THE VIRGINIA BOARD OF HEALTH PROFESSIONS
THE VIRGINIA DEPARTMENT OF HEALTH PROFESSIONS

Study into the Need to Regulate

Surgical Assistants & Surgical Technologists

in the Commonwealth of Virginia

July 2010

Virginia Board of Health Professions
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Study into the Need to Regulate Surgical Assistants and Surgical Technologists in the Commonweath of Virginia

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Study into the Need to Regulate Surgical Assistants and Surgical Technologists in the Commonweath of Virginia

List of Acronyms

ABHES	Accrediting Bureau of Health Education Schools
ABSA	American Board of Surgical Assistants
ACGME	Accreditation Council on Graduate Medical Education
ACS	American College of Surgeons
AHA	American Hospital Association
AMA	American Medical Association
AORN	Association of periOperative Registered Nurses
APN	Advanced Practice Nurse
ARC-ST	Accreditation Review Committee on Education in Surgical Technology
ASA	Association of Surgical Assistants
AS-C	Assistant at Surgery-Certified (by NASC)
ASPMA	American Society of Podiatric Medical Assistants
AST	Association of Surgical Technologists
BLS	US Bureau of Labor Statistics
CAAHEP	Commission on Accreditation of Allied Health Education Programs
CFA	Certified First Assistant (by NBSTSA)
CMS	Centers for Medicare and Medicaid Services
CNOR	Certified Nurse-Operating Room
COA	Certified Ophthamalic Assistant
COOL	Credentialing Opportunities Online (provides information on civilian credentialing for military personnel
CoP	Medicare Conditions of Participation
CORST	Certified Operating Room Surgical Technologist
CPS	Current Population Survey of the US Census Bureau and the BLS
CRNFA	Certified Registered Nurse First Assistant
CSA	Certified Surgical Assistant (by NSAA)
CST	Certified Surgical Technologist (by NBSTSA)
DORA	Colorado Department of Regulatory Agencies
EVMS	Eastern Virginia Medical School
HAI	Hospital-Acquired Infections
HPSO	Healthcare Providers Service Organization
JCAHPO	Joint Commission on Allied Health Personnel in Ophthalmology
LCC-ST	Liaison Council on Certification for the Surgical Technologist (Now NBSTSA)
LPN	Licensed Practical Nurse
MOS	Military Occupational Specialty
NASC	National Assistant at Surgery Council
NBSTSA	National Board of Surgical Technology and Surgical Assistants
NCCA	National Commission for Certifying Agencies
NCCT	National Center for Competency Testing
NHA	National Healthcareer Association
NP	Nurse Practitioners
NSAA	National Surgical Assistant Association
OES	Occupational Employment Statistics Survey (by BLS)
OPA-C	Orthopedic Physician's Assistant-Certified
OT-C	Orthopedic Technologist-Certified
OT-SC	Orthopedic Technologist-Surgery Certified
PA-C	Physician Assistant-Certified
PASA	Washington State's Physician Assistant Surgical Assistant Act.
PHS	U.S. Public Health Service
PMAC	Podiatric Medical Assistant, Certified
RCIS	Registered Cardiovascular Invasive Specialist
RFO	Retained Foreign Object
RN	Registered Nurse
RNFA	Registered Nurse First Assistant
SA	Surgical Assistant
SA-C	Surgical Assistant-Certified (by ABSA)
SASA	Subcommittee on Accreditation for Surgical Assisting (of the ARC-ST)
SICP	Society of Invasive Cardiology Professionals
SOC	Standard Occupational Classification (by BLS)
TS-C (NCCT)	Tech in Surgery-Certified(NCCT)
VAWC	Virginia Workforce Connection
VDOH	Virginia Department of Health
VEC	Virginia Employment Commission

EXECUTIVE SUMMARY

Authority and Impetus

By virtue of its statutory authority in §54.1-2510 of the *Code of Virginia* to advise the Governor, the General Assembly, and the Department Director on matters related to the regulation and level of regulation of health care occupations and professions, the Board is performing an ongoing review of emerging health professions. The study will highlight individual professions selected by the Board for review. The Board selected *Surgical Assistants* and *Surgical Technologists* as emerging professions for review in 2009.

Major Findings of the Study

1. The Surgical Team consists of persons filling distinct but overlapping roles. Some team members work within the sterile field that protects the patient from infection, while some work outside of the sterile field. These roles are filled by a variety of licensed and unlicensed personnel.

Role		Who Performs	Who Manages	Tasks
Sterile				
	Surgeon	Surgeon, Dentist, Podiatrist	Surgeon	Perform surgery, manage procedure
	Assistant at Surgery	Surgeon, Physician, Physician Assistant, Resident, Registered Nurse, Surgical Assistant, Surgical Technologist, Licensed Practical Nurse	Surgeon	Provide exposure, control bleeding, close wounds, apply dressing
	Scrub Person	Surgical Technologist, Registered Nurse, Licensed Practical Nurse	Circulating Nurse/Surgeon	Maintain sterile field, pass and count instruments, prepare supplies
Non-sterile				
	Anesthesia Provider	Anesthesiologist, Certified Registered Nurse Anesthetists, Dentist, Physician, Physician Assistant Anesthesiologist Assistant	Anesthesia Provider	Provide and maintain anesthesia, maintain vitals
	Circulator	Registered Nurse	Circulating Nurse	Patient advocate, patient comfort, manage team members, maintain sterile field, emergency assistance
	Perianesthesia	Certified Registered Nurse Anesthestists , Licensed Practical Nurse, Surgical Technologist, Anesthesiologist Assistant		Pre- and postoperative patient assessment and preparation

Table 1: An overview of the surgical team.

2. The surgical suite is highly regulated.

The Virginia Department of Health, the Center for Medicare & Medicaid Services' Conditions of Participation and the Joint Commission all have a role in regulating the surgical suite. These include specific provisions for who may perform as the circulator (in Virginia, only an RN) and supervision of the scrub role by the circulating nurse.

3. The assistant-at-surgery performs complex and potentially dangerous tasks in an autonomous fashion. These tasks require specialized skills and training. The unregulated performance of these tasks pose a risk of harm to patients. The risk of harm is attributable to the nature of the practice.

The assistant-at-surgery acts as the "co-pilot" or "second set of hands" for the surgeon. The assistant-at-surgery does not perform surgery, but performs complex surgical tasks including harvesting veins for bypass grafts, dissecting tissue, removing tissue, altering tissue, clamping and cauterizing vessels, subcutaneous sutures, suctioning, irrigating, sponging and implanting devices. Some of these tasks are performed with the surgeon present in the operating room, while others are performed with the surgeon within the surgical site. The assistant-at-surgery is expected to anticipate the needs of the surgeon, solve problems and perform significant surgical tasks in the proper sequence without distracting the surgeon from the performance of the surgical procedure.

4. The use of non-physician practitioners and unlicensed persons as assistant-at-surgery is increasing.

Increased use of non-physician practitioners and unlicensed persons as assistant-at-surgery has several causes including:

- A restriction on resident duty hours promulgated by the Accreditation Council on Graduate Medical Education (ACGME) in 2003,
- Changing reimbursement strategies by Centers for Medicare and Medicaid Services (CMS) and other third-party payers,
- Increased demands on physician and surgeon time, and
- The availability of skilled and experienced unlicensed personnel, particularly those trained in the military.

5. Educational pathways and credentialing options for unlicensed surgical assistants are diverse.

Some educational pathways and credentialing options for unlicensed surgical assistants are rigorous and well established. Examples include the post-graduate educational programs available at the Eastern Virginia Medical School or the certifications provided by the National Surgical Assistants Association and the National Board for Surgical Technologists and Surgical Assistants, among others. Other educational pathways supplement on-the-job training with online modules of various lengths. Online programs have proliferated. Some of these educational pathways are nationally accredited, while others are not. There is disagreement within the Surgical Assistant Community about the value of some of these educational programs, including both accredited and unaccredited programs.

6. Surgical technologists perform in the scrub role and often perform certain advanced tasks to support the surgeon or assistant-at-surgery.

The tasks associated with each role appear below:

Scrub Role	"Advanced Surgical Technology"	Assistant-at-Surgery
• Clean and prep room and equipment • Set up operating room and instrument trays • Assemble medications or solutions • Transport Patient • With circulator, verify chart, patient identity, procedure and site of surgery • Shave and drape patient • Maintain Sterile Field • Perform counts with circulator • Assist surgeon with gown and gloves • Pass instruments • Prepare sterile dressing	• Hold retractors, instruments or sponges • Sponge, suction or irrigate surgical site • Apply electrocautery to clamps • Cut suture material • Connect drains to suction apparatus • Apply dressing to closed wounds • Venipuncture (Inserting IV) • Manipulation of endoscopes within the patient • Skin stapling	• Position patient • Place retractors, instruments or sponges • Cauterization and clamping • Closure and subcutaneous closure • Harvest veins • Placing hemostatic agents • Participate in volume replacement and autotransfusion • Injection of local analgesics • Select and apply dressing to wounds • Assist with securing drainage systems

Framework of roles within the Surgical Assistant and Surgical Technologist continuum, and illustrative tasks.

7. The circulating nurse may have difficulty supervising some advanced surgical technology tasks from outside of the sterile field. Some of these tasks are delegated surgical tasks. These tasks require the independent competence of the scrub person.

CMS Conditions of Participation require the circulating nurse to supervise the scrub person. However, the circulating nurse may have difficulty supervising certain advanced surgical technology tasks, or taking over for the scrub person, from outside of the sterile field. These include tasks such as holding retractors or instruments, sponging the surgical suite, passing instruments, connecting drains, applying electrocautery or manipulating endoscopes. Additionally, part of the role of the circulating nurse is to leave the operating room if necessary.

8. Surgical errors and surgical infections are a large and growing concern. The performance of persons in the scrub role influences the probability of surgical errors and surgical infections.

The U.S. Public Health Service estimates that approximately 1.7 million persons acquire infections in hospitals annually, resulting in almost 100,000 deaths. Approximately 290,000 of these infections originate in surgical sites. The AHRQ's 2009 National Health Quality Report reports that the use of prophylactic antibiotics after surgery is improving rapidly, and rates of postoperative pneumonia are decreasing. Nevertheless, the rate of postoperative sepsis (blood stream infections) continues to

increase, creating a major public health and patient safety concern.[1] Additionally, the scrub person assists the circulating nurse in preventing wrong site/wrong person surgeries, retained foreign objects, and other surgical errors.

9. The unregulated practice of surgical technology poses a risk of harm to the patient.

The harm posed by particular "advanced surgical technology" tasks is attributable to the nature of the tasks themselves, and to the inability of the circulating nurse to effectively supervise these tasks. The harm posed by the scrub role is due to the inherent risks associated with infection and errors during the surgical procedure and within the surgical suite.

10. Patients may not know who is on the surgical team prior to, or even after, surgery.

While patients may meet and verify the credentials of surgeons, they often do not know about the different roles within the surgical team nor do they know who fills them. Informed consent forms generally only name the surgeon. Patients cannot verify the credentials of persons on the surgical team, and the surgeon may not know who is on the team until just prior to the time of surgery.

Recommendations of the Board of Health Professions

1. The Board of Medicine should establish a license for surgical assistants based on proper training and education.

The unregulated practice of surgical assistants poses a high risk of harm to patients which is directly attributable to the nature of the practice. Surgical Assistants require specialized, post-secondary training from independently validated programs and assurances of clinical competency from independent credentialing bodies. Although surgical assistants practice with surgeons, the nature of their work requires independent judgment, knowledge and competence. Therefore licensure is the least restrictive means of protecting the public and ensuring the minimum qualifications of surgical assistants.

2. The Board of Medicine should ensure that surgical technologists are competent to perform in the scrub role, and to perform associated advanced tasks.

The unregulated practice of surgical technologists poses a moderate potential for harm to patients. This harm is attributable to the nature of certain advanced tasks, and the inherent hazards and patient vulnerability associated with surgery and infection. Surgical technologists require specialized skills, knowledge and competence acquired through independently validated structured education or training programs. While much of the work performed by surgical technologists is supervised by the circulating nurse, the

[1] Agency for Healthcare Research and Quality. *2009 National Healthcare Quality Report*. US Department of Health and Human Services. http://www.ahrq.gov/qual/nhqr09/nhqr09.pdf. Pg. 7.

nature of the risks and tasks require the independent competence and judgment of surgical technologists.

3. The Board of Medicine should require mandatory certification for surgical technologists.

As patients are not generally able to verify the credentials of those performing in the scrub role, voluntary certification is insufficient to protect the public. Therefore, the Board of Medicine should create a mandatory certification program for surgical technologists based on the Certified Surgical Technologist credential from the National Board of Surgical Technology and Surgical Assisting. A mandatory certification program relies on employers and practitioners to ensure that practitioners have the credentials required by the Board of Medicine. It does not create a state-run credentialing program. This form of regulation may be less restrictive and less burdensome than licensure while ensuring that all practitioners have the minimum qualifications needed to perform in the scrub role.

4. Appropriately trained military personnel should be able to practice.

The United States Uniformed Services provide high quality training and experience to surgical technologists and surgical assistant serving at home and abroad. Due to the unique purpose of the Uniformed Services, training programs often forgo civilian accreditation and the expense and distraction they entail. Regulations preventing these servicemen and women from practicing in Virginia would be a disservice to these practitioners and to the residents of Virginia. The Board of Medicine should identify training programs and military occupational specialties that impart the necessary skills, knowledge and competence and allow competent military-trained surgical technologists and surgical assistants to practice in Virginia.

5. The Board of Medicine should ensure an adequate supply of qualified surgical technologists.

Mandatory certification relies on standards set by private credentialing boards. The availability of qualified surgical technologists under mandatory certification is highly sensitive to eligibility and other standards set by the National Board of Surgical Technologists and Surgical Assistants. The Board of Medicine should have recourse to approving alternate hospital-based training programs should the supply of surgical technologists be unduly restricted by private credentialing agencies. (See "Board of Medicine Comment" on page vi.)

6. The Physician Assistant Advisory Board should be expanded and should advise the Board of Medicine on matters pertaining to surgical assistants and surgical technologists.

Because many Physician Assistants practice as assistants-at-surgery, the Physician Assistant Advisory Board should advise the Board of Medicine on matters pertaining to

surgical assistants and surgical technologists. The Physician Assistant Advisory Board should be expanded from five to seven members. One of the new members should be a licensed surgical assistant and the other should be a licensed surgical assistant who is also a Certified Surgical Technologist. (See "Board of Medicine Comment" on page vii).

7. The Regulatory Research Committee has provided proposed statutory language.

The Regulatory Research Committee requested a public hearing to receive comment on four legislative proposals. The proposals varied on two issues: (1) whether all persons performing in the surgical scrub role be certified, or only those performing advance second assisting tasks do so, and (2) whether the regulation of surgical assistants and surgical technologists should have an independent advisory board under the Board of Medicine or whether they should be included on the current Physician Assistant Advisory Board. Upon consideration of the research findings and public comment, the Committee recommended "Version 4." (See Appendix J, page 154).

Board of Medicine comment subsequent to the May 4, 2010 meeting *– The Board of Medicine reviewed this report subsequent to the Board of Health Professions May 4, 2010 meeting and offered additional comment concerning Recommendations #5 and #6 on June 17, 2010. With regard to Recommendation#5, the Board of Medicine counsels that it does not have the authority to ensure practitioner supply and that it is uncertain, at this time, as to how it would approach approving alternative pathways to national credentialing that differ from on-the-job training and how this would provide additional safeguards for the public. This comment is provided on page. Concerning Recommendation #6, the Board of Medicine questions the regulatory effectivess of expanding the existing Physician Advisory Board. The full comment is provided beginning on page 57 of this report.*

BACKGROUND & AUTHORITY

By virtue of its statutory authority in §54.1-2510 of the *Code of Virginia* to advise the Governor, the General Assembly, and the Department Director on matters related to the regulation and level of regulation of health care occupations and professions, the Board is beginning an ongoing review of emerging health professions. The study will highlight individual professions selected by the Board for review. The Board selected *Surgical Assistants* and *Surgical Technologists* as emerging professions for review in 2009.

To govern evaluative reviews, the Board has developed formal criteria and policies referenced in its publication, *Policies and Procedures for the Evaluation of the Need to Regulate Health Occupations and Professions, 1998.* Among other things, the criteria assess the degree of risk from unregulated practice, the costs and benefits of the various levels of regulation, and the advantages and disadvantages of the various alternatives to regulation that might protect the public. By adopting these criteria and application policies, the Board has endorsed a consistent standard by which to judge the need to regulate any health profession. The aim of this standard is to lead decision-makers to consider the least governmental restriction possible that is consistent with the public's protection. This standard is in keeping with regulatory principles established in Virginia law and is accepted in the national community of regulators.

The Regulatory Research Committee initially held two public hearings, on July 10, 2009 and August 11, 2009, and received extensive oral and written comment. Board of Health Professions staff also presented a draft summary of research on August 11, 2009. After considering this report and all public comment, the Committee agreed that surgical technologists should be certified and that surgical assistants should be licensed at its November 10, 2009 meeting. However, the Committee tabled a final decision until it could consider proposed statutory language. Staff created four versions of proposed legislation (see Appendix J). The Committee discussed these versions at its February 9, 2010 meeting and requested that staff hold a public hearing to receive comment specifically on the four versions of legislative language. A public hearing was held on March 31, 2010, and written and oral comment was received. After reviewing this comment, the Committee recommended Version 4 of the proposed legislative language at its meeting on May 4, 2010. This version required mandatory certification for surgical technologists and licensure for surgical assistants. It also placed responsibility for regulating the professions with the Board of Medicine and charged the Physician Assistant Advisory Board with advising the Board of Medicine on these professions. To facilitate this, it added seats on the advisory Board for Surgical Assistants. This recommendation was accepted by the full Board of Health Professions at its meeting later in the afternoon.

Mandatory certification is a new form of regulation in Virginia. Traditionally, every regulatory program relies on the state, through its regulatory Boards, to ensure credentials, issue a license or certificate, and maintain a list of qualified individuals. The mandatory certification included in the recommendation from the Board only lists certain qualifications and credentials required to perform specified roles—the scrub role. It is the responsibility of individual practitioners and employers to ensure compliance. The Committee believes this to be a less burdensome method of ensuring minimum qualifications of persons performing delegated tasks that pose a risk to consumers.

Study Scope & Methodology

The general scope of this study was to provide an evaluative review of the policy literature, pertinent state and federal laws, malpractice and disciplinary data, potential economic impact, and public comment concerning the selected emerging health-related occupations and professions in Virginia. The aim was to better understand the scopes of practice of these practitioners and issues relating to the need for adequate safeguards for the public's protection.

The Committee made recommendations to the full Board concerning the surgical assistants and surgical technologists. With the approval of the full Board, the Committee examined the competencies currently expected of these practitioner groups in other jurisdictions to the degree that they existed. The Committee focus their efforts in determining the answers to the following key questions for each group:

- What is the potential risk for harm to the consumer?
- What specialized skills and training do practitioners possess?
- To what degree is independent judgment required in their practices?
- Is their scope of practice distinguishable from other regulated occupations or professions?
- What would be the economic impact to the public if this group were regulated?
- Are there alternatives other than state regulation of this occupation which would adequately protect the public?
- If the Committee determines that this occupation requires state regulation, what is the least restrictive level that is consistent with the protection of the public's health, safety and welfare?

To answer the key questions, the following steps were planned:

1. Conduct a review of the general policy literature, if any, related to the regulation of the respective group.
2. Conduct a review of the current relevant states laws and regulations.
3. Review malpractice insurance coverage data (if it is found to exist) in conjunction with other data to address Criterion One - Risk of Harm to the Public.
4. Review available reimbursement data to develop an estimate of how regulating this group may affect costs to address Criterion Five – Economic Impact
5. Prepare an initial draft report to the Board for public comment.
6. Conduct a hearing on the issue of the state regulation of this occupation, including any public health and safety issues germane to current practices as well as the potential fiscal impact which may result from such regulation.
7. Review all public comment, apply the Board's criteria and policies, and consider recommendations for changes in Virginia statute.
8. Prepare a draft with recommendations to the full Board.
9. Review the report and recommendations by the Board, and publish a draft report for consideration by the Department Director and Secretary.
10. If required based on recommendations by the Department Director and Secretary, amend the report and prepare a final report for their approval.

OVERVIEW OF THE SURGICAL TEAM

Surgery

Surgery, in general, refers to any medical technique that temporarily or permanently alters any tissue. Traditionally, surgery has referred to physical invasion of tissue by cutting probing or injecting. However, modern medical technology, such as laser or ultrasound technology, often allows surgeons to perform surgery while avoiding physically breaking skin or other tissues. The following definition of surgery proffered by the American College of Surgeons (ACS), a national research and education academy of surgeons, is widely cited.

> *Surgery is performed for the purpose of structurally altering the human body by the incision or destruction of tissues and is a part of the practice of medicine. Surgery is also the diagnostic or therapeutic treatment of conditions or disease processes by any instruments causing localized alteration or transposition of live human tissue, which include lasers, ultrasound, ionizing radiation, scalpels, probes, and needles. The tissue can be cut, burned, vaporized, frozen, sutured, probed, or manipulated by closed reduction for major dislocations and fractures, or otherwise altered by any mechanical, thermal, light-based, electromagnetic, or chemical means. Injection of diagnostic or therapeutic substances into body cavities, internal organs, joints, sensory organs, and the central nervous system is also considered to be surgery (this does not include administration by nursing personnel of some injections, such as subcutaneous, intramuscular, and intravenous when ordered by a physician). All of these surgical procedures are invasive, including those that are performed with lasers, and the risks of any surgical intervention are not eliminated by using a light knife or laser in place of a metal knife or scalpel.*[2]

The American Medical Association (AMA) has adopted ACS's definition, and the Centers for Medicare and Medicaid Services use a modified version.[3] In general, Surgeons perform surgery in dedicated areas of hospitals or in ambulatory surgical facilities. Physicians and dentists may perform minor surgeries in offices. The Virginia Department of Health requires licensure for any office that primarily provides facilities for surgery.

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[2] American College of Surgeons. "Statement 11[ST-11]: Statement on Surgery Using Lasers, Pulsed Light, Radiofrequency Devices, or Other Techniques." American College of Surgeons Website: http://www.facs.org/fellows_info/statements/st-11.html. Accessed 4/21/2009.

[3] CMS appends a brief statement on patient safety to the end of the definition.

The Surgical Team

Role		Who Performs	Who Manages	Tasks
Sterile				
	Surgeon	Surgeon, Dentist, Podiatrist	Surgeon	Perform surgery, manage care
	Assistant at Surgery	Surgeon, Physician, Physician Assistant, Resident, Registered Nurse, Surgical Assistant, Surgical Technologist, Licensed Practical Nurse	Surgeon	Provide exposure, control bleeding, close wounds, apply dressing
	Scrub Person	Surgical Technologist, Registered Nurse, Licensed Practical Nurse	Circulating Nurse/Surgeon	Maintain sterile field, hand and count instruments, prepare supplies
Non-sterile				
	Anesthesia Provider	Anesthesiologist, Certified Registered Nurse Anesthetist, Dentist, Physician, Physician Assistant Anesthesiologist Assistant	Anesthesia Provider	Provide and maintain anesthesia, maintain vitals
	Circulator	Registered Nurse, Licensed Practical Nurse or Surgical Technologist	Circulating Nurse	Patient advocate, patient comfort, manage team members, maintain sterile field, emergency assistance
	Perianesthesia	Certified Registered Nurse Anesthetist, Licensed Practical Nurse, Surgical Technologist, Anesthesiologist Assistant		Pre- and postoperative patient assessment and preparation

Table 1: An overview of the surgical team.

A team of healthcare professionals trained to fill specific roles manages every surgical procedure (see Table 1). Although the team works as a cohesive unit, it is divided into distinct operational roles. Additionally, a matrix of managerial lines of control overlay the surgical team. In addition to the generalist professions listed in the table, many functional specialists, such as Podiatric Medical Assistants or Orthopedic Technologists assist at surgery or work in the scrub role.

Operationally, the team is divided into the sterile team and the non-sterile team. The sterile team works within the sterile field that surrounds surgical procedures, while non-sterile team members support the surgical procedure before and after surgery or manage patient care from outside the sterile field during surgery. [4] The sterile and non-sterile teams are further broken down into operational roles.

<u>The Sterile Team</u>

Surgeon: The surgeon assists with preoperative diagnosis and preparation, selects the procedure, performs the surgery and assists with post-operative care. The surgeon is responsible for the management of the surgical procedure and medical judgments regarding the surgical patient.

Assistant-at-Surgery: Assistants-at-surgery provide direct support to the surgeon, including providing exposure, cauterizing and tying off blood vessels, dissecting of tissue (including harvesting veins) and suturing at all tissue levels. Most surgeries require only one assistant,

[4] See Phillips, Nancymarie. 2004. *Berry & Kohn's Operating Room Technique, 10th Ed.* Mosby Press

referred to as the first assistant, although complex procedures may require a second or third assistant. Practitioners often use the term "first assistant" to describe all assistants-at-surgery and the term "second assistant" to describe assistant-at-surgery functions performed from the scrub role.

Scrub Person: Intraoperatively, the scrub person performs two related tasks. The scrub person is responsible for maintaining the sterile field. This includes receiving sterile items and instruments from outside the sterile field using aseptic technique. The scrub person is also responsible for managing surgical instruments and items within the sterile field. This includes passing instruments to the surgeon and first assistant and accounting for all instruments and equipment. The scrub person also assists by transporting, positioning and draping the patient, and by setting up and cleaning the operating room.

Non-sterile Team

Circulator: Due to licensing, reimbursement and accreditation requirements, a registered nurse acts as the circulator in the overwhelming majority of procedures. Licensed practical nurses or surgical technologists may assist in circulating duties in some states. The circulator is the patient's advocate throughout the surgical procedure. The circulator ensures that all procedures occur in a safe environment, with proper support, and in accordance with the plan of care, aseptic technique and best practices. The circulator is the communication link between the sterile team members and persons outside the sterile field, including the patient's family. The circulator must be immediately available to assist the patient in the event of an emergency.

Anesthesia Provider: The anesthesia provider manages the physiology of the patient throughout the surgical process and provides anesthesia.

Perianesthesia: Perianesthesia include nurses and other personnel who manage patient care before and after the operation.

Managerial Roles

The circulating nurse, the anesthesia provider and the surgeon share the duties of managing the surgical procedure. The circulating nurse manages the environment surrounding the operation, including responsibility for managing the sterile field, the operating room and equipment. Both state licensing standards and Medicare require that a registered nurse manage the operating suite. Circulating nurses and the scrub persons they supervise fall under the managerial purview of the operating room nurse manager.

The anesthesia provider manages the patient's physiology from the preoperative phase through recovery. This includes providing anesthesia, and ensuring the patient remains in stable condition throughout the surgical procedure. The surgeon performs and manages the surgical procedure. Members of the medical staff manage and credential themselves, including determining the clinical privileges of all medical and non-medical staff.

Surgical Technologists and Surgical Assistants

Surgical technologists and surgical assistants fill distinct roles and work under different managerial and regulatory arrangements; however, their duties sometimes overlap. Surgical Technologists support surgical procedures in the scrub or circulator roles but traditionally perform in the scrub role. In Virginia, a registered nurse must act as circulator and the registered nurse may not delegate tasks associated with the circulator role, limiting surgical technologists to the role of the scrub person. Experienced surgical technologists may perform some tasks associated with the first assistant position and, with experience and training, progress into the first assistant role and ultimately the profession of surgical assistant. In minor or less invasive procedures, an experienced surgical technologist may serve in both the scrub role and the first assistant role, known as performing dual roles.

Surgical assistants act as first assistants in surgery. Hospitals may employ surgical assistants directly, or contract individual surgical assistants. Surgeons or surgical practices often independently employ or contract their own surgical assistants. Surgical assistants often work for staffing firms that provide surgical assisting services to hospitals or independent practitioners. In all cases, the hospital or surgical facility grants clinical privileges to individual assistants.

Supervision of Unlicensed Personnel in the Operating Room

Specified roles and managerial arrangements imply clear responsibilities and lines of control. In reality, however, roles and managerial arrangements often overlap. This is particularly true when considering the influence of liability and regulatory requirements and employment arrangements.

Surgical assistants and surgical technologists work in a highly regulated environment. Case law regarding liability and medical malpractice in the surgical suite outline responsibility for patient care. The Virginia Department of Health Professions licenses health care practitioners. Although licensed practitioners may delegate some medical acts, they are exclusively responsible for the practice of medicine. The Virginia Department of Health (VDH) licenses all hospitals and outpatient surgical facilities. All of these facilities are certified for reimbursement through Medicare and Medicaid and must meet their Conditions of Participation, including accreditation by either the Joint Commission, the American Osteopathic Association, or accrediting bodies for ambulatory surgery centers. Together, these organizations set standards for hospital organization and personnel management. See Appendix A for an overview of relevant VDH, CMS and Joint Commission Standards.

