothing happened. I could not believe that she said that and that she did not even care or think there was anything wrong with it. I quit and got a job at a new hospital.

I think that on the job training is a bad idea. I cannot believe that hospitals will hire someone who has no experience just so they do not have to pay them more money or take the time to look for a CST. I did not give names of hospitals to protect privacy.

Shannon, CST

In my hospital they hire people from housekeeping and put them in the surgical technologist position with no training.

Dominic, CST

I have been a surgical technologist for 11 years and have witnessed many poorly trained surgical technologists. I worked with a guy at a surgery center who was trained at a school that was "shut down." He had no record of a diploma and was not certified as a CST. He was hired based on a surgeon's request. He did know basic setups and had mediocre technique at best.

While I was scrubbed in with an ophthalmic surgeon, an instrument became contaminated and he asked for a sterile replacement. I knew there was an open tray finishing a cycle in the sterilizer, so the circulating nurse paged this "surgical tech" to bring in the sterile tray. He brought it in and I retrieved it from the "sterile" container. I verified the steam indicator and asked him if it was sterile, because it didn't feel warm from the sterilizer. He said yes it was sterile and we used it.

A week later the surgeon asked us to look at our sterilizers and be sure we were following proper procedure. His patient had a serious eye infection that could cause blindness. The surgical tech admitted to me that he had taken the tray out and set it on the counter. Then he sprayed it with alcohol to kill any germs, telling me that this was a good sterilization technique in the Philippines. Thank God the patient survived the infection and kept his eyesight. The nurse who hired this tech knew something wasn't right about his training and only because a particular surgeon requested him and no requirements are in place for hiring Surgical Technologists is why this happened. I suspect he was trained on the job in some doctor's office, but will never know.

This is only one story about people putting patients at risk due to poor training or no training. I hope someday all states require certification for surgical technologists.

Marcus, CST

I work with nurse aides who don't have any idea as to how to setup or assist with a surgical case. The bottom line is that a surgical technologist has more responsibility than a nurse once a case begins, they have to know the procedure, read surgeons minds, anticipate their needs all while the nurse is outside the sterile field and can't intervene!!

To just train someone on the job is simply not fair to the patient. Most on the job trained surgical technologists do not have the mindset, or the ability to think during stressful situations, and the panic or freeze up. **True story, I was just working with a on the job trained scrub, and she had a panic attack before the case got started, simply because she had not MENTALLY prepared for it.** Long story short I had to come in and do the case. Going through a surgical tech program would have given her the mindset she needed to do the case even though she had never done one. She has horrible techniques, contaminates on a regular, and doesn't realize when she has contaminated a sterile field. I spent countless hours in class, lab, and clinical rotations only to find out if I had held out and continued being a bag boy, I could have just called the OR Supervisor and said I would like to be a surgical tech.

I wonder if I call the policymakers and tell them that I want to be trained on the job as a Policymaker, Will they let me?? I don't think so!

Cadence, CST

I've been a CST for just over 3 years now, and I've seen on the job trained surgical technologists make many mistakes. One case in particular that I remember was an ENT case with multiple medications on the back table including a local anesthetic, Afrin, and cocaine. I don't remember whether it was the Afrin or the cocaine that was given to the surgeon instead of the local anesthetic, but the surgeon injected the medication. **The patient's heart rate spiked. In a separate incident in the same procedure the on-the-job trained surgical technologist once again gave the wrong medication for injection. The patient's heart rate was irregular again** and the procedure had to be stopped. The great importance of knowing how critical it is to label and hand correct medications for the safety of the patient is one lesson that was taught in our surgical technology class, but is illustrated in this unfortunate situation. Luckily the patient was not harmed.

Kristin, CST

Hello, my name is Kristin and my story happened at a **Trauma Level II Children's Hospital. I was called at 5:00 am for a five year-old girl in an unrestrained motor vehicle accident with head trauma which they were going to rush upstairs. It took hours to get the bleeding under control. My charge nurse brought a recent graduate from a surgical technology program (a program I later found out was unaccredited) to help set up my table as this was a case that was already in the room by the time I got there. Anyway, I was more focused on the surgeon and my patient and said "sure." I was comfortable with using her because I remembered my training in school and it was very thorough. She made mistakes in sterile technique left and right. After she made a mistake and re-scrubbed in three times, I asked for someone else. This little girl was in critical condition. We had no time for mistakes.**

I later found out that not only did this particular school have trouble teaching basic technique in sterility, they did not have access to many of the things I had taken for granted in my training. They didn't know what an electrosurgical unit was, or the difference between absorbable and non absorbable suture, or even why we do certain things. These unaccredited programs pop up, open their doors, charge unsuspecting students \$25,000 dollars, promising them training and then send them to be a secretary in a medical office for their "clinical rotation." Accredited programs can't get away with this or they lose their accreditation. Certification requires graduation from an accredited program, so that's one of many reasons it's important.

Robin, CST, CSFA

I had worked for several years in a facility that habitually cross trained the janitorial staff to scrub in to a surgery for the purpose of holding a retractor. I saw a newly "trained" member of the housekeeping staff holding a retractor for a vaginal hysterectomy **cause a perforation between the vagina and rectum due to excess pressure** in the wrong direction.

Mary, CST

This incident occurred in Labor & Delivery in June at midnight, when an obstetric nursing assistant, trained to scrub c-sections years ago, **had a retained sponge**. The patient went 6 weeks with a lap sponge in her abdomen. It was found upon x-ray after complaints at her 6 week check up. Was the count done? If so, it was incorrect. I feel the entire team failed to keep the patient safe. In my opinion, I am the patient's last defense against such mistakes. If I am lackadaisical about my technique, the patient may suffer.

Vickie, CST

My hospital frequently uses certified nursing assistants to scrub cases. They also recently cut back on the training they provided to them. Since then a lap sponge was left in a patient (wrong count). The patient was brought back to the main operating room twice more. She contracted a serious infection. Another time, there was an emergency c-section. They had less than 10 minutes to get the baby out. There was no surgical assistant on the floor, so it was just the doctor and the certified nurse assistant. **The baby didn't make it.**

I can go on and on for what I have seen due to the lack of education and not having the proper training. These hospitals need to stop cutting corners.

Shirley, CST

Last year the Director of Surgery approved the nurse aides to be trained by the Surgical Technologists in the surgery department. This made me extremely angry. **I had to scrub a c-section, and they had one of the nurse aides scrub in. She knew nothing about surgical technique, sterile field was beyond her she broke scrub and started touching my back table. It made me so angry. C-sections are no time to mess around. It is not her fault she has been put in a situation without proper training.** Surgical technologists are certified in order to insure that patients are provided with the best care available during operative procedures. Having a nurse aide provide these services is not beneficial to the patient or the operating room staff.

Jim, CST

In my health system, certification is mandatory for all surgical technologists. I believe it is imperative to have a vast, superior and mandated knowledge of sterile technique in order to avoid these mishaps. **CSTs teach medical residents, nurses and students sterile technique.** I can't tell you the number of times I've consulted with them about sterile technique and OR protocol. CSTs are a vital and necessary entity in the surgical environment.

Jennifer, CST

Woman in early thirties goes in for emergency cesarean section. Person scrubbed in the surgical technologist role is an aide/housekeeper in labor and delivery and has had on the job training to carry out c-sections (nothing else; department is a closed unit and our surgical technologists are not staffed for this department and are not required to perform c- sections). **This patient (young/thirties/no known health issues) suffers an amniotic fluid embolism (obstetric emergency in which amniotic fluid or other debris enters the mother's blood stream via the placental bed of the uterus and trigger an allergic reaction). This reaction then results in cardiorespiratory (heart and lung) collapse and coagulopathy (trouble with blood clotting) during the c- section.**

Respiratory arrest ensues and patient goes into full blown disseminated intravascular coagulopathy (DIC). Patient is also starting to bleed to death now. While trying resuscitation, the surgeon is trying to demand things from the uncertified surgical technologist who is scrubbing the case (who is only working with an extremely small, standard c-section instrumentation kit). This surgical technologist does not know what extra instrumentation is needed/what kit to pull. The team is discussing getting cardiovascular involved to facilitate patient with extracorporeal membrane oxygenation and/or cardiopulmonary bypass machine (aka: heart and lung machine). The on-the-job trained surgical technologist has never been trained on any of these skills; doesn't even know basic anatomy and physiology associated with what is happening and what areas of the body need to be explored. She does not know specialized instrumentation or would even know what to hand a cardiac surgeon in that event or what tubing hooks up to what/meds needed, etc. Trust me when I say these things have to happen FAST...every second counts.

Patient gets intubated and the surgeon decides to pack patient and send off to ICU as quickly as possible in order to get patient over to OUR O.R. rooms where our CERTIFIED SURGICAL TECHNOLOGISTS are and our even more specially trained cardiac surgical technologists are. **Patient was so unstable at that point she could not even be transported down the hallway from ICU.** Cardiac team had to operate on her in her ICU BED! At this point, compressions had been non-stop for about 30 minutes. Compressions continued as our cardiac team and surgical technologist (specially trained/full schooling/certified/graduate of an accredited program) sped to put the patient on extracorporeal membrane oxygenation through femoral cannulation. Patients heart successfully started/ extracorporeal membrane oxygenation support in place for respiratory assistance, and patient was THEN brought (after

better stabilization) to OUR O.R. where our SURGICAL TECHNOLOGISTS are (again, certified/graduates of accredited program/senior techs with YEARS experience also grandfathered in and graduates of appropriate schools).

Patient was unpacked/bleeding controlled BETTER but not completely due to DIC. Sent to ICU. Brought back later that night for same thing. Brought back in morning for same thing. Brought two days later so cardiac team could stand by in case emergent extracorporeal membrane oxygenation placement was needed again and extracorporeal membrane oxygenation was discontinued with success. Suffers cerebral hemorrhage two days later. Specially trained neurosurgical team has to look at delicate brain. Outcome: patient unbelievably survives all odds (no one thought she would) with almost no neurological deficit. Baby also survives. **She absolutely would have died if specially trained people could not come to intervene; they also had to deal with lapse of time issue because she could not be helped right away.**

Roseanne, CST

We had an issue with an uncertified surgical tech who had several meds on her field (conray, marcaine, and saline). **When the surgeon asked for the local she gave him the conray.** I do believe this incident would not have happened if she was certified and had more pride in what she does and patient care.

