Support House Bill 373 by Representative LaTourette and Representative Huffman
Surgical Technologist Licensure

SURGICAL TECHNOLOGIST LICENSURE LEGISLATION SUMMARY

- Creates licensing requirements for surgical technologists and requires surgical technologists to be licensed by the State Medical Board;
- Prohibits unlicensed individuals from practicing as surgical technologists and from using the title surgical technologist;
- Specifies the tasks licensed surgical technologist may perform;
- Lists the requirements for obtaining initial and renewing surgical technologist licenses; and
- Authorizes the Medical Board to adopt rules to implement the legislation.

THE ROLE OF THE SURGICAL TECHNOLOGIST

Prior to surgery, the surgical technologist:

- Prepares the operating room, including the sterile field using sterile technique, setting up surgical instruments, sterile drapes and sterile solutions;
- Assembles surgical equipment and checks it to ensure it is working properly;
- Prepares patients for surgery by washing, shaving and disinfecting incision sites;
- Participates in positioning and draping patients; and
- Observes patients’ vital signs, checks charts and helps the surgical team put on sterile gowns and gloves.

Skillful pre-surgery technique protects patients from life-threatening surgical site infections, malfunctioning equipment and unneeded delays during the procedure.
During surgery, the surgical technologist stands next to the surgeon at the operating table, who relies on the surgical technologist every moment of the surgery. The surgical technologist:

- Swiftly passes instruments, fluids and supplies to the surgeon; and
- Operates lasers, robots, sterilizers, lights, suction apparatus, and diagnostic equipment.

The surgical technologist must be able to anticipate the needs of the surgeon because every moment a patient is in surgery the risks related to anesthesia and bleeding increase. The surgical technologist is trained to handle and minimize exposure to hazardous materials, communicable diseases and bloodborne pathogens. The integrity of the sterile field is the surgical technologist’s highest priority.

After surgery, the surgical technologist performs a count of sponges and supplies with another member of the surgical team to assure no sponges or instruments remain inside the patient, which can cause serious infections, disability, and, in rare cases, death. The surgical technologist is the only staff member in the sterile field, near the patient, responsible for counting objects to prevent a foreign object from being retained after surgery.

**EDUCATION, CERTIFICATION AND CONTINUING EDUCATION**

**Surgical Technology Curriculum**

Nationwide, there are more than 490 accredited surgical technology programs. Programs are generally twelve to twenty-four months in length resulting in a certificate or an associate’s degree. 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.

**Certified Surgical Technologists Taught to Safeguard Surgical Patients by Managing Human Factors**

Accredited surgical technology programs incorporate human factors throughout their practice curricula. Long adopted by the airline industry, with proven safety improvements, human factors implementation and management safeguard both patient and surgical team and is recognized by performance experts to reduce medical errors and improve quality of care.1, 2, 3

**Continuing Education**

Continuing education is exceptionally important in an increasingly complex field. Through continuing education, practitioners learn about new techniques, equipment, technologies and new findings regarding patient safety.

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REQUIRING CERTIFICATION OF SURGICAL TECHNOLOGISTS - EFFECTIVE PUBLIC POLICY WITH BROAD SUPPORT

Surgical Technologists- The Only Member of Surgical Team Not Required To Meet Minimal Requirements

Surgical technologists currently are the only member of the surgical team who are not required to meet minimal threshold educational and certification requirements. No law or regulation exists in Ohio to assure objective evidence of even minimal competence. This legislation ensures all personnel caring for surgical patients are appropriately educated and meet minimum standards.

Certified Surgical Technologists in Ohio

Currently, Ohio health facilities employ approximately 3,500 surgical technologists. The legislation will have no impact either on the currently employed surgical technologists or on future demands. There are currently 25 accredited surgical technology programs in Ohio. Accredited distance and online programs are also available for those who qualify. The proposed bill has a grandfathering provision for people currently working as surgical technologists and exempts military graduates and federal facilities.

Other States Require Certification of Surgical Technologists

Nine states have passed legislation that requires certification as a condition of employment: Idaho, Indiana, Massachusetts, New Jersey, New York, Oregon, South Carolina, Tennessee, and Texas. In addition, Washington, Colorado and Illinois provide for registration of surgical technologists.

Hospitals and Health Departments Support Legislation Requiring Certified Surgical Technologists

Hospitals and other health care facilities in Massachusetts, Idaho, Indiana, New Jersey, New York, Oregon, South Carolina, Tennessee and Texas have been either supportive or neutral about minimum standards for surgical technologists. According to the Bureau of Labor Statistics data, surgical technologists in states in which similar legislation has passed have seen no spike in wages for surgical technologists. State health departments in Idaho, Indiana, Massachusetts, New Jersey, New York, South Carolina, Tennessee and Texas have been neutral or supportive of the legislation. In addition, the Virginia Board of Health Professions has formally recommended that surgical technologists be certified.
Surgeons Support Surgical Technologist Certification

The American College of Surgeons (ACS) has issued a formal statement supporting accredited education and certification of surgical technologists.