Liability

Liability for acts committed by allied health professionals during surgery is often difficult to determine. Through the 1940's and 1950's, courts often held that the surgeon was analogous to the captain of a ship, and was accountable for all actions performed during the procedure. Since then, however, courts have chipped away at the "captain of the ship doctrine." Courts have increasingly recognized that circulating nurses and scrub persons perform specialized tasks

according to hospital policy outside of the control of the surgeon. Courts may hold scrub persons, circulating nurses, other personnel and the hospital itself liable for acts performed during surgery, depending on the findings of the jury. [5]

Some jurisdictions hold that surgeons are always responsible for certain non-delegable tasks. Retained foreign objects (RFO) left in the body are a case in point. Nurses and scrub persons are generally responsible for performing multiple counts of every item entering the sterile field, from sponges to needles to instruments, to ensure that the team leaves nothing in the patient. In some jurisdictions, courts have found that verification of the count by the surgeon may absolve him or her of liability. Others have found the duty to remove all non-therapeutic objects to be non-delegable.[6] Despite this, courts have also recognized that nurses and technicians have an independent duty to perform counts, and may hold them liable along with surgeons.[7] Similar considerations exist regarding maintenance of the sterile field, positioning the patient and other tasks.

In Dickerson v. Fatehi, et al, (1997) a patient sued a surgeon, a circulating nurse and a surgical technician for leaving a needle in her neck. Following the appeal of a summary judgment in favor of the defendants, the Supreme Court of Virginia ruled that the lawsuit against all three parties could proceed.[8]

Regulation

The surgical team often consists of a mix of licensed and unlicensed members. Within the operating room, state and Medicare regulations only require the surgeon and the circulating nurse to hold a license.[9] In accordance with §54.1-2901(6) of the *Code of Virginia*, licensed practitioners may delegate the tasks associated with the roles of scrub person, anesthesia provider and assistant-at-surgery to unlicensed professionals:

> ***§ 54.1-2901.*** *Exceptions and exemptions generally.*
>
> ***A.*** *The provisions of this chapter shall not prevent or prohibit:*
>
> ***6.*** *Any practitioner licensed or certified by the Board from delegating to personnel supervised by him, such activities or functions as are nondiscretionary*

[5] Berry & Kohn, 49-50.
[6] See Pozgar, 218-219. Pozgar notes that in Holger v. Irish, the Oregon Supreme Court did not hold a surgeon liable for the negligence of nurses in performing a count. However, in Romero v. Bellina, the Louisiana Court of Appeals held that removing of objects is a non-delegable duty, and the surgeon was concurrently responsible with the nurses that performed the count.
[7] Cash, pp 35-36
[8] Dickerson v. Fatehi, et al. In reversing the summary judgment, Justice Roscoe B. Stepheson, Jr wrote in the opinion that "the record has not been developed sufficiently to enable either the trial court or this Court to determine whether the doctrine of res ipsa loquitor is applicable." He further noted that the "doctrine applies where means or instrumentality causing injury is in exclusive possession and control of person charged with negligence" pg. 6. Available at: http://www.courts.state.va.us/scndex.htm
[9] The Virginia Board of Nursing Guidance Document #90-42 advises that Registered Nurses may not delegate circulating duties to unlicensed personnel. Also, 18VAC90-20-460.b.6 lists 'circulating duties in an operating room' as nondelegable task.

and do not require the exercise of professional judgment for their performance and which are usually or customarily delegated to such persons by practitioners of the healing arts, if such activities or functions are authorized by and performed for such practitioners of the healing arts and responsibility for such activities or functions is assumed by such practitioners of the healing arts.

Despite the hospital's role in setting policies, hiring and contracting with personnel and granting clinical privileges, the authority to perform medical acts flows from licensed practitioners. Only licensed practitioners may practice medicine, and hospitals are not licensed practitioners. Therefore, hospitals may not delegate medical acts.[10] The circulating nurse or the surgeon must take responsibility for delegated acts. For unlicensed personnel performing in the roles of scrub person or first assistant the delegating authority may not always be clear, especially as they move between domains overseen by each practitioner.

Regulations set by the appropriate Board provide standards for delegation. The Virginia Board of Medicine, in 18VAC85-20-29 (A) (1), simply states:

18VAC85-20-29. Practitioner responsibility.

A. A practitioner shall not:
1. Knowingly allow subordinates to jeopardize patient safety or provide patient care outside of the subordinate's scope of practice or area of responsibility. Practitioners shall delegate patient care only to subordinates who are properly trained and supervised;

In contrast, the Virginia Board of Nursing, in §18VAC90-20-420 to 460, sets out extensive procedures for delegation, including adherence to a facility's delegation plan, assessment of the patient, assessment of the unlicensed person and supervision requirements. It also includes a list of non-delegable tasks, including circulating duties. See Appendix B for nursing delegation regulations. The Association of periOperative Registered Nurses (AORN) holds the position that the scrub role consists of technical functions delegated by the "periOperative registered nurse in charge".[11]

Employment Arrangements

Prior to July 1, 2001, a licensed practitioner could only delegate tasks to persons he or she employed directly. An amendment to §54.1-2901 of the *Code of Virginia*, however, removed that restriction.[12] Licensed practitioners, including surgeons, may now delegate tasks to assistants-at-surgery and surgical technologists employed by hospitals or staffing agencies.

[10] See Virginia Board of Medicine Guidance Documents #85-20 and #85-21. The provisions of Section 54.1-2901(6) mentioned in #85-20 limiting delegation to unlicensed personnel only in the *personal employ* of licensed practitioners was amended in 2001 to the language shown in the text.
[11] See AORN Position Statement on the Role of the Scrub Person. http://www.aorn.org/PracticeResources/AORNPositionStatements/Position_ScrubPerson/ Accessed 5/26/2009.
[12] See 2001 Virginia General Assembly House Bill 1694, patron Watkins M. Abbitt, Jr., and 2001 Senate Bill 849, chief patron Emily Couric.

In practice, surgical assistants and surgical technologists work in a mix of employment arrangements. A 2004 survey performed by the Office of Policy, Research and Regulatory Reform of the Colorado Department of Regulatory Agencies found that 50 percent of Colorado's rural and independent hospitals (excluding hospitals managed by large health systems) retained the services of surgical assistants themselves, including a mix of direct employees and contractors. Seventy-five percent allowed the use of surgical assistants retained by physicians. The numbers were similar for ambulatory surgical centers; however, a larger percentage of ambulatory surgical centers employed surgical assistants directly.[13] Similarly, the Commission on Accreditation of Allied Health Education Programs website reports that surgical technologists work in diverse employment arrangements, including physician-employment or as self-employed contractors.[14]

Regardless of the employment arrangement, all hospitals and outpatient surgical centers in Virginia must ensure the qualifications and competence of personnel that provide patient care within their facilities. This includes independent contractors or physician-employed personnel. The medical staff in large hospitals or the governing body of ambulatory surgical centers grants particular surgical and clinical privileges to each person providing patient care. These privileges should be matched to credentials and training, and should delineate particular procedures and tasks. A roster of privileges must be available in the surgical suite, and the operating room register must contain a list of personnel performing surgery, including the names of the scrub person and the first assistant.

<u>In Practice</u>

Surgical assistants and surgical technologists perform within a highly regulated environment. Despite this, it is often difficult to identify one responsible authority from the matrix of authority that overlays their performance. Within a rapidly evolving healthcare system marked by personnel shortages, this may lead to ambiguity of roles and responsibilities. Public Comment provided to the Board by Teresa Cooper, CFA, CSA illustrates the confusion that sometimes exists:

> *. . . Towards the end of a case the surgeon normally drops out to dictate op notes etc., leaving the SA to close. At the end of many surgeries a local anesthetic agent is injected for pain (bupivicaine or lidocaine - just like you would get at the dentist for numbing the gums). I had been doing this normally for some time - until a couple of nurses decided that I should not be injecting medication when I don't have a licence! They pushed the issue, many nurses went to the manager and changed the policy to state that I could not do this anymore. . .*

[13] Office of Policy, Research and Regulatory Reform, Colorado Department of Regulatory Agencies. *2004 Sunrise Review: Surgical Assistants*. State of Colorado, October 15, 2004. Available at: http://www.dora.state.co.us/OPR/archive/2004SurgicalAssistants.pdf

[14] Commission on Accreditation of Allied Health Education Programs (CAAHEP) website. "Surgical Technologists". http://www.caahep.org/Content.aspx?ID=53 Accessed 5/22/09

In this case, the surgeon delegated the task and supervising nurses judged the task non-delegable. Ultimately, hospital policy determined whether the task was delegable. The competency of the assistant, however, was not at issue.

Patient Consent

Except in emergency or other unusual situations, the operating surgeon must gain the informed consent of the patient or his legal representative to perform surgical procedures. Informed consent historically includes information on the risks, indications, alternatives and prognosis associated with the procedure. In 2004, however, CMS issued interpretive guidelines to hospitals suggesting they include information on assistants performing important surgical tasks such as opening and closing, harvesting veins and placing invasive lines. Also in 2004, the Virginia Board of Medicine proffered ethical guidelines advising that patients are entitled to be informed if the attending physician delegates some or all portions of a surgery to a resident, assistant or other provider.

Neither of these guidelines, however, have the weight of statutory code or regulation. To increase scheduling flexibility and avoid liability, hospitals and practitioners are often reluctant to list specific assistants or professions when obtaining informed consent.[15] Rather, informed consent forms sometimes contain blanket approvals for assistants. For instance, the University of Virginia Health System informed consent form for a kidney donor states:

> *I authorize Dr._____, and such residents (physicians in training) and assistants and* [sic] *s(he) may select, to treat my condition,* including *performing further diagnosis and the procedures described below. All qualified practitioners will only perform tasks that are within their scopes of practice and for which they have been granted clinical privileges. Residents will only perform all or parts of the procedures under the supervision of my doctor.*[16]

Informed consent forms from ASCs, examined during the course of the research, often offered only general references to assistants or did not mention assistants at all. Though discussions with physicians make up an important part of the informed consent process, these forms offer surgeons and facilities broad leeway in determining who will participate in surgery and what their qualifications will be.

PROFESSIONAL ORGANIZATION

This section provides brief descriptions of relevant professional associations, certification boards and accreditation boards. For more information on certifications and education, see pages 25 and 30, respectively.

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[15] See Hancock, Daniel, Johnson & Nagle, PC. March 7, 2005. "CMS Creates Special Informed Consent Requirements for Surgery." *Client Advisory* http://www.hdjn.com/pdfs/Client_Advisory%20-%20Informed%20Consent%20Requirement.pdf.

[16] University of Virginia Health System. "Consent for Medical/Surgical Procedures and Administration of Anesthesia or Sedation: Living Kidney Donor Informed Consent for Surgery." Form # 081163. University of Virginia Printing and Copying Services. http://www.virginia.edu/uvaprint/HSC/pdf/081177.pdf Accessed June 30 2009.

Surgical Technologists

Three associations predominate over the national organization of surgical technologists.

The Association of Surgical Technologists (AST) was founded in 1969 by members of the American College of Surgeons (ACS), the American Hospital Association (AHA) and the Association of periOperative Registered Nurses (AORN). AST includes both surgical technologists and surgical assistants among its members and provides a code of ethics, code of conduct, standards of practice and job descriptions for the profession.

The Accreditation Review Committee on Education in Surgical Technology (ARC-ST), in cooperation with the Commission on Accreditation of Allied Health Education Programs (CAAHEP), accredits educational programs in surgical technology and surgical assisting. Two surgeon representatives of the ACS sit on ARC-ST's Board of Directors and the ACS cooperates with ARC-ST in developing educational standards for surgical technology and surgical assisting programs.

The National Board of Surgical Technology and Surgical Assisting (NBSTSA) provides the only accredited certifications for surgical technologists and surgical assistants. Similar to ARC-ST, one surgeon representative selected by the ACS sits on NBSTSA's Board of Directors.

The National Healthcareer Association (NHA) and the National Center for Competency Testing (NCCT) also provide certifications to surgical technologists.

Surgical Assistants

In addition to organizations shared with surgical technologists, several associations and certification boards cater primarily to surgical assistants.

The Association of Surgical Assistants (ASA) is a professional society for surgical assistants. Surgical assistant members of AST may join ASA free of charge. ASA provides information for existing and aspiring surgical assistants and, with AST, developed a job description.

The National Surgical Assistant Association (NSAA) evolved from the Virginia Association of Surgical Assistants. The NSAA is a professional membership organization that also provides certifications to surgical assistants. The NSAA provides a code of ethics and a scope of practice for surgical assistants.

The American Board of Surgical Assistants (ABSA) is a Colorado-based private corporation that provides certifications to surgical assistants.

The National Assistant at Surgery Council (NASC) is a Nevada-based private corporation that provides certifications to surgical assistants.

SCOPE OF PRACTICE

Surgical Technologists

Although surgical technologists may function outside of the purview of professional associations and formal educational programs, the AST and the ACS have created a set of standardized job descriptions that define the profession.[17] The surgical technologist performs at three levels: the scrub surgical technologist, the circulating surgical technologist and the second assisting technologist.

The **scrub surgical technologist** functions as the scrub person and is responsible for the following tasks:

(1) Checks supplies and equipment needed for surgical procedure
(2) Scrubs, gowns, and gloves
(3) Sets up sterile table with instruments, supplies, equipment, and medications/solutions needed for procedure
(4) Performs appropriate counts with circulator prior to the operation and before incision is closed
(5) Gowns and gloves surgeon and assistants
(6) Helps in draping sterile field
(7) Passes instruments, etc., to surgeon during procedure
(8) Maintains highest standard of sterile technique during procedure
(9) Prepares sterile dressings
(10) Cleans and prepares instruments for terminal sterilization
(11) Assists other members of team with terminal cleaning of room
(12) Assists in prepping room for the next patient[14]

The **circulating surgical technologist** functions as the circulator or assists the circulator in states or localities that permit it. In Virginia, a registered nurse must function as circulator and may not delegate circulator duties. In other states, where permitted, the circulating surgical technologist is responsible for the following tasks:

(1) Obtains appropriate sterile and unsterile items needed for procedure
(2) Opens sterile supplies
(3) Checks patient's chart, identifies patient, verifies surgery to be performed with consent forms, and brings patient to assigned operating room
(4) Transfers patient to operating room table
(5) Assesses comfort and safety measures and provides verbal and tactile reassurance to the patient
(6) Assists anesthesia personnel
(7) Positions patient, using appropriate equipment

[17] See Association of Surgical Technologists "Job Description: Surgical Technologist." Available at http://www.ast.org/professionals/documents/2008_Surgical_Technologist_Job_Description_12.9_Final.pdf. Direct quotes are in italics

(8) Applies electrosurgical grounding pads, tourniquets, monitors, etc., before procedure begins
(9) Prepares the patient's skin prior to draping by surgical team
(10) Performs appropriate counts with scrub person prior to the operation and before incision is closed
(11) Anticipates additional supplies needed during the procedure
(12) Keeps accurate records throughout the procedure
(13) Properly cares for specimens
(14) Secures dressings after incision closure
(15) Helps transport patient to recovery room
(16) Assists in cleaning of room and preparing for next patient[18]

The **second assisting technologist** assists the surgeon or the first assistant. Second assisting is often performed concurrent with the scrub role and includes the following tasks:

(1) Holds retractors or instruments as directed by the surgeon
(2) Sponges or suctions operative site
(3) Applies electrocautery to clamps on bleeders
(4) Cuts suture material as directed by the surgeon
(5) Connects drains to suction apparatus
(6) Applies dressings to closed wound[15]

In addition to the tasks associated with these job descriptions, AST has released position statements supporting the performance of the following procedures by Certified Surgical Technologists (CST) educated in a CAAHEP-accredited surgical technologist program[19]:

(1) Venipuncture for IV Therapy (inserting IVs)
(2) Intraoperative advancement and positioning of endoscopes
(3) Skin stapling
(4) As First Assistant with specialized education or training

Surgical Assistants

Surgical assistants function in the role of assistant-at-surgery. Like many allied health professions, surgical assisting developed as a career following the Vietnam War. While there, many soldiers developed extensive clinical skill without related professional credentials. In a 2005 article on CNN.com, Peggy Peck relays how Mark Kapes, a registered nurse and certified first assistant with the heart surgery team at the Cleveland Clinic, described the birth of the clinic's first assistant program:

> *The "certified first assistant" is actually a surgical innovation developed by the Cleveland Clinic in the aftermath of the Vietnam War, Kapes says.*

[18] See note 14
[19] See Association of Surgical Technologists. "Standards of Practice." Available at http://www.ast.org/educators/standards_table_of_contents.aspx. Accessed 5/28/2009.

"Corpsmen returning from the war had a lot of surgical experience, and hospitals like the Cleveland Clinic were challenged to find a way to use that experience."

Kapes told the story of an Army medic who came to the clinic 37 years ago, James Filisky.

Filisky showed up at the clinic just a year after surgeon Dr. Rene Favaloro made medical history by performing the first coronary artery bypass operation. Favaloro stitched veins taken from the patient's leg into the heart to bypass clogged arteries.

Favaloro offered Filisky a deal: If he could harvest the leg veins as safely and quickly as Favaloro's surgical residents, the former corpsman could have the job.

"And that was how the first assistant program started," Kapes says. "Filisky is the grandfather of all of us."[20]

Since that time, the U.S. Department of Defense has developed programs that match competencies gained by soldiers to related civilian credentials, including surgical assistant and surgical technologist credentials.[21] The shortage of skilled surgical personnel, however, has persisted and licensed personnel, such as physician assistants or licensed practical nurses, and unlicensed personnel, such as surgical technologists and orthopedic technicians, have moved into a role formerly practiced by surgeons, physicians and residents. In their Winter 2006 newsletter, the Association of Surgical Assistants noted that 800 CSTs self-reported that they act as surgical assistants.[22] Surgeons, hospitals and ambulatory surgery centers have largely set the scope of practice of surgical assistants as they have chosen, and sometimes trained, assistants at surgery in an environment of workforce shortages and rising costs.

Both the AST/ASA and the NSAA have developed scopes of practice for surgical assistants. The AST and ASA jointly published a job description, approved by the ACS, that lists specific roles for surgical assistants. A fragmented excerpt of important tasks appears below. The full scope of practice appears in Appendix C.

Role of the Surgical Assistant

1. Positioning the patient
2. Providing visualization of the operative site by the following:
- *C. Digital manipulation of tissue*
- *D. Suctioning, irrigating, or sponging*
- *E. Manipulation of suture materials (e.g., loops, tags, running sutures)*

[20] Peck, Peggy. 7 June 2005. "First Assistants Give Surgeons More Hands: Program Evolved from Army Medic's Wartime Experience." CNN.com. http://www.cnn.com/2005/HEALTH/06/06/profile.assistant.kapes/index.html Accessed 5/15/2009.
[21] See, for instance, the Credentialing Opportunities Online (COOL) programs of the US Army, https://www.cool.army.mil/, and the US Navy, https://www.cool.navy.mil/.
[22] Association of Surgical Assistants. Winter 2006. "Determining the Value of Surgical Assisting Certification Credentials" ASANEWS. Vol. 11, No. 1. pg. 2.

3. Utilizing appropriate techniques to assist with hemostasis

A. Permanent

(1) Clamping and/or cauterizing vessels or tissue

(4) Placing local hemostatic agents [blood-clotting chemicals]

4. Participating in volume replacement or autotransfusion techniques as appropriate

5. Utilizing appropriate techniques to assist with closure of body planes

A. Utilizing running or interrupted subcutaneous sutures with absorbable or non absorbable material

D. Postoperative subcutaneous injection of local anesthetic agent as directed by the surgeon

6. Selecting and applying appropriate wound dressings,

7. Providing assistance in securing drainage systems to tissue[23]

Although the AST/ASA job description does not include some advanced procedures, AST has released position statements supporting Certified First Assistants (CFA) harvesting saphenous veins, through a traditional operation or endoscopically, for bypass surgery.[24]

The NSAA provides a more broadly worded scope of practice that includes many of the same tasks:

> *Surgical Assistants assist physicians in surgery and may perform specific significant surgical tasks under "professional supervision". (Significant surgical tasks include, but are not limited to: opening and closing surgical sites, exposure of the surgical site, harvesting grafts, dissecting tissue, removing tissue, implanting devices, altering tissues).*
>
> *Surgical Assistants may, under "professional supervision", perform specific significant tasks which include, but are not limited to, applying and removing splints/casts, placing Foley catheters, IV's, and arterial lines, administering local anesthesia, and other such procedures as requested and necessary.*[25]

OVERLAPPING SCOPES OF PRACTICE

Surgical technologists and surgical assistants share their scope of practice with anyone who performs in the scrub person, circulator or assistant-at-surgery roles. Since these roles are largely unregulated, many persons step into these roles. Additionally many specialty areas, such as orthopedic surgery or ophthalmology, use specialist technicians and technologists to fill roles similar to the surgical technologist and surgical assistant continuum within a specific specialty area.

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[23] From Association of Surgical Assistants

[24] See Association of Surgical Technologists. "Standards of Practice." Available at http://www.ast.org/educators/standards_table_of_contents.aspx. Accessed 5/28/2009.

[25] See National Association of Surgical Assistants "Scope of Practice." Available at http://www.nsaa.net/scopeofpractice.shtml. Accessed 5/28/2009.

Scrub Person

Regulations prohibit registered nurses from delegating circulating duties to unlicensed personnel, largely relegating surgical technologists to the scrub person role in Virginia. Medicare's CoPs restrict the performance of the scrub person to registered nurses, licensed practical nurses and surgical technologists. A registered nurse must supervise licensed practical nurses and surgical technologists performing as the scrub person.[26]

AORN has issued a position statement indicating that the scrub person role is the practice of nursing and that unlicensed personnel performing the scrub person role are performing delegated nursing tasks.[27] For its part, AST has issued position statements indicating that surgical technology falls outside of the scope of practice of nursing and that certified surgical technologists are independently qualified to perform surgical technology. In a separate position statement, AST indicated that the scrub person role is an integral part of the practice of surgical technology. [28]

Nurses that specialize in the surgical setting may pursue specialty certification as a Certified Nurse Operating Room (CNOR). The Certified Nurse Operating Room (CNOR) verifies the competency of nurses fulfilling circulator, scrub, administrative and other patient care roles within surgical settings. To sit for the exam, nurses must possess a valid nursing license and have two years experience, including 2,400 hours, as an operating room nurse. In addition to the CNOR credential, many specialty areas, such as orthopedics or plastic surgery, offer certifications that include perioperative nursing within the specialty.[29]

First Assistant

In describing the qualifications of a responsible surgeon, the American College of Surgeons also provides an outline of the qualifications of a first assistant. ACS notes that the first assistant must "participate in and actively assist the surgeon" during surgery. Ideally, ACS notes, the first assistant should be another surgeon or a surgical resident. Barring that, a physician with assisting experience should perform as first assistant. The ACS goes on to state that where it is necessary to use surgeon's assistants, physician assistants or registered nurse first assistants, they should possess surgical training meeting national standards and be properly credentialed. (See Appendix D for ACS' complete statement on surgical assistants).

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[26] Center on Medicare and Medicaid Services. *State Operations Manual*. Appendix A. §482.51(a)(2)
[27] See AORN "Position Statement on the Role of the Scrub Person," revised April 2005, http://www.aorn.org/PracticeResources/AORNPositionStatements/Position_ScrubPerson/. Accessed 5/28/2009
[28] See AST "Position Statement on Unlicensed Assistive Personnel," adopted 1994 http://www.ast.org/pdf/Standards_of_Practice/Position_Unlicensed_Assistive_Personnel.pdf and "Role of the Scrub Person Resolution," updated 1993, http://www.ast.org/pdf/Standards_of_Practice/Resolution_Scrub_Person.pdf, accessed 5/28/2009.
[29] Ibid. Phillips, Nancymarie. pp. 59-60.

Surgeons, Surgical Residents and Physicians

Historically, surgeons, surgical residents and physicians assisted at surgery. This provided the surgeon with skilled assistance in the case of complications and provided assistants with experience, training and the opportunity to increase the breadth of their medical knowledge. The use of non-physicians as first assistants, however, has been quickly increasing. The number of first assistant cases reimbursed by Medicare for non-physicians doubled between 1997 and 2002, while for physicians, the same figure declined by 23 percent.[30]

Year	Physician	Non-Physician
1986	$ 295 mil	NA
1997	$ 166 mil	$16 mil
2002	$ 104 mil	$54 mil

Table 2: Total Medicare reimbursements to physician and non-physician first assistants, in millions of dollars.

Surgeon shortages, low reimbursement rates and rising costs have largely driven the shift to non-physician first assistants, but regulation changes have also played a part. In 1986, Medicare removed its only, rather weak, Conditions of Participation(CoPs) regarding the credentials of first assistants, while leaving restrictions on the scrub and circulator role in place.[31] In 1987, Medicare began reimbursing physician assistants, nurse practitioners and clinical nurse specialists for first assistant services during authorized procedures.[32] A decade later, the Balanced Budget Act of 1997 raised the amount Medicare pays to non-physician first assistants, removed restrictions on billing for nurse practitioners and clinical nurse specialists and removed employment requirements on physician assistants.[33]

In 2003, the Accreditation Council on Graduate Medical Education (ACGME) restricted resident duty-hours to 80 hours per week. This change limited the availability of residents for first assisting at surgery. Non-physician assistants have filled the gap.[34]

Nurses

Virginia licenses nurses at a variety of levels, including licensed practical nurses (LPNs) and registered nurses (RNs). Additionally, Virginia licenses clinical nurse specialists (CNSs) and nurse practitioners (NPs), generally referred to as advanced practice nurses (APNs). LPNs generally complete one year of education accompanied by 400 hours of supervised clinical experience. Medical facilities and community and technical schools often administer LPN educational programs. Additionally, many high schools provide extended programs for high school students. RNs enter practice by obtaining an associate or bachelor level degree in

[30] U.S. General Accounting Office. January 2004. *Medicare: Payment Changes Are Needed for Assistants-at-Surgery.* Report to Congressional Committees. GAO-04-97. pg. 12.
[31] Ibid. pp 8,9. The report notes that prior to 1986, physicians were required "for procedures 'with unusual hazard to life' while 'nurses, aides, or technicians having sufficient training to properly and adequately assist could assist at 'lesser operations'".
[32] Ibid. pg 12.
[33] Ibid, pg. 12. Prior to 1997, Medicare only reimbursed nurse practitioners and clinical nurse specialists practicing in rural areas, and only reimbursed physician assistants employed directly by surgeons.
[34] American College of Surgeons News Release. 17 September 2007. "New Study Finds Limiting Work Hours for Surgical Residents Does Not Weaken Patient Care and Enhances Training" http://www.facs.org/news/jacs/workhours0907.html Accessed 5/29/2008.

nursing, along with 500 hours of supervised clinical practice or obtain a diploma through a hospital based program. APNs receive masters or doctorate level education.

As noted earlier, Medicare reimburses clinical nurse specialists and nurse practitioners for first assistant services. Medicare does not reimburse RNs or LPNs. On June 30, 1976, the Virginia Board of Nursing issued guidance indicating that RNs may act as first assistants, in accordance with hospital and medical staff policy and credentialing, and within his or her training and experience. In 1994, following a request from the Virginia Board of Nursing, the Virginia Board of Medicine indicated that LPNs may act as first assistants as well.[35] Before performing any task, nurses are required to exercise independent professional judgment to determine if the task is within his or her scope of practice, including a self-assessment of personal knowledge and clinical skills.[36]

The Certified Registered Nurse First Assistant (CRNFA) credential is for registered nurses that fill the first assistant role. Candidates for the CRNFA credential are RNs with a bachelor's degree and a CNOR credential. Before sitting for the exam, candidates must have 2000 hours of first-assisting experience and have completed an approved 1-year Registered Nurse First Assistant (RNFA) educational program following AORN's core curriculum.[37]

In addition to these credentials, nurses may pursue credentials in specialty areas that encompass first assisting within their scope of practice. For instance, certified nurse midwives first assist with Caesarian sections.[38]

Physician Assistant

Physician assistants work under the general supervision of physicians. To attain licensure in Virginia, physician assistants must complete an accredited physician assistant education program and pass a national certification exam. Before a physician assistant may practice in Virginia, the physician assistant's employer must provide the Board of Medicine with a list of supervising physicians and a description of the practice and role of the physician assistant.[39]

Degree	Programs
Certificate	5
Associate	3
Baccalaureate	21
Masters	113

Table 3: Number of schools offering certificate, associate, baccalaureate and master level degrees as their highest physician assistant degree.
Source: ARC-PA

The contemporary physician assistant profession unified two similar but separate professions: physician assistants, who focused on primary care and surgeon's assistants, who focused on surgery. Today, physician assistants focus in all medical and surgical specialties, but retain a background in general medicine. After passing the entry-level Physician Assistant-Certified (PA-C) exam, PA-Cs may renew certification by taking a recertification exam with a focus on primary care,

[35] See Virginia Board of Nursing Guidance Document #90-1. Available at http://www.dhp.virginia.gov/nursing/nursing_guidelines.htm. Accessed 6/01/2009
[36] See Virginia Board of Nursing Guidance Document #90-23. Available at http://www.dhp.virginia.gov/nursing/nursing_guidelines.htm. Accessed 6/01/2009
[37] See Competency and Credentialing Institute Website for information on CRNFA credentialing. http://www.cc-institute.org/. Accessed 6/1/2009.
[38] Ibid. Phillips, Nancymarie, pg 78.
[39] See *Code of Virginia* § 54.1-2951.1.

adult medicine or surgery. PA-Cs that specialize in surgery are often referred to as "surgical physician assistants" or as "surgeon's assistants."