Cassandra, CST

The surgeon and I were at the scrub sink preparing to do a transvaginal tape sling. His preference card asks for 60 ccs of 1/2% lidocaine plain for hydrodissection. The circulating nurse thought she could mix marcaine instead of lidocaine with saline for the same result. When the circulating nurse passed the drug the uncertified surgical technologist, she said, "60 cc half-percent plain" and the uncertified surgical technologist passed it to the surgeon and said, "60 cc half-percent plain." The surgical technologist should have known to name the medication. The surgeon started to inject it and said, "60 cc of half percent plain WHAT?" The circulating nurse said "half percent MARCAINE. I already TOLD you we don't HAVE lidocaine!" **The surgeon turned red, threw the syringe across the room and said "How DARE you? You just purposefully and maliciously gave me the wrong drug and almost caused me to give this 95 lb patient a LETHAL dose of marcaine! Those drugs are NOT interchangeable, they have different actions and cannot be used interchangeably! Every single person in this room including anesthesia stood here and watched while I almost injected 60 cc of drugs into this patient and nobody was going to bother to verify what I was injecting? Thank God SOMEONE was paying attention!"** Certified Surgical Technologists are trained to never introduce a drug into the field without verifying its contents every time it is transferred, to the back table, to the surgeon, etc.

Sandra, CST

My hospital forced me train high school drop outs to scrub. I was vehemently opposed, but when it became clear the administration was going to put these individuals in the OR, I agreed to train them with the condition that they would not be allowed to scrub until I felt confident in their abilities. I should not have been surprised when they cut the training time short- I had ONE DAY to train each person in the operating room. ONE DAY. Within days, one of the newbies burned a patient with a bovie that require skin grafts. It was a slap in the face that they have these people do such an important job with no medical background whatsoever! Not even medical terminology!

Matt, CST

Certification should be required because it requires graduation from an accredited surgical technology program. There is a big divide between the accredited programs that actually teach the students what they need to know- medical terminology, surgical procedures, anatomy, physiology, etc and give them clinical rotations in real operating rooms while the for-profit, unaccredited programs that get unsuspecting students to get loans from the government and then give them a substandard education and “virtual clinical training.” (Not all for-profit schools are bad- the accredited ones I compete with have to meet certain standards to keep their accreditation.)

Valerie, CST

I don't care to go into any detail regarding the name of the hospital, but there is an uncertified tech who after two years of work in a hospital setting, she still needs to be reminded to count her sharps and sponges! Why hasn't she been fired yet? Because hospitals don't care! They're too busy paying attention to everything else!

Erin, CST

I have been working for the last four years as a Certified Surgical Technologist with a two year associates degree from an accredited program. I specialize in orthopedic surgeries including all trauma cases and total joint replacements. A CST must have vast knowledge in this ever changing fast-paced field. Being a well trained CST is imperative and the knowledge gained in our training is what helps us to be attentive to the surgeon and quick thinking at all times. Patients can be caused further injury if the CST is not knowledgeable of the various systems and the instrumentation needed for each case. Using the incorrect size reamers and broaches during a total can cause the patient's bone to fracture resulting in extended time under anesthesia, skin breakdown due to additional time on the table (especially in elderly patients), a higher increase in blood loss, a fractured bone accompanied by plates and or cables. This adds to an extended recovery period, exposure to x-ray, as well as increased pain for

the patient. I have worked with techs that have not completed a surgical technology program and they are severely lacking in the knowledge needed to scrub efficiently.

Heather, CST

During a routine laparoscopic cholecystectomy, a surgery to remove the gallbladder, which is frequently removed for people with frequent gallstones. A "surgical technologist" with only on the job training was setting up the case. **During the setup the newly "trained" scrub was told to retrieve the co2 for insufflation and hook up all the equipment before setting up the sterile field.** Soon the surgery was underway- lights, camera, action. What no one noticed or thought to check was the gas tank the "surgical technologist" had hooked up. **The patient's abdomen was filled with 100% oxygen. It wasn't noticed until the hook electrode was used. When the electricity made contact with 100% oxygen, it triggered a fire/explosion. The patient died immediately upon the explosion and two others were injured. All of this was due to a person who had two weeks of training and was left in the role no one should play besides a certified surgical technologist.**

Vernell, CST, RN, MSN, CNS

Here are the most alarming issues that come with poorly trained, uncertified surgical technologists:

1. Not inspecting equipment properly before, during or after surgery resulting in broken pieces of metal, plastic or any other material left in patient causing injury. Now is one of the leading causes for patient related injuries in surgery- The Joint Commission
2. Not properly inspecting sterile items which have gone through the sterile process but may have bioburden in instruments with lumens or just in the genesis trays, causing infection related to surgery
3. Being unprepared and unable to anticipate surgeon's needs causes the patient to be under anesthesia for prolonged periods of time which can be unsafe to patients physiologically, longer recovery, potential for airway related complications, and longer hospital stay
4. Poor aseptic technique leads to surgery related infections and possible patient death.
5. Not understanding how to operate equipment can lead to patient injury such as permanent nerve damage, patient burns and compromise of patient mobility
6. Poor Patient Outcomes Related to Poor aseptic technique- Infection, sepsis, death, bodily injury, additional treatments including surgery, organ failure etc.
7. Patient injury- Nerve damage, muscle damage, possible paralysis etc.

Broc, CST

At our hospital our inpatient surgery and c-sections have separate staff. The Labor and Delivery unit does not use certified surgical technologists. Though I do not know their full training these techs have been observed by other staff, doctors, and anesthesia as not having good technique. Examples include

scrubbing in to set up cases without help in the room to check pan filters and tie them up. So they check the filters after completing the set up. **Also, if there is an emergency during a c-section such as an emergent hysterectomy is needed the staff has to call in a certified surgical technologist whether it's from home in the middle of the night or bring in our staff during the day to hand for this portion because the OJTs (on the job trained) are not competent with those cases.**

David, Program Director, CST

I work with a breast surgeon and a plastic surgeon that work together to help breast cancer patients. **For bilateral mastectomies with right or left auxiliary dissection with reconstruction I do two set-ups. cancer from non-cancer. Since these cases require two surgical technologists, not only are the counts important in these type of set ups, constantly keeping track of where everything is being used and put down, but making sure cancer technique is being used. Nothing gives me chills like watching someone go from the cancer side to the clean side without changing gloves.** These patients have been through a battle.

I have also seen poor sharps technique (leaving blades on handles after case, suture needles just laying on the backtable instead of needle book). Not only does that harm others, but the tech as well.

I myself have been put in a situation during an abdominal hysterectomy where the surgeon wanted to close before we even finished a total lap and instrument count. In those situations the tech needs to be assertive and not fear the surgeon. They might be doctors, but you are the patient's voice!

Angelina, CST

My hospital only trains on-the-job trained techs how to set-up for elective procedures, which creates crisis when there's an emergency, like if the person has set-up for a c-section, but then there's the need for an emergency hysterectomy. I'm certified and I was scrubbed in a c-section and my patient started to hemorrhage. During this times was setting us up for an abdominal hysterectomy, the 2nd tech was to relieve me of my duty. She was ethical because she refused to scrub in because she said she has absolutely no idea on what to do. She wasn't familiar with the instruments, the procedure or protocols. (Other people in that situation just make it up as they go along.) **She simply only knew how to set up for a normal c-section, not for emergencies that can happen during c-sections.** Another tech has numerous times been told that during gowning and gloving she has contaminated her field but she doesn't understand where she is going wrong. She too has transferred from sterile processing. Although she knows her instruments but she fails to recognize proper sterile technique.

Stacy, CST

I work with an on-the-job trained surgical tech on a daily basis and continuously have "fix" problems that occur because of her lack of proper training. I went to an accredited school and I also took the certification exam, which I think both are extremely important to be an instrumental part of the OR, and a valuable team player. In school I feel like you learn the importance of why we count things, and how to get the all around picture of each case.

In a surgery yesterday, I performed a pre-operative count prior to a laparoscopic case, just in case the patient had to be opened up. I had a feeling the specimen would be too big to come out of a 10/12 port and that we might have to open the patient, which requires counting.

I set up the case, counted, and the on-the-job trained scrub gave me a lunch break. When I came back, she opened more instruments that she didn't bother to count, didn't tell me she didn't count them, and of course I was right. The specimen was too big and we ended up doing a mini laparotomy. Since we opened the belly, we needed to count, but I had no idea if I had the right amount of instruments because of the OJT scrub tech's mistake. I then counted all sponges and sharps, and informed the surgeon that we had to do an X-ray to ensure we hadn't lost an instrument. That could have been avoided had the tech been properly trained, in my opinion. This tech is known for unreliable counts and she does not have the medical conscience to inform the surgeon when she screws up.

Paul, CST

I have witnessed poor technique many times resulting in surgical wound infections; sometimes resulting in death. **A sternal wound infection is often fatal.**

Another main concern is pharmacology. Without a proper understanding of the many medications we handle on a daily basis, we can cause serious harm. **I was in the same surgical suite working on a surgery next door when an uncertified person handed a surgeon lidocaine thinking it was heparin flush. When the surgeon injected this into a port (thinking it was flush) the patient displayed severe arrhythmias and almost coded.**

Another example is something that happened just this year with one of my students. My student received straight epinephrine to the sterile field and labeled it correctly! The senior technician in the room was poorly trained and handed the doctor the syringe that was clearly labeled thinking it was Marcaine. **The surgeon began to inject straight epinephrine into the patient when my student spoke up and let the surgeon know what it was.** I was proud that my student was trained well enough to know that labeling was very important and also what it was used for!

Once medications are one the field, they all look identical. Clear liquid is clear liquid. A poorly trained person will easily mix these medications up and I have seen it on many occasions.

Melanie, CST

I was training an on-the-job trainee borrowed from the secretary desk. I explained that our next case was an appendectomy (a very common, basic, easy skill level case.) The trainee said "What's that?" I patiently explained that it is the removal of the appendix. The trainee said "What's the appendix?"

My jaw dropped. This person had no idea what the appendix is or where at in the body it is located. As a CST, I am frequently asked to train OJT trainees with ZERO medical terminology, ZERO anatomy and physiology, and ZERO sterile technique. Working in a very busy, fast passed OR, we have very little time to actually teach so the OJT trainee may learn how to do something, but still does not understand why to do something. It takes years for OJT trainees to fully understand their job. By comparison, when I was orientating a new grad CST, the CST's very first case was a kidney transplant (a high risk, expert level case.) The CST was able to explain the reasoning for doing a kidney transplant, the anatomy involved, and had a good understanding of the steps involved and a surgical technologist's role in the case before the case started. The orientee CST was able to scrub the entire kidney transplant case by himself and did a very good job. The orientee CST had never actually done a kidney transplant before, but through his educational background, he knew how to safely and competently complete his job.