REQUIRING CERTIFICATION OF SURGICAL TECHNOLOGISTS INCREASES QUALITY AND REDUCES COSTS

Surgical Site Infection Rates Continue to Increase

According to the 2009 National Healthcare Quality Report by the Agency for Healthcare Research and Quality, the hospital-acquired infection rates are increasing. The quality measure that is deteriorating fastest is the measure for post-operative sepsis. Post-operative sepsis rates increased by 8% in only one year. The training, education and experience of a Certified Surgical Technologist can only logically serve to arrest and abate this alarming statistic, protect patients and save lives.

Health Care-acquired Infections Significantly Drive Health Care Costs

- Health care-acquired infections incur an estimated $28 to $33 billion in excess healthcare costs each year.4
- The hospital cost is an estimated $25,546 per surgical site infection, and surgical site infections result in an estimated 13,088 deaths nationally per year.5
- Reduction in surgical site infections would save lives and, indirectly, result in savings to consumers.

Surgical Technologists- Responsible for Preventing Surgical Site Infections

A JAMA study demonstrated that the most common cause of unplanned hospital readmissions are surgical site infections.6 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.

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Facilities Using Certified Surgical Technologists have Lower Infection Costs

Empirical data and studies analyzing surgical technologists’ contributions to patient outcomes are rare, due largely to the fact that the profession is unregulated at present. Most studies involving adverse medical and surgical events are not publicly available, making analysis difficult. Nonetheless, some data are available.

Data from Virginia reveal that facilities utilizing only credentialed surgical technologists reduced the costs associated with extended stays due to surgical site infection by 11%.

Certified Surgical Technologists Reduce Cost and Increase Quality

The Patient Protection and Affordable Care Act requires health care facilities to meet quality standards, linking Medicare payment to positive quality outcomes. Hospitals which do not reduce infections and preventable surgical errors will incur significant reductions in Medicare payments. Certified Surgical Technologists are educated and trained in identifying and correcting asepsis during surgery. Their expertise will improve overall quality, reduce hospital-acquired conditions and minimize Medicare cost penalties.

Requiring Certification of Surgical Technologists Protects Patients

Unqualified Surgical Technologists = Potential Harm to Patients

A more educated professional is a more competent professional. Examples of potential patient harm resulting from uncertified surgical technologists include:

- An increase in retained foreign objects and an increase in failures to pass sharp instruments properly—resulting in serious complications or exposing patients to bloodborne pathogens. An *Annals of Surgery* report found that the majority of discrepancies in instrument count happened when surgical technologists or nurses misplaced items in the operating room;
- Slow surgical procedures, resulting in unnecessary risk since the patient is under anesthesia and can experience excessive blood loss;
- Passing the wrong fluid or the wrong equipment; or
- Poorly assembling sophisticated surgical equipment, such as laser, endoscopic and neurosurgery equipment.

Most importantly, uncertified surgical technologists increase the risk of a patient contracting a surgical site infection. The surgical technologist is the person in the operating room responsible for maintaining the integrity of the sterile field.

- The Centers for Disease Control and Prevention estimates that 5%-10% of hospitalized patients develop health care-acquired infections.

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6 [www.vapricepoint.org](http://www.vapricepoint.org)
7 HR 3590, Pub.L.111-148m 124 Stat, 119, Sec. 3008
Approximately 1.7 million patients develop health care-acquired infections each year and there are approximately 98,000 deaths per year, making it the 6th leading cause of death in the country according to a 2007 study. Of these infections, 290,000 were surgical site infections.10

**Fewer Adverse Events in Health Care Facilities Requiring Certification**

The Minnesota Adverse Health Events Reporting Act requires public dissemination by healthcare facilities of 28 adverse medical events. **Analysis of the data from 2009-2013, by facility, reveals that reported adverse surgical events (wrong body part, wrong procedure, wrong patient, foreign retained objects) occurred 40% less often in hospitals that require education and certification for surgical technologists compared to hospitals that do not require education or certification for surgical technologists.**

The surgical technologist is the professional near the patient responsible for counting supplies and instruments to prevent foreign retained objects. **Foreign retained objects analyzed separately occurred 55% less in hospitals that require surgical technologist education and certification compared to hospitals that do not.**

Data were calculated using relative increase. Because of the confidentiality of root cause analyses of these events, it is difficult to determine exact fault. Nevertheless, the data decisively show that healthcare facilities that value competency in their surgical staffs experienced better outcomes.

Data source: [http://www.health.state.mn.us/patientsafety/](http://www.health.state.mn.us/patientsafety/)

**REQUIRING LICENSURE OF SURGICAL TECHNOLOGISTS IS EFFECTIVE PUBLIC POLICY THAT PROTECTS PATIENTS**

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 technologists are the only member of the surgical team not required to meet minimal educational and certification requirements. 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.

Ohio patients deserve no less.

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