Accredited physician assistant educational programs award certificate, associate, baccalaureate and master level degrees; however, the greater majority of programs award master degrees (see Table 3). Virginia hosts four masters level programs.[40] Nationally, the average program length is 26 months.[41]

Physician assistants augment the practices of all types of licensed physicians, including surgeons. According to the American Academy of Physician Assistants, 25 percent of physician assistants specialize in general surgery or the surgical subspecialties.[42] In 2008, 171, or 29 percent, of Virginia's physician assistants worked in general surgery or surgical specialties. An additional 10 PA-Cs worked in obstetrics/gynecology.[43]

Specialist Technicians & Technologists

A number of specialist technicians and technologists support surgeons in the scrub and assistant-at-surgery roles within the surgical specialties.

Cardiovascular Care

Cardiovascular technologists assist licensed physicians in treating and diagnosing heart and vascular ailments. Cardiovascular technologists may gain credentials in a variety of specialties including the Registered Cardiovascular Invasive Specialist (RCIS) from the Cardiovascular Credentialing Institute. RCISs support physicians during invasive catheterization and angioplasty procedures and may assist with open heart and other cardiac surgeries.[44] According to the Society of Invasive Cardiology Professionals (SICP), invasive specialists fulfill four primary roles during invasive cardiac procedures:

(1) Scrub assistant
(2) Operation of Imaging Equipment
(3) Circulating during the procedure
(4) Patient monitoring and procedure documentation

[40] See Accreditation Review Commission on Education for the Physician Assistant, Inc. www.arc-pa.org. Accessed 6/1/2009.
[41] See American Academy of Physician Assistants website. http://www.aapa.org/education-and-certification/physician-assistant-programs. Accessed 7/01/2009.
[42] See American Academy of Physician Assistants website. http://www.aapa.org/about-pas/our-practice-areas. Accessed 6/1/2009.
[43] American Academy of Physician Assistants. 2008. "2008 AAPA Physician Assistant Census Report." Virginia. pg. 5. http://www.aapa.org/images/stories/documents/research/research/StateReports08/VA08c.pdf. Accessed 6/1/2009.
[44] See Bureau of Labor Statistics. 2008-2009. "Cardiovascular Technologists and Technicians." Occupational Outlook Handbook. http://www.bls.gov/oco/ocos100.htm. Accessed 6/01/2009.

RCISs also perform X-rays and other imaging diagnostics, administer procedure-related drugs and first assist during procedures.[45]

To be eligible for RCIS, candidates must have either two years of experience or an associate's degree from a CAAHEP accredited program, or have an equivalent combination of education and experience.[46]

Ophthalmology

Ophthalmologists perform surgery on the eyes and other vision related structures, including the tear ducts, eyelids, eye muscles and vision related portions of the brain. The Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO) credentials allied health personnel that specialize in ophthalmology. JCAHPO provides "core" credentials at three progressive levels: Certified Ophthalmic Assistant, Certified Ophthalmic Technician and Certified Ophthalmic Medical Technologist. JCAHPO also provides specialty credentials, including a certification in Ophthamalic Surgical Assisting.

The COA exam includes entry-level information on surgical instruments, aseptic technique and other competencies associated with the scrub role. Eligibility for the COA exam includes completion of an accredited 80 hour Ophthalmic Assistant educational program, or completion of an accredited independent study course and 1,000 hours of experience.

To sit for the Surgical Assisting exam, candidates must have achieved at least the COA credential and have completed an ophthalmology program that included surgical assisting, or have 18 months experience as a first assistant, scrub assistant or circulator with an ophthalmic surgeon.[47]

Orthopedics

Orthopedic technologists and orthopedic physician's assistants assist orthopedic surgeons in applying casts and splints, reducing bone fractures and by acting as scrubs or assistants-at-surgery.

The National Board for Certification of Orthopedic Physician's Assistants offers the Orthopedic Physician's Assistant-Certified (OPA-C) credential. The experiential route, requiring five years of experience, is the only route currently available to non-licensed professionals.

The National Board for the Certification of Orthopedic Technologists offers an entry level, Orthopedic Technologist-Certified (OTC) credential and an advanced Orthopedic

[45] Society of Invasive Cardiology Professionals "Scope of Practice for the Invasive Cardiovascular Professional" http://www.sicp.com/PDF/Scope_%20of_%20practice.pdf. Accessed 6/01/2009.
[46] Cardiovascular Credentialing International. 2009. "2009 Examination Application and Overview." http://www.cci-online.org/2009%20App%20Book-FINAL.pdf.
[47] See Joint Commission on Allied Health Personnel in Opthalmology. *Criteria for Certification and Recertification for Ophthalmic Medical Personnel*. Available at http://www.jcahpo.org/certification/pdfs/CriteriaforCert_FULL.pdf accessed 6/3/2009.

Technologist-Surgery Certified (OT-SC) credential to allied health professionals specializing in orthopedics. NBCOT offers the OT-SC credential to OTCs and OPA-Cs; however, first assisting at orthopedic surgery is within the scope of practice for both entry-level credentials.

Candidates for the OTC certification exam must have graduated from an accredited one-year program in orthopedics, have two-years full time experience or an equivalent combination of unaccredited education and experience in orthopedics. OTCs or certified orthopedic physician's assistants with one year of surgical assisting experience may sit for the OT-SC exam.[48]

Podiatry

Podiatric medical assistants assist podiatrists. This includes, with training, assisting at surgery. The American Society of Podiatric Medical Assistants (ASPMA) offers the Podiatric Medical Assistant, Certified (PMAC) credential to its members. There are no educational or experiential requirements beyond membership in ASPMA and employment in a podiatry office.

International Medical Graduates

Many graduates of foreign medical schools practice as surgical assistants, either in lieu of seeking licensure to practice or while awaiting residency opportunities.

REGULATION IN OTHER STATES

Two states regulate surgical technologists, two require CST credentials through facility licensure and one provides title protection. Three states and the District of Columbia regulate surgical assistants, and at least one places limits on who may perform the first assistant role.

Surgical Technologists

Illinois

Illinois registers both surgical assistants and surgical technologists; however, the registration rules amount to a title protection program. The law specifically notes that health facilities and licensed physicians are not required to use registered surgical assistants or registered surgical technologists.

To qualify for registration, a surgical technologist must complete an approved educational program, maintain certification by the NBSTSA, and meet normal administrative requirements.[49] Fifty-nine surgical technologists hold active licenses in Illinois and six are currently inactive. No surgical technologists have disciplinary records as of the date of this report.

[48] See Virginia Department of Health Professions Report *Study into the Need to Regulate Orthopedic Technologists and Orthopedic Physician's Assistants.*
[49] Illinois Complied Statutes 225 ILCS 130/.

Indiana

Effective July 1, 2009, persons who wish to work as surgical technologists within a licensed hospital, ambulatory surgery center, birthing center or abortion clinic must meet one of the following requirements:

- Certified by the NBSTSA and completed an accredited surgical technology program,
- Completed a surgical training program from the US uniformed services,
- Worked as a surgical technologist in Indiana at any time prior to July 1, 2009,
- Graduated from an accredited surgical technology program within the last twelve months, or
- Have been determined to have appropriate qualifications by a health care facility.

The last requirement attenuates the legislation's effect on current practice. Surgical technologists may perform tasks associated with the scrub role, assist the RN circulator with circulating duties and may hold retractors, irrigate, sponge and suction, and cut sutures. These requirements build on previous title protection legislation.[50]

South Carolina

Persons who wish to work as surgical technologists within a licensed facility in South Carolina must meet one of the following requirements:

- Certified by the NBSTSA and completed an accredited surgical technology program,
- Completed a surgical training program from the US uniformed services,
- Worked as a surgical technologists in South Carolina at any time prior to Jan 1., 2008 or,
- Graduated from an accredited surgical technology program within the last three months.

All surgical technologists must complete 15 hours of continuing education annually. Surgical technologists may perform tasks associated with the scrub role, assist the RN circulator with circulating duties and may hold retractors, sponge and suction, and cut sutures. Health care facilities that cannot find sufficient surgical technologists may hire technologists that do not meet these requirements.[51]

Tennessee

In 2004, Tennessee added credentials for surgical technologists to its hospital and ambulatory surgical center licensure regulations. Tennessee requires that surgical technologists have:

- Achieved certification from the NBSTSA,
- Completed a CAAHEP accredited Surgical Technology program and,
- Completed adequate training in the armed forces or in a CAAHEP accredited facility.

[50] Indiana Code 25-36.1-1 & 25-36.1-2
[51] See South Carolina Code of Laws Section 44-7-380. http://www.scstatehouse.gov/code/t44c007.htm

Health care facilities that cannot find sufficient surgical technologists may hire technologists that do not meet these requirements. [52]

Washington

In 1989, Washington passed the Physician Assistant Surgical Assistant (PASA) statute. This law declared that only licensed personnel could perform tasks associated with the assistant-at-surgery role. Currently, physician assistants and registered nurses (not licensed practical nurses) may assist at surgery.

In 1996, following an application by the Greater Seattle Chapter of the Association of Surgical Technologists, the Office of Health Services Development performed a sunrise review on surgical technologists. According to comments received, surgical technologists were routinely, and illegally, performing tasks associated with the first assistant role, including clamping and tying blood vessels, suturing, stapling and inserting urinary catheters.[53] This prompted the legislature to pass a law requiring registration of surgical technologists. Under the law and regulations, surgical technologists may sponge, suction, retract tissue, irrigate and cut sutures as well as perform tasks associated with the scrub role.[54]

As of 2008, there were 2,382 registered surgical technologists in Washington State. Registrations have grown by 94 percent since the program began in 2001, or at about 10 percent per year.[55] However, these numbers likely include licensed practical nurses that function in the scrub role. The BLS Occupational Employment Statistics Survey estimates only 1530 surgical technologists were employed in Washington as of May 2008.

A search of news releases from the Washington Department of Health revealed several instances of disciplinary action, most related to drug use or criminal convictions rather than actions on the job. However, in 2008, one surgical technologist left her shift early without informing her supervisor, putting a patient at risk. Another, in 2004, impersonated a veterinarian and performed operations on dogs. Additionally, the surgical technologist program denied several applications for registration, mostly related to off-the-job convictions. The Department denied one applicant registration in 2002 for pleading guilty to the sexual assault of a post-operative patient.[56]

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[52] See Tennessee Code 1200-08-01 "Standards for Hospitals" and 1200-08-10 "Standards for Ambulatory Surgical Treatment Centers". http://tn.gov/sos/rules/1200/1200-08/1200-08.htm

[53] See Washington Office of Health Services Development. Nov. 1996. *Surgical Technologist Sunrise Review: Information Summary and Recommendations*. Olympia Washington. pp 10-11. http://www.doh.wa.gov/hsqa/sunrise/Pre1999Reports/SurgTech.pdf

[54] See Washington Administrative Code WAC 246-918 "Physician assistants — medical quality assurance commission" and WAC 246-939 "Surgical Technologist Program"; Revised Code of Washington RCW 18.71A.

[55] Washington State Department of Health. Dec. 2008. *2008 Annual Report: Health Professions Discipline and Regulatory Activities*. Washington. http://www.doh.wa.gov/hsqa/documents/2008UDA.pdf

[56] See Washington Department of Health Newsroom: http://www.doh.wa.gov/NewsRoom/default.htm. Reviewed June 19, 2009.

Surgical Assistant

District of Columbia

Since 2007, the District of Columbia has required all persons practicing as surgical assistants to obtain a license. To be eligible for licensure, surgical assistants must meet one of the following requirements:

- Completed a CAAHEP accredited surgical assisting program or a military training program for surgical assisting, or
- Completed 1300 hours of experience as a surgical assistant within the last three years.

Additionally, applicants must be certified by either NSAA or ABSA. Licensed surgical assistants must keep certifications current and complete 50 hours of continuing education every two years. The District of Columbia has issued 24 licenses, and there have been no disciplinary actions as of the date of this report.

The District of Columbia lists specific tasks that surgical assistants may perform. These tasks are particular to the first assistant role. They notably do not include harvesting veins. Additionally, regulations prohibit surgical assistants from performing surgical procedures independently, prescribing medication or writing non-operative progress notes or orders. A licensed physician must directly supervise the surgical assistant and the physician must remain within the surgical suite (although not the operating room) while the surgical assistant performs.

Illinois

As noted above, Illinois registers both surgical assistants and surgical technologists, however the registration rules amount to a title protection program. The law specifically notes that health facilities and licensed physicians are not required to use registered surgical assistants or registered surgical technologists.

To qualify for registration, a surgical assistant must complete an approved educational program or US Military program that emphasizes surgical assisting, maintain certification by the NSAA, NBSTSA or ABSA and meet other normal administrative requirements.[57]
Between 2005 and June 2009, Illinois registered 229 surgical assistants, 217 of which are currently active. There have been no disciplinary cases as of the date of this report.

Kentucky

Kentucky provides certification for surgical assistants. Persons who are otherwise unlicensed or uncertified by the state to practice as surgical assistants must attain state certification to practice as surgical assistants. However, surgical assistants employed by a hospital and under the direct supervision of a registered nurse are exempt from the certification requirement.

[57] Illinois Complied Statutes 225 ILCS 130/.

To qualify for certification, surgical assistants must:

- Maintain a current certification from the NSAA or NBSTSA,
- Graduate from a CAAHEP surgical assisting program or a US Military program that emphasizes surgical assisting and,
- Have 3 years of full time work experience including 800 hours in surgical assisting.[58]

Kentucky began certifying surgical assistants in 2005. There are currently 175 licensed surgical assistants and there have been no practice-related disciplinary actions as of this report date. There has been one Agreed Order to Surrender related to investigations of inaccurate reporting of qualifications.

Texas

The Texas Medical Board licenses surgical assistants; however, exemptions to the licensure requirement are broad and render the program, in practice, voluntary. The list of exemptions includes a person acting under the delegated authority of a licensed physician.[59] A licensed physician physically present in the operating room must directly supervise licensed surgical assistants.[60]

To qualify for licensure, a surgical assistant must meet the following requirements:

- Have an associate's degree,
- Have completed a CAAHEP accredited surgical assistant program or equivalent,
- Have 2,000 hours of experience in surgical assisting, and,
- Maintain current certification by the ABSA, NSAA or NBSTSA.[61]

As of June 2009, the Texas Medical Board had issued 339 licenses to surgical assistants. Of these, 274 were active. Of the remaining, 56 had been cancelled due to non-payment and four were cancelled at the request of the license holder. Two surgical assistants had undergone disciplinary action. One had held himself out as a physician, and the other voluntarily surrendered his license to avoid the trouble and expense of investigations and hearings.

Washington

As noted earlier (pg. 21), Washington's Physician Assistant Surgical Assistant (PASA) law and board regulations restrict the first assistant role to licensed physician assistants and registered nurses. However, Washington registers surgical technologists, and allows registered surgical technologists to perform some tasks related to the first assistant role.

[58] Kentucky Revised Statutes 311.864 to 311.890. http://www.lrc.ky.gov/KRS/311-00/CHAPTER.HTM
[59] Texas Statutes Occupation Code Section 206.002 (a)(3)
[60] Texas Administrative Code Title 22, Part 9 Section 184.13.
[61] Texas Administrative Code Title 22, Part 9 Section 184.4.

Other State Reviews

A few states have conducted sunrise and sunset reviews of surgical assistant and surgical technologist regulations. Links to these reports are located in the reference section.

Texas

In 2004, the Texas Sunset Advisory Commission performed a sunset review of the surgical assistant licensure program as part of its normal legislative process. The sunset review noted that, due to exemptions, the Texas statute does not actually prevent anyone from surgical assisting. The report also noted that health care facilities must approve surgical assistants to practice in operating rooms and that surgical assistants may only perform under the direct supervision of an accountable licensed physician. Additionally, ambiguous credentialing requirements demand excessive research time from staff. For these reasons, the Board recommended abolishing the licensure program. As of this date, however, the program is still in place.

Colorado

In 2004, the Colorado Department of Regulatory Agencies (DORA) completed a sunrise review of its licensure program for surgical assistants. DORA recommended against licensure of surgical assistants for several reasons, including:

- A review of literature and a review of health regulatory board records did not reveal significant evidence of harm.
- The surgical suite is a highly regulated environment. Hospital credentialing committees and the supervising surgeon ensure the competency of surgical first assistants.
- Persons with diverse professional backgrounds fill the role of first assistant. Creating a regulatory framework that is inclusive of all disciplines is difficult, and regulation will likely exclude some qualified individuals.

DORA completed two separate surveys to supplement their research, a survey of Colorado rural and independent hospitals and a survey of Colorado ambulatory surgical centers. The survey revealed that the use of certified first assistants, non-certified surgical assistants and surgical technologists as first assistants was relatively common. (See Table 4)

Profession	ASC	RI
Physician	51 %	67 %
Registered Nurse	70 %	67 %
Certified Registered Nurse First Assistant	35 %	73 %
Licensed Practical Nurse	14 %	0 %
Nurse Practitioner	5 %	20 %
Physician Assistant	54 %	87 %
Certified Surgical Assistant	65 %	60 %
Non-Certified Surgical Assistant	38 %	13 %
Surgical Technologist	35 %	40 %
International Medical Graduate	5 %	7 %

Table 4: The percentage of Colorado's Ambulatory Surgical Centers (ASC) and Rural and Independent Hospitals (RI) that use various disciplines to first assist at surgery according to a 2004 survey.

Washington

In 1996, the Washington Office of Health Services Development (OHSD) conducted a sunrise review of the need to regulate surgical technologists. This review arose largely in response to the *Physician Assistant Surgical Assistant Act (PASA)*. It held that unregulated persons performing functions associated with the first assistant role were practicing medicine. This created some confusion among surgical professionals since unregulated surgical technologists performed some of these tasks.

The OHSD recommended that relevant boards clearly define terms related to surgical roles, specifically surgical assistant, surgical first assistant and surgical second assistant. OHSD did not recommend or oppose regulation. However, if the legislature decided to regulate, OHSD recommended registration over certification or licensure. Washington State adopted a registration program in 2001.

Previous Legislative Efforts in Virginia

In 2001, the Virginia General Assembly considered House Bill No. 2320 "Surgical Assistants," sponsored by delegate S. Chris Jones of House District 76. HB2320 was a title protection bill that directed the Board of Medicine to establish standards for voluntary surgical assistant certification and define a scope of practice. The bill included a definition of "intraoperative surgical care" that included first and second assisting and supervision by a licensed physician or registered nurse. The Committee on Health, Welfare and Institutions tabled the bill by unanimous vote on February 3, 2001. Delegate Jones introduced a slightly modified version of the bill (including a definition of "non physician surgical assistants") in 2002 as House Bill No. 1259. That bill was continued to the 2003 session, where it was left in the Committee on Health, Welfare and Institutions. No further legislative proposals have been put forth in Virginia since 2002.

PRIVATE CERTIFICATION

Several private organizations provide certifications to surgical technologists and surgical assistants. The NBSTSA provides the only independently accredited certification programs for surgical technologists or surgical assistants.

Surgical Technologists

National Board of Surgical Technologists and Surgical Assistants

The NBSTSA, formerly the Liaison Council on Certification for the Surgical Technologist (LCC-ST) provides the Certified Surgical Technologist (CST) credentials to candidates that meet eligibility requirements and pass a certification exam. The National Commission for Certifying Agencies (NCCA), a nationally recognized accreditation body for professional certifications, accredits the CST credential.

There are three eligibility options for CST candidates:

(1) Current or previous CST certification,
(2) Graduation from a CAAHEP accredited surgical technology program, or,
(3) Graduation from an Accrediting Bureau of Health Education Schools (ABHES) accredited surgical technologist program.

The certification exam consists of 200 multiple-choice questions covering perioperative care, basic sciences and administrative procedures. In addition to tasks normally associated with the scrub role, the exam content outline includes sections on placing and securing retractors, irrigation, suctioning and sponging, use of endoscopic and other surgical technology, cutting suture materials, assisting with internal and skin stapling, as well as sections assessing knowledge of chemical, mechanical and thermal hemostasis (cauterization) methods. CSTs must complete 60 hours of continuing education every four years or retake the certification exam to maintain their credential.

National Center for Competency Testing

The NCCT provides the Tech in Surgery-Certified (NCCT) [TS-C(NCCT)] credential to candidates who meet eligibility requirements and pass a certification exam. The TS-C(NCCT) credential is not independently accredited. Applicants must provide documentation of acting in the scrub or circulator role in 150 cases and meet one of four eligibility options for the TS-C (NCCT):

(1) Graduation from an operating room technician, surgical technician or surgical technologist program from a US Department of Education Recognized School,
(2) Graduation from a formal operating room technician or surgical technician training program and have one year of full time experience or equivalent part-time experience,
(3) Seven years experience as an operating room technician, or,
(4) Professional credentials as a medical doctor, registered nurse or licensed practical nurse and have scrub experience.

TS-C(NCCT)s must complete 14 hours of continuing education per year.

National Healthcareer Association

The National Healthcareer Association (NHA) provides the Certified Operating Room Surgical Technologist (CORST) credential to candidates that meet eligibility requirements and pass a certification exam. The CORST program is not independently accredited. Applicants for the CORST credential must meet one of two eligibility options:

(1) Have completed an NHA approved program, or
(2) Have one year of experience.

NHA also offers a "Home/Self-Study Certification" for persons with two years experience.

Overview

	Accreditation	Minimum Education	Minimum Experience	Exam Questions	Annual CEU	Fee
CST	NCCA	CAAHEP or ABHES accredited program	NA	200	15	$290*
TS-C (NCCT)	None	NCCT approved program at an USDOE recognized school	150 Cases	NA	14	$195
CORST	None	NHA approved program	One year	Optional	NA	$225

Table 5: Overview of Surgical Technologist Certifications

Surgical Assistants

American Board of Surgical Assistants

The ABSA provides the Surgical Assistant-Certified (SA-C) credential to candidates that meet eligibility requirements and pass a certification exam. The SA-C credential is not independently accredited. There are two separate eligibility requirements. The first is for US or foreign-trained physicians and the second is for other allied health professionals.

To be eligible to sit for the exam, US or foreign-trained physicians must have:

- Graduated from a medical school listed in the International Medical Education Directory, and provide documentation of at least two years of surgical experience, or
- Have first assistant experience including 1500 hours and 400 cases within the last two years.

Allied health professionals must complete an ABSA approved surgical assisting educational program. The ABSA accepts all CAAHEP accredited surgical assisting programs and two additional non-CAAHEP accredited programs at Rock Valley College, Colorado and School for Allied Health Professionals, Ltd., Texas. (For more information on education, see pages 34 through 36.)

The ABSA will institute new eligibility requirements effective January 1, 2011. The new requirements will remove the experience only eligibility route for US and foreign trained physicians and require that allied health professionals obtain an associate-level degree or higher.

The ABSA exam comprises three sections. The first section consists of 180 multiple-choice questions covering surgical knowledge and procedures in all disciplines. Twenty in-depth multiple choice questions constitute the second section. This section covers a surgical procedure the candidate chooses on the application. Candidates may choose from the following six procedures: Total Knee Replacement, Cholecystectomy, Carotid Endartarectomy, Caesarean Section, Lumbar Discectomy or Open Heart Surgery. The third section is a practical section demonstrating suturing and tying-off manual skills. Two recommending surgeons, an ABSA designated examiner or the surgical assistant training program may perform the practical section.

SA-Cs must complete 80 contact hours of continuing education every two years to remain current. This includes a mandatory 50 contact hours granted for first assisting with 400 clinical cases (or 1500 hours) every two-year period. This equates to 30 continuing education hours every two years on top of employment.

National Assistant at Surgery Council

NASC focuses on certifying nurses that do not meet the education requirements for the CRNFA credential. While NASC recommends non-nurse surgical assistants attempt the NBSTSA certification (see below) first, NASC will provide credentials to non-nurse surgical assistants. NASC provides the Assistant at Surgery-Certified (AS-C) credential to candidates that graduate from a NASC-approved surgical assisting program that includes 135 proctored cases, and pass a certification exam. Alternatively, candidates that graduated from any surgical assisting program prior to December 1, 2005 may sit for the exam.

NASC currently approves two educational programs: the CAAHEP accredited distance-learning program at the National Institute of First Assisting, Inc. and an unaccredited surgical technology first assisting program at the College of Southern Nevada (see Education below for more information on these programs). The exam consists of 200 multiple-choice questions

AS-Cs must recertify every three years by completing 50 "points" annually, including a required 25 points for first assisting in 200 cases (or 700 hours). NASC awards points at various levels for participating in educational seminars, reading, viewing or producing published media and similar activities.

National Board of Surgical Technologists and Surgical Assistants

The NBSTSA provides the Certified First Assistant (CFA) credentials to candidates that meet eligibility requirements and pass a certification exam. The National Commission for Certifying Agencies (NCCA), a nationally recognized accreditation body for professional certifications, accredits the CFA credential.

To be eligible to sit for the CFA exam candidates must meet one of three eligibility routes:

(1) Previous credentialing as a NBSTA Certified First Assistant (CFA)
(2) Current CST with 350 cases and two years of first assisting experience, or
(3) Graduation from a CAAHEP accredited surgical assisting program.

The certification exam consists of 200 multiple-choice questions covering perioperative care, advanced sciences and administrative procedures. Surgical assisting content covers general first assisting tasks and procedures. See Appendix E for a complete content outline. CSTs must complete 60 hours of continuing education every four years or retake the certification exam to maintain the credential.

National Surgical Assistant Association

The NSAA provides the Certified Surgical Assistant (CSA) credential to candidates that meet eligibility requirements and pass a certification exam. The NSAA considers the CSA to be an advanced level surgical assisting credential. The CSA credentialing process is not independently accredited. The following professionals are candidates for the CSA exam, provided they supply the supplemental documentation:

(1) Graduates from NSAA approved surgical assisting programs
(2) Medical Doctors, Doctor of Osteopathy or Foreign Medical Graduate
    a. Letter of Recommendation from a surgeon
    b. Documentation of surgical training or rotation including 2250 hours of first assisting
(3) Registered Nurse, Physician Assistant, CFA or SA-C
    a. Letters of Recommendation from three surgeons
    b. One year case log as first assistant
(4) US Military trained surgical assistants
    a. Letter of Recommendation from a surgeon the candidate has assisted within the past three years
    b. Copy of Discharge papers or certificate/diploma indicating training that emphasized surgical assisting
    c. Six months to 1 year case log as first assistant within the last three years

NSAA approves some, but not all, CAAHEP accredited surgical assisting programs. Additionally, NSAA approves some non-CAAHEP accredited surgical assisting programs (See Education, pg. 30). The exam covers assisting on procedures within all surgical fields, including complex assisting tasks such as harvesting veins and arteries for bypass surgeries. (See Appendix F for the study guide). Candidates must renew certification every two years by completing 50 continuing education units and must maintain membership in the NSAA.

Overview

The CSA credentialing process is not independently accredited, although in a letter dated January 29, 2009 to Laurie Rains, Dr. Paul E. Collicott, Director of Member Services of the American College of Surgeons indicated that the ACS supports NSAA's *Standards of Competency for the non-Physician Surgical Assistant*. A copy of the letter appears in Appendix G. These standards list two tiers of competency for surgical first assistants, a technical tier and a professional tier.

The technical tier is an entry-level tier. The minimum requirement for the technical tier is the CFA credential from NBSTSA, or its equivalent. Minimum requirements for the professional tier include the CSA credential from NSAA, RNFA or PA-C credentials, or meet minimum education and experiential standards including 2000 clinical hours of first assisting.

	Accreditation	Minimum Education	Minimum Experience	Written Exam Questions	Clinical Exam	Annual CEU*	Fee
SA-C	None	Approved or CAAHEP accredited program	NA	200	Yes	15	$345
AS-C	None	Approved Program	NA	200	No	**	$399
CFA	NCCA	CAAHEP accredited program **or…**	**...**CST with 350 proctored cases	200	No	18.75	$290
CSA	None	NSAA approved program or military training	NA			25	$1250

Table 6: Overview of Surgical Assistant Certifications

EDUCATION

The ARC-ST recommends educational programs for accreditation by the CAAHEP in both surgical technology and surgical assisting, while the ABHES accredits surgical technology programs. For either profession, the NBSTSA is the only credentialing body that accepts graduates from accredited CAAHEP and ABHES programs exclusive of other educational programs for eligibility. All other programs accept at least one non-accredited program.