I was involved in a laparotomy ventral herniorrhaphy where a mesh product was being placed in a patient's abdomen. This surgeon and the mesh representative had worked together before using this health care industry representative's new mesh product. The health care industry representative told the surgeon the best practice for this particular mesh was to soak a portion of the mesh in alcohol prior to placing it in the patient. (I do not remember the specifics of why alcohol was suggested for this particular mesh.) As the health care industry representative was explaining "remember how we did it last time with the alcohol...", the RN circulator proceeded to obtain a bottle of isopropyl alcohol and started to bring it to the field. As a CST, I know that alcohol should NEVER be poured onto a field, let alone have a mesh soaked in it, and then place the mesh into an open belly where cautery is most likely to be used. I immediately refused to have alcohol poured on my field and put a stop to this practice. The rep and RN genuinely had no idea that alcohol shouldn't be used. A fire could have started in the patient's belly.

Carol, CST

I am a tech with 31 years experience. I have been certified the whole time. I work at an ASC. I can tell you about a private scrub/assistant one of the MDs brings with him. No formal training, just what his office has taught her. What a disaster! **No sense of sterile technique, couldn't glove herself without contaminating them, no idea how to gown or glove her surgeon...the list goes on and on.** Everyone at my place of employment pitched in and helped train her the correct way. She obviously has benefited greatly from our tutelage.

Danielle, CST

I graduated and became a Certified Surgical Technologist through an accredited surgical technology program a year ago. I was immediately hired and currently work full-time as a CST in a local, community hospital. Since working there, we have had the opportunity of training new surgical technologist students from all over. One of my students was brand new and could not grasp the concept of sterility. **The program she came from was new, not accredited and did not properly teach some basic, important concepts that are implemented every day in the OR. Essentially, it was as if we were training someone "on the job" to scrub. During a case, she reached over and turned up the bovie settings for a surgeon. This is just one example of increasing the risk of patient infection, which can be a matter of life and death under certain circumstances.** It is so important to have some medical knowledge and training because it provides the foundation for a competent, skilled, and professional surgical technologist.

Ruth, CST, FAST

At our facility we are now instituting a new count policy "No Thing Left behind." Within our hospital system it has been found that **within the last year there have been ten miscounts regarding sponges.** Our hospital trains techs on the job. This alone accounts and adds up to over \$300,000 in added cost. This does not account for the added time that our patients have had to spend in the hospital and in the operating room.

Joyce, CST, Lead Tech - Neuro/Ortho/ENT/Eye/Heart

Here in our hospital we work with oral surgeons who bring in their office help to scrub their cases. We usually give them a Certified Surgical Technologist to help them because they have no training at all in aseptic technique, instrumentation care and handling and basic surgical technology skills. These cases are unorganized, chaotic and lack any professional scope of practice. **We have to do the counts for them because they not only have a hard time containing them, but also lack the understanding of the need to count at all. We also lose instruments on every case they scrub and it is costly to our facility.**

We are trying to work out an arrangement with the surgeons to where they can leave the practice of scrubbing to trained professionals and do whatever they see fit in their offices. There truly does need to be a national and state expectation toward our profession.

Renee, CST

I am a CST and I currently hold the position as a Clinical Preceptor. I work for an Allied Health School where I am responsible for observing and supervising surgical technology students in a hospital. I have a total of eight students that are divided into two groups of four and they report on rotating days. I get to go into several of the operating rooms on a daily basis and I witness firsthand the practices of surgical technologists who are not certified and let me tell you it is unacceptable! You are doing the patient a disservice by not holding up the same standard for all technologists. They must become certified and meet the minimum requirements. **I clearly can see the difference between the technologist that is certified and the one that is not. I see those who get in house training and in my opinion it is simply not enough.** My students are being trained by most who are not certified and I am constantly in my students' ears as to how to perform the task in the correct manner. **I also believe positions should be created where CST's go into hospitals and medical centers to oversee the performance of technologists in the O.R. as to be sure they are performing at the highest standard.** I cringe at what I see at times.

Pat, CST

I'm glad I had been through proper training to be a surgical technologist because **I was in on a case where we had a trachea fire and I had water ready and on hand for the surgeon to put out the fire.** No one went screaming out of the room or freaking out. The patient was not hurt or anyone else because of the great schooling that I had. I was not only taught great surgical technique but to be cool, calm and collected during a surgical case.

Amber, CST

I face the problem of having someone who is not certified work for me when I request days off or I am sick and when I return I discover scary situations that could have been harmful to a patient. The employee followed me for two weeks and was expected to know how to do my job as a Certified Surgical Technologist. A surgical conscience is required when maintaining a sterile field and being able to confess to contamination, an employee pulled from another department has no concept of a surgical conscience.

L. Gene, CST, AAS

A non-certified on-the-job trained surgical technologist was in the OR assisting on a mastoidectomy. The surgeon requested lidocaine and the surgical technologist, **who had failed to label ALL medications on her field, handed the surgeon epinephrine, who then injected it. The patient coded on the table and the patient died because of a mishandled drug.** This is one of the many standards that we teach within the classroom that ALL medications MUST be labeled in order to avoid circumstances like this. With OJT trained techs, this is not “standard” that they must follow. No one ensures that they are teaching the correct aseptic way and the correct way of handling drugs and medications.

Another story I actually witnessed. **An OJT surgical technologist completed a total knee arthroplasty. Once the case was over she removed her gown and gloves and started breaking down the back table. NO GLOVES. She proceeded to take the dirty bloody instruments to the work room and again used her bare hands to put them in the washer sterilizer to be processed. Later on we found that the patient was positive for HIV. Luckily she DID NOT get the disease but again if she had followed protocol and been taught that protocol, this incident would not have happened.**

Crystal, CST

I witnessed an OJT tech try to use a tray that did not have filters in it (the pan was obviously not cleaned correctly), when I brought it to their attention, they assured me it would be okay. I however knew better. I did not want to doubt their experience/knowledge, so I purposely put my ungloved hands on the instruments to keep them from being used.

Jessica, CST

These are real-life examples demonstrating how poorly-trained, OJT surgical technologists can cause patient harm in the operating room.

1. The use of unsterile instruments and supplies because the tech did not have proper training.
- 2. The OJT tech threw away a skin graft due to lack of training on how to handle a graft. They had to get a second graft. The patient had to heal in two places.**
3. Needle sticks and stabbed by a scalpel because the tech did not have proper training on how to pass instruments

Shannon, CST

There was an OJT tech once that was doing a simple port. The doctor she was with doesn't like saline; he used holy water (triple antibiotic irrigation). Well the OJT tech didn't know what to flush the port with and when he asked for flush, she gave him a syringe loaded with holy water! **Would have killed the person they were doing the port. Luckily, the surgeon had noticed she was handing the instruments to him wrong, and was watching her and caught what had happened!**

Sue, CST/CSFA

- A vena cava filter was loaded incorrectly and it was expelled in the jugular vein. The neck had to be resected to get the filter out.
- During a total hip arthroplasty (total hip) the OJT surgical technologist twisted the leg incorrectly and broke the femur.
- A Kelly clamp was left in the abdomen during a laparotomy. Requiring a second surgical procedure.
- Many surgical mistakes are made as far as surgical contamination of the surgical field due to lack of education of the non certified surgical technologist.

Jeremy, CSTIII, BSHA, S-MHA

I have been part of review boards that investigate how to correct issues that occur. I was given access to a case where a surgical technologist did not do his or her job. **A specimen was discarded that prevented identification of a type of cancer. This means that the patient was never treated for the correct type of cancer. I do not know the outcome of the event but I do know that it was directly related to a breach in policy and poor education.**

I was also given access to a case where a patient almost died due to poor communication. This incident was the responsibility of the entire team and the entire process failed. A throat pack was inserted into a patient's mouth and into the nasopharynx area. The surgeon forgot about the pack and no one on the team reminded him. The patient was sent to recovery. The patient coded and almost died. This incident involved a person who was not a surgical technologist by schooling. The person was on the job trained. This is why I strongly recommend that everyone who is involved in patient care be held to a higher standard.

Lorraine, CST

I worked with a plastic surgeon that chose to work with an uncredentialed Surgical Assistant who claimed to have never been a Surg Tech. In the course of their association, two patients died. There were many incidents of wrong counts and breaks in technique which resulted eventually in the surgeon and the assistant's dismissal. **In one instance, during a dermoplasty and liposuction of the upper arm, the breaks in sterile technique were so dramatic that the patient endured many months of post surgical infection and ultimately disfigurement.** The assistant, who often acted as a surgical technologist, had no formal training and therefore, had no sensitivity to aseptic technique, and no knowledge of anatomy. This resulted often in wrong instrumentation and contamination of the field.

In another instance, a cysto was set up by a "on the job" trained surgical technologist. The doctor planned to use a resectoscope on some bladder polyps and the surgical technologist spiked the irrigation bag filled with saline. This is an electrolytic solution that had the doctor not inquired of before using, could have badly burned the patient. The physician was very angry and asked the hospital to reprimand the scrub.

Barry, CST

There was a case where they did not wait for the alcohol to dry before they draped the patient. The surgeon went to use the bovie to stop a bleeder and the drapes caught on fire, with fast thinking and years of training and from being from an accredited school we pulled the drapes off of the patient and stomped the fire out and thank god the patient was not seriously hurt.

Amy, CST

When I was traveling as a surgical technologist I was going in to relieve a "on the job trained" surgical technologist for a break during a carotid endarterectomy. **The surgeon had requested mineral oil to be poured on the field and poured over his hands by the surgical technologist before he was gloved; not an unusual request, but also not frequent request. As I was opening my sterile gown and gloves, the surgeon asked for heparinized injectable saline to inject into the anastomosis sight to prevent clotting. I saw the OJT surgical technologist draw up what she thought was the heparinized saline and hand it to the surgeon. Upon flushing the carotid with the solution handed to him, the patient crashed and died instantly. It was indeed the mineral oil that was drawn up and injected rather than the heparinized saline. This on the Job trained surgical technologist didn't label her meds given to her. As a result, she killed a patient and the surgeon and circulating nurse in the room had to take the fall for it.**

Another problem is aseptic technique. It is the scrubs responsibility to uphold and maintain the sterile field. Unless you have been through an accredited course and trained about microbiology and prevention of infections, you can't possibly know how to protect yourself and your patient from infections. I do a large amount of spine surgery. **It is my responsibility to protect the nerve root from damage while the**

surgeon is decompressing around the nerve root. It takes someone who has been trained and is knowledgeable of the body's anatomy and physiology to know how to protect that nerve root. This is not trainable on the job, this is about having the understanding of the severity of the position, the knowledge of the anatomy, and the consequences of what can happen if you fail to protect it properly, how much tension can be applied, what the signs are if you put too much tension and for how long you can apply such tension. Whether or not your patient will lose their ability to walk or move their arms can depend on your actions.