Surgical Technology

There are a substantial number of surgical technology programs within the United States, including 458 CAAHEP accredited programs and 37 ABHES accredited programs. Both CAAHEP and ABHES accredited programs must adhere to AST's *Core Curriculum for Surgical Technology*. Additionally, the US Army trains soldiers and the US Navy trains corpsmen to act in roles equivalent to surgical technologists. The US Navy's training program is CAAHEP accredited, while the US Army's is not.

AST's Core Curriculum for Surgical Technology

The AST's *Core Curriculum for Surgical Technology* serves as the basis for both ABHES and CAAHEP accredited programs. Core Curriculum covers the following content areas:

- Microbiology
- Pharmacology
- Anesthesia
- Electricity
- Physics
- Robotics
- Emergency Procedures
- Hemostasis
- Surgical Wound Classification
- Wound Healing
- Information Management
- Legal Issues
- Professional Credentialing
- Professional Organizations
- Leadership
- Affective Behaviors
- Employability Skills
- Risk Management and Liability
- Hospital Organization and Management
- Scope of Practice

Accrediting Bureau of Health Education Schools

The US Secretary of Education recognizes ABHES as an institutional and programmatic accreditation agency. As part of its programmatic accreditation activities, ABHES accredits surgical technologist programs that meet, among others, the following standards:

(1) 1,100 hours of education,
(2) Includes 500 hours of clinical externship,
(3) Provides entry level-competency designed to lead to employment, and
(4) Adheres to the *Core Curriculum for Surgical Technology* from the AST.

There are two ABHES accredited programs in Virginia (See Table 7).

Commission on Accreditation of Allied Health Education Programs

The ARC-ST recommends programs for accreditation by the CAAHEP. Accredited programs must follow the AST *Core Curriculum* and include both didactic and clinical experience, including participating in at least 80 cases in the scrub role. CAAHEP accredits certificate, diploma and associate level programs.[62] There are seven CAAHEP accredited programs in Virginia (See Table 7)

Program	Location	Degree Offered	Cost*
ABHES Accredited			
ECPI College of Technology	Various	Associate	NA
Sentara School of Health Professions	Chesapeake	Diploma	$9,345*
CAAHEP Accredited			
Fortis College	Richmond	Diploma	NA
Miller-Motte Technical College	Lynchburg	Associate	NA
National College	Danville	Associate	NA
National College	Harrisonburg	Associate	NA
Naval School of Health Sciences	Portsmouth	Certificate	NA
Piedmont Virginia Community College**	Charlottesville, Joint Programs	Certificate	$4,611*
Riverside Regional Medical Center	Newport News	Diploma	$9,000*
Unaccredited			
John Tyler Community College	Richmond	Certificate	$4,150*

Table 7: Accredited Surgical Technology Programs in Virginia
*Approximate costs only, based on advertised tuition and fees. Costs listed may or may not include ancillary fees including books, insurance, uniforms or equipment.
**Piedmont Virginia Community College administers several programs at community colleges in Virginia.

Military Training

US Military Occupational Classifications for surgical technologists include the US Navy's HM-Surgical Technologist, the US Army's MOS 68D *Operating Room Specialist* and the US Air Force's 4N1x1 Surgical Services. Soldiers specializing in surgical technologist related occupational groups receive training and often extensive experience in surgical technology within the military environment. The Naval School of Health Science surgical technologist programs at Portsmouth, Virginia and San Diego, California are CAAHEP accredited, and Hospital Corpsmen in the Surgical Technology specialty are eligible for all civilian surgical

[62] See Accreditation Review Committee on Education in Surgical Technology. 2004. "Surgical Technology Standards Interpretive Guide" Littleton, CO. http://www.arcst.org/pdfs/SIGs_revision_011309.pdf

technology credentials. According to the Army's Credentialing Opportunities Online (COOL) website, however, soldiers in MOS 68D may need additional training before sitting for the NBSTSA CST credential.

In addition to occupational specialties specifically tailored toward the surgical technologist and first assistant roles, many combat medics receive compatible training and experience. The Special Operations Combat Medic course and Special Operations Independent Duty Corpsman courses, for instance, are intensive 26 week courses, including four week clinical rotations, that includes training in operating room procedures and surgical skills. These courses, are completed by appropriate personnel from each of the US Military services, including US Army Special Forces Medical Sergeant, Air Force Pararescuers, medically-trained members of US Navy SEAL teams and Force Reconnaissance Hospital Corpsman with the US Marine Corps. Service members completing these courses provide comprehensive medical care, independent of physicians, to their units and within indigenous communities.[63]

Other Training

As there are no statutory or accreditation requirements for surgical technologists performing in the scrub role, many surgical technologists are trained on the job. Surgical technologists may also train as allied health professionals in surgical specialties (i.e., as orthopedic technicians or ophthamalic specialists).

Surgical Assistants

The educational offerings for surgical assistants are not as clear-cut as those for surgical technologists. While the CAAHEP does accredit surgical assistant programs, accreditation is not the standard for most certification programs. Only the NBSTSA and ABSA accept all CAAHEP accredited programs, and the NBSTSA is the only certification program that accepts CAAHEP accredited programs exclusively. The ABSA, NASC and NSAA approve some non-accredited programs. Additionally, although many military personnel gain experience as first assistants in surgical roles, military occupational classifications and training programs are not formally geared towards the surgical assistant profession.

Commission on Accreditation of Allied Health Education Programs

The ARC-ST recommends programs for accreditation to the CAAHEP. The ARC-ST's Subcommittee on Accreditation for Surgical Assisting (SASA) began developing standards and reviewing programs in 2002.

CAAHEP accredits programs in accredited post-secondary educational schools, hospitals and medical centers or within the US military. There are currently ten accredited CAAHEP programs, including one in Virginia and two in states that border Virginia (See Table 8). The quality of these programs seems to vary widely, from one-year online courses augmenting documented work experience to the intensive, two-year graduate certificate offered by the

[63] See Naval Special Operations Medical Institute at Fort Bragg. http://www.med.navy.mil/sites/navmedmpte/nomi/nsomi/Pages/default.aspx

Eastern Virginia Medical School. Eligibility for these programs require, at a minimum, two years or more of surgical technologist experience, and usually require certification or licensure in a related field (i.e., CSTs or nurses). Although some programs affiliate with medical facilities, students in other programs must have access to a surgeon or surgeons willing to proctor cases.

Program	Location	*Not* Accepted by	Degree	Didactic Segment	Clinical Segment	Cost*
Virginia						
Eastern Virginia Medical School	Norfolk, VA	NASC	Certificate/ graduate certificate	55/63 credits	1,500 hrs	$30,170
Bordering States						
Meridian-Institute of Surgical Assisting	Joelton, TN	NASC	Certificate	13 modules, 60 Lab hours	125 Cases	NA
Madisonville Community College	Madisonville, KY	NASC	Certificate	16 credits	4 credits	$2,076
Other Programs						
American Center for Excellence in Surgical Assisting	Greenwood Village, CO	NASC	Certificate	Online course, 6-day seminar	135 proctored cases	$4,995
National Institute for First Assisting, Inc	Centennial, CO	NSAA	Certificate	Online	135 proctored cases	$2,995
Vincennes University	Vincennes, IN	NASC	Certificate	29 online credits	135 proctored cases	$4,630
Macomb Community College	Macomb, MI	NASC	Certificate	NA	NA	NA
Wayne County Community College	Belleville, MI	NASC	Certificate	28 credits	NA	NA
University of Cincinnati, Claremont College	Batavia, OH	NASC	Certificate	27 credits	6 credits	$3,028
Tulsa Technology Center	Tulsa, OK	NASC	Certificate	300 online hours	350 proctored hours	$1,275

Table 8: CAAHEP Accredited Surgical Assistant Programs.
*Approximate costs only. Costs listed may not include ancillary fees including books, insurance, uniforms or equipment.

Other Programs

Like CAAHEP accredited programs, the quality of non-CAAHEP accredited programs ranges from DVD and online training augmenting on the job experience to an intensive, 80-credit, 60-week program administered by Aultman Health Foundation. See Table 9.

Institution (Accreditation)	State	Accepted by	Degree	Program	Clinical Segment	Cost*
College of Southern Nevada (NW Commission on Colleges and Universities)	NV	NASC	Certificate	NA	NA	NA
Rock Valley College (Higher Learning Commission)	IL	ABSA	Certificate	DVD/Online + Six day seminar	135 cases	NA
School for Allied Health Professionals, Inc.	TX	ABSA, NSAA	Certificate	24 week	135 Cases	NA
Aultman Health Foundation	OH	NSAA	Certificate	80 credits	1154 hours	NA
Mayo Clinic	MN	NSAA	NA	NA	NA	NA
Lorraine County Community College (Higher Learning Commission)	OH	--	Certificate	17 online credits	400 hours	$1,900

Table 9: Non-CAAHEP accredited surgical assistant programs.
*Approximate costs only. Costs listed may not include ancillary fees including books, insurance, uniforms or equipment.

Site Visit

On July 24, 2009 instructor Kevin Browne provided a tour of the CAAHEP accredited surgical technologist program at the Richmond campus of Fortis College. Additionally, Mr. Browne provided documentation including a syllabus and a student "Mock Surgery" form, included in Appendix H. The Fortis College program includes a didactic portion, a laboratory portion, including mock surgeries, and a four to five month clinical externship.

The facilities include classrooms, computer labs, a laboratory room with laboratory equipment and a mock surgical suite. The mock surgical suite includes and separate rooms for sterile supply and the operating room. Students use a surgical mannequin to perform mock surgeries. During mock surgeries, students rotate through all support roles, including anesthesia, assistant and circulator roles, to provide a holistic perspective on the surgical process. Students practice tasks associated with the scrub role, as well as tasks associated with "second assisting" such as holding retractors, suctioning and endoscope placement.

Mr. Browne reported that all of his surgical technologist students certify with the NBSTSA. The school also achieves an 80 to 86 percent placement rate following graduation, often with employers that provide externships. Mr. Browne also noted that the school coordinates with other local programs to match graduate numbers with local employment needs.

ECONOMIC IMPACT

The surgical technologist and, in particular, surgical assistant professions grew to meet a gap in the availability of licensed surgeons, physician's assistants and periOperative nurses. As with most medical professions, the US Bureau of Labor Statistics (BLS) expects demand for surgical technologists to increase as the population ages. Additionally, technological advancement both increases the number of procedures available and facilitates the use of non-nurse and non-physician professionals. Although the BLS does not track them, the same factors are likely to stimulate demand for surgical assistants as well. The BLS expects hospitals, surgeons and other employers to employ 24 percent more surgical technologists nationwide in 2016 than in 2006, much faster than the average occupational growth rate of about 7 to 13 percent.[64] The Virginia Workforce Connection (VAWC) of the Virginia Employment Commission (VEC) expects a similar growth rate in Virginia, with the number of surgical technologist jobs increasing from 1,897 in 2006 to 2,362 in 2016, a 24.5 percent increase.[65]

[64] Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2008-09 Edition*, Surgical Technologists, on the Internet at http://www.bls.gov/oco/ocos106.htm**.** Accessed June 15, 2009.
[65] Virginia Workforce Connection "Occupational Employment Projections in Virginia for Surgical Technologists for a base year of 2006 and a projected year of 2016." Accessed through Occupational Employment and Projections at http://www.vawc.virginia.gov/analyzer/session/session.asp?cat=OCC on June 16, 2009.

Surgical Technologists

Salary

The BLS tracks surgical technologists as the Standard Occupational Classification (SOC) 29-2055 through its Occupational Employment Statistics (OES) Survey. OES data does not include self-employed practitioners, and is current as of May 2008. Additionally, the BLS includes surgical technologists that act as surgical first assistants or circulators in the count of surgical technologists. The average annual salary for Virginia surgical technologists is $39,650. The lowest ten percent of earners make under $28,000 per year; however, top earners may earn over $53,000 per year.

State	Work-Force	Average Salary
D. of Columbia	390	$50,070
Maryland	1620	$47,270
Virginia	**1940**	**$39,650**
Tennessee	3620	$37,490
North Carolina	3030	$36,930
Kentucky	1850	$35,060
West Virginia	690	$31,760

Table 10: Average salaries of surgical technologists in Virginia and bordering states

	Hourly Wage	Cost of Entry	Hours to pay	Weeks to Pay
Surgical Technologist				
10th %ile	$13.33	≈$5,000	375	9 ⅜
Median	$18.54	≈$5,000	267	6 ⅝
Medical Assistant				
10th %ile	$9.96	≈$5,000	502	12 ½
Median	$13.48	≈$5,000	371	9 ¼

Table 11: Rough estimates of the amount of work hours required to pay for cost of entry.

Surgical technologists in Virginia earn slightly more than surgical technologists in most border states, particularly West Virginia, but they earn significantly less than surgical technologists employed in Maryland or the District of Columbia. Differences become more pronounced at the higher end of the wage scale, indicating high demand for experienced surgical technologists in Maryland and DC. (See Figure 1) The top 10 percent of earners in the Washington DC Metropolitan area earn upwards of $68,000 per year.

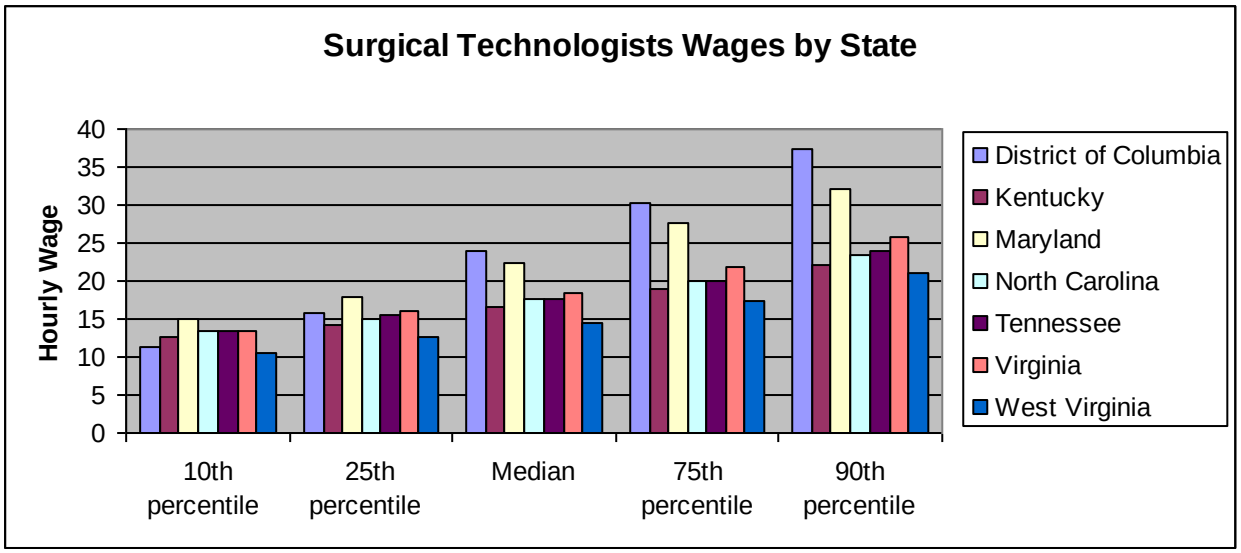

Figure 1: Salaries of surgical technologists in Virginia and bordering states.

Earnings Incentive

In Virginia, surgical technologists earn slightly more than licensed practical nurses. However, this includes LPNs employed in all settings. Wages among professionals employed in the operative suite may be similar. Registered nurses earn significantly more than surgical technologists, even at the high end of the wage scale. This indicates that employers may be willing to pay a premium to RNs with advanced training or experience (such as CRNFAs) over surgical technologists who may also perform in the assistant-at-surgery roles. Specializing in surgical technology provides a means for medical assistants to increase earnings (See Figure 2).

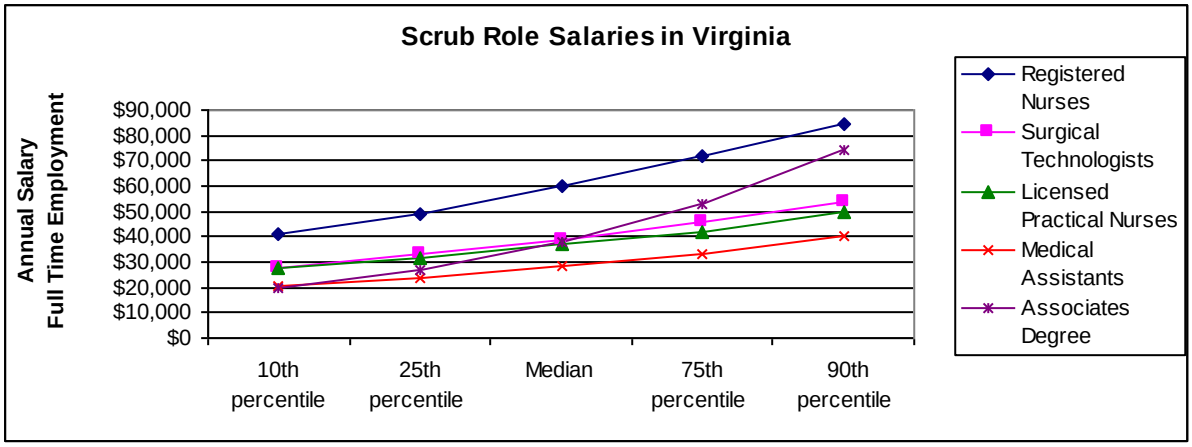

Figure 2: Salaries of professions that may perform in the scrub role in Virginia. National salaries for persons over 25 holding associate degrees or some college.

Surgical assistants can expect to earn about $10,000 more per year over the course of their careers than medical assistants. Surgical assistant earnings are in line with the median earnings of persons 25 years old or older holding an associates degree or some college education. However, the top 25 percent of workers with the same characteristics may earn significantly more than surgical technologists.[66] This may be due to the fact that surgical technologists may not have an associate degree. It may also be due to a lack of advancement options in the OR setting. Regulations and accreditation standards require registered nurses to hold most management roles in the OR. Alternatively, data from different surveys, even accurate surveys, may incorporate technical differences that influence comparisons. For instance, The Current Population Survey (CPS), which tracks earnings by education, is a survey of households and includes the self-employed. OES, which tracks earnings by occupation, is a survey of employers and does not address all practicioners. This may also explain some of the differences in salaries.

Although wages at the low end of the wage spectrum for surgical technologists are higher than for those with associates degree/some college and for medical assistants, costs of entry are somewhat high. Costs of accredited programs vary widely. Certificate programs at public

[66] Information on earnings workers 25 years old or older with some college or associates degree is derived from the Bureau of Labor Statistics' Current Population Survery (CPS) Weekly and Hourly Earnings Series. Usual weekly earnings for 2008 were multiplied by 52 to get usual annual earnings for full-time employees. Current Population Survey data is available at http://www.bls.gov/cps/.

institutions, such as those provided by the Piedmont Community College may be as low as $4,611. Costs for private programs may approach $10,000. The NBSTSA certification fee is $290, not including preparation materials. Additionally, these costs may not include books, insurance, scrubs or other incidentals. Table 11 demonstrates the cost of certification in terms of hours worked for persons that are likely to enter the profession, or for current practitioners who wish to gain certification. The estimated minimum cost of entry is $5,000 which is based roughly on the cost of the Piedmont Community College program and the NBSTSA CST certification. For an entry-level surgical technologist, the cost of education and CST certification may take almost 9 ½ weeks to recover. Costs, and work hours needed to recover costs, may double for persons in private certification programs.

An online survey conducted by the NBSTSA reports that most CSTs gain a $1 to $1.99 hourly increase in pay with certification, resulting in annual increases of $2,000 to $4,000. Additionally, the NBSTSA's 2002 Job Analysis Report indicated that employers are increasingly compensating employees for certification.[67]

Surgical Assistants

Salary

Reliable salary information for surgical assistants is unavailable. The BLS does not track surgical assistants separately from surgical technologists or other medical professionals. Professional organizations have not undertaken salary surveys of surgical assistants. The BLS does track the salaries of several professions that do assist at surgery. Table 12 presents employment figures and average salaries for these professions. Figure 3 compares the salaries of these professionals across the wage spectrum. Wages among professions that assist at surgery vary widely, making it difficult to estimate wages for assistants at surgery.

Occupation	Average Salary	Average Hourly Wage
Surgeons	$198,620	$95.49
Physician Assistants	$63,940	$30.74
Registered Nurses	$61,780	$29.70
Surgical Technologists	$39,650	$19.06
Licensed Practical Nurses	$37,330	$17.95

Table 12: Average Virginia salaries of professions that may perform in the assistant-at-surgery role.

[67] See Association of Surgical Technologists website "Surgical Technology Assistants". http://www.ast.org/professionals/professionals_about_prof_stats.aspx. Accessed June 16, 2009.

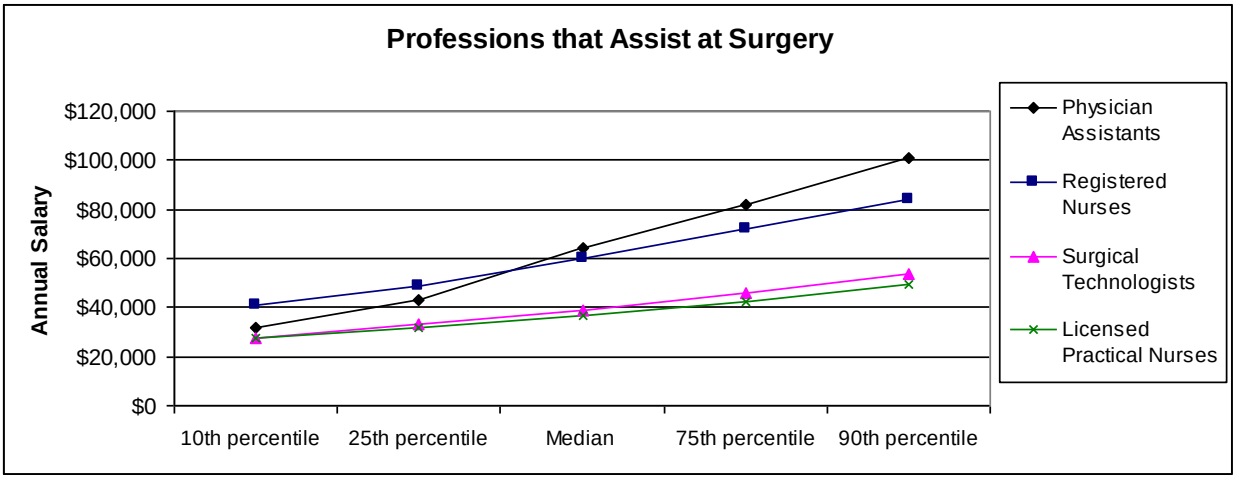

Figure 3: Salaries of surgical technologists in Virginia and bordering states.

Despite the lack of reliable information, anecdotal evidence from job postings, college program overviews and online salary sites suggest that surgical assistants earn around $18 to $22 per hour, or $35,000 to $45,000 per year. Additionally, the upper quartile of BLS data on surgical technologists likely captures many surgical assistants, suggesting a similar salary range.

Reimbursement

Reimbursement for first assistant services varies substantially among states and third party payers. Third party payers often limit reimbursement for first assisting by the type of procedure and the credentials of the assistant. Currently, CMS only reimburses physicians, physician assistants, nurse practitioners and clinical nurse specialists for first assisting services. CMS reimburses physician first assistants at 16 percent of the surgeon's fee and non-physician first assistants at 13.6 percent of the surgeon's fee.

Third-party reimbursement for other non-physician first assistants is often difficult to attain. Non-physician first assistants often bill patients directly if third-party payers do not reimburse their services. AORN has made reimbursement for RNFAs a legislative priority. Fifteen states have adopted some provisions providing for reimbursement of RNFAs. [68] Several private companies, such as Surgbill, Inc. of Illinois and Imperial Medical Services of Tennessee, specialize in collecting fees for assistants at surgery. These companies seek payment from all possible sources: third party payers, hospitals, surgeons and patients. Bills for surgical assistants often surprise patients, who are often unaware that a surgical assistant played a role in their procedure. The following is a list of frequently asked questions for patients on the Surgbill, Inc. website:

1. *Who is Surgbill, Inc.?*
2. *What is a Surgical Assistant?*
3. *Why am I getting a bill from you?*

[68] Association of PeriOperative Nurses. 26 January 2009. "RNFA Reimbursement Language." http://ems.aorn.org/docs_assets/55B250E0-9779-5C0D-1DDC8177C9B4C8EB/1D2E736F-1F29-E23E-B83326F7296F2BAF/RNFA%20Reimbursement%20language.pdf

4. Why did my surgeon utilize a Surgical Assistant?
5. Why didn't my surgeon tell me he was going to use a Surgical Assistant?
6. Why did my surgeon use a provider not in my network?
7. My insurance company said that a Surgical Assistant was not medically necessary.
8. Why is my insurance company not covering the services of a Surgical Assistant?
9. My insurance company said that the Surgical Assistant is not licensed in the State where my surgery was performed. Does this mean that this individual is not qualified or trained?
10. Why are surgical assistant not licensed in my State?
11. Will you file a review or appeal to my insurance company if the charges are denied?
12. Can I make payment arrangements?
13. Why do I have to pay for a surgical assistant when I did not authorize this? Since my surgeon is the one who asked individual to provide the service, he or she should pay for it.
14. I have Blue Cross Blue Shield insurance. Why are you sending me a bill?
15. Did you bill my insurance?[69]

Reimbursement provisions have accompanied licensure and registration of surgical assistants in Kentucky and Illinois.

Cost of Entry

The cost of entry may be very low. The CAAHEP accredited program at the American Center for Excellence in Surgical Assisting accepts high school graduates that have completed two years of scrub experience and who have completed college level courses in five subjects: medical terminology, anatomy and physiology, microbiology, pathophysiology and pharmacology. The course, which consists of a 9-month online program and a traveling 6-day skills seminar, is advertised for $4,995. Students may complete the required 135 proctored cases (in at least three surgical specialties, including General Surgery) on the job. Students completing this course may sit for NSAA, ABSA or NBSTSA assistant at surgery certification exams with no other credentials.

The CAAHEP accredited online program at the Tulsa Technology Center does away with the 6-day seminar and charges $1,275. However, like most accredited (and unaccredited) programs the Tulsa Technology Center requires students to hold CST or other credentials. To earn the CST credential, students must complete an accredited program in surgical technology.

Other programs, such as the certificate programs offered by the Eastern Virginia Medical School (EVMS), offer course loads comparable in rigor to those in PA-C programs (see page 17). The graduate certificate provides 24 months of post-graduate education to candidates holding an appropriate baccalaureate degree. The certificate program offers a similar education to CSTs with three years experience, or the equivalent in education and experience. EVMS charges accordingly, and students complete clinical rotations at associated facilities. Despite

[69] See the Surgibill, Inc. website "Patient Information" page. http://www.surgicalbilling.net/patient/index.shtml. Accessed June 16, 2009. See also Imperial Medical Services, LLC. http://imperialmedicalservices.com/index.html

similar rigor, graduates from EVMS' surgical assistant program may not have the same earnings potential as licensed PA-Cs.

Surgical Assistant certification boards accept widely varying educational programs. This wide diversity likely encourages candidates to pursue *less* education. Students who may achieve the same credential in less time, for less inconvenience and money are likely to do so. Advanced education and institutional reputation that lead to higher income may counter this incentive but only if the advantages are clear. Anecdotal evidence, however, suggests that surgical assistant salaries fluctuate within a narrow range. This may be due to reluctance by facilities to pay unlicensed professionals amounts similar to licensed PA-Cs and RNs.

The NSAA, through its *Standards of Competency for the Non-Physician Surgical Assistant*, has suggested a two-tiered certification process based on the CFA and CSA credentials. Although the rigor of the exams for these certifications may vary, eligibility requirements overlap. Without a distinct separation that is easily recognized, both on paper and in skill level, employers may not recognize the difference between the tiers.

Though tailored specifically to surgical assisting, the program at Eastern Virginia Medical School is similar in rigor and length to programs for licensed PA-Cs. Other surgical assistant programs involve only online components supplemented by documentation of experience in specific procedures. A regulatory structure that does not take this divergence of educational background into account may fail to communicate to employers and patients the competency of practitioners and encourage lower educational attainment. Nursing regulation, divided into registered nurses and licensed practical nurses, may provide a model for professions with widely divergent educational backgrounds. Alternatively, the current regulatory structure, divided into licensed PA-Cs and unlicensed surgical assistants, may already effectively communicate the difference in educational background of assistants, despite the fact that some surgical assistants with educations comparable to PA-Cs in rigor and content are on the unlicensed side.

HARM

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 and surgical assistants perform in the scrub and assistant-at-surgery roles at all levels of surgical complexity.

The Scrub Role

Harm from the scrub role comes from two main sources: surgical site infections and foreign objects left in surgical patients. Tasks such as positioning the patient and other perioperative tasks may also pose risks.

Cause of Death	2002 Deaths
Heart Disease	696,947
Cancer	557,271
Stroke	162,672
Lower Respiratory	124,816
Accidents	106,742
HAIs	**98,987**
Diabetes	73,249
Influenza/ pneumonia	65,681

Table 13: 2002 Cause of Death including HAIs. The National Center for Vital Statistics does not track Hospital Acquired Infections. If counted, HAIs would have been the sixth leading cause of death in the US in 2002.

Surgical Site Infections

Along with the circulating nurse, the person in the scrub role 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. Surfaces include the hands and chest area of sterile team members, the sterilized portion of the patient, the drapes that protect the surgical site, and the instrument tray. Instruments that touch any surface outside of the sterile field are automatically considered contaminated. 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 infections.[70] An investigative report by the Chicago Tribune for the same year reported 2.1 million infections and 102,000 deaths. It also estimated that 6 percent of patients admitted to hospitals acquire infections while there.[71] For perspective, the PHS estimate of 98,987 hospital-acquired infections resulting in death in 2002 would place nosocomial infections as the 6th leading cause of death in 2002, behind unintentional injuries and above diabetes (see Table 13).[72]

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 infections and to 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.

[70] R. Monina Klevens, 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 Dealths in U.S. Hospitals, 2002." *Public Health Reports*. Vol. 122, pp 164.

[71] Michael J. Berens, "Unhealthy Hospitals: Infection Epidemic Carves Deadly Path: Poor Hygiene, overwhelmed workers contribute to thousands of deaths," Chicagoe Tribune, July 21, 2002. http://www.chicagotribune.com/news/chi-0207210272jul21,0,2177158.story

[72] Robert N. Anderson & Betty L. Smith. "Deaths: Leading Causes for 2002" National Vital Statistics Reports, vol 53, No 17, March 7, 2005, p 7.

Methicillin-resistant Staphylococcus (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.[73] The CDC estimates that there were 94,360 MRSA cases in 2005 (85 percent were healthcare related) resulting 18,650 deaths. Other drug resistant bacteria strains found in healthcare settings include Vancomycin-Intermediate/Resistant Staphylococcus aureus, Acinetobacter, S. pneumoniae, Drug-resistant TB and Vancomycin-resistant Enterococci.[74]

The rise in HAI rates grew slowly over several decades. High infection rates are often associated with sometimes flagrant disregard for infection risks by surgeons, nurses and other personnel. The introduction of stringent aseptic technique and other measures can reduce the risk of surgical site infections significantly. To accomplish this, hospitals implement cultural change at all personnel levels.[75]

Health regulatory and professional organizations have elevated infection control to a policy issue. The 2009 American Recover 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.

Regulatory and accreditation standards require all hospitals in Virginia to maintain an Infection Control Committee, charged with implementing prevention and surveillance measures throughout the facility and discovering the root cause of any infection outbreaks. Ambulatory care facilities must also implement comprehensive infection control measures.

Maintaining the sterile field is just one facet of the comprehensive effort to prevent surgical site infections. Other facets include specialized facility and instrument cleaning, protective gear, water sanitation, continuous hand washing and limited access to surgical suites. Aseptic concerns are incorporated into the architectural design of operating rooms, often including specialized air handlers and airflow systems that push dust away from surgical sites.

Foreign Objects

Along with the circulating nurse, the scrub person 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.

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

[74] See "Center for Disease Control and Prevention: Antimicrobial Resistance in Healthcare Settings" at http://www.cdc.gov/ncidod/dhqp/ar.html. Accessed 8/29/2008.

[75] Ibid. McCaughey, Betsy.

Analyst estimates of the incidence of retained foreign objects vary. Common estimates 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.[76] RFOs may be underreported, however, as malpractice settlements often include confidentiality agreements and some surgeons may persist in "defensive charting," recording incidents on charts in a manner that reduces the risk of liability.

There are no studies that compare licensed and unlicensed personnel performing in the scrub role. Factors that have been demonstrated to increase the risk of retained foreign objects include incorrect counts, having multiple surgeries combined in one procedure,[77] emergency surgeries, unplanned procedure changes and high body mass index.[78] Additionally, one study found that an increase in the number of scrub techs or circulating nurses does not decrease the incidence of RFOs.[79] In the Mayo Clinic, Rochester study, 59 percent of the RFO cases were discovered after perioperative personnel reported correct counts, indicating that counts are an unreliable means of reducing RFOs.[80]

In addition to performing counts and cavity surgeries, hospitals employ a variety of technological means to prevent RFOs. These include post-operative or intra-operative X-rays, using sponges that show up on X-rays, placing bar codes or radio frequency ID tags on sponges and instruments.[81]

The Assistant at Surgery Role

First assistants participate directly in the surgical procedure, performing significant surgical tasks. The surgeon should remain in the operative suite but may not be in the operating room when the first assistant performs these tasks. First assistants have the potential to cause severe and long-term harm. Little direct information is available on actual harm caused at the assistant-at-surgery level. However, the risk of harm may be inferred from the advanced tasks assistants-at-surgery perform, the lack of training that assistants-at-surgery may have and the cost of professional liability insurance.

<u>Vein Harvesting</u>

In the case of cardiac bypass surgery, the first assistant harvests veins from the legs or arms of patients. Surgeons use these veins to bypass clogged arteries connecting the heart and

[76] Cima, Kollengode, Garnatz, Storsveen, Weisbrod and Deschamps. 2008. "Incidence and Characteristics of Potential and Actual Retained Foreign Object Events in Surgical Patients." *Jounral of the American College of Surgeons.* Vol. 207. pg. 80.
[77] Lincourt, Harrel, Cristiano, Sechrist, Kercher & Heniford. 2006. "Retained Foreign Bodies After Surgery." *Journal of Surgical Research* Vol 138, pg. 170.
[78] Gawande, Studdert, Orav, Brennan and Zinner. 16 Jan 2003. "Risk Factors for Retained Instruments and Sponges after Surgery" *The New England Journal of Medicine*. 348:3. pg. 229.
[79] Lincourt, et al. pg. 172.
[80] Cima et al, pg. 85.
[81] Gibbs, Coakley and Reines. May 2007. "Preventable Errors in the Operating Room: Retained Foreign Bodies After Surgery—Part 1." *Current Problems in Surgery*. Vol. 44, Issue 5, pg. 284.

aorta. First assistants harvest veins through open procedures, or through minimally invasive endoscopic procedures. In either case, the first assistant may damage the vein, negatively affecting the long-term viability of the bypass. Additionally, poorly performed harvesting may increase risks for embolism or other problems. In many cases, the cardiac surgeon may not have experience harvesting the vein himself.[82] Although harvesting a vein is a small part of cardiac bypass surgery, it may be difficult for a non-medically trained person to understand the difference between this procedure and a small surgical procedure. Especially since the patient's longevity may depend on the quality of the vein the first assistant harvests.

Examples from the Literature

Harm resulting from the actions of assistants at surgery is often attributed to surgeons, and subject to confidentiality agreements related to malpractice settlements and employment contracts. Attorneys appealed one case (*HealthTrust v. Cantrell* (689 So 2d 822 [Ala] 1997) involving an "operating room technician" holding retractors to the Alabama Supreme Court in 1997. In that case, parents sued a surgeon and a hospital after their child suffered sciatic nerve damage (the nerve serving the legs) which left her with permanent numbness and a limp. During the course of surgery, either the surgeon or the scrub person, who had been holding retractors, cut the child's sciatic nerve.

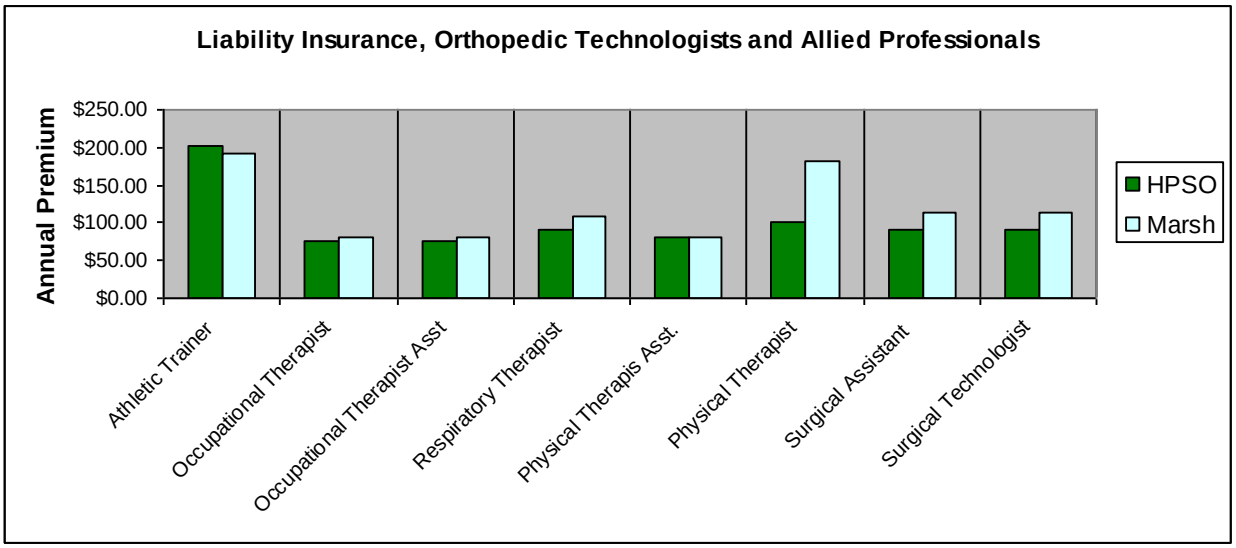
According to a review of the case by Ellen K. Murphy, a registered nurse, attorney and professor at the School of Nursing at the University of Wisconsin, Milwaukee, the technician testified that he had held retractors at the direction of the surgeon in previous operations, but "had simply held them where the surgeon had placed them. He also testified, however, that he had never before held retractors on a child's hip, that he was unaware of the size of a child's sciatic nerve, and that he did not know the distance between the sciatic nerve and the hip joint."[83] The jury concluded that movement of the retractors caused the patient's condition and was the result of the hospital's negligence for not maintaining a formal training or skills assessment process for assistive personnel in the operating room.[84]

Malpractice

Malpractice insurance rates provide insight into the liability risk faced by various professions. Insurance providers offer professional liability insurance to non-physician healthcare practitioners. An internet search revealed two companies that provide professional liability insurance tailored to surgical assistants and surgical technologists practicing in Virginia: Healthcare Providers Service Organization (HPSO) of Pennsylvania and Marsh Proliability of Iowa. The following chart details the base annual insurance premiums for several licensed

[82] See the discussion in Appendix I. This insightful discussion by cardiac surgeons, pulled from the public archive of the Open Heart-L list serve discusses the use of Physician Assistants to harvest veins. Surgical assistants also harvest veins in their role as first assistants.
[83] Murphy, Ellen K. October 1998. "Intraoperative Use of Unlicensed Assistive Personnel" *AORN Journal*. Vol 68 No. 4. pg 680.
[84] Ibid.

professions and for surgical technologists and surgical assistants, employed full-time, seeking protection of $1 million per claim and $3 million aggregate insurance.[85]



Both companies charge the same rate for both surgical assistants and surgical technologists. Rates for both companies are similar to rates charged to respiratory therapists.

POLICY CONSIDERATIONS

After reviewing the background information, the Regulatory Research Committee requested that staff provide further background on the relationship between surgical technologists, surgical assistants and other members of the surgical team. The Committee also requested a comprehensive listing of policy options available for the two professions. The following sections were presented, as a separate document, to members at the Nov. 10, 2009 meeting of the Regulatory Research Committee.

The Relationship of the Professions

Surgical assistants and surgical technologists fulfill two distinct roles within the surgical team. Surgical assistants directly assist the surgeon by performing delegated surgical tasks. Assistants at surgery of all professions work under the supervision of the surgeon. Surgical technologists, by contrast, support surgery from the scrub role. They manage surgical instrumentation and ensure proper aseptic technique from within the sterile field. The scrub role is a nursing role, and surgical technologists in the scrub role work under the supervision of the circulating nurse.

Despite these distinct roles, the surgical assistant and surgical technologist professions are related. In the contemporary surgical setting, surgical technologists often perform tasks

[85] Rates were retrieved using the online "quick quotes" service. For HPSO: https://www.hpso.com/quick-quote/page1.jsf. For Marsh Proliability: https://www.proliability.com/ahc/prol/?APPLICATION=PROL. Accessed 6/22/2009.

associated with the assistant-at-surgery role. The Association of Surgical Technologists (AST), the primary professional organization for surgical technologists, includes the role of *Second Assistant* within its self-developed scope of practice. This role includes tasks such as applying electrocautery to clamps, sponging and suctioning, holding retractors and cutting suture materials. Additionally, AST position statements indicate that Certified Surgical Technologists (CSTs) may operate endoscopes for surgeons and staple skin following surgery. These tasks are taught within the CAAHEP accredited program at Fortis College Richmond Campus, and within other CAAHEP accredited programs. Additionally, the Association of periOperative Nursing's (AORN) model legislation includes these tasks within the scrub role.

Credentialed surgical assistants perform advanced tasks that surgical technologists lack the training to perform. These tasks include subcutaneous closure, permanent cauterization and harvesting veins. Surgical technologists often pursue advanced training and education to perform these tasks and earn surgical assistant credentials. The National Board of Surgical Technology and Surgical Assisting (NBSTSA), the main credentialing board for surgical technologists, allows CSTs with two years of first assisting experience and 350 cases to sit for their Certified First Assistant (CFA) exam without any additional education. With additional experience, CFAs are eligible for the National Surgical Assistant Association's Certified Surgical Assistant (CSA) exam. Surgical technologists may attain the highest credentials available to unlicensed surgical assistants while only having formal education in a surgical technologist program. Additionally, they may perform as assistants at surgery when pursuing these credentials.

For these reasons, regulation of surgical assistants will affect the practice and career development of surgical technologists. In fact, any surgical assistant regulation would exist in part to regulate certified or uncertified surgical technologists as they move into the "second assistant" or assistant-at-surgery roles. Although these professions are distinct, it is the determination of staff that the Board of Health Professions should consider regulation of either profession as a "total package" that will effectively regulate both.

Roles and Tasks

At the request of members of the Regulatory Research Committee at its Sept. 30, 2009 meeting, staff has developed several policy options for consideration. When considering these options, the Board may wish to consider three distinct roles, and the tasks associated with each. These roles are the scrub, second assistant and first assistant roles (see Table 1). Under current practice, formal surgical technologist training includes both the scrub role and the "second assistant" role, while surgical assistants perform in the first assistant role. Rather than focus on professions or scopes of practice, it may be beneficial to focus on tasks related to each role. The Board, for instance, may wish to regulate only those surgical technologists performing "second assisting" tasks. For example, the Board may recommend leaving the scrub role unregulated, requiring certification as a surgical technologist to perform second assisting tasks, and requiring licensure as a surgical assistant to perform first assisting tasks.

Please note that these roles and associated tasks are adapted from scopes of practice and "ranges of function" provided by professional organizations. The Board may wish to pursue a

more thorough criticality study before committing to the illustrative role and task framework outlined in Table 1.

Scrub Role	"Second Assistant"	First Assistant
• Clean and prep room and equipment • Set up operating room and instrument trays • Assemble medications or solutions • Transport Patient • With circulator, verify chart, patient identity, procedure and site of surgery • Shave and drape patient • Maintain Sterile Field • Perform counts with circulator • Assist surgeon with gown and gloves • Pass instruments • Prepare sterile dressing	• Hold retractors, instruments or sponges • Sponge, suction or irrigate surgical site • Apply electrocautery to clamps • Cut suture material • Connect drains to suction apparatus • Apply dressing to closed wounds • Venipuncture (Inserting IV) • Manipulation of endoscopes within the patient • Skin stapling	• Position patient • Place retractors, instruments or sponges • Cauterization and clamping • Closure and subcutaneous closure • Harvest veins • Placing hemostatic agents • Participate in volume replacement and autotransfusion • Injection of local analgesics • Select and apply dressing to wounds • Assist with securing drainage systems

Table 1: Framework of roles within the Surgical Assistant and Surgical Technologist continuum, and illustrative tasks.

Nursing and Supervisory Arrangements

Professional regulation exists to protect patients by ensuring that persons who perform potentially dangerous tasks are qualified to perform them. Often, regulatory scopes of practice will include supervision by other licensed professionals. For instance, physician assistants work under the general supervision of licensed physicians. This allows practitioners with broader or more advanced qualifications to ensure quality practice.

Virginia regulations for physician assistants provide definitions for three levels of supervision (18VAC85-50-10(B)):

> *1. "Direct supervision" means the physician is in the room in which a procedure is being performed.*
>
> *2. "General supervision" means the supervising physician is easily available and can be physically present or accessible for consultation with the physician assistant within one hour.*
>
> *3. "Personal supervision" means the supervising physician is within the facility in which the physician's assistant is functioning.*

In the case of the operating suite, Department of Health licensing standards require a registered nurse to supervise the operating suite, CMS standards require a registered nurse to supervise LPNs and surgical technologists within the scrub role in hospitals, and accreditation

standards require a registered nurse to supervise perioperative care in ambulatory surgery centers. These regulations and standards place the scrub role within the purview of nursing.

The scrub role, however, provides an interesting case. While surgical technologists and LPNs perform in the scrub role under the supervision of a registered nurse, they perform many tasks at the direction of the surgeon or the surgeon's first assistant. This includes the second assisting tasks--holding clamps or instruments, suctioning, irrigating or sponging, applying electrocautery and positioning endoscopes. Even passing instruments is done at the direction of the surgeon. Neither the circulating nurse nor the surgical technologist may perform these tasks absent direction of the surgeon. The surgeon or the surgeon's first assistant directly supervises these tasks. The circulating nurse, meanwhile, remains outside of the sterile field and may leave the room in the course of his duties. It may be appropriate for the Board to consider whether these roles and tasks are exclusively nursing tasks, or whether they are roles and tasks that other professions practice independently of nursing.

Licensed Practical Nurses

Guidance from the Board of Nursing and the Board of Medicine allow licensed practical nurses to perform in the scrub role and as surgical first assistants. If the Board recommends regulation of any of these roles, it may wish to consider whether to include licensed practical nurses within the regulatory framework.

POLICY OPTIONS

No Additional Regulation

Despite fulfilling distinct and defined roles within the surgical team, surgical technologists and surgical assistants function within a highly regulated environment. Additionally a registered nurse and a surgeon supervise the assistant and the technologist from within the surgical suite (though not necessarily from within the operating room). Hospital administration and medical staff credential and privilege surgical personnel as appropriate and as required by licensing, CMS and facility accreditation standards.

Hospitals and surgeons are held accountable for staffing decisions through malpractice claims. Additionally, several organizations provide quality and outcome ratings for hospitals. Ratings allow consumers to choose facilities or practitioners based on outcome. Staffing decisions may influence ratings. These ratings, however, are limited in their scope, availability and ability to measure quality, especially for ambulatory surgery centers.

This option allows the hospital and the surgeon the most flexibility in choosing a scrub person or assistant-at-surgery. The Board could accompany this option with recommendations for additional guidance or regulations on the use and supervision of unlicensed or other non-physician personnel performing assistant-at-surgery duties. For instance, regulations could require that surgeons remain in the room with unlicensed personnel (or LPNs).

Most states do not regulate surgical technologists or surgical assistants.

Enforcing or Adjusting Existing Regulatory Tracks

Guidance from the Board of Nursing and the Board of Medicine allows licensed practical nurses (LPNs) to assist at surgery. Additionally, registered nurses and licensed physician assistants regularly fulfill this role. These professional tracks are available should the Board wish to regulate these roles without setting up new regulatory programs (i.e., the Board could recommend that only LPNs, RNs and/or PAs perform tasks associated with the scrub, second or first assisting roles outlined above.)

Currently unlicensed surgical assistants or surgical technologists may pursue the LPN track, which requires as little as a year of training. Needless to say, experienced and educated surgical assistants (and surgical technologists) might resent this option and LPN credentials may not be a useful indicator of surgical assistant (or surgical technologist) qualifications. Additionally, it may discourage entry-level candidates from pursuing directly applicable education or credentials before entering the field. Nevertheless, it would formally require some training in practice and ethics for these roles, which is something that does not currently exist.

Alternatively, the Board could recommend that only licensed registered nurses and licensed physician assistants perform tasks within the second and/or first assistant roles. This would relegate LPNs and unlicensed personnel to either the scrub role alone, or the scrub and second assisting roles.

Historically, the physician assistant profession included "Surgeon's Assistants." As the profession of physician assistant has developed, however, it has trended towards education and training in primary care. Concurrently, educational programs have trended away from associate level programs into masters level programs. Programs that emphasized surgical assisting and technical level training fell out of the regulatory system. [86]

Many unlicensed surgical assistants have pursued certificate, associate or online training to supplement proctored cases. Others received training and experience in the military. Virginia benefits from the surgical assistant program at Eastern Virginia Medical College. This program provides postgraduate certificate and master level training in surgical assisting. Its requirements exceed those of other accredited programs and match or exceed those in many physician's assistant programs. However, the program specifically trains assistants-at-surgery and its graduates are not eligible for PA credentials.

Strengthen Informed Consent Regulations

Most informed consent documents include blanket approvals for support personnel. Regulations could require that informed consent documents include scheduled support personnel, or include lists of potential professional credentials (e.g., licensed nurses, certified surgical technologists or certified cardiovascular technologists) for support personnel. This would allow patients more information and control over whom provides their care. Additionally, these

[86] Physician Assistants emphasize practical skills, and associate's level programs still exist. However, they have become progressively less available. Additionally, 25 percent of physician assistants specialize in surgery.

provisions could encourage the use of credentialed and qualified staff. Providing consumers with additional information is a "consumer-based" alternative to more restrictive regulation.

Nonetheless, patients may not have the knowledge or expertise to judge credentials or qualifications and may remain dependent on surgeons or hospitals to select support staff. Unnecessary or excessive information on surgical personnel may cause patients undue confusion and stress and may diminish trust in surgeons or hospitals. Thus, information may cause drawbacks without increasing the ability of patients to pursue quality care. This type of market failure is one of the reasons states regulate physicians and other health professionals.

The Board of Medicine, in Guidance Document 85-15 adopted January 22, 2004, provides ethical guidance on this matter. The following section is germane to assistant-at-surgery roles:

> *. . .Under the usual and customary arrangement with patients, and with reference to the usual form of consent to surgery or an invasive procedure, it is the attending physician to whom the patient grants consent and who is obligated to perform the surgery or invasive procedure. With the consent of the patient or another legally authorized person available to give consent, it is ethical for the attending physician to delegate the performance of some or all aspects of the surgery or invasive procedure to the fellow, resident, intern or assistant provided this is done under the physician's supervision as described in the supervising policy of the Accreditation Council for Graduate Medical Education (ACGME). If some or all of the surgery or procedure is to be delegated to another health care provider or if care of the patient is to be turned over to another attending physician, the patient or the legally authorized person available to give consent is entitled to be so informed and to give documented consent. . .*

Strengthening informed consent would essentially make this guidance more explicit regarding the scrub and assistant at surgery roles, or elevate it from guidance to regulation.

This option may decrease facility or surgeon flexibility in choosing or changing staff, or in performing unexpected procedures. However, it does allow employers flexibility in choosing the specific credentials required for each procedure. In addition to its direct role in informing patients, shedding additional light on the scrub and assistant-at-surgery roles may encourage facilities to use appropriately credentialed staff.

Voluntary Certification

Only a few states have pursued regulation of either surgical technologists or surgical assistants. Most of these states have created regulations that equate to voluntary certification. For surgical technologists, this often involves facility-licensing requirements that make an exception for health care facilities with difficulty finding certified staff. For surgical assistants, this often involves licensure or registration with an exception for health care facilities or for tasks delegated by a physician.

Since patients are often unaware of the scrub or assistant at surgery roles, Voluntary Certification (or exception-laden variants) may not provide much information to consumers. Employers should already have the capability of judging qualifications and do not need this information from state agencies. However, Voluntary Certification combined with strengthened informed consent documentation may assist consumers.

Mandated Certification

Several states require health care facilities to hire or contract surgical technologists that have certain qualifications, i.e., NBSTSA certification, military training or graduation from an accredited program. Most of these states include exceptions for facilities that cannot find certified technologists, rendering the programs essentially voluntary. Rather than these broadly worded exemptions, facility-licensing requirements may include a grace period for achieving certification for new employees. This would provide facilities with flexibility in hiring but also ensure certification of long-term employees. Alternatively, facility-licensing standards may require certification only for those technologists performing second assisting tasks, allowing facilities even more flexibility in hiring and staffing.

Facility licensing may provide a flexible means of achieving certification of persons working in scrub and/or assistant-at-surgery roles without restricting the roles to certain professions. Qualifications could include certifications or accredited education for cardiovascular technologists or orthopedic technologists for corresponding surgeries or facilities.

To provide maximum flexibility, standards could avoid listing specific qualifications, and only require an accredited credential, graduation from an accredited program or military training. This latter option would require facilities to ensure persons performing in regulated roles have some appropriate education or credentials. However, facilities or medical staff could choose the most appropriate credentials for specific procedures or facilities (e.g., certified ophthalmic assistants for ophthalmic surgery).

Facility licensing standards in Virginia fall under the purview of the Board of Health or the General Assembly. As an alternative to facility standards, the Board could achieve mandatory certification by adjusting regulations for delegation by licensed physicians and nurses. This would place the onus for implementation on practitioners and professional Boards rather than facilities and the Board of Health.

Role associated tasks	**Option 1**	**Option 2**	**Option 3**	**Option 4**	**Option 5**
Scrub Tasks	No Regulation	No Regulation	No Regulation	ST Certification	ST Certification
Second Assisting Tasks	No Regulation	SA Certification	ST Certification	SA Certification	ST Certification
First Assisting Tasks	SA Certification	SA Certification	SA Certification	SA Certification	SA Certification

Registration

Registration is an option for persons functioning in any or all of the three roles. Since all OR personnel have access to medications, registration for all surgical technologists and surgical assistants may be appropriate. Registration for only those performing second or first assistant tasks may prevent the incompetent or the malfeasant from performing tasks with the most potential for harm. Although registration generally does not require specific qualifications, it would identify individual practitioners and disciplinary data useful to the Board and employers.

Licensure for Surgical Assistants

No organization or citizen has recommended licensure for surgical technologists. Rather, the national and state organizations representing surgical technicians prefer mandatory certification, whether through facility licensure standards or through registration. Likewise, the Virginia Nursing Association prefers mandatory certification, with possible exceptions for hospitals. The Virginia Chapter of the Association of periOperative Nurses prefers voluntary certification. Likewise, no state requires licensure, though two states register surgical technologists. Therefore, this section will review licensure for surgical assistants in conjunction with other regulatory arrangements for surgical technologists.

In each case, surgical technologists that wish to move into licensed roles would have to meet the requirements of the surgical assistant license (e.g., enroll in a surgical assistant training program). These technologists may enroll in accredited educational programs based on proctored cases supplemented with online training and skills seminars. This formalized on-the-job training, with external testing and accreditation, provides a convenient and affordable bridge for surgical technologists.

<u>With no additional regulation of surgical technologists</u>

A) Licensure required for those performing first assistant tasks only: This option would leave surgical technologists and the scrub role, as practiced now, essentially unregulated. Surgical assistants that perform the most advanced tasks would need a license.

B) Licensure required for those performing either first or second assisting tasks: This option would limit surgical technologists exclusively to the scrub role. Surgical technologists wishing to perform second assisting tasks would have to pursue full surgical assistant credentials and training.

Role associated tasks	**Option 1**	**Option 2**
Scrub Tasks	No Regulation	No Regulation
Second Assisting Tasks	No Regulation	SA License
First Assisting Tasks	SA License	SA License

With mandated certification for surgical technologists

A) Licensure required for those performing first assistant tasks only: With this option, facility-licensing standards may require certification for all surgical technologists, or only for those that perform second assisting tasks. As noted in the discussion o f facility licensing standards previously, the later option provides facilities with increased staffing flexibility.

B) Licensure required for those performing either first or second assisting tasks: This option would limit surgical technologists to the scrub role. Staffing for the scrub role would be limited only to certified technologists (or those in a grace period) and nurses. Surgical technologists wishing to perform second assisting tasks would have to pursue full surgical assistant credentials and training.