Tammy, CST

Last year, I was in the OR with a new on-the-job trained surgical technologist. One day I witnessed something disturbing. He tore a glove, and proceeded to re-glove himself using the open gloving technique. It was not good. I could tell right away that he had never been trained in this. I watched him contaminate himself trying to re-glove. **I pointed out his self-contamination, and I watched him repeat the whole un-sterile sequence again.** Stunned, I had to speak up. Eventually, I just stopped what I was doing and gloved him myself, properly. I realized that he did not know how to perform this skill, without contaminating the field and the patient. My school would not let me graduate until I demonstrated sterile self-gloving. I am so grateful for the standards and training.

Also, I had a traveling job in 2010, and I witnessed many breaks in sterile technique. It was painful to witness. You can teach anyone the general, basic skills of surgical conduct. But it's in the ****details**** where you can really tell who is certified, and who is not. And these details can be the starting point for countless infections and complications.

I truly believe it serves the patients and the team, if surgical technologists are required to be certified. Especially the patients - who are at their most vulnerable, and most afraid, when they go to the OR. We owe them a rock-solid standard of care.

Sydney, PhD, MSN, RN, CNOR

I work as a circulating nurse. During an exploratory lap gun shot, **the surgeon had placed a large deaver with lap sponge to pad it up against the patient's spleen while he explored bleeding due to gun shot. The surgical technologist was instructed to hold the deaver retractor in place. As she was pulling too hard and the surgeon kept replacing the deaver correctly, the surgical technologist said, "just think two weeks ago I was working the line at Aire-Systems (a local air conditioner manufacturer)." The surgeon stopped and screamed about an idiot holding a steel instrument against a patient spleen** and threw her out of the room.

Sarah, CST

I am a CST, currently the Clinical Coordinator of a Surgical Technology program that is accredited by CAAHEP. We are actively involved in the movement to provide a minimum standard for our profession, and all of our graduates sit for the National CST exam, at our college, upon completion of our program. I am submitting one of my past experiences.

I was working at a hospital in OR 8, which shared a substerile with OR 9. The procedure going on next door in OR 9 was an ORIF (Fracture Open Reduction Internal Fixation) of an extremity. The staff in OR 9 had to flash sterilize a tray, as we were a very busy ortho trauma center, and sometimes there just were not enough instruments to go around. The surgical technologist working in the room retrieved the instrument tray that needed to be sterilized, and placed it into the autoclave located in the substerile. Things were hectic that day, like always, as staff was trying to get lunch relief and surgeons were in a hurry...everyday OR stuff. Another on-the-job trained surgical technologist came into the room to relieve the first on-the-job trained surgical technologist for lunch. A very brief report was given, and the exchange was done. As the case got started, the lunch relief on-the-job trained surgical technologist came to the realization that he was missing instrumentation from his table. The nurse recalled, "I had (anonymous) flash them, they should be in the substerile." The lunch relief on-the-job trained surgical technologist went into the substerile and opened the autoclave, retrieved the instrumentation, and then went on to finish the procedure. It was discovered later that the first surgical technologist in the room had only placed the instrument set in the autoclave and closed the door, never putting the set through a sterilization process. This was not discussed in their "report" before the first surgical technologist went to lunch. The second mistake was that the lunch relief on-the-job trained surgical technologist did not check the autoclave tape, which would have ensured that proper temperature parameters were met to achieve sterilization. If he would have checked the autoclave tape, he also would have noticed that the load had not even been run. Furthermore, he did not check the indicator, which was placed inside the tray, to make sure it had changed colors, from orange to black: another hint that the instruments had never actually been put through a sterilization process. In conclusion, a set of contaminated instruments was not only placed onto the sterile back table, but actively used on the patient during the entire surgery. Neither surgical technologist involved in the incident was, or had ever been, certified. I am not sure of the post-operative outcome of the patient, as we usually do not encounter patients after our brief contact with them in the Operating Room. I can only imagine, however, the potential harm that was done to this unsuspecting patient.

Michele, CST

I had an incident where a non-certified person scrubbed in to assist during a case. Although this person was good at his job of technical support for the department, he did not belong scrubbed at the field. He scrubbed in to offer assistance with a piece of equipment at the surgeon's request. **After completing this task where he used a counted sponge to clean a lens off a camera he left the room. Unbeknownst to**

the team he had kept the sponge in his glove when disrobing his sterile gown and disposed of the gown outside of the "OR". When we went to count the sponges at the end of the case we were short by one and it was nowhere to be found. The OR room was scoured in every nook for that sponge which we never found. We had to get an x-ray per hospital policy which keeps the patient asleep longer. We have to wait for the x-ray to be read by an anesthesiologist. When you are having your quadruple bypass or kidney transplant or brain surgery, who do you want assisting the surgeon?

Melissa, CST

I worked in a rural hospital and I had two particular incidents that come to mind. One was a day that we had several cataract procedures and I learned in school the importance of correct sight surgery and the integrity to double and triple check everything. Prior to the operation I always check the board and doctor orders as it is my responsibility as a professional to do so. I went into the operation and prepared for the upcoming operation. The surgeon came in and went to drape the eye. Knowing what I knew about my surgical conscience and the proper way to identify the sight I noticed the surgeon had draped the incorrect eye. **I spoke up and let him know that the eye was not the one that I had prepared for and that the consent was signed for. He immediately halted what he was doing and was a bit angry at the time, but I knew to stand my ground.** He double checked everything and I was correct. Even if I hadn't been correct I know from my education to always triple check and when in doubt stop and be sure.

If I had not said anything this could have resulted in unnecessary surgery and possible blindness in the eye.

Second incident, the hospital decided one day that they needed to cross train housekeeping into surgical technologists. **They brought in this lady with no medical experience and no medical background and told me I had two weeks to train her. First, my mouth hit the floor in pure shock and second I just could not believe that these educated people were making this extremely dangerous decision.** She ended up in a total joint case and did not know how to put the instrumentation together and to know about biological indicators. It was completely wrong to put a patient's life at stake. From that day forward I was determined to go into education. If you're lying on that table in an emergency situation do you really want the lady that cleans the toilets that has no idea about your anatomy participating in a major role in your surgery. I'm guessing no.

Patricia, CST

In the OR it is critical that you understand sterility, the reasons for sterility and the job to protect the patient from contamination. **There was a hospital based class that was implemented in the hospital. The class was for six months. The class was introduced into the operating room after that. The students did not understand the concept of sterility and the person who had gone to the class did not understand how to create a sterile field for a procedure. The surgeon was very irritated and someone had to come to the room to help the person. This was a thirty minute case that turned into an hour because the person contaminated drapes used and having to change their gown and gloves.**

This cost the patient extra anesthesia time as well as room time that would not have occurred had the person gone to an accredited school. It is easy to teach a person a routine but unless they understand the theory of the routine then the patient is at risk.

Rene, CST

I worked at an ambulatory surgi-center that hired a surgical technologist that had failed out of an approved surgical technologists program at the local college, but had finished from a non-accredited program. Many things happened with this person, I will highlight two: While walking into the OR to help a newly hired surgical technologists get set up for an arthroscopy, I observed this gowned and gloved person, using a towel wiping the sweat from her forehead while leaning over the backtable open with the sterile supplies. Her gloved fingertips touched her hat and mask. I asked her to step back right away and tried to explain the break in sterile technique she had made, she did not understand.

While assisting in an orthopedic procedure with her, I saw her stab the 11 blade into her own thumb while trying to replace it on the mayo stand. When I looked at her and asked if everything was alright, she hid her thumb which was now dripping blood in her hand. I asked her to step back; I threw the blade and knife off of the field and had her go out to wash her hand. After the case was over, I talked to her privately about why she needed to get rid of the blade, go wash her hand and the appropriate paper and blood work that needed to be done for her sake. Her blood had not contaminated the field but I explained to her that the patient would have been contaminated with her blood as well as the patient's blood contaminating her if I had not had her step back and leave the sterile field. She did not understand the risks and was not going to fill out a sharp/needle stick incident report until I explained how she needed to do it to protect herself. She had no understanding of the extreme break in sterile technique, the risk to herself of bloodborne pathogens or the potential risk to the patient had her blood been in contact with them. I was not sure what program passed this person on as a surgical technologist, but she did not understand even though most basic concepts of sterile technique.

Another incident was in a Labor & Delivery unit at a hospital they nurse aides scrub c-sections. The nurse aides had no concept of sterile technique. **Going into an open OR with no hat or mask. Bumping backwards into everything, no concept of draping, or knowing what was sterile and what was not. The most atrocious sterile technique I have ever witnessed.**

Another time, at a Labor & Delivery unit at a very large, level three center with an over 38% c-section rate **was experiencing a high level of post -op infections.** They had many untrained and new RN's that had never been in an OR. They did not understand sterile technique at all, did not know how to prep, open sterile supplies, walk in the sterile environment, etc. **This unit aggressively attacked this problem, they more than doubled their surgical technologist staff, including hiring many certified surgical technologists.** They have two surgical technologists on 24 hours a day, seven days a week. The

surgical technologists started having classes with the RN's, completely re -organized the OR's, trained the RNs in simple sterile technique, opening supplies, the surgical prep, cautery, etc. **The infection rate dropped dramatically in a matter of months.** The surgical technologists run the entire department for both operative and non-operative deliveries. They do all of the quality assurance, work directly with infection control as well as the educators to plan O.R. training with all new orientees as well as having yearly competencies in the OR. Any issues from correct bovie pad placement to how to position the stirrups, use the OR bed and opening sterile supplies is covered in an organized, efficient manner.

Dan, CST

I am a certified surgical technologist. I had practiced in this profession for some 50 years when I retired in the year 2006. Needless to say when I was trained in the late 1950's to my knowledge there were no schools that taught the profession, therefore I was hospital trained.

Functioning in this position I experienced the lack of confidence and was always aware of the lack of knowledge that I believed would allow me to perform with more confidence and ease. Through the years I acquired books on anatomy and other medical topics to study in order to help me in my profession yet I still felt inadequate.

When I learned that we could become certified, I then studied intensely to prepare for the examination and attended an accelerated, accredited program. I took the exam and passed with a pleasing score and felt extremely proud and performed with much more confidence and ease. This was all due to the knowledge that I had gained along with experience. I also realized that all the conversations that I had been hearing during surgery between the nurses, doctors, I now can understand and participate in. An unfortunate experience during my working career that I remember happened when I was employed at a hospital my supervisor always would choose me to orient or help to train new staff or surgical technologist who were generally graduates of accredited programs and certified, but not always. I was assigned to proctor a gentleman who had been hired as an experienced surgical technologist after having been given some basics by the nurses. When I attempted to work with him, after a couple of days I was beginning to feel uncomfortable with what I thought he should have known and began to question him.

He then confessed to me that he had a friend who was a surgical technologist who told him everything to say in order to be hired. Then he went on to tell me that he did not know if he was even born in a hospital, and if he was not born in a hospital this was the first time he had ever set foot in a hospital in his life.

Vicki, CST

During a total knee replacement, the procedure was done with instruments that were not sterile; the surgical technologist was not a certified technologist and the mistake was discovered when a second RN

was putting the empty instrument pans in the cart. The doctor was notified and the patient put on antibiotics.

Lionel, CST

I worked at a hospital where the owner of the hospital also happened to be the CEO. He sent over a friend of his who was laid off at the local fire department. He employed this guy as a surgical technologist. We were told he had experience. I was instructed by my supervisor to orient this fellow. We were in the process of opening up for an exploratory laparotomy. This guy opened a pair of gloves which missed the table and went on the floor. He picked up the gloves and placed them on to the back table. I asked "now what about this situation is wrong"? He had no idea of what I was talking about. **That's one of many experiences I have had with these so-called techs that hospitals love to bring in or transfer from the housekeeping department to work in the OR. My present place of employment is notorious for that. We once had a guy put a camera and light cord in the autoclave.** Well good luck in all the work that you guys do.

Jeff, CST, ROT

1. Circumcision: the tech had drawn up medication without circulating nurse in the room. When the tech gave the surgeon the medication he stated the meds which is required when handing over. .25 w/ epinephrine. **If this was a properly trained tech they would have known that you do not use .25 w/ epi for toes fingers or the penis because the epi will constrict the blood flow.** This was caught and new meds were drawn up. The tech as not certified just on the job training.

2. It was an ankle ORIF (Open Reduction Internal Fixation) and the surgeon was making an initial incision. **The tech had given the surgeon an 11 blade. That would never have been used for that procedure!**

Juan, CST

I work at one the nation's busiest trauma centers. I was the day Lead Orthopedic Surgical Technologist for 4 years. **Long story short, this past Thursday night, I went in to work at 11 pm and I relieved in a case that had been going on since 9 am that morning.** The case was a bi-lateral femur, humerus, sacral fracture, open tibia and bone repair of the pelvis. **When I walked in the surgeon said finally someone who knows what they are doing. The faculty surgeon told his resident if Juan had been here we would have been gone 4 hours ago.** Every set imaginable had been opened up and the table was a mess. The two scrubs before that were not certified. The surgeon stated to me that the (uncertified) techs who had scrubbed that day delayed the case by like four hours, his words were "I wish we would

have had somebody who knew what they were doing earlier." I wasn't going to share a story but I thought about you guys and said I have to agree that not just anybody can do my job. May God bless you and good luck.

Robert, CST, CSFA

I have three stories:

During a nasal polypectomy at an outpatient surgery center affiliated with the hospital there was a medication error. The surgical technologist refused to label any fluids, including medications, on the sterile field. The surgical technologist handed the surgeon cocaine to inject instead of local anesthesia. If she had been certified, she would know to label all fluid containers and syringes with the contents. **The mistake was actually discovered because the patient was a podiatrist (and he was just to be locally anesthetized) and he said he felt funny and actually asked if he had been given local anesthesia or cocaine. The surgeon asked for the code team to be called and the patient had to be taken to the ICU.** This surgical technologist graduated from an unaccredited program, so he could not take the exam. The diploma mill programs didn't even teach him labeling.

During a total joint replacement at the hospital, an uncertified tech failed to maintain the sterile field. **During set-up for the procedure, the surgical technologist started to change the radio/CD player with a sterile towel. He did this while the surgeon and the first assistant were busy looking at the x-rays. It seems like he was trying to sneak it. Well, he got caught and the surgeon told him not to do it again and to change his gown and gloves. Within two weeks, the same tech was again on a total joint replacement with the same surgeon and assistant. During the case, while the knee was open, the tech adjusted the music again. He should have known he could just ask an unsterile member of the team, like the circulating nurse, to adjust the music. The surgical assistant facing the CD player caught the mistake and he was removed from the case. The surgeon asked the patient to be given additional antibiotics. Also, the personnel change caused the case to slow down.** Obviously, this tech was not certified.

During a lumbar laminectomy with implants, a spine procedure, during a hospital inpatient procedure, a Certified Surgical Technologist relieved an on-the-job trained surgical technologist for lunch. As the Certified Surgical Technologist was checking over the trays and doing the change of personnel counts, she noticed the sterilization indicators in the trays had not changed color to indicate the trays were sterile. She then examined the tray wrappers which proved the trays in questions had not been sterilized. Certified Surgical Technologists now before opening a tray, they need to inspect it for any damage to the wrapper and that the sterilization tape has turned the appropriate color, and that the autoclave load indicator is on the package. Once the tray is opened, the wrapper is then inspected to ensure there are no holes by holding them up to a bright light and looking for any light coming through. The tray system, pan lids and filters are checked with the locking indicator to ensure that there was not a compromise. The inside indicator must also be checked. **All of this inspection should be done before the tray is placed**

in the sterile field. Unfortunately, the Certified Surgical Technologist who discovered the mistake, relieved the OJT tech halfway through the procedure and it was too late to correct the error. The patient was treated with antibiotics during the case, had a post-operative infection in the spine within a week, which resulted in a return to surgery to drain the infection and a two-week stay in the hospital for antibiotic treatment to the infected area.

Vanessa, CST

I had an incident in the Labor and Delivery Department at a hospital **where the Lead Surgical Technologist, which was only hospital trained, was unaware of the proper way to store sterilized instruments.** The instruments were in the proper packaging. However, there was so much dust that would form on the instrument packs. When we would drop an instrument during surgery or need extra instruments during surgery that is where we would draw them from.

Often when the circulator would retrieve instruments from there they would get dust on our field which was quite alarming to me but when I would report it to the Lead Tech he was dismissive and often upset because he felt I was challenging his authority. He also said that, the instruments have always been stored in that manner and it is fine the way it is. The last straw for me was when I saw that all the laryngoscopes were thrown in a non-sterile Ziploc bag (like the Ziploc sandwich bags) after being supposedly sterilized! **These laryngoscopes are going into very sick babies who would be extremely susceptible to infection!** I went to my Director about it and she was amazed. **If the Lead Tech had proper education he would know how extremely important it is to keep sterile instruments sterile and why dust is NOT something you want on your sterile field. The bigger issue is that he was in charge of training others who were also hospital trained which had no clue about sterile technique and its importance.**

Marsha, CST, AAB, BSHCA

1. On-the-job trained surgical technologist took a Xeroform foil envelop, opened the wrapper like a 'banana', reached underneath bottom of sterile table cover, pinched the Xeroform and placed it on top of the back table.
2. Opening sterile items from peel packs, by reaching over the sterile back table, using the wrapper to cover hand/arm.
3. Surgical cases would be opened up to an hour before the scheduled case, then covering the back table with a sterile drape to 'preserve the sterile field'.
4. Surgical technologist are allowed to leave his or her sterile field to take an instrument and change the channel on the radio, then bending down to drop the instrument under the back table.
5. Surgical technologists did not label any solutions or medications, which were transferred to the sterile field.

6. Many times the surgical technologist would draw up his or her own medications without first verifying the drug with the registered nurse.
7. When the surgical technologist needed to have his or her gown tied, yet there was not another person to assist them, he or she would place the gown card under a basin, and then turn themselves. This is a break in sterile technique.
8. Leaving operating room door open while preparing to set-up a surgical case.
9. When removing item from an autoclave, the tray or item would be transferred down a hall way without being contained in a metal container.
10. Leaning outside an operating room door trying to get someone's attention, leaving the sterile field unattended.
11. Surgical technologist sits on stool (many times with elbow/arm resting on the top of the sterile table or hands on lap), while other surgical team member's transport and position patient to the operating room table.
12. Surgical technologist would gown and glove from sterile back table, instead of a separate area away from sterile field.
13. STERIS tray carried from decontamination room to the operating room, entire tray is placed on the sterile back table. Stating that since the item was carried with sterile gloves, the tray was still sterile.

Karen, CST

Example: a doctor had an emergency perc. Triple A repair the people who were on call did not know how to do one where the supplies were and how to get started. **In an emergency patient bleeding from a ruptured Triple A you need a person who knows the instruments knows there anatomy so that they can get the right clamps and suture to the doctor in a timely manner to save the patient's life.**

Christy, CST

First I have witnessed people who just cannot handle their job and are just on the job trained. For example in our Family Birthing Center they are just on the job trained people who never had gone through a program. They would do nonscheduled C-Sections. **On multiple occasions the on the job trained techs would call in a panic to the Operating Rooms because their patients were bleeding out or they had to do an emergency hysterectomy and had no idea what they had to do. They do not properly count, they had made up their own version of sterile technique by using kemgaurd (what they wrap the instruments in) as their back table covers. They had instruments at all parts of the room and pans incomplete and had not counted any of them. It was such a disaster in the room the patients lucky they lived through it. Also it is like that anytime there is an emergency they always panic because they are not properly trained and to think of how many instances something could be left in the patient or the infections that most likely go on just blows my mind. If these people had proper education and have been board certified than they would know what to do in emergencies**

and how to properly do the counts and opening a room and the list goes on. We have a lot of responsibilities that people do not give us credit for until something goes wrong. If you are not trained properly you cannot function in the operating room in my opinion, yes anyone can pass instruments when someone tells you what they will need but when you have something go wrong and have to think on the spot what you need to help that surgeon save someone's life than you will absolutely have to go through proper training through a program. It just takes one mistake that can cost someone their life. Think about your family would you want someone who graduated from school and passed their boards assisting the surgeon so if something went wrong you know they could handle it or would you prefer someone who just walked in and was trained on the job by someone else who was probably trained on the job....Because there's no way I would ever let my family have them in my room, which is why people ALWAYS request their family members team when having surgery...