Role associated tasks	Option 1	Option 2	Option 3
Scrub Tasks	No Regulation	ST Certification	ST Certification
Second Assisting Tasks	ST Certification	ST Certification	SA License
First Assisting Tasks	SA License	SA License	SA License

With registration of surgical technologists

A) Licensure required for those performing first assistant tasks only: With this option, registration may be required for all surgical technologists, or only those performing second assisting tasks. Alternatively, the Board may recommend licensure for first assistant tasks, certification for second assisting tasks, and registration for all surgical technologists.

B) Licensure required for those performing either first or second assisting tasks: This option would limit surgical technologists to the scrub role. All surgical technologists would register with the department. Surgical technologists wishing to perform second assisting tasks would have to pursue full surgical assistant credentials and training.

Role associated tasks	Option 1	Option 2	Option 3	Option 4
Scrub Tasks	No Regulation	Registration	Registration	Registration
Second Assisting Tasks	Registration	Registration	ST Certification	SA License
First Assisting Tasks	SA License	SA License	SA license	SA License

Tiered Licensure

Rather than providing one license for surgical assistants, the Board may wish to recommend two separate licenses: one for surgical assistants performing first assistant tasks and one for surgical technologists limited to second assisting tasks. The scrub role, then, may be included in surgical technologist licensure, may remain unregulated, or may be regulated through other methods.

Role associated tasks	Option 1	Option 2	Option 3	Option 4
Scrub Tasks	No Regulation	ST Certification	Registration	ST License
Second Assisting Tasks	ST License	ST License	ST License	ST License
First Assisting Tasks	SA License	SA License	SA License	SA License

FINAL RECOMMENDATIONS

1. The Board of Medicine should establish a license for surgical assistants based on proper training and education.

The unregulated practice of surgical assistants poses a high risk of harm to patients which is directly attributable to the nature of the practice. Surgical Assistants require specialized, post-secondary training from independently validated programs and assurances of clinical competency from independent credentialing bodies. Although surgical assistants practice with surgeons, the nature of their work requires independent judgment, knowledge and competence. Therefore licensure is the least restrictive means of protecting the public and ensuring the minimum qualifications of surgical assistants.

2. The Board of Medicine should ensure that surgical technologists are competent to perform in the scrub role, and to perform associated advanced tasks.

The unregulated practice of surgical technologists poses a moderate potential for harm to patients. This harm is attributable to the nature of certain advanced tasks, and the inherent hazards and patient vulnerability associated with surgery and infection. Surgical technologists require specialized skills, knowledge and competence acquired through independently validated structured education or training programs. While much of the work performed by surgical technologists is supervised by the circulating nurse, the nature of the risks and tasks require the independent competence and judgment of surgical technologists.

3. The Board of Medicine should require mandatory certification for surgical technologists.

As patients are not generally able to verify the credentials of those performing in the scrub role, voluntary certification is insufficient to protect the public. Therefore, the Board of Medicine should create a mandatory certification program for surgical technologists based on the Certified Surgical Technologist credential from the National Board of Surgical Technology and Surgical Assisting. A mandatory certification program relies on employers and practitioners to ensure that practitioners have the credentials required by the Board of Medicine. It does not create a state-run credentialing program. This form of regulation may be less restrictive and less burdensome than licensure while ensuring that all practitioners have the minimum qualifications needed to perform in the scrub role.

4. Appropriately trained military personnel should be able to practice.

The United States Uniformed Services provide high quality training and experience to surgical technologists and surgical assistant serving at home and abroad. Due to the unique purpose of the Uniformed Services, training programs often forgo civilian accreditation and the expense and distraction they entail. Regulations preventing these servicemen and women from practicing in Virginia would be a disservice to these practitioners and to the residents of Virginia. The Board of Medicine should identify training programs and military occupational specialties that impart

the necessary skills, knowledge and competence and allow competent military-trained surgical technologists and surgical assistants to practice in Virginia.

5. The Board of Medicine should ensure an adequate supply of qualified surgical technologists.

Mandatory certification relies on standards set by private credentialing boards. The availability of qualified surgical technologists under mandatory certification is highly sensitive to eligibility and other standards set by the National Board of Surgical Technologists and Surgical Assistants. The Board of Medicine should have recourse to approving alternate hospital-based training programs should the supply of surgical technologists be unduly restricted by private credentialing agencies. (See "Board of Medicine Comment" on page vi.)

6. The Physician Assistant Advisory Board should be expanded and should advise the Board of Medicine on matters pertaining to surgical assistants and surgical technologists.

Because many Physician Assistants practice as assistants-at-surgery, the Physician Assistant Advisory Board should advise the Board of Medicine on matters pertaining to surgical assistants and surgical technologists. The Physician Assistant Advisory Board should be expanded from five to seven members. One of the new members should be a licensed surgical assistant and the other should be a licensed surgical assistant who is also a Certified Surgical Technologist. (See "Board of Medicine Comment" on page vi.)

7. The Regulatory Research Committee has provided proposed statutory language.

The Regulatory Research Committee requested a public hearing to receive comment on four legislative proposals. The proposals varied on two issues: (1) whether all persons performing in the surgical scrub role be certified, or only those performing advance second assisting tasks do so, and (2) whether the regulation of surgical assistants and surgical technologists should have an independent advisory board under the Board of Medicine or whether they should be included on the current Physician Assistant Advisory Board. Upon consideration of the research findings and public comment, the Committee recommended "Version 4." (See Appendix J, page 154).

NOTE: *Subsequent to the full Board of Health Professions meeting on May 4, 2010 in which the above recommendations were adopted, the Board of Medicine offered the following comments concerning Recommendation #5 and #6 on June 17, 2010.*

> *Recommendation #5 states, 'The Board of Medicine should ensure an adequate supply of qualified surgical technologists.' Although a laudable goal, the Board of Medicine does not have the statutory authority to regulate or ensure 'an adequate supply' of any of the fourteen professions it currently oversees. The Board has the authority to regulate individual licensees. Implicit in the language of the Executive Summary for this item is the anticipation that the Board of Medicine would approve alternative pathways to traditional national credentialing for surgical technologists, perhaps related to the issue of adequate supply.It is unclear at this time how this approach would differ from on-the-job training, and how such an approach would provide additional safeguards for the public.*

Recommendation #6 states, 'The Physician Advsiory Board should be expanded and should advise the Board of Medicine on matters pertaining to surgical assistants and surgical technologists.' Surgical assistants and surgical technologists are not physician assistants. There is little evidence to think that the vast majority of physician assistants have any special knowledge of these two emerging professions. It is more reasonable to presume that they are better known to those they work with daily, e.g., nursing staff and surgeons. To position these two professions with the Advisory Board of Physicians Assistants would not appear to be the best regulatory fit. One would also wonder if the physician assistant community would be welcoming, and if the surgical assistants and technologists wish to be with the physician assistants. The chief purpose of an Advisory Board is to give a profession a voice in its own regulation through its recommendations ot the full Board of Medicine. Adding another profession to an advisory board does not presently guarantee the new profession will have a seat on the advisory. All seven existing advisory boards of the Virginia Board of Medicine are uniform in structure and function. Expanding the Advisory Board on Physician Assistants would alter the uniform structure, which has worked well for the professions and the Board of Medicine since it was instituted in 2002. The Board would suggest that these issues be explored prior to sending a final recommendation forward.

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Association of Surgical Assistants: surgicalassistant.org

Association of Surgical Technologists: www.ast.org

Cardiovascular Credentialing International: www.cci-online.org

Centers on Medicare and Medicaid Services: www.cms.hhs.gov

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Competency & Credentialing Institute (CNOR and CRNFA credentials): www.cc-institute.org

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APPENDICES

Appendix A: Overview of Regulations

Outside of minor surgeries performed in physician and dental offices, surgery is performed in two types of facilities: dedicated surgical suites in hospitals or ambulatory surgery centers (ASCs). The Virginia Department of Health (VDH), Centers for Medicaire and Medicaid Services (CMS) and appropriate facility accreditation bodies promulgate regulations and standards covering surgical practice in each type of facility. Relevant regulations and standards pertain to two subject areas: 1) the management of the operating suite and the non-physician surgical staff, 2) the credentialing of surgeons and surgical staff. Additionally, guidance documents from the Board of Medicine and Board of Nursing guide the practice of surgeons and nurses in the operating suite.

This Appendix is organized by type of facility, then subject area, then regulatory/accredition body. The goal is to provide a listing of all regulations affecting the subject area at each type of facility in one convenient place. Each subject area section begins with a summary of regulations and standards, and how they are applied. It is followed by relevant sections from the following sources:

American Association for Accreditation of Ambulatory Surgery Facilities, Inc. 2009. *Procedural Standards and Checklist for Accreditation of Ambulatory Facilities*. AAAASF, Inc. http://www.aaaasf.org/pub/AAAASF%20Procedural%20Standards%20Version%201%20FINAL.pdf

Centers for Medicare & Medicaid Services. 2009. "Appendix A – Survey Protocol, Regulations and Interpretive Guidelines for Hospitals." *State Operations Manual.* Available at: http://www.cms.hhs.gov/Manuals/IOM/list.asp

Code of Virginia. Available at http://leg1.state.va.us/000/src.htm

Joint Commission on Accreditation of Healthcare Organizations. 2007. *Hospital Accreditation Standards*. Joint Commission.

Joint Commission on Accreditation of Healthcare Organizations. 2007. *Comprehensive Accreditation Manual for Ambulatory Care.* Joint Commission.

Joint Commission on Accreditation of Healthcare Organizations. "The Joint Commission Requirements" Joint Commission Resources. (Provides updates to manuals). http://www.jcrinc.com/Joint-Commission-Requirements/. July, 2009.

Virginia Administrative Code. Available at http://leg1.state.va.us/000/reg/TOC.HTM

Only relevant line items from each section are included, however each line item is quoted in full (with the exception of interpretive guidelines for CMS CoPs). The summary includes

information from the quoted line items and information from items that may not be included, such as interpretive guidelines.

HOSPITALS

The Virginia Department of Health licenses all hospitals within the state of Virginia. Additionally, VDH has certified all hospitals for reimbursement by CMS, therefore all hospitals must comply with CMS Conditions of Participation. CMS requires that all certified hospitals maintain accreditation with either the Joint Commission or the Healthcare Facilities Accreditation Program of the American Osteopathic Association.

OR Management and Non-Physician Surgical Staff

State law requires that hospitals organize surgical services into a separate department under the medical supervision of a licensed physician. A registered nurse, however, must supervise the operating suite, and regulations from the Board of Nursing require a registered nurse to perform *all* circulating duties.

CMS Conditions of Participation allow licensed practical nurses and surgical technologists to serve in the scrub role; however, they specifically require supervision by a registered nurse. The interpretive guidelines for CMS CoP §482.51 (a)(4) require hospitals to specify surgical privileges and supervision requirements for each person performing "surgical tasks" and specifically list surgical assistants, surgical physician assistants and RN first assistants among those requiring privileges. The interpretive guidelines give added emphasis to non-physician surgical assistants, requiring the hospital to "establish critieria, qualifications and a credentialing process."

The Joint Commission requires hospitals to maintain an appropriate amount and mix of supporting staff and skills to meet the needs of patients and provide services. A nurse executive, with a specified, executive-level role in hospital wide decision-making, runs nursing services. The nurse executive establishes policies and procedures for nursing services, including the staffing plan and outcome measurements.

Although hospitals have a wide degree of flexibility in choosing which departments and indicators to track, they must maintain a data on staffing effectiveness within the hospital. Hospitals must have competence assessment protocols and perform them at least every three years. Though the Joint Commission does not require that all staff have relevant certifications, where hospital bylaws require it, certifications must be verified along with licensure, registration or other credentials. Additionally, contracted services or personnel must meet applicable Joint Commission standards. The hospital retains overall responsibility for services provided.

Virginia Department of Health Licensing Requirements

12VAC5-410-420. Surgical service.

A. The surgical department/service shall have a defined organization and shall be governed by written policies and procedures.

B. The surgical department/service shall be under the medical supervision of a physician who meets the requirements of the medical staff bylaws.

C. The operating suite shall be:

1. Under the supervision of a registered professional nurse.

2. Designed to include operating and recovery rooms, proper scrubbing, sterilizing and dressing room facilities, storage for anesthetic agents and shall be equipped as required by the scope and complexity of the services.

3. Provided with prominently posted safety policies and procedures.

Centers for Medicaire and Medicaid Services Conditions of Participation

§ 482.51 Condition of participation: Surgical services.
If the hospital provides surgical services, the services must be well organized and provided in accordance with acceptable standards of practice. If outpatient surgical services are offered the services must be consistent in quality with inpatient care in accordance with the complexity of services offered.

(a) Standard: Organization and staffing.
The organization of the surgical services must be appropriate to the scope of the services offered.

(1) The operating rooms must be supervised by an experienced registered nurse or a doctor of medicine or osteopathy.
(2) Licensed practical nurses (LPNs) and surgical technologists (operating room technicians) may serve as ‘‘scrub nurses’’ under the supervision of a registered nurse.
(3) Qualified registered nurses may perform circulating duties in the operating room. In accordance with applicable State laws and approved medical staff policies and procedures, LPNs and surgical technologists may assist in circulatory duties under the surpervision of a qualified registered nurse who is immediately available to respond to emergencies.
(4) Surgical privileges must be delineated for all practitioners performing surgery in accordance with the competencies of each practitioner. The surgical service must maintain a roster of practitioners specifying the surgical privileges of each practitioner.

Interpretive Guidelines: … The hospital must specify the surgical privileges for each practitioner that performs surgical tasks. This would include practitioners such as MD/DO, dentists, oral surgeons, podiatrists, **RN first assistants, nurse practitioners, surgical physician**

assistants, surgical technicians, etc. When a practitioner may perform certain surgical procedures under supervision, the specific tasks/procedures and the degree of supervision (to include whether or not the supervising practitioner is physically present in the same OR, in line of sight of the practitioner being supervised) be delineated in that practitioner's surgical privileges and included on the surgical roster.

If the hospital utilizes **RN First Assistants, surgical PA, or other non-MD/DO surgical assistants**, the hospital must establish criteria, qualifications and a credentialing process to grant specific privileges to individual practitioners based on each individual practitioner's compliance with the privileging/credentialing criteria and in accordance with Federal and State laws and regulations. This would include surgical services tasks conducted by these practitioners while under the supervision of an MD/DO.

When practitioners whose scope of practice for conducting surgical procedures requires the direct supervision of an MD/DO surgeon, the term "supervision" would mean the supervising MD/DO surgeon is present in the same room, working with the same patient. . .

Accreditation Standards

Joint Commission

Standard PC.13.20
Operative or other procedures and/or the administration of moderate or deep sedation or anesthesia are planned.

Rationale for PC13.20
Because the response to procedures is not always predictable and sedation-to-anesthesia is a continuum, it is not always possible to predict how an individual patient will respond. Therefore, qualified individuals are trained in professional standards and techniques to manage patients in the case of a potentially harmful event.

Elements of Performance for PC.13.20
1. Sufficient numbers of qualified staff (in addition to the individual performing the procedure) are present to evaluate the patient, help with the procedure, provide the sedation and/or anesthesia, monitor and recover the patient.
3. A registered nurse supervises perioperative nursing care.

Standard HR.1.10
The hospital provides an adequate number and mix of staff consistent with the hospital's staffing plan.

Rationale for HR.1.10
An organization must provide appropriate types and numbers of qualified staff necessary to furnish care, treatment, and services offered by the organization. This can be done either through traditional employer-employee arrangements or through contractual arrangements. *See* the "Nursing" chapter for additional information regarding the provision of nursing care services.

Elements of Performance for HR 1.10
1. The hospital has an adequate number and mix of staff to meet the care, treatment, and service needs of the patients.

Standard HR.1.30
The hospital uses data from clinical/service screening indicators and human resource screening indicators to assess and continuously improve staffing effectiveness.

Rationale for HR1.30
Significant changes in nurse staffing level and the skill mix of nursing personnel in health care organizations raise questions about potential adverse effects on the quality and safety of patient care related to staffing effectiveness. The Joint Commission has developed a comprehensive approach to the management of staffing effectiveness that looks at staffing as more than just "numbers." The approach relies on data driven quality improvement principles and is objective and methodologically sound. Since the causes and consequences of diminished staffing effectiveness differ from organization to organization, the approach allows flexibility to reflect characteristics unique to individual health care settings.

Elements of Performance for HR.1.30
1. The hospital identifies no fewer than two inpatient units/divisions for which data on staffing effectiveness are to be collected.
Note: If the hospital has only one unit/division, the hospital may collect data for that single unit/division.
2. The hospital identifies the units/divisions (no less than two) based on assessment of relevant information or risk, including
- Knowledge about staffing issues likely to impact patient safety or quality of care
- Patient population served
- Type of setting
- Review of existing data (e.g., incident logs, sentinel event data, performance improvement reports)
- Input from clinical staff who provide patient care

Note: If the hospital has only one unit/division, the hospital need not apply these criteria.
3. A minimum set of four indicators are selected for each of the identified inpatient units/divisions.
Note: Hospitals are free to choose the same set, the same set in part or completely different measure sets for each identified unit/division.
4. The hospital determines the indicators for each unit/division based on assessment of relevant information or risk, including the following:
- Knowledge about staffing issues likely to impact patient safety or quality of care
- Patient population served
- Type of setting
- Review of existing data (e.g., incident logs, sentinel event data, performance improvement reports)
- Input from clinical staff who provide patient care

5. Of the four indicators required for each unit/division, two must be clinical/service indicators and two must be human resource indicators.
6. One of the human resource indicators and one of the clinical/service indicators must be selected from the Joint Commisssion's list of approved indicators.*
Note: Additional indicators may be selected from among the hospital's own indicators.
*The Joint Commissions's list of approved screening indicators consists of National Quality Formum (NQF) nursing sensitive patient care measures and Joint Commission consensus measures.
7. The human resource indicators for all identified units/divisions include all nursing staff (including registered nurses, licensed practical nurses, and nursing assistants or aides).
Note: Decisions regarding stratification of data by discipline are left to the hospital.
8. When the hospital chooses to include other practitioner groups (in addition to nursing staff in the human resource indicators for the identified units/divisions, this decision is based on the impact the absence of such care/service providers would be expected to have on patient outcomes.
9. The hospital does the following:

- Defines the numerator and denominator for indicators chosen
- Standardizes the data element definitions for each indicator, including those indicators applied in more than one setting.
- Determines acceptable ranges/parameters/trigger levels for the indicators*

*Acceptable ranges/parameters/trigger levels may be reflective of past performance, expert opinion, expert literature, or a combination of these. The ranges/parameters/ trigger levels should be reasonable goals that are possible to attain. When desired ranges/parameters/trigger levels are not met, an investigation in the cause(s) is needed.
10. The hospital does the following for each unit/division selected:

- Collects data for all indicators
- Analyzes data for all indicators
- Review all indicator data together when analyzing variation from desired performance for additional information that may assist in identifying any potential causes of variation
- Investigates to identify any staffing effectiveness issues when indicator data varies from expected.
- Takes appropriate action in response to analyzed data

11. The hospital reports at least annually to the leaders on the results of data analyses related to staffing effectiveness (see PI.1.10 and PI.2.20) and any actions taken to resolve identified problems.

List of Joint Commission Approved Subjects for Screening Indicators for Hospitals
6. Postoperative infections (Clinical/Service)
11. Death among surgical inpatients with treatable serious complications (failure to rescue) (Clincal/Service)(National Quality Forum measure)
12. Pressure ulcer prevalence (Clinical/Service)(National Quality Forum Measure) (*DHP Staff Note: Relates to positioning of patients for surgery)*
30. Agency staff use (Human Resource)
31. Skill mix (registered nurse, licensed vocational nurse/licensed practical nurse, unlicensed assistive personnel, and contract) (Human Resource)(National Quality Forum Measure)

Standard HR.3.10
Staff competence to perform job responsibilities is assessed, demonstrated, and maintained.

Rationale for HR.3.10
Competence assessment is systematic and allows for a measureable assessment of the person's ability to perform required activities. Information used as part of competence assessment may include data from performance evaluations, performance improvement, and aggregate data on competence, as well as the assessment of learning needs.

Elements of Performance for HR.3.10
1. The competence assessment process for staff is based on the population(s) served.
2. The competence assessment process for staff is based ont eh defind competencies to be required.
3. The competence assessment process for staff is based on the defined competencies to be assessed during orientation.
4. The competence assessment process for staff is based on the defined competencies thatneed to be assessed and reassessed on an ongoing basis, based on techniques, procedures, technology, equipment, or skills needed to provide care, treatment, and services.
5. The competence assessment process for staff is based on a defined time frame for how often competence assessments are performed for each person, minimally, once in the three-year accreditation cycle and in accordance with law and regulation.
6. The competence assessment process for staff is based on the assessment methods (appropriate to determine the skill being assessed).
7. The competence assessment process for staff is based on the use of qualified individuals to assess competence.
Note: When there is no qualified individual in the organization that performs comparable care, treatment, and services, the organization may
- Utilize qualified staff from other organizations to assist with the assessment of competence or
- Consult the appropriate professional organization guidelines with respect to expectations for competence and use these guidelines to assess competence.

8. The hospital assesses and documents staff's ability to carry out assigned responsibilities safely, competently, and in a timely manner upon completion of orientation.
9. The hospital assesses staff according to its competence assessment process.
10. When improvement activities lead to a determination that a person with performance problems is unable or unwilling to improve, the hospital takes appropriate action (which may include modifying the person's job assignment).

Standard NR.1.10
A nurse executive directs the hospital's nursing services

Elements of Performance for NR.1.10
1. An identified nurse leader at the executive level coordinates the following functions:
    - Development of hospitalwide patient care programs, policies, and procedures that describe how patients' nursing care needs, or the needs of patient populations receiving nursing care, treatment, and services, are assessed, evaluated, and met

- Development and implementation of the hospital's plans for providing nursing care, treatment, and services
- Participation with governing body, management, and organized medical staff in the hospital's decision-making structures and processes
- Implementation of an effective, ongoing program to measure, assess, and improve the quality of nursing care, treatment, and services delivered to patients

4. Decentralized hospital structures with geographically distant sites have an established process for selecting, electing, or appointing one appropriately prepared nurse as its nurse executive.
5. The nurse executive functions at the executive level to provide effective and coordinated leadership to deliver nursing care, treatment, and services.

Standard NR.2.10
The nurse executive is a licensed professional registered nurse qualified by advanced education and management experience.

Standard NR.3.10
The nurse executive establishes nursing policies and procedures, nursing standards, and nurse staffing plan(s).

Elements of Performance for NR.3.10
1. The nurse executive, registered nurses, and other designated nursing staff members write nursing policies and procedures; nursing standards of patient care, treatment, and services; standards of nursing practice; a nurse staffing plan(s); and standards to measure, assess, and improve patient outcomes.
4. The nurse executive or a designee(s) exercises final authority over those associated with providing nursing care, treatment, and services.

*Healthcare Facilities Accreditation Program--**Not yet available***

Credentialing of Surgeons and Surgical Staff

The Code of Virginia recognizes limited rights of qualified licensed physicians to clinical privileges and staff membership in hospitals of 25 beds or more. Section 32.1-134.1 limits denial or revocation of privileges to certain job related causes, and allows physicians who lose or are refused privileges to remedy in circuit courts. Similar protections are granted to podiatrists and certified nurse midwives.

Licensing regulations require each hospital to maintain a medical staff, independent of the administrative governing body but responsible to it, that is responsible for medical care. The medical staff is responsible for extending clinical privileges, however, CMS CoP §482.12 requires that the administrative governing body ensure that privileges are extended based on actual competence, and not "solely upon certification, fellowship, or membership in a specialty body or society."

The Joint Commission requires that all licensed independent practitioners practicing in an accredited hospital be privileged by the medical staff of a Joint Commission accredited facility.

Otherwise, contracted practitioners must receive privileges from the hospital's medical staff. For non-physician staff, including physician assistants and advanced practice nurses, the hospital itself must ensure the competence and credentials through proper assessment or credentialing and privileging.

Virginia Department of Health Licensing Requirements

Code of Virginia

§ 32.1-134.1. When denial, etc., to duly licensed physician of staff membership or professional privileges improper.

It shall be an improper practice for the governing body of a hospital which has twenty-five beds or more and which is required by state law to be licensed to refuse or fail to act within sixty days of a completed application for staff membership or professional privileges or deny or withhold from a duly licensed physician staff membership or professional privileges in such hospital, or to exclude or expel a physician from staff membership in such hospital or curtail, terminate or diminish in any way a physician's professional privileges in such hospital, without stating in writing the reason or reasons therefor, a copy of which shall be provided to the physician. If the reason or reasons stated are unrelated to standards of patient care, patient welfare, violation of the rules and regulations of the institution or staff, the objectives or efficient operations of the institution, or the character or competency of the applicant, or misconduct in any hospital, it shall be deemed an improper practice.

Any physician licensed in this Commonwealth to practice medicine who is aggrieved by any violation of this section shall have the right to seek an injunction from the circuit court of the city or county in which the hospital alleged to have violated this section is located prohibiting any such further violation. The provisions of this section shall not be deemed to impair or affect any other right or remedy; provided that a violation of this section shall not constitute a violation of the provisions of this article for the purposes of § 32.1-135.

§ 32.1-134.2. Clinical privileges for certain practitioners.

The grant or denial of clinical privileges to licensed podiatrists and certified nurse midwives licensed as nurse practitioners pursuant to § 54.1-2957 by any hospital licensed in this Commonwealth, and the determination by the hospital of the scope of such privileges, shall be based upon such practitioner's professional license, experience, competence, ability, and judgment, and the reasonable objectives and regulations of the hospital in which such privileges are sought.

(Code 1950, § 32-301.1; 1979, c. 40; 1992, c. 452.)

§ 32.1-134.3. Response to applications for clinical privileges.

Whenever a podiatrist or certified nurse midwife licensed as a nurse practitioner makes application to any hospital for clinical privileges, the hospital shall either approve or disapprove

the application within 120 calendar days after it has received all necessary information to make a determination as provided in § 32.1-134.2 from the practitioner.

Virginia Administrative Code

12VAC5-410-180. Governing body.

A. Each hospital shall have an organized governing body or other legal entity responsible for the management and control of the operation.

The governing body or other legal entity may be an individual, group, corporation or governmental agency.

D. The governing body shall adopt and maintain written bylaws, rules and regulations in accordance with legal requirements. A copy of said bylaws, rules and regulations including amendments or revisions thereto, shall be made available to the OLC on request.

E. The bylaws, rules and regulations shall include:

7. Provision for the selection and appointment of medical staff and the granting of clinical privileges including the provision for current license to practice in Virginia.

12VAC5-410-210. Medical staff.

A. Each hospital shall have an organized medical staff responsible to the governing body of the hospital for its own organized governance and all medical care provided to patients.

B. The medical staff shall be responsible to the hospital governing board and maintain appropriate standards of professional performance through staff appointment criteria, delineation of staff privileges, continuing peer review and other appropriate mechanisms.

C. The medical staff, subject to approval by the governing body, shall develop bylaws incorporating details of the medical staff organization and governance, giving effect to its general powers, duties, and responsibilities including:

1. Methods of selection, election, or appointment of all officers and other executive committee members and officers;

2. Provisions for the selection and appointment of officers of departments or services specifying required qualifications;

3. The type, purpose, composition and organization of standing committees;

4. Frequency and requirements for attendance at staff and departmental meetings;

5. An appeal mechanism for denial, revocation, or limitation of staff appointments, reappointments and privileges;

6. Delineation of clinical privileges in accordance with the requirements of § 32.1-134.2 of the Code of Virginia;

7. Requirements regarding medical records;

8. A mechanism for utilization and medical care review; and

9. Such other provisions as shall be required by hospital or governmental rules and regulations.

D. A copy of approved medical staff bylaws and regulations and revisions thereto shall be made available to the OLC on request.

Statutory Authority

§§ 32.1-12 and 32.1-127 of the Code of Virginia.

12VAC5-410-420. Surgical service.

D. A roster of current surgical privileges of every surgical staff member shall be maintained on file in the operating suite.

Centers for Medicaire and Medicaid Services Conditions of Participation

§ 482.12 Condition of participation: Governing body.
The hospital must have an effective governing body legally responsible for the conduct of the hospital as an institution. If a hospital does not have an organized governing body, the persons legally responsible for the conduct of the hospital must carry out the functions specified in this part that pertain to the governing body.

(a) Standard: Medical staff. The governing body must:

(1) Determine, in accordance with State law, which categories of practitioners are eligible candidates for appointment to the medical staff;

(2) Appoint members of the medical staff after considering the recommendations of the existing members of the medical staff;

(3) Assure that the medical staff has bylaws;

(4) Approve medical staff bylaws and other medical staff rules and regulations;

(5) Ensure that the medical staff is accountable to the governing body for the quality of care provided to patients;

(6) Ensure the criteria for selection are individual character, competence, training, experience, and judgment; and

(7) Ensure that under no circumstances is the accordance of staff membership or professional privileges in the hospital dependent solely upon certification, fellowship, or membership in a specialty body or society.

§ 482.22 Condition of participation: Medical staff.
The hospital must have an organized medical staff that operates under bylaws approved by the governing body and is responsible for the quality of medical care provided to patients by the hospital.

(a) Standard: Composition of the medical staff. The medical staff must be composed of doctors of medicine or osteopathy and, in accordance with State law, may also be composed of other practitioners appointed by the governing body.

(1) The medical staff must periodically conduct appraisals of its members.

(2) The medical staff must examine credentials of candidates for medical staff membership and make recommendations to the governing body on the appointment of the candidates.

(b) Standard: Medical staff organization and accountability. The medical staff must be well organized and accountable to the governing body for the quality of the medical care provided to patients.

(1) The medical staff must be organized in a manner approved by the governing body.

(2) If the medical staff has an executive committee, a majority of the members of the committee must be doctors of medicine or osteopathy.

(3) The responsibility for organization and conduct of the medical staff must be assigned only to an individual doctor of medicine or osteopathy or, when permitted by State law of the State in which the hospital is located, a doctor of dental surgery or dental medicine.

(c) Standard: Medical staff bylaws. The medical staff must adopt and enforce bylaws to carry out its responsibilities.

The bylaws must:

(1) Be approved by the governing body.

(2) Include a statement of the duties and privileges of each category of medical staff (e.g., active, courtesy, etc.)

(3) Describe the organization of the medical staff.

(4) Describe the qualifications to be met by a candidate in order for the medical staff to recommend that the candidate be appointed by the governing body.

(6) Include criteria for determining the privileges to be granted to individual practitioners and a procedure for applying the criteria to individuals requesting privileges.

Accreditation Standards

Joint Commission

Standard LD.3.50

Care, treatment, and services provided through contractual agreement are provided safely and effectively.

Rationale for LD.3.50

The guiding principle behind the requirements for contracted services is that the same level of high-quality care should be delivered regardless of whether services are provided directly by the organization or through contractual agreement. Just as leadership oversight is necessary to make sure that services provided directly are safe and effective, leadership oversight of services provided through contractual agreement is required in order to assure that those services are provided safely and effectively.

Elements of Performance for LD.3.50

1. Clinical leaders and medical staff have an opportunity to provide advice about the sources of clinical services that are to be provided through contractual agreement.
2. The nature and scope of services provided through contractual agreements are described in writing
3. Designated leaders approve the contractual agreements.

Leaders monitor contracted services by doing the following (EPs 4–6):

4. Establishing expectations for the performance of the contracted services
5. Communicating the expectations in writing to the provider of the contracted services
6 Evaluating the contracted services in relation to the expectations
7. Leaders take steps to improve contracted services that do not meet expectations.
8. When contractual agreements are renegotiated or terminated, the continuity of patient care is maintained.
9. When using the services of licensed independent practitioners from a Joint Commission–accredited ambulatory care organization through a telemedical link for interpretive services, the organization accepts the credentialing and privileging decisions of a Joint Commission–accredited ambulatory provider after confirming that those decisions are made using the process described in MS.4.10 through MS.4.20.
10 Reference and contract lab services meet the applicable federal regulations for clinical laboratories and maintain evidence of the same.

Standard LD.3.70
The leaders define the required qualifications and competence of those staff who provide care, treatment, and services and recommend a sufficient number of qualified and competent staff to provide care, treatment, and services.

Rationale for LD.3.70

The determination of competence and qualifications of staff is based on the following:

- The hospital's mission
- The hospital's care, treatment, and services
- The complexity of care, treatment, and services needed by patients
- The technology used
- The health status of staff, as required by law and regulation

A single set of criteria must be used to judge the competency of all clinicians who provide care, treatment, and services within the organization, regardless of whether they are employees of the organization or of licensed independent practitioners.

Element of Performance for LD.3.70
1. The leaders provide for the allocation of competent qualified staff.

Standard HR 1.20
Staff qualifications are consistent with his or her job responsibilities

Elements of Performance for HR. 1.20
1. The organization defines the required competence and qualifications of staff in each program(s) or service(s).
2. When the hospital requires current licensure, certification, or registration, but these credentials are not required by law or regulation, the hospital verifies these credentials at the time of hire and upon expiration of the credentials.
3. When current licensure, certification or registration are required by law or regulation to practice a profession,* the hospital verifies these credentials with the primary source at the time of hire and upon expiration of the credentials.
4. The hospital also verifies the education, experience, and competence appropriate for assigned responsibilities.
5. The hospital also verifies information on criminal background if required by law and regulation or hospital policy
6. The hospital also verifies compliance with applicable health screening requirements if required by law and regulation or established by the hospital.
7. The information obtained from EPs 2-6 is used in making decisions regarding staff job responsibilities.
8. All staff that provide patient care, treatment, and services possess a license, certification or registration as required by law and regulation.

EPs 11 and 12 apply to staff other than physician assistants (PAs) and advanced practice registered nurses (APRNs)

11. Prior to the provision of care, treatment or services, the qualifications and competence of a non-employee individual, brought into the hospital by a licensed independent practitioner to provide care, treatment or services within the scope of the hospital's services are assessed by the hospital and determined to be commensurate with the qualifications and competence required if the individual were to be employed by the hospital to perform the same or similar services.
Note: When the service to be provided by the individual is not currently performed by anyone employed by the hospital, it is leadership's responsibility to consult the appropriate professional organization guidelines with respect to expectations for credentials and competence.
12. The hospital reviews the qualifications, performance, and competence of each non-employee individual brought into the hospital by a licensed independent practitioner to provide care, treatment, or services at the same frequency as individuals employed by the organization.

EP 13 applies to physician assistants and APRNs

13. The leaders ensure that physician assistants and APRNs who practice within the hospital are credentialed and privileged and reprivileged through the medical staff process or an equivalent process that has been approved by the governing body. An equivalent process at a minimum does the following:

- Evaluates the applicant's credentials
- Evaluates the applicant's current competence
- Includes peer recommendations
- Involves communication with and input from individuals and committees, including the (Medical Staff Executive Committee), in order to make an informed decision regarding the applicant's request for privileges

14. Staff supervises students when they provide patient care, treatment, and services as part of their training.

*Healthcare Facilities Accreditation Program-**Not yet available***

AMBULATORY SURGICAL CENTERS

OR Management and Non-Physician Surgical Staff

In ambulatory surgical centers, the roles of the governing body, the medical staff and the nurse executive lose much of their distinctiveness, yet the separate roles persist. The governing body makes provisions for credentialing and privileging medical staff. A registered nurse must still direct nursing care, and a registered nurse must be available during all surgical procedures. Additionally, all post-operative patients must be under the care of a registered nurse.

The Joint Commission requires that staffing is sufficient and meets professional standards. AAAASF requires all operative suite personnel remain under the "immediate supervision of a physician, registered nurse or physician's assistant. (30:830-010).

Virginia Department of Health Licensing Requirements

12VAC5-410-1150. Governing authority.

A. Each outpatient surgical hospital shall have a governing body or other legal authority responsible for the management and control of the operation of the facilities.

C. The governing body shall provide facilities, personnel, and other resources necessary to meet patient and program needs.

D. The governing body shall have a formal organizational plan with written bylaws, rules and regulations or their equivalent. These shall clearly set forth organization, duties, responsibilities, accountability, and relationships of professional staff and other personnel. The person or organizational body responsible for formulating policies shall be identified.

E. The bylaws, rules and regulations, or their equivalent, shall include at least the following:

1. A statement of purpose;

2. Description of the functions and duties of the governing body, or other legal authority;

3. A statement of authority and responsibility delegated to the chief administrative officer and to the medical staff;

4. Provision for selection and appointment of medical staff and granting of clinical privileges:

5. Provision of guidelines for relationships among the governing body, the chief administrative officer, and the medical staff.

F. The responsibility for administration and management of the outpatient surgical hospital shall be vested in an individual whose qualifications, authority and duties shall be defined in a written statement adopted by the governing body.

12VAC5-410-1190. Nursing staff.

The total number of nursing personnel will vary depending upon the number and types of patients to be admitted and the types of operative procedures to be performed or the services programmed.

1. A registered nurse qualified on the basis of education, experience, and clinical ability shall be responsible for the direction of nursing care provided the patients.

2. The number and type of nursing personnel, including registered nurses, licensed practical nurses, and supplementary staff, shall be based upon the needs of the patients and the types of services performed.

3. At least one registered nurse shall be on duty at all times while the facility is in use.

4. Job descriptions shall be developed for each level of nursing personnel and include functions, responsibilities, and qualifications.

5. Evidence of current Virginia registration required by state statute shall be on file in the facility.

12VAC5-410-1280. Post-operative recovery.

A. Each patient shall be observed for post-operative complications under the direct supervision of a registered professional nurse. Recovery room nurses shall have specialized training in resuscitation techniques and other emergency procedures consistent with policies and procedures of the institution for designated special units.

B. A physician licensed in Virginia shall be present on the premises at all times during the operative and post-operative period until discharge of the patient.

Centers for Medicaire and Medicaid Services Conditions of Participation

Sec. 416.41 Condition for coverage--Governing body and management.

The ASC must have a governing body, that assumes full legal responsibility for determining, implementing, and monitoring policies governing the ASC's total operation and for ensuring that these policies are administered so as to provide quality health care in a safe environment. When services are provided through a contract with an outside resource, the ASC must assure that these services are provided in a safe and effective manner. Standard: Hospitalization. The ASC must have an effective procedure for the immediate transfer to a hospital, of patients requiring emergency medical care beyond the capabilities of the ASC. This hospital must be a local, Medicare participating hospital or a local, nonparticipating hospital that meets the requirements for payment for emergency services under Sec. 482.2 of this chapter. The ASC must have a written transfer agreement with such a hospital, or all physicians performing surgery in the ASC must have admitting privileges at such a hospital.

Sec. 416.46 Condition for coverage--Nursing services.
The nursing services of the ASC must be directed and staffed to assure that the nursing needs of all patients are met.

(a) Standard: Organization and staffing. Patient care responsibilities must be delineated for all nursing service personnel. Nursing services must be provided in accordance with recognized standards of practice. There must be a registered nurse available for emergency treatment whenever there is a patient in the ASC.

Accreditation Standards

Joint Commission

Standard PC.13.20
Operative or other procedures and/or the administration of moderate or deep sedation or anesthesia are planned.

Rationale for PC13.20
Because the response to procedures is not always predictable and sedation-to-anesthesia is a continuum, it is not always possible to predict how an individual patient will respond. Therefore, qualified individuals are trained in professional standards and techniques to manage patients in the case of a potentially harmful event.

Elements of Performance for PC.13.20
1. Sufficient numbers of qualified staff (in addition to the individual performing the procedure) are present to evaluate the patient, help with the procedure, provide the sedation and/or anesthesia, monitor and recover the patient.
3. A registered nurse supervises perioperative nursing care.

Standard HR.1.10
The organization provides an adequate number and mix of staff and licensed independent practitioners consistent with the organization's staffing plan.

Rationale for HR.1.10
An organization must provide appropriate types and numbers of qualified staff necessary to furnish care, treatment, and services offered by the organization. This can be done either through traditional employer-employee arrangements or through contractual arrangements.

Elements of Performance for HR 1.10
1. The organization has an adequate number and mix of staff and licensed independent practitioners to meet the care, treatment, and service needs of the patients.

For Medicare-Certified Ambulatory Surgical Centers (EP 5):
5. Staff trained in emergency equipment use and cardiopulmonary resuscitation through an evidence-based* training program is available whenever a patient is in the ambulatory surgery center.

For Medicare-Certified Ambulatory Surgical Centers (EPs12-15):
12. The nursing services of the ambulatory surgical center (ASC) must be directed and staffed to assure that the nursing needs of all patients are met.
13. Patient care responsibilities are delineated for all nursing service personnel.
14. Nursing services are provided in accordance with recognized standards of practice.
15. There must be a registered nurse available for emergency treatment whenever there is a patient in the ambulatory surgical center.

Healthcare Facilities Accreditation Program

Accreditation Association for Ambulatory Health Care

American Association for Accreditation of Ambulatory Surgery Facilities

30 Procedure Room Personnel
830-010
All procedure suite personnel are under the immediate supervision of a physician, registered nurse or physician's assistant.
830-015
Must meet acceptable standards as defined by their professional governing bodies, where applicable.
830-020
This person is responsible for the operation of the procedure room suite and patient care areas.

Credentialing and Privileging Surgeons and Surgical Staff

Virginia requires that a licensed physician supervise professional and clinical services in ambulatory surgery facilities. The facility must clearly define the clinical privileges of both physician and non-physician practitioners, and ensure proper credentials.

CMS requires that all ASCs have procedures in place for transferring patients to an emergency hospital. The ASC must either have a written transfer agreement, or all physicians that perform surgery at the center must have admitting privileges at an appropriate hospital. CMS also requires that ASCs review privileges periodically, and that the ASC maintain policies and procedures for overseeing and evaluating all non-physician clinical staff.

Joint Commission standards for ensuring the competence of staff and contractors are similar to those for hospitals. ASCs must ensure that the competency of contracted staff (physician or non-physician) is assured following Joint Commission standards by a Joint Commission facility, whether an outside facility or the ASC itself.

The AAAASF requires ASCs to have a medical director certified or eligible for certification by the American Board of Medical Specialties or the American Osteopathic Association Bureau of Osteopathic Specialists. Physicians must have privileges at a licensed acute care hospital in the procedures they perform. Exceptions may be made for some procedures if, for instance, the hospital does not have equipment for the procedure and therefore does not extend privileges.

AAAASF requires all physicians to have admitting privileges at a nearby hospital, or a signed agreement with a physician within the same specialty that does. Additionally, the AAAASF requires peer reviews every six months of random cases and of an unanticipated sequelae.

Virginia Department of Health Licensing Requirements

Note: The governing body, outlined in **12VAC5-410-1150(e)(4)**, above, makes provisions for appointing and privileging medical staff.

12VAC5-410-1180. Medical staff.

A. The size and organizational structure of the medical staff will vary depending on the scope of service.

1. Professional and clinical services shall be supervised by a physician licensed to practice medicine or surgery in Virginia.

2. Surgical procedures shall be performed by a physician licensed to perform such procedures in Virginia.

3. Clinical privileges of physician and nonphysician practitioners shall be clearly defined.

4. Credentials including education and experience shall be reviewed and privileges identified, established, and approved for each person allowed to diagnose, treat patients or perform surgical procedures in accordance with guidelines, policies or bylaws adopted by the governing body and approved by the medical staff.

Centers for Medicaire and Medicaid Services Conditions of Participation

Sec. 416.42 Condition for coverage--Surgical services.

Surgical procedures must be performed in a safe manner by qualified physicians who have been granted clinical privileges by the governing body of the ASC in accordance with approved policies and procedures of the ASC.

(a) Standard: Anesthetic risk and evaluation. A physician must examine the patient immediately before surgery to evaluate the risk of anesthesia and of the procedure to be performed. Before discharge from the ASC, each patient must be evaluated by a physician for proper anesthesia recovery.

(b) Standard: Administration of anesthesia. Anesthetics must be administered by only--

(1) A qualified anesthesiologist; or

(2) A physician qualified to administer anesthesia, a certified registered nurse anesthetist (CRNA) or an anesthesiologist's assistant as defined in Sec. 410.69(b) of this chapter, or a supervised trainee in an approved educational program. In those cases in which a non-physician administers the anesthesia, unless exempted in accordance with paragraph (d) of this section, the anesthetist must be under the supervision of the operating physician, and in the case of an anesthesiologist's assistant, under the supervision of an anesthesiologist.

(c) Standard: Discharge. All patients are discharged in the company of a responsible adult, except those exempted by the attending physician.

(d) Standard: State exemption.

(1) An ASC may be exempted from the requirement for physician supervision of CRNAs as described in paragraph (b)(2) of this section, if the State in which the ASC is located submits a letter to CMS signed by the Governor, following consultation with the State's Boards of Medicine and Nursing, requesting exemption from physician supervision of CRNAs. The letter from the Governor must attest that he or she has consulted with State Boards of Medicine and Nursing about issues related to access to and the quality of anesthesia services in the State and has concluded that it is in the best interests of the State's citizens to opt-out of the current physician supervision requirement, and that the opt-out is consistent with State law.

(2) The request for exemption and recognition of State laws, and the withdrawal of the request may be submitted at any time, and are effective upon submission.

Sec. 416.45 Condition for coverage--Medical staff.

The medical staff of the ASC must be accountable to the governing body.

(a) Standard: Membership and clinical privileges. Members of the medical staff must be legally and professionally qualified for the positions to which they are appointed and for the performance of privileges granted. The ASC grants privileges in accordance with recommendations from qualified medical personnel.

(b) Standard: Reappraisals. Medical staff privileges must be periodically reappraised by the ASC. The scope of procedures performed in the ASC must be periodically reviewed and amended as appropriate.

(c) Standard: Other practitioners. If the ASC assigns patient care responsibilities to practitioners other than physicians, it must have established policies and procedures, approved by the governing body, for overseeing and evaluating their clinical activities.

Accreditation Standards

Joint Commission

Standard LD.3.50
Care, treatment, and services provided through contractual agreement are provided safely and effectively.
Rationale for LD.3.50
The guiding principle behind the requirements for contracted services is that the same level of high-quality care should be delivered regardless of whether services are provided directly by the organization or through contractual agreement. Just as leadership oversight is necessary to make sure that services provided directly are safe and effective, leadership oversight of services provided through contractual agreement is required in order to assure that those services are provided safely and effectively.
Elements of Performance for LD.3.50
1. Clinical leaders have an opportunity to provide advice about the sources of clinical services that are to be provided through contractual agreement.
2. The nature and scope of services provided through contractual agreements are described in writing
3. Designated leaders approve the contractual agreements.
Leaders monitor contracted services by doing the following (EPs 4–6):
4. Establishing expectations for the performance of the contracted services
5. Communicating the expectations in writing to the provider of the contracted services
6 Evaluating the contracted services in relation to the expectations
7. Leaders take steps to improve contracted services that do not meet expectations.
8. When contractual agreements are renegotiated or terminated, the continuity of [patient] care is maintained.
10. Reference and contract lab services meet the applicable federal regulations for clinical laboratories and maintain evidence of the same.

Standard LD.3.70
The leaders define the required qualifications and competence of those staff who provide care, treatment, and services and recommend a sufficient number of qualified and competent staff to provide care, treatment, and services.

Rationale for LD.3.70

The determination of competence and qualifications of staff is based on the following:

- The organization's mission
- The organization's care, treatment, and services
- The complexity of care, treatment, and services needed by patients
- The technology used

- The health status of staff, as required by law and regulation

A single set of criteria must be used to judge the competency of all clinicians who provide care, treatment, and services within the organization, regardless of whether they are employees of the organization or of licensed independent practitioners.

Element of Performance for LD.3.70
1. The leaders provide for the allocation of competent qualified staff.

Standard HR 1.20
Staff qualifications are consistent with his or her job responsibilities

Elements of Performance for HR. 1.20
1. The organization defines the required competence and qualifications of staff in each program(s) or service(s).
2. When the organization requires current licensure, certification, or registration, but these credentials are not required by law or regulation, the organization verifies these credentials at the time of hire and upon expiration of the credentials.
3. When current licensure, certification or registration are required by law or regulation to practice a profession,* the organization verifies these credentials with the primary source at the time of hire and upon expiration of the credentials.
4. The organization also verifies the education, experience, and competence appropriate for assigned responsibilities.
5. The organization also verifies information on criminal background if required by law and regulation or organization policy
6. The organization also verifies compliance with applicable health screening requirements if required by law and regulation or established by the organization.
7. The information obtained from EPs 2-6 is used in making decisions regarding staff job responsibilities.
8. All staff that provide patient care, treatment, and services possess a license, certification or registration as required by law and regulation.
11. Prior to the provision of care, treatment or services, the qualifications and competence of a non-employee individual, brought into the organization by a licensed independent practitioner to provide care, treatment or services within the scope of the organization's services are assessed by the organization and determined to be commensurate with the qualifications and competence required if the individual were to be employed by the organization to perform the same or similar services.
12. The organization reviews the qualifications, performance, and competence of each non-employee individual brought into the organization by a licensed independent practitioner to provide care, treatment, or services at the same frequency as individuals employed by the organization.
14. Staff supervises students when they provide patient care, treatment, and services as part of their training.

Healthcare Facilities Accreditation Program

800 PERSONNEL (RG 800.1)

Medical Director: The medical director must have an M.D. or D.O. degree.
800-010
The medical director must be a physician currently licensed by the state in which the facility is located.
800-015
The medical director must be a physician certified or eligible for certification by either an American Board of Medical Specialties (ABMS medical specialty certifying boards), or by The American Osteopathic Association Bureau of Osteopathic Specialists (AOABOS).
800-020
The medical director must be actively involved in the direction and management of the facility.
10 Staff Physicians (RG 800.3)
810-010
Physicians using the facility are credentialed and qualified for the procedures they perform.
810-015
Physicians using the facility have core privileges in their specialty at a licensed acute care hospital.
810-020
Physicians who perform procedures in facilities accredited by AAAASF must hold or demonstrate that they have held valid, unrestricted hospital privileges in their specialty at an accredited and/or licensed hospital. Only procedures included within those hospital privileges may be performed within the AAAASF accredited facility. If the privilege-granting hospital does not possess equipment or technology to allow a physician to be credentialed for a specific procedure, the physician may provide alternative evidence of
training and competence in that procedure. Individual consideration will be given if the physician no longer possesses or cannot obtain such privileges, and can demonstrate that loss of, or inability to obtain such privileges was not related to lack of clinical competence, ethical issues, or problems other than economic competition.
810-025
If the physician does not hold admitting privileges at a hospital within 30 minutes driving time, there must be a signed and dated document from a person in the same specialty who has admitting privileges in a hospital within 30 minutes driving time from the facility that indicates their willingness to admit the patient to the hospital.
810-030
All individuals using the facility must meet one of the following criteria:
1. A Doctor of Medicine certified or eligible for certification by one of the member boards of the American Board of Medical Specialties (ABMS).
2. A Doctor of Osteopathy certified or eligible for certification by the American Osteopathic Association Bureau of Osteopathic Specialists (AOABOS).
ABMS certified or eligible medical specialists who perform procedures within the accredited facility may perform only those procedures delineated in their ABMS board certification and/or

covered by AMA Core Principle #7. AOA certified or eligible physicians who perform procedures within the accredited facility may perform only those procedures delineated in their AOA Board Certification and/or covered by AMA Core
Principle #7.
The AMA Core Principle #7 (from AMA Resolution dated April, 2003): "AMA Core Principal #7 - Physicians performing office-based procedures must be currently board certified/qualified by one of the boards recognized by the American Board of Medical Specialties, American Osteopathic Association Bureau of Osteopathic Specialists, or a board with equivalent standards approved by the state medical board. The procedure must be one that is generally recognized by that certifying board as falling within the scope of training and practice of the physician providing the care."

810-035

Each physician must currently be licensed by the state in which they practice. A copy of each physician's current license must be maintained on file in the facility.

810-040

Any change in the physician's staff must be reported in writing to the AAAASF Central Office within thirty days of such changes. Copies of the credentials of any new staff, including their current medical license, ABMS Board Certification, AOABOS Board Certification or other approved Boards, letter of eligibility or equivalent documentation, and current documentation of hospital privileges or satisfactory explanation for the lack thereof must also be sent to the AAAASF Central Office.

810-045

Any action affecting the current professional license of the facility director, a member of the medical staff, a member of the physician's pain management staff or other licensed facility staff must be reported in writing to the AAAASF Central Office within ten days of the time the facility director becomes aware of such action.

20 Peer Review (RG 700.5)

Note: To be HIPAA compliant, a copy of the Business Associates Agreement must be signed by each physician participating in Peer Review, and a copy retained on file in the facility. For an example of a generic HIPAA Business Associates Agreement, contact the AAAASF Office.

720-010

Peer review is performed at least every six (6) months (biannually) and includes reviews of both random cases and unanticipated sequelae using the AAAASF forms and reporting format. Peer Review must be reported on line at www.aaaasf.org, or submitted to AAAASF in hard copy for AAAASF staff to manually enter on line for an additional processing fee. A random sample of the cases for each physician must include the first case done by each physician each month during the reporting period for a total of six (6)
cases. If a physician using the facility has done less than six (6) cases during a reporting period, all of that physician's cases during that period must be reviewed.

720-015

If peer review sources external to the facility are used to evaluate delivery of medical care, the Business Associates Agreement is so written as to waive confidentiality of the medical records.

720-020
Peer review may be done by a recognized peer review organization or a physician, other than the physician doing the procedure.

30 Random Case Review (RG 700.2)

730-010
A minimum of six (6) cases per physician utilizing the facility, or 2% of all cases in a group practice are reviewed every six months. Random case reviews must include at a minimum:
730-015
Adequacy and legibility of history and physical exam.
730-020
Adequacy of consent.
730-025
Presence of laboratory, EKG and radiographic reports.
730-030
Presence of a written procedure report.
730-035
Anesthesia and recovery record (with IV sedation or general anesthesia).
730-040
Presence of instructions for post-procedure care.
730-045
Documentation of complications.

40 Unanticipated Procedure Sequelae (RG 700.3)

All unanticipated procedure sequelae which occur within thirty (30) days of procedures are reviewed, including but not limited to:

740-010
Unplanned hospital admission.
740-015
Unscheduled return to the procedure room for a complication of a procedure.
740-020
Complications such as infection, bleeding, or injury to other body structure.
740-025
Cardiac or respiratory problems during stay at facility or within forty eight (48) hours of discharge.
740-030
Allergic reactions.
740-035
Patient or family complaint (RG 700. 4-6).
740-040
Equipment malfunction leading to injury or potential injury to patient.
740-045
Death occurring within thirty (30) days of a procedure done in the facility.

Each Unanticipated Procedure Sequela chart review must include the following information, in addition to the procedure performed:

740-050

Identification of the problem.

740-055

Immediate treatment or disposition of the case.

740-060

Outcome.

740-065

Reason for problem.

740-070

Assessment of efficacy of treatment.

Appendix B
Regulations Governing the Practice of Nursing
Part VIII: Delegation of Nursing Tasks and Procedures

Virginia Board of Nursing
Revised Date: July 23, 2008
http://www.dhp.virginia.gov/nursing/leg/Nursing%207-23-08.doc

Part VIII. Delegation of Nursing Tasks and Procedures.

18VAC90-20-420. Definitions.

"Delegation" means the authorization by a registered nurse to an unlicensed person to perform selected nursing tasks and procedures in accordance with this part.

"Supervision" means guidance or direction of a delegated nursing task or procedure by a qualified, registered nurse who provides periodic observation and evaluation of the performance of the task and who is accessible to the unlicensed person.

"Unlicensed person" means an appropriately trained individual, regardless of title, who receives compensation, who functions in a complementary or assistive role to the registered nurse in providing direct patient care or carrying out common nursing tasks and procedures, and who is responsible and accountable for the performance of such tasks and procedures. With the exception of certified nurse aides, this shall not include anyone licensed or certified by a health regulatory board who is practicing within his recognized scope of practice.

18VAC90-20-430. Criteria for delegation.

A. Delegation of nursing tasks and procedures shall only occur in accordance with the plan for delegation adopted by the entity responsible for client care. The delegation plan shall comply with provisions of this chapter and shall provide:

1. An assessment of the client population to be served;

2. Analysis and identification of nursing care needs and priorities;

3. Establishment of organizational standards to provide for sufficient supervision which assures safe nursing care to meet the needs of the clients in their specific settings;

4. Communication of the delegation plan to the staff;

5. Identification of the educational and training requirements for unlicensed persons and documentation of their competencies; and

6. Provision of resources for appropriate delegation in accordance with this part.

B. Delegation shall be made only if all of the following criteria are met:

1. In the judgment of the delegating nurse, the task or procedure can be properly and safely performed by the unlicensed person and the delegation does not jeopardize the health, safety and welfare of the client.

2. The delegating nurse retains responsibility and accountability for nursing care of the client, including nursing assessment, planning, evaluation, documentation and supervision.

3. Delegated tasks and procedures are within the knowledge, area of responsibility and skills of the delegating nurse.

4. Delegated tasks and procedures are communicated on a client-specific basis to an unlicensed person with clear, specific instructions for performance of activities, potential complications, and expected results.

5. The person to whom a nursing task has been delegated is clearly identified to the client as an unlicensed person by a name tag worn while giving client care and by personal communication by the delegating nurse when necessary.

C. Delegated tasks and procedures shall not be reassigned by unlicensed personnel.

D. Nursing tasks shall only be delegated after an assessment is performed according to the provisions of 18VAC90-20-440.

18VAC90-20-440. Assessment required prior to delegation.