Tamara, CST

During an excision of a lesion at a hospital, the specimen was removed from the patient and was not collected right away from the circulator. **The specimen was left on the back table, not labeled, nor was it in the proper fluid, and as a result got thrown in the trash. If a Certified Surgical Technologist would have been scrubbed in then the specimen would have been properly handled (until the circulator had time to get it later in the case)** by properly labeling it on the back table and preserving it in the proper fluid or handed off the field right away, but instead it was discarded because the "tech" got distracted while trying to tend to the patient instead of her/his sterile field, it was thrown in the trash and unfortunately unable to be recovered because it was taken to the dumpster by the environmental services staff. The dumpster had a "crusher" and crushed the trash therefore it was unable to be recovered and **now the patient doesn't know if it was cancer or not, or for that matter what it was, what caused it, was it preventable.** The patient is left without any answers as to what it was. This was textbook for a Certified Surgical Technologist - ST 101 - how to treat specimens! This was not discovered until after the procedure was finished and the room cleaned. The next procedure had started in the same room when the "tech" realized it. This person was not certified.

Phyllis, CST

Just one example involved a physician who had taken off his own outer glove which he had contaminated, dropped it into the "clean trash." When reminded that we separate the trash, he then with his "still sterile gloves", picked up the contaminated glove he had just taken off and put into the trash and was going to continue the surgery until the **CERTIFIED SURGICAL TECHNOLOGIST INSISTED he change gloves because he was now contaminated.** By the way, the surgeon argued but still followed the lead of the CERTIFIED SURGICAL TECHNOLOGIST.

In another example, while draping and preparing the sterile field for a laparoscopic case, camera and light cord being handed off, the circulator did not inform anyone the light source had been turned on. Had the

CERTIFIED SURGICAL TECHNOLOGIST not been paying attention and protecting the field, the entire drape and the patient could have burned instead of a tiny hole the diameter of the 5mm scope. Both of these examples may seem like something that can be taken for granted, a well trained surgical technologist never takes anything for granted! I believe this integrity is learned in accredited surgical technology programs.

Mina, CST

During a knee arthroscopy at a hospital an on-the-job trained tech punctured himself with an injection needle, proceeded to hand the doctor the syringe with the contaminated needle and the physician injected the patient's knee. Then, the tech asked the circulator for another set of gloves and the surgeon asked him why he was changing his gloves. The tech told the surgeon he poked himself with a needle. The surgeon asked the tech, "which needle." The tech told the surgeon, "the needle that you just injected the patient with." Thus, the patient was exposed to the surgical technologist's blood, which should never happen. Health care workers know there is a risk of being exposed to patient's blood, but there is no reason for a patient to be exposed to a health care worker's blood.

Also, during a Laparoscopic Cholecystectomy (gallbladder removal) at a hospital, an OJT tech handed the surgeon contrast and told the surgeon it was local anesthetic. **The surgeon injected the trocars ports with contrast instead of local anesthetic. The RN circulator caught the mistake, only after it had been injected. The injection caused necrosis of the laparoscopic portals.**

Also, during a stat c-section at the hospital, an emergency C-Section bag filled with suture and other supplies needed for stat C-Sections were to be opened sterile onto the surgical table. Surgical tech opened plastic bag filled with items to be opened individually and dumped the whole bag onto the sterile field. The right action would have been to open each item individually. Another tech came in and caught the mistake before the patient was in the room. The tech that dumped everything was not certified, another OJT tech.

Jennifer, CST

I graduated from an accredited program and after a year or so of working, the manager hired a woman with no surgical experience, but had central supply knowledge. **The next one to be hired was pretty much "off the street" too. No experience in the Operating Room, just Nurse's Aide experience.** I was upset at this. How could it be that I went to college for this profession and someone with no prior training could come in and do what I do?

Sandra, CST

I have been a certified surgical technologist for 24 years. Recently there was an example of an uncertified technologist making a mistake and causing harm to a patient. The procedure was yag laser for bladder stones. The mistake was found after the procedure was done. The uncertified surgical technologist used a regular metal cystoscope sheath, for the laser procedure. **Certified surgical technologists learn basic laser concepts in school and learn not to use sliver, stainless steel or metal that has not been coated or blackened for laser use. Otherwise, the laser bounces off of it and go anywhere.** The damage to the cystoscope sheath was seen at the end of the sheath where the plastic curved protector at the end of the sheath was lasered off making it sharp and harmful to the patient's urethra and bladder. Unfortunately, it was not discovered till after the procedure was done the next day. I wish I could show the cystoscope to let you see the sharp end to the cystoscope and the obvious laser marks made. This is one of the recent incidents that came to mind. In the course of my career there have been many.

Sarah, CST, AAS, BA

During a hysterectomy at hospital, during closing, the doctor inserted a lap sponge. The tech did a closing count and counted the inserted sponge. The tech failed to do an additional count to confirm the removal of the sponge. **The patient was sent home with the retained sponge and suffered severe abdominal pain, high fever and infection from the sponge.** A week later the patient was brought back into the OR to have the sponge removed. **The patient had a severe infection due to the sponge, upon reopening the incision about 2 liters of pus excreted.**

Charlene, CST

Good morning, I am a Certified Surgical Technology Instructor, and I have been properly trained in the operating room and instrumentation. I have worked in all of the specialties in the operating room. There are many hospitals that want to place students where they are needed to fill their opening, instead of placing them where they can be properly trained. **The hospitals try to make students perform procedures alone at the beginning of their clinical rotations because they want the free labor. To keep my accreditation status, I insist the students have a preceptor train them for the required length of time.**

Dorothell, CST

I think the CST should be required because it screens out people who are not naturally exacting. People who lack attention to detail never make it through the accredited programs. Also, it takes commitment to show up at school and study to earn a one-year certificate or an Associate's Degree. People who can't achieve that should not be in the scrub role in the operating room.

Gina, CST

I came to work and one of the uncertified people on the Labor and Delivery unit I work on mentioned how she had to hold the plug in the cautery machine that attaches to the grounding pad, because it kept losing connection. I told him he should use a cable that was in the machine or have swapped out the machine from the other room. That it was dangerous for the patient, nurse and the rest of the team touching the patient.

One time I was summoned to an OB OR to assist them in locating a missing lap sponge post a scheduled C-section. You can only imagine what it felt like sifting through the trash and linen, some of which had already been removed from the OR. The worst thing was the patient had been moved to the recovery room already. The staff which included an OJT tech had only begun the count after the patient had left the room. When asked why this had happened and why the counts did not occur at the correct time the tech responded that they (the tech and the circulator) were closing too quickly and they couldn't keep up. Also reported that the instrument count had distracted them as neither of them were familiar with many of the instruments and got behind trying to get that count straight! It seemed as though this team was the blind leading the blind. An x-ray was taken in the PACU and a laparotomy sponge was detected in the patient. She was brought back to the OR to have the sponge removed. I had to set up the case and do that procedure because the OR manager said the other two people did not understand the urgency.

Kathy, CST

A surgical airway fire could have been prevented or controlled better had the surgical team which included an OJT tech and a new RN advised the surgeon and anesthesiologist that they were using the cautery and reminded them to reduce the flow of O2. There was no sterile water on the field either to control the surgical fire.

Jackie, CST

There are many incidents concerning both OJT and other poorly trained surgical technologists. One such was a technologist in dealing with surgical implants. The technologist was OJT (not certified) with little experience in this procedure. **In this case it was determined that a non sterile implant was placed in a patient.** This was not known until a week later when hospital central sterile department noticed a load of implants biological tests were not right. The surgical technologist on the case failed to see that the indicators for the implant being sterilized were not good. The hospital informed the doctor and patient had to stay in hospital longer and be given massive antibiotics. The right action would have been for the tech to notice implant gauges had not changed and proceeded to remove them from the sterile field. This would have contaminated the entire sterile field.

Jennifer, CST

Recently, a Surg. Tech. (not certified) at my facility, stuck himself with a clean suture needle. Instead of getting the needle off of the field and correcting any breaks in contamination, he went ahead and handed the needle to the surgeon, who then used it on the patient! **The needle had been contaminated by the scrub tech on himself and he had no surgical conscience to stop and correct the situation.** He addressed the situation after the case had finished, and only because he was concerned for himself bleeding. When asked why had he not made a better effort to stop the situation when it began, he stated that he wasn't concerned about the situation, because in his mind he knew that he "did not have any diseases or anything" so it was probably ok to continue using the needle.

-this is scary.....

Heidi, CST

I was involved in an orthopedic case where the rep opened an intermedullary femoral nail to the (OJT) scrub who took it but it was still in the cardboard box (the unsterile box). They didn't notice that it was not the sterile portion. The implant was removed, the scrub had to reglove and then was handed the implant out of the sterile container.

Surgical Technology Program	Degree(s) offered	Tuition/fees (resident)	Tuition/fees (nonresident)
<p>Bellingham Technical College - Bellingham, WA</p> <p>Website: www.btc.ctc.edu</p> <p>Surgical Technology Program 3028 Lindbergh Avenue Bellingham , WA - 98225-1599</p>	Certificate	\$9,669 (includes books, materials and supplies, equipment, clothing)	Same as resident
<p>Clover Park Technical College - Lakewood, WA</p> <p>Website: www.cptc.edu</p> <p>Surgical Technology Program 4500 Steilacoom Blvd SW Lakewood , WA - 98499-</p>	Associate Degree	\$14,447.16 (includes tuition, fees, books and immunizations)	\$29,135.00
<p>Columbia Basin College - Pasco, WA</p> <p>Website: www.columbiabasin.edu</p> <p>Surgical Technology Program 2600 North 20th Avenue MS-R2 Pasco , WA – 99301</p>	Certificate	\$10,666	\$17,243.93

<p>Renton Technical College - Renton, WA</p> <p>Website: www.rtc.edu</p> <p>Surgical Technology Program 3000 Northeast 4th Street Renton , WA - 98056-4195</p>	<p>Certificate</p> <p>Associate</p>	<p>\$8,692.24</p> <p>Additional tuition for Associate Degree general education requirements</p>	<p>Same as resident</p>
<p>Seattle Central Community College Seattle, WA</p> <p>Website: www.seattlecentral.org</p> <p>Surgical Technology Program 1701 Broadway Seattle , WA - 98122-</p>	<p>Certificate</p>	<p>\$4,281 (includes tech, activity, transportation fees, books, lab fees, uniforms, dues and national examination)</p>	
<p>Spokane Community College Spokane, WA</p> <p>Website: www.scc.spokane.edu</p> <p>Surgical Technology Program 1810 North Greene Street Spokane , WA - 99217-5399</p>	<p>Associate</p>	<p>\$9.700 (includes tuition, fees, books, immunizations)</p>	<p>\$13,380.48</p>

<p>Yakima Valley Community College Yakima, WA</p> <p>Website: www.yvcc.edu</p> <p>Surgical Technology Program 16th Avenue and Nobhill Boulevard Yakima , WA - 98902</p>	<p>Associate</p>	<p>\$9,700 (includes tuition, fees, books, immunizations)</p>	<p>\$13,380.48</p>
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According to the Bureau of Labor Statistics, employment of surgical technologists is expected to increase 19 percent from 2010 to 2020, a growing medical occupation. Washington accredited surgical technology programs produce enough graduates each year to meet anticipated demand.



THE NATIONAL BOARD
OF SURGICAL TECHNOLOGY
AND SURGICAL ASSISTING

August 24, 2012

Washington State Department of Health
Health Systems Quality Assurance
PO Box 47850
Olympia, Washington 98504-7850

Re: Sunrise Proceeding, Surgical Technologists

Dear Sir/ Madam,

In reference to the current proceedings related to surgical technologist registration, I would like to provide some basic information regarding the National Board of Surgical Technology and Surgical Assisting (NBSTSA), as well as the Certified Surgical Technologist (CST) and Certified Surgical First Assistant (CSFA) credentials.

The NBSTSA is independently incorporated as a 501C6 tax exempt organization and as such maintains complete autonomy in all operational and certification matters conducted by the organization. Further, the CST and CSFA examination programs sponsored by the NBSTSA are fully accredited by the National Commission for Certifying Agencies (NCCA), and are currently the only surgical technology and surgical first assisting credentials in the United States that meets the rigid accreditation requirements of the NCCA (www.credentialingexcellence.org).

The CST and CSFA credentials are fully trademark protected by the NBSTSA and as such may only be utilized by individuals who have successfully passed either the CST or CSFA examination. The NBSTSA aggressively protects the CST and CSFA trademarks, and pursues action against individuals who falsely purport to be certified by the NBSTSA. The NBSTSA provides credential verification services for individual credential holders as well as current and prospective employers on the organization's website, www.nbstsa.org.

Both the American College of Surgeons (ACS) and the Association of Surgical Technologists (AST) recognize the CST and CSFA credentials and both organizations provide representation in the development and administration of the examinations.

The NBSTSA partners with Applied Measurement Professionals, Inc. (AMP) in development and administration of the CST and CSFA examinations. As both the CST and CSFA examination programs are fully accredited by the NCCA, the NBSTSA utilizes best practices in examination development, administration and security. The resulting examinations are valid measurements indicators of the knowledge entry level practitioners should possess entering into the surgical arena.

With over 40,000 currently Certified Surgical Technologists and 2,200 Certified Surgical First Assistants the NBSTSA has the most widely recognized and utilized professional credentials in surgical technology and surgical first assisting in the nation.

Thank you for the opportunity to provide you with this information regarding the NBSTSA. Please feel free to contact me if I can be of any further assistance.

Best Regards,

A handwritten signature in black ink, appearing to read "Ronald Kruzal". The signature is fluid and cursive, written over the printed name.

Ronald Kruzal CST, MA

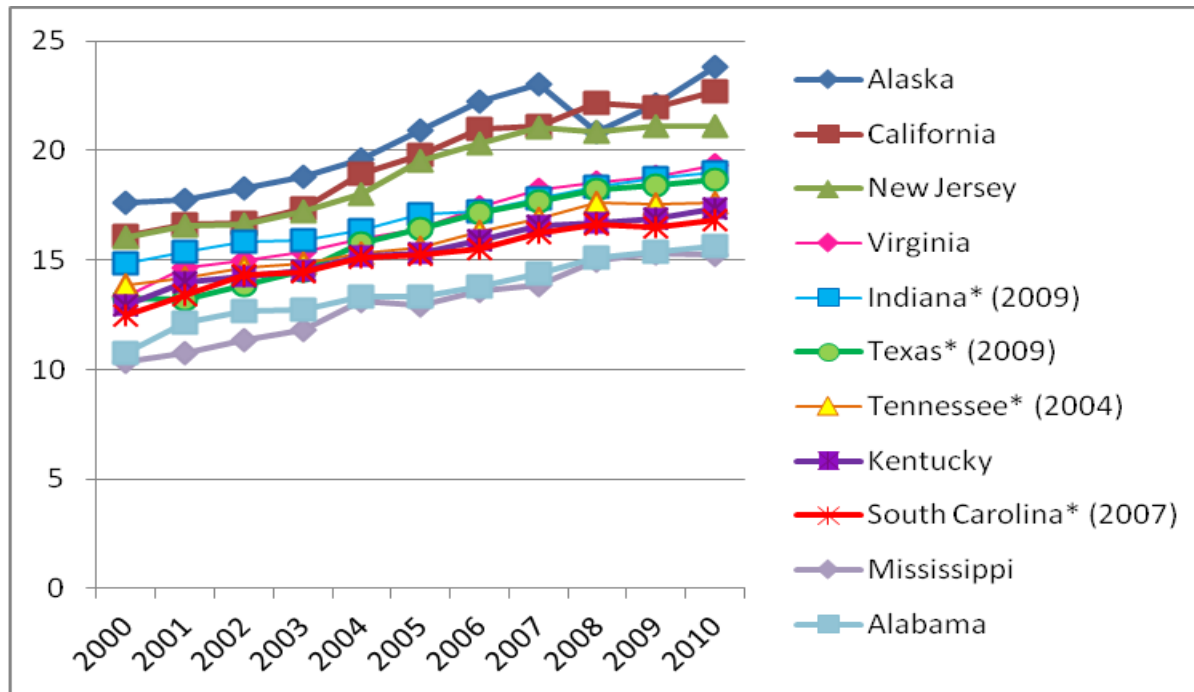
Chief Executive Officer

National Board of Surgical Technology and Surgical Assisting

Surgical Technologist Certification Laws Have Not Impacted Wages

Surgical Technologist Median Hourly Wages 2000-2010 in 11 States

Source: Bureau of Labor Statistics



*State has minimum entry-to-practice requirements for surgical technologists.

This chart demonstrates the median hourly wages for surgical technologists in 11 sample states. The states were chosen because the state has minimum entry-to-practice standards for surgical technologists or the state ranks high or low on the national comparative cost-of-living index.

Surgical technologist entry-to-practice laws passed in Tennessee in 2004, South Carolina in 2007, and in Indiana and Texas in 2009. This chart clearly demonstrates that surgical technologist wages correlate strongly with the cost of living in each state and that surgical technologist entry-to-practice laws have not impacted wages.

state	2000	2001	2002	2003	2004	2005	2006	2007
Alaska	17.64	17.75	18.29	18.81	19.57	No data	22.23	23.03
California	16.11	16.65	16.67	17.36	18.95	19.77	20.96	21.10
New Jersey	16.02	16.54	16.66	17.23	18.04	19.55	20.29	21.02
Idaho	15.31	15.15	15.93	17.01	17.36	16.74	16.46	17.22
Indiana	14.84	15.35	15.81	15.91	16.39	17.06	17.24	17.84
South Carolina	12.47	13.38	14.34	14.48	15.13	15.27	15.48	16.21
Tennessee	13.87	14.21	14.68	14.83	15.29	15.59	16.30	16.87
Texas	13.29	13.19	13.87	14.54	15.74	16.45	17.14	17.70
Virginia	13.35	14.62	15.00	15.40	15.95	16.45	17.39	18.19
Mississippi	10.35	10.74	11.38	11.82	13.14	12.92	13.59	13.83
Kentucky	12.91	14.01	14.25	14.53	15.2	15.28	15.92	16.56
Alabama	10.77	12.16	12.65	12.71	13.34	13.35	13.77	14.40

2008	2009	2010
20.88	22.13	23.79
22.20	21.94	22.67
20.82	21.12	21.11
18.45	20.10	19.33
18.35	18.72	19.01
16.63	16.50	16.82
17.65	17.58	17.59
18.22	18.38	18.69
18.54	18.81	19.34
14.98	15.32	15.25
16.68	16.90	17.33
15.08	15.40	15.62

Appendix F

Rebuttals to Draft Recommendations

Washington Surgical Technologist Sunrise Review Rebuttal
Submitted by the Washington State Assembly of the Association of Surgical Technologists
September 21, 2012

I. Response to “The applicant has not provided verifiable data to identify a clear and easily recognizable threat to public health and safety caused by registration of surgical technologists in Washington.”

A. The sunrise committee report stated there is no corresponding evidence of complaints from patients to the department to conclude the current level of regulation is inadequate to protect the public from harm.

1. Most of a surgical technologist’s work is performed before the patient enters the operating room and while a patient is under anesthesia. Patients neither select nor have the opportunity to know either the identity or qualifications of the surgical technologist.
2. Requiring proponents to meet a threshold of complaints from patients who are under anesthesia is an unreasonable standard.

B. The report also states “the applicant provided malpractice cases of patient harm where surgical technologists were potentially involved but these cases could not be tied directly to the surgical technologists.”

1. This statement is inaccurate as many of the submitted lawsuit examples specifically ascertained causation by surgical technologists.
2. While surgeons are vicariously liable, submitted malpractice case examples demonstrated patient harm caused by surgical technologists.

C. The committee received numerous examples of patient harm caused by uncertified surgical technologists, causing the following clear and easily recognizable patient injuries or harm:

- External and internal 3rd-degree burns (legs, thighs, vaginal);
- Injury due to malfunctioning equipment such as drills;
- Misplaced or lost specimens (causing inability of doctors to study patients’ cancerous tumors, which were needed to identify cancer and/or inform treatment or skin having to be grafted from a second location when the first skin graft was compromised);
- Patient death;
- Newborn mishandling and improper equipment set-up for emergency c-sections;
- Patients being injected with the wrong fluid or medication;
- Internal organ perforations caused by retractor mishandling;
- Trachea fires;
- Lack of ability to prepare for emergency surgeries causing delayed treatment; and
- Foreign retained objects.

D. The highest potential for harm by a surgical technologists is not “clear and easily recognizable” due to the invisible nature of infectious organisms, yet the surgical technologist’s most important role is to prevent surgical site infections.

1. The surgical technologist is the professional in the operating room charged with the responsibility of maintaining the integrity of the sterile field. The sterile field refers to surfaces that sterile objects, such as surgical instruments, may contact. The sterile field includes the area immediately around a patient that has been prepared for a surgical procedure. Protecting the sterile field involves carrying out specific procedures using

sterile technique. Surgical technologists must follow proper technique to prevent surgical site infections.

2. Surgical site infections pose a significant problem and are the second most common health care-associated infection in the United States. Health care-associated infections are of such national concern that in 2009, the American Recovery and Reinvestment Act directed \$50 million in stimulus funding to state efforts to reduce health care-associated infections.
- E. The sunrise report acknowledges the scholarly journal article which states the surgical technologist involved in all the infection cases being studied had no formal training in operative techniques or infection control. Hence, the study reinforces the connection between lack of formal training and poor patient outcomes.
 - F. In addition, data were provided that demonstrated a positive correlation between certified personnel and reduction in surgical site infections. It was acknowledged that the data are not specific to surgical site infections directly caused by a surgical technologist, uncertified or otherwise, due to HIPAA and reporting constraints. Nonetheless, the data reveal that facilities utilizing only credentialed personnel as surgical technologists reduced by 11%, the costs associated with extended stays due to surgical site infection, a statistically significant number.
 - G. During a similar sunrise process in Virginia, the Virginia Department of Health Professions reviewed the need to require certification of surgical technologists using analogous criteria and found, despite the unavailability of unequivocal data, that uneducated, uncertified surgical technologists pose risks to patients and, thus, recommended certification of surgical technologists. Washington compares to Virginia in terms of population (7 million: 8 million, respectively), number of surgical technologists as estimated by the Bureau of Labor Statistics (2,140:2,110, respectively), and number of the Certified Surgical Technologists (700:600, respectively). Washington has a greater supply of surgical technologists and Certified Surgical Technologists per capita than Virginia.
 - H. It is inappropriate to make Washington patients wait for indubitable data.
 1. Linking infections to surgical technologist performance with patient outcome data is currently infeasible.
 - a. Obtaining more specific data is currently infeasible as hospital data are not public and, even in the rare circumstance data are public, hospitals are highly unlikely to provide proponents access to root cause analyses, due to complex HIPAA and other patient privacy rules.
 - b. A formal study would require direct observation of hundreds of surgeries to track breaks in sterile technique and correlate such mistakes with surgical site infections and incidents of patient harm. Due to patient consent requirements and HIPAA rules, such a study is unfeasible at this time.
 2. If definitive, mathematical data are required for regulation of surgical technologists, Washington patients will have to wait indefinitely. It is irresponsible and counter-intuitive to use lack of data (particularly where the data are currently unobtainable) to decide whether or not a profession poses risk to patients, despite the obvious public policy conclusion that more educated professionals achieve more positive outcomes, axiomatic in every other medical profession.

II. Response to “A surgical technologist works under the delegation and direct supervision of a surgeon and RN nurse circulator, who must ensure the surgical technologist’s competence to perform delegated tasks.”

A. Supervision by the registered nurse circulator is an incorrect application of the law in Washington.

1. Washington law states surgical technologists are under the supervision of the surgeon.
2. The circulating nurse is outside the sterile field, monitoring the patient’s vital signs and creating and updating the patient record and may even be out of the operating room to meet the needs of the surgical team.
3. The Washington State Nurses Association and AORN expressed their support for requiring certification of surgical technologists during the Washington sunrise process.

B. Health care facilities’ human resources departments hire a majority of surgical technologists, not surgeons or nurse circulators. Hence, the surgeon or registered nurse has no authority or input on which surgical technologists are hired, or their qualifications.

1. The best way to ensure competence is to use an objective measure of competence, such as certification.
2. Currently, hospitals are not meticulous about determining qualifications for surgical technologists. The committee was provided with evidence that minimum educational qualifications for surgical technologists in Washington hospitals varies, even within the same hospital or hospital chain.

C. The Department of Health analysis presupposes that the surgeon exercises continual vigilance over all staff.

1. The surgeon’s eyes and focus is – and should be– on the patient, not behind or beside himself or herself.
2. The idea that competence is unnecessary because a surgeon is overseeing, catching and intercepting the surgical technologist’s duties to mitigate harm during surgery, especially during emergency or otherwise high-risk surgeries (which are common), demonstrates a lack of understanding of the pace and risk in an operating room.
3. Such a statement presupposes a hierarchical nature in the operating room and minimizes or dismisses the universally-accepted team approach to surgery.
4. After scrubbing in, surgical technologists generally set-up the backtable independently, using sterile technique and knowledge of the operational order of the scheduled procedure, while the surgeon has yet to arrive (and the circulating nurse is with the patient).

- D. Between 2006 and 2009, Washington hospitals reported 110 cases of foreign retained objects to the Washington Adverse Event Reporting Program. Only 53% of facilities required to report submitted reports, thus the actual number of incidents is likely higher. Supervision did not prevent these 110 reported cases.
- E. The report states, many of these “examples [of patient harm] indicated inadequate training by the facility...”
 - 1. The Washington State Assembly of the Association of Surgical Technologists categorically agrees that inadequate training of surgical technologists causes patient harm. This threat to surgical patient safety is obviated by appropriately accredited education and training, and objective credentialing.

III. Response to “The proposal would place a significant burden on surgical technologists to obtain the national certification without a corresponding increase in public protection.”

- A. Laws requiring certification for newly-practicing surgical technologists have not caused a significant burden in other states.
 - 1. The national surgical technologist association has never received a complaint about inability to find a qualified surgical technologist or other difficulties complying with the law.
 - 2. In addition, conversations with compliance officers at the Texas Department of State of Health Services, the South Carolina Department of Health and Environmental Control, the Indiana State Department of Health and the Tennessee Department of Health, where similar surgical technologist certification laws have passed, reveal their departments have never received a complaint about the burden of surgical technologist certification.
- B. The proposal would not place a significant burden on health care facilities.
 - 1. Currently, 700 Washington surgical technologists hold the Certified Surgical Technologist certification. (The sentence on page five which reads, “It is unknown how many registered surgical technologists in Washington have national certification” is in error. This information was provided on to committee through a formal submission of documentation on June 10, 2012.)
 - 2. In addition, an additional 500 Washington surgical technologists have graduated from an accredited program and passed the certification exam at least once and are certification-eligible.
 - 3. The legislation applies only to newly-practicing surgical technologists.
 - a. Under the proposed legislation, when a new position is available for a surgical technologist, a facility may hire one of the 2,140 grandfathered surgical technologists, a graduate of an accredited program (Washington surgical technology programs graduate more than 100 students per year), a registered nurse, or a graduate of a U.S. Armed Forces surgical technology program.

C. The proposal would not place a significant burden on newly-practicing surgical technologists.

1. Accredited surgical technology programs in Washington already produce enough graduates to meet current demand.
2. The cost of the certification test is included in accredited surgical technology program tuition.

D. The proposal would not place significant burden on currently practicing surgical technologists.

1. Most or all currently-practicing surgical technologists would be grandfathered, depending on the final, negotiated legislative language of the grandfathering provision.
2. Individuals trained in surgical technology in the U.S. Armed Forces and other health professionals working within the scope of their license are exempt.
3. Maintenance of certification requires, on average, only fifteen hours of continuing education per year.
 - a. Many credits may be obtained for free at hospitals and other health care facilities.
 - b. Continuing education is also available online for as little as \$11 per year.

E. Certification increases public protection.

1. Certification is an objective measure of competency indicating a surgical technologist has graduated from a two-year surgical technology program that meets accreditation standards and passed a certification exam administered by a non-profit credentialing organization, the National Board of Surgical Technology and Surgical Assisting (NBSTSA), which is accredited by the National Commission for Certifying Agencies.
2. Certification is the most objective measure of competency available.
3. Individuals formally educated in surgical technology provide better patient care.
 - a. Surgical technology program curriculum includes anatomy, physiology, microbiology, medical terminology, surgical asepsis, sterilization techniques, assembling and operating surgical equipment including lasers and robotics, medical ethics, basic and advanced surgical techniques and basic and advanced surgical operative procedures.
 - b. Accredited surgical technology programs incorporate human factors throughout their practice curricula.
 - i. Long adopted by the airline industry, with proven safety improvements, human factors implementation and management safeguard both patient and surgical team. Human factors training is recognized by performance experts to reduce medical errors and improve quality of care.

IV. Response to “The proposal contains flaws that would make it difficult to implement, such as a stated intent to apply only in certain facilities and certain surgeries although the proposal clearly applies to all surgical technologists in Washington.”

- A. The bill that was in review during the sunrise process did not have the opportunity for a legislative hearing prior to being referred to the sunrise review process.
- B. The Washington State Assembly of the Association of Surgical Technologists has accepted much of the feedback received during the sunrise process.
- C. The revised legislation will integrate the concerns of various stakeholders.
- D. The legislation is not intended to apply to minor surgeries, *e.g.* office-based surgeries.
- E. The re-drafted legislative proposal for the 2013 session will apply only to specific facilities.



September 21, 2012

Sherry Thomas
PO Box 47850
Olympia, WA 98504-7850

Dear Ms. Thomas:

We are writing in response to the Department of Health's draft sunrise review for House Bill 2414 that would require certification of surgical technologists in Washington State. For the following reasons, we are disappointed that the Department does not support certification:

- Requiring passage of a certification examination would assure surgeons and circulating registered nurses in the operating room that surgical technologists on the team meet a minimum level of competency when joining the team. The team, as well as patient safety, benefits from assurance that surgical technologists meet a minimum level of competency.
- Research is available to show that higher educational levels for a health professional increases patient safety.
- It is surprising to argue that requiring certification is an undue burden for surgical techs, since physicians and registered nurses are required to pass examinations in their respective fields.
- We are concerned that instances of harm reported by 93 individuals in the applicant's report is not given due consideration.

However, WSNA does support requiring certification of all surgical technologists regardless of the setting. The result would be some consistency among surgical technologists that choose to change practice settings.

Thank you for the opportunity to comment.

Sincerely,

Sofia Aragon, JD, RN
Senior Governmental Affairs Advisor
Washington State Nurses Association