Prior to delegation of nursing tasks and procedures, the delegating nurse shall make an assessment of the client and unlicensed person as follows:

1. The delegating nurse shall assess the clinical status and stability of the client's condition, shall determine the type, complexity and frequency of the nursing care needed and shall delegate only those tasks which:

a. Do not require the exercise of independent nursing judgment;

b. Do not require complex observations or critical decisions with respect to the nursing task or procedure;

c. Frequently recur in the routine care of the client or group of clients;

d. Do not require repeated performance of nursing assessments;

e. Utilize a standard procedure in which the tasks or procedures can be performed according to exact, unchanging directions; and

f. Have predictable results and for which the consequences of performing the task or procedures improperly are minimal and not life threatening.

2. The delegating nurse shall also assess the training, skills and experience of the unlicensed person and shall verify the competency of the unlicensed person in order to determine which tasks are appropriate for that unlicensed person and the method of supervision required.

18VAC90-20-450. Supervision of delegated tasks.

A. The delegating nurse shall determine the method and frequency of supervision based on factors which include, but are not limited to:

1. The stability and condition of the client;

2. The experience and competency of the unlicensed person;

3. The nature of the tasks or procedures being delegated; and

4. The proximity and availability of the registered nurse to the unlicensed person when the nursing tasks will be performed.

B. In the event that the delegating nurse is not available, the delegation shall either be terminated or delegation authority shall be transferred by the delegating nurse to another

registered nurse who shall supervise all nursing tasks delegated to the unlicensed person, provided the registered nurse meets the requirements of 18VAC90-20-430 B 3.

C. Supervision shall include but not be limited to:

1. Monitoring the performance of delegated tasks;

2. Evaluating the outcome for the client;

3. Ensuring appropriate documentation; and

4. Being accessible for consultation and intervention.

D. Based on an ongoing assessment as described in 18VAC90-20-440, the delegating nurse may determine that delegation of some or all of the tasks and procedures is no longer appropriate.

18VAC90-20-460. Nursing tasks that shall not be delegated.

A. Nursing tasks that shall not be delegated are those which are inappropriate for a specific, unlicensed person to perform on a specific patient after an assessment is conducted as provided in 18VAC90-20-440.

B. Nursing tasks that shall not be delegated to any unlicensed person are:

1. Activities involving nursing assessment, problem identification, and outcome evaluation which require independent nursing judgment;

2. Counseling or teaching except for activities related to promoting independence in personal care and daily living;

3. Coordination and management of care involving collaboration, consultation and referral;

4. Emergency and nonemergency triage;

5. Administration of medications except as specifically permitted by the Virginia Drug Control Act (§54.1-3400 et seq. of the Code of Virginia); and

6. Circulating duties in an operating room.

Appendix C

JOB DESCRIPTION: SURGICAL ASSISTANT

The *Standards and Guidelines for the Accreditation of Educational Programs in Surgical Assisting* have been approved by the Association of Surgical Technologists (AST), American College of Surgeons (ACS), Accreditation Review Committee on Education in Surgical Technology (ARC-ST), Subcommittee on Accreditation for Surgical Assisting (SASA), and the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and include this description of the profession of surgical assisting:

As defined by the American College of Surgeons (ACS), surgical assistants provide aid in exposure, hemostasis, closure, and other intraoperative technical functions that help the surgeon carry out a safe operation with optimal results for the patient. In addition to intraoperative duties, the surgical assistant also performs preoperative and postoperative duties to better facilitate proper patient care. The surgical assistant performs these functions during the operation under the direction and supervision of the surgeon and in accordance with hospital policy and appropriate laws and regulations.

Education

Surgical assistants graduate from surgical assisting programs accredited through ARCST, a collaborative effort of AST, ACS, and SASA, by CAAHEP. CAAHEP is a recognized accreditation agency of the Council for Higher Education Accreditation (CHEA). In addition, surgical assisting programs are located in educational institutions that are institutionally accredited by agencies recognized by the United States Department of Education (USDE), The Joint Commission, or an agency acceptable to CAAHEP and the ARC-ST. The ARC-ST is also a member of the Association of Specialized and Professional Accreditors (ASPA).

Credentials

Certification is conferred by the National Board of Surgical Technology and Surgical Assisting (NBSTSA). Initial certification as a Certified First Assistant (CFA) is based upon satisfactory performance on the national certifying examination following completion of an accredited program in surgical assisting or another pathway acceptable to the NBSTSA. CFAs maintain their certification by earning 75 hours of approved continuing education in a four-year period or by successfully retaking the certifying examination at the conclusion of the four-year period.

The NBSTSA's certification program is accredited by the National Commission for Certifying Agencies (NCCA), the accreditation division of the National Organization for Competency Assurance (NOCA) and is in compliance with NCCA's *Standards for the Accreditation of Certification Programs*. NCCA standards and accreditation services are referenced requirements in state and federal legislation pertaining to personnel certification. NOCA is accredited by the American National Standards Institute (ANSI) as a developer of American National Standards. ANSI accreditation provides third-party validation that NOCA's standards development process ensures openness and due process.

The American College of Surgeons strongly supports adequate education and training of all surgical assistants, supports the accreditation of all surgical assisting educational programs, and supports examination for certification of all graduates of accredited surgical assistant educational programs.

Professional Organizations

The professional organizations for surgical assistants are the Association of Surgical Assistants (ASA) along with its partner organization, the Association of Surgical Technologists. AST was formed in 1969 with the support of the American College of Surgeons, American Medical Association (AMA), American Hospital Association (AHA), and Association of periOperative Registered Nurses (AORN).ASA and AST represent the interests of over 5,000 surgical assistants.

ASA's and AST's primary purposes are to ensure that surgical assistants have the knowledge and skills to administer patient care of the highest quality and are the principal providers, in conjunction with more than 40 state organizations of continuing education for surgical assistants. AST also works with ARC-ST and NBSTSA to set standards for education and certification and represents the profession at state and national levels to ensure that all surgical assistants attain the Certified First Assistant credential as a condition of employment.

Role of the Surgical Assistant

The following description of the surgical assistant has been approved by the American College of Surgeons and Association of Surgical Technologists:

1. Positioning the patient

A. The surgeon shall convey the exact position that will give the best exposure for the surgical procedure. The surgical assistant will carry out this order. Consideration will be given to the patient's comfort and safety.

B. Points of pressure shall be padded: elbows, heels, knees, eyes, face, and axillary region.

C. Circulation shall not be impaired. (A tourniquet may be required for some procedures.)

D. Nerve damage shall be guarded against.

E. The temperature of the patient should be discussed with the anesthesia personnel and methods employed to maintain the desired temperature range.

F. The surgical assistant shall be familiar with common positions related to the surgical procedure and will be able to use the equipment necessary to provide the position. Competencies will include the following:

(1) Fracture tables
(2) Head stabilizers
(3) Body stabilizers
(4) C-arm extensions
(5) Any other equipment needed

G. Upon completion of the procedure, the patient shall be evaluated for any possible damage from positioning which will include assessment of the skin. The abnormal condition shall be reported to the surgeon and treatment and documentation shall be carried out.

2. Providing visualization of the operative site by the following:

A. Appropriate placement and securing of retractors with or without padding

B. Packing with sponges

C. Digital manipulation of tissue

D. Suctioning, irrigating, or sponging

E. Manipulation of suture materials (e.g., loops, tags, running sutures)
F. Proper use of body mechanics to prevent obstruction of the surgeon's view
3. Utilizing appropriate techniques to assist with hemostasis
A. Permanent
(1) Clamping and/or cauterizing vessels or tissue
(2) Tying and/or ligating clamped vessels or tissue
(3) Applying hemostatic clips
(4) Placing local hemostatic agents
B. Temporary
(1) Applying tourniquets and demonstrating awareness of the indications/contraindications for use with knowledge of side effects of extended use
(2) Applying vessel loops
(3) Applying noncrushing clamps
(4) Applying direct digital pressure
4. Participating in volume replacement or autotransfusion techniques as appropriate
5. Utilizing appropriate techniques to assist with closure of body planes
A. Utilizing running or interrupted subcutaneous sutures with absorbable or nonabsorbable material
B. Utilizing subcuticular closure technique with or without adhesive skin closure strips
C. Closing skin with method indicated by surgeon (suture, staples, etc
D. Postoperative subcutaneous injection of local anesthetic agent as directed by the surgeon
6. Selecting and applying appropriate wound dressings, including the following:
A. Liquid or spray occlusive materials
B. Absorbent material affixed with tape or circumferential wrapping.
C. Immobilizing dressing (soft or rigid)
7. Providing assistance in securing drainage systems to tissue

Appendix D

American College of Surgeons Statement of Principles, Section I.G
http://www.facs.org/fellows_info/statements/stonprin.html
accessed 5/28/2009

G. Surgical Assistants

The first assistant during a surgical operation should be a trained individual who is able to participate in and actively assist the surgeon in completing the operation safely and expeditiously by helping to provide exposure, maintain hemostasis, and serve other technical functions. The qualifications of the person in this role may vary with the nature of the operation, the surgical specialty, and the type of hospital or ambulatory surgical facility.

The American College of Surgeons supports the concept that, ideally, the first assistant at the operating table should be a qualified surgeon or a resident in an approved surgical education program. Residents at appropriate levels of training should be provided with opportunities to assist and participate in operations. If such assistants are not available, other physicians who are experienced in assisting may participate.

It may be necessary to utilize nonphysicians as first assistants. Surgeon's Assistants (SAs) or physician's assistants (PAs) with additional surgical training should meet national standards and be credentialed by the appropriate local authority. These individuals are not authorized to operate independently. Formal application for appointment to a hospital as a PA or SA should include:

Qualifications and Credentials of Assistants

- Specification of which surgeon the applicant will assist and what duties will be performed.
- Indication of which surgeon will be responsible for the supervision and performance of the SA or PA.
- The application should be reviewed and approved by the hospital's board.
- Registered nurses with specialized training may also function as first assistants. If such a situation should occur, the size of the operating room team should not be reduced; the nurse assistant should not simultaneously function as the scrub nurse and instrument nurse when serving as the first assistant. Nurse assistant practice privileges should be granted based upon the hospital board's review and approval of credentials. Registered nurses who act as first assistants must not have responsibility beyond the level defined in their state nursing practice act.

Surgeons are encouraged to participate in the training of allied health personnel. Such individuals perform their duties under the supervision of the surgeon.

Appendix E

NBSTSA CFA Content Outline
From the Candidate Handbook, available online at:
http://www.nbstsa.org/downloads/2009/NBSTSA2009CFA-Exam-Outline.pdf

I. PerI-OPeratIve Care (55%)

A. Pre-Operative Preparation (22%)

1. Verify availability of surgical equipment and supplies (e.g., reserve equipment and implants for surgery according to surgeon's preference).
2. Prepare and maintain operating room environment according to surgical procedure (e.g., temperature, humidity, lights, suction, furniture).
3. Verify operative consent and other pertinent information (e.g., history and physical, advanced directives, laboratory results, diagnostic results).
4. Obtain diagnostic studies for reference.
5. Review diagnostic tests to identify results.
6. Obtain instruments, supplies, and equipment and verify readiness for surgery.
7. Remove casts, splints, braces, and similar devices.
8. Transfer patient to operating room table.
9. Assemble and test positioning equipment.
10. Coordinate and participate in patient positioning.
11. Obtain and apply tourniquet.
12. Perform pre-operative invasive procedures (e.g., urinary catheterization).
13. Prepare skin for surgery (e.g., hair removal, surgical preparation).
14. Don personal protective equipment.
15. Check package integrity of sterile supplies.
16. Open sterile supplies while maintaining aseptic technique.
17. Perform surgical hand scrub, gowning, and gloving.
18. Gown and glove sterile team members.
19. Verify identity of patient and operative site (time out).
20. Assemble and inspect specialty equipment for surgical procedures.
21. Coordinate and participate in the draping of the patient.
22. Specify methods of operative exposure (e.g., surgical incisions).
23. Accommodate for specific patient needs (e.g., pediatrics, psychological needs).
24. Discuss radiologic surgical techniques and safety.

B. Intra-Operative Procedures (26%)

1. Provide assistance to the surgical team in the assessment and care of patient.
2. Facilitate the efficiency of the surgical procedure.
3. Pass instruments and supplies to surgeon during surgery.

4. Perform video recording and/or still photography or procedures (e.g., endoscopic).
5. Perform advanced intra-operative functions as directed.
6. Monitor and maintain aseptic technique throughout the procedure.
7. Verify medications and solutions at the sterile field.
8. Mix medications and solutions at the sterile field.
9. Calculate amount of medications and solutions used.
10. Monitor that supplies and solutions are adequate.
11. Verify and mark specimen(s).
12. Observe patients intra-operative status (e.g., monitor color of blood, onset of blood loss, monitor position of patient during procedure).
13. Operate specialty equipment during surgery.
14. Utilize the following specialty equipment:
a) ultrasound technology (e.g., harmonic scalpel, phacoemulsification)
b) endoscopic technology
15. Irrigate, suction, and sponge operative site.
16. Place and secure retractors and packing.
17. Clamp, tie, or cauterize vessels.
18. Operate internal stapling devices.
19. Request and verify suture materials.
20. Suture tissue.
21. Prepare drains, catheters, and tubing for insertion.
22. Insert, position, and secure drains, catheters, and tubing.
23. Apply skin staples.
24. Assist in the placement of closed wound drainage systems.
25. Prepare and apply sterile dressing.
26. Perform designated action during an emergency (e.g., CPR).

C. Post-Operative Procedures (7%)

1. Dispose of contaminated sharps after surgery in compliance with Standard Precautions.
2. Dispose of contaminated waste after surgery.
3. Assist with room turnover.
4. Apply casts, splints, braces, and similar devices.
5. Transfer and transport patient to PACU.
6. Evaluate patient post-operatively and document findings (e.g., skin integrity).
7. Remove sutures or staples.
8. Change dressings.

II. ADDITIONAL DUTIES (10%)

A. Administrative and Personnel (6%)

1. Revise surgeon's preference card as necessary.
2. Utilize computer technology for:
a) communication
b) continuing education

3. Follow disaster plan protocol.
4. Recognize safety and environmental hazards (e.g., fire, chemical spill, laser smoke).
5. Apply ethical and legal practices related to surgical patient care.
6. Use interpersonal skills (e.g., listening, diplomacy, responsiveness) and group dynamics.
7. Understand the importance of cultural diversity.
8. Serve as technical subject matter expert to the surgical team.
9. Discuss legal and ethical aspects of surgery (e.g., surgical consents, limitations, negligence, patient rights).

B. Equipment Sterilization and Maintenance (4%)

1. Operate sterilizing devices according to manuf. recommendations.
2. Troubleshoot equipment malfunctions.
3. Take malfunctioning equipment out of service.
4. Report malfunctioning equipment to proper personnel.

I1I. ADVA NCED SCIENCE (35%)

A. Anatomy and Physiology (20%)

1. Apply advanced knowledge of surgical anatomy.
2. Apply advanced knowledge of pathophysiology and histology to the handling and manipulation of tissue for the following surgical pathologies:

a) abnormal anatomy
b) disease processes
c) fractures
d) malignancies

B. Advanced Principles Of Microbiology (9%)

1. Apply advanced knowledge of microbiology to operative practice:

a) classification and pathogenesis of micro-organisms
b) factors influencing wound healing (e.g., condition of patient, infections process, wound type)
c) infection control procedures (e.g., aseptic technique)
d) principles of tissue handling (e.g., Halsted principles, tissue manipulation methods, traction/counter traction)
e) surgical wound classification/management

C. Surgical Pharmacology and Anesthesia (6%)

1. Apply advanced knowledge of pharmacology and anesthesiology to operative practice to:

a) the use of anesthesia methods to assist anesthesia providers
b) assist physician in treating pharmacological and/or anesthetic complications
c) handle and administer medications
d) identify situations in which blood and fluid replacement is needed
e) recognize signs and symptoms of drug reactions and interactions

2. Apply pain management concepts.

Appendix F

Available at: http://www.nsaa.net/examination.shtml

NATIONAL SURGICAL ASSISTANT ASSOCIATION CERTIFICATION EXAMINATION STUDY GUIDE

The Anatomy Diagrams are from the "Atlas of Human Anatomy" Third Edition, by Frank H. Netter, MD published in 2002
The page numbers of the study guide are from the "Alexander's care of the patient in surgery" Twelfth edition, by Jane C. Rothrock published in 2003

ANATOMY DIAGRAMS

- KNEE: POSTERIOR AND SAGITTAL VIEWS plate # 493
- KNEE: ANTERIOR VIEWS plate # 489
- MUSCLES OF HIP AND THIGH: POSTERIOR VIEWS plate # 477
- MUSCLES OF SHOULDER plate # 407
- URETERS plate # 327
- THYROID GLAND: ANTERIOR VIEW plate # 70
- HEART IN SITU plate # 207
- HEART: BASE AND DIAFRAGMATIC SURFACE plate # 210
- PELVIC VISCERA: FEMALE plate # 354

SURGERY SPECIALTY PROCEDURE LIST

A: GENERAL SURGERY

1. Skin tumors (can also be Plastic Surgery)……1015
2. Split-thickness grafts (can also be Plastic surgery)……....1015-1016
3. Skin lacerations (can also be Plastic Surgery) desgarros
4. Thyroglossal ducts……631
5. Branchial clefts –Hendiduras branquiales…632
6. Pharyngal-esophageal diverticulum……...360
7. Thyroidectomy……629-631
8. Phrenic nerve –Motor- Diaphragm- Cervical plexus
9. Breast biopsy……...647-648
10. Simple & modified radical mastectomy……650-654
11. Radical mastectomy……...650
12. Thoracentesis y closed drainage –The removal of fluid from the chest cavity by puncture ……1054-1056
13. Intrathoracic surgery ……...1043
14. Diaphragmatic surgery ……360-361-1224
15. Paracentesis –The surgical puncture of a cavity for the purpose of removing fluid
16. Closure of perforated ulcer ……367
17. Other gastric surgery……...363-366-368
18. Ramstedt pyloromyotomy ……...1226
19. Gallbladder & common duct surgery ……407-410-414
20. Pancreatic surgery……...418-420
21. Splenectomy/splenorrhaphy……...430
22. Small & large bowel surgery……...374-378-393
23. Appendectomy……...375
24. Abdominal-perineal resection……385
25. Abdominal exploration……...355-356
26. I & D of intra-abdominal abscess –Drains- ……...295
27. Traumatic laparotomy……..1348
28. Simple inguinal hernia……...434-439-451- pediatric – 1230-1231
29. Strangulated or recurrent hernia
30. Ventral or femoral hernia……....435-438

31. Pilonidal cyst……..393
32. Hemorrhoids……...391
33. Fistula in ano region……...479
34. Hand infections (major) (can also be ortho or plastic surgery)……..871
35. Hand infections (minor) (can also be ortho or plastic surgery)
36. All intra-abdominal and retro-peritoneal surgery
37. Laparoscopic surgery
    a. endo cholecystectomy……410-413
    b. diagnostic
    c. endo appendectomy……...376
    d. endoherniorrhaphy……446-447
    e. endo fundoplication……...361-363
    f.

B. PLASTIC SURGERY

1. Wolff grafts
2. Pedicle grafts……..815
3. Extensive burns……1019-1020-1032-1351
4. Parotid gland surgery……..799-801
5. Lip & tongue surgery……...1255
6. Surgery of ranula (sublingual cyst)
7. Surgery of epulis (epulis gravidarum, tumor of the gums)
8. Resection of jaw
9. Breast biopsy (can also be General surgery)……..647
10. Simple mastectomy (can also be General surgery)…….650-652
11. Hand infections (major) (can also be ortho or general surgery)
12. Hand infections (minor) (can also be ortho or general Surgery)
13. Abdominoplasty & repair diastasis……..1228
14. Suction lipectomy……1036
15. Breast augmentation or reduction……...1025-1027
16. Tissue expansion……...1008-1021-1022
17. Chemical peels (Mohs micrographic surgery –chemosurgery-)…….1019
18. Facelifts (Rhytidectomy)……1034-1035
19. Blepharoplasty……..1033-1034-681-682-683
20. Rhinoplasty……1033-762-764
21. Microvascular free transfers
22. Hand (all soft tissue except replants)…….871
23. Nerve & tendon (elbow & distal)……871-998-999
24. Fractures (metacarpal & distal)……...820-871-873
25. Facial fractures
    a. Mandible…….1028
    b. maxillary (LeFort I, II, III)……..1029
    c. orbital rim
    d. zygomatic arch……1029
    e. frontal sinus
    f.

C. UROLOGIC SURGERY

1. Nephrectomy……..610
2. Renal exploration for stone, cyst, & other such conditions as UPJ (ureteral pelvic junction) obstruction repair……...605-609
3. Cystostomy……582
4. Open simple prostatectomy……569
5. Bladder surgery including cystectomy……...581
6. Hydrocele, spermatocele, & scrotal surgery……1246
7. Testicular surgery……..1247-1248-1249
8. Circumcision & meatotomy…….1239
9. Major surgery of penis including hypospadias repair……..1241
10. Radical prostatectomy……578
11. Retroperitoneal & pelvic lymph node dissection……...556
12. Micro-surgical vasovasostomy ……..553

13. Ileal-conduit ……..599
14. Reimplantation of ureter……604
15.

D. OBSTETRIC/GYNECOLOGIC SURGERY

1. Cesarean section…….513
2. Cesarean hysterectomy……...498-502
3. Ectopic pregnancy laparotomy or laparoscopy……..495
    a. Salpingostomy with tubal contents excised
    b. Salpingectomy
4. Repair of uterine lacerations
5. Hysterotomy
6. I & D Bartholin duct abscess……487
7. Bartholin duct cystectomy……487
8. Perineotomy
9. Perineorrhaphy
10. Repair of rectocele……...391-473-474
11. Repair of enterocele……...473
12. Repair of cysto-urethrocele……473
13. Excision of Skene's duct gland (female urethra)……...455
14. Vulvectomy
    a. Simple……...471
    b. Radical with groin dissection……472
    c. Radical with groin & gastric node dissection
15. Hysterectomy
    a. Vaginal……..497
    b. Abdominal (total or subtotal)……498
16. Uterine suspension…….505-506
17. Marshall-Marchetti pubo-vesico-uretheral suspension…….587
18. Burch urethral suspension…….587
19. Salpingectomy ……..507
20. Oophorectomy……506-507
21. Hypogastric artery ligation
22. Appendectomy……..375
23. Hymenotomy
24. Incompetent cervical os surgery……483
25. Repair surgical rent bladder or bowel
26. Ureteral repair
27. Incisional hernia repair
28. Myomectomy……500
29. Fundectomy
30. Umbilical hernia repair
31. La Forté vaginal repair
32. Repair vesica-vaginal fistula ……475
33. Repair recto-vaginal fistula……..479
34. Excision of Meckel's diverticulum……374-375
35. Hymenectomy
36. Wedge resection of ovaries
37. Salpingostomy……...507
38. Salpingoplasty……...507
39. Tubal implantation into uterus
40. Closure of vaginal fistula……...475-479
41. Evacuation of pelvic abscess
42. Evacuation of hematoma
    a. Abdominal wound
    b. Vaginal vault
43. Colpectomy
44. Plastic reconstruction of vagina with skin graft for congenital absence
45. Perineoplasty
46. Operative laparoscopy
    a. Lysis of adhesions……507
    b. Laparoscopic assisted vaginal hysterectomy……...497

c. Salpingostomy/Salpingectomy
d. Myomectomy……..500
e. Hysterectomy……...502
f. Burch procedure……...587
g. Oophorectomy…….506
h. Lymphadenectomy……...472
i.

E. NEUROLOGIC SURGERY

1. Craniotomy……971
2. Craniectomy……...980
3. Cranioplasty……...984
4. Laminotomy/Laminectomy……990
5. Scalenotomy & cervical rib resection
6. Lumbar, thoracal-lumbar, & cervical sympathectomy……..997
7. Intervertebral discectomy (anterior or posterior) –Rhizotomy- ……994
8. Spinal fusion with/without mechanical fixation……995
9. Vascular
   a. Carotid endarterectomy……...996-1106
   b. Intra-cranial artery aneurysm clipping……973
10. Cerebrospinal fluid shunting procedures……...970
11. Nerve transpositions……...999-869
12. Insertion of intra-cranial monitoring devices

F. ORTHOPAEDIC SURGERY

1. Open fractures (compound)
   a. Minimal soft tissue disruption
   b. Marked soft tissue disruption
2. Spine
   a. Disc excision
   b. Laminotomy/Laminectomy
   c. Fusion with/without instrumentation
3. Pelvic fractures……...896
4. Clavicle (displaced, non displaced)……861
5. Scapula (displaced, non displaced)
6. Shoulder (fracture, dislocation)……..859
7. Humeral neck fracture (impacted, displaced)……863
8. Humeral tuberosities separated…866
9. Humerus mid shaft fracture, supracondylar, condylar
10. Elbow (fractures, dislocations)……..866
11. Forearm fractures (single or both bone)……869
12. Colles fracture……871
13. Reverse Colles (Smith) fracture
14. Fracture and dislocation of wrist and hand……871
15. Femur (neck FX, proximal FX, intertrochanteric FX, subtrochanteric FX, mid shaft FX, supracondylar FX, condylar FX,)……...885
16. Acetabular fracture of hip……..873
17. Patellar dislocations with/without fracture
18. Patellar fractures……886
19. Tibial shaft fracture……889
20. Tibial plateaux fracture
21. Fibular mid shaft
22. Trimalleolar fracture……..892
23. Bimalleolar fracture (Potts)……
24. Subtalar dislocation
25. Calcaneus fracture
26. Fractures of the bones of the foot……..895
27. Epiphyseal injuries
28. Arthroscopic procedures
   a. Shoulder……921

b. Elbow……923
c. Wrist
d. Knee……..915
e. Ankle……924

29.Total joint replacement
a. Shoulder……...909
b. Elbow……..912
c. Wrist/Hand……...913
d. Knee……902
e. Ankle……913

30.Soft tissue reconstructive procedures
a. Joint
b. Tendon
c. Ligament
d. Nerve

31.Amputation……...1105
a. Upper extremity
b. Lower extremity

G. CHEST & CARDIOVASCULAR SURGERY

1. Thoracic
   a. Wedge resection of lung……1069
   b. Pneumonectomy……1066
   c. Pleurodesis
   d. Mediastinoscopy……1063
2. Cardiac
   e. Pericardiectomy……..1156
   f. C.A.B.G……..1157
   g. Mitral valve surgery……1165
   h. Aortic valve replacement……1171
   i. Saphenous vein an radial artery harvesting
3. Vascular
   j. Femoral-popliteal bypass……1101
   k. Abdominal aortic aneurysm……...1097-1099
   l. Carotid endarterectomy……1106-1108
   m. A.V. fistula……1109
   n. Vein stripping……1113
   o. Axilla-femoral bypass graft……1101

H. TRAUMA SERVICES

1. Emergency thoracotomy……..1346
2. Emergency abdominal exploration……..1348
3. Aortic repair
4. Retroperitoneal exploration
5. Splenectomy
6. Diaphragmatic repair
7. Peripheral vascular repair
8. Tracheostomy
9. Irrigation and debridement primary and secondary
10. Repair lacerations
11. Debridement of necrotic tissue
12. Free flap and vascularized grafts

OUTLINE FOR STUDY GUIDE/TEST QUESTIONS

1. Anatomy
   Skull and brain
   Eye
   Ear

Face, neck and throat
Shoulder, axilla and breast
Back
Thorax
Abdominal cavity and retroperitoneum
Pelvis and perineum
Inguinal and femoral regions
Upper extremities
Lower extremities

2. Surgical Physiology
   Cardiac
   Hormonal
   Wound healing ……..281
   Respiratory system
   Vascular
3. Perioperative Microbiology
   Infectious processes
   Organisms
   Immune responses
   Risks to patients and personnel
   Universal precautions
4. Surgical Pharmacology
   Adverse reactions
   Drugs commonly used in surgery
   Drugs affecting blood clotting
   Intravenous fluids
   Blood replacement
   Diuretics
   Anti-infective agents
   Irrigation solutions
5. Anesthesia Methods and agents ……219
   Pre-anesthesia medications
   General anesthesia
   Complications of general anesthesia
   Stages of anesthesia
   Local anesthesia
   Alternate methods of anesthesia
6. Bioscience
   A. Wound Healing
   B. Understanding diagnostic test
   C. Care end handling of surgical specimens
   D. Management of the critically ill patient
   E. Thermoregulatory devices
   F. Fluid, electrolyte, acid-base and nutritional balances
   G. Skin assessment
7. Procedures
   A. Neurosurgery
      1. Laminectomy
      2. Aneurysms
      3. Brain tumors
      4. Lumbar spine procedures
   B. Eye surgery
   C. ENT surgery
   D. General surgery
      1. Breast
         a. Biopsy ……647
         b. Mastectomy
         c. Sentinel node biopsy ……..649
      2. Hernias
         a. Inguinal, open vs. laparoscopic
         b. Ventral
         c. Diaphragmatic

3. Coarctation
4. Patent ductus arteriosus
5. Tetralogy of Fallot

M. Transplant surgery
1. Liver
2. Kidney
3. Heart
4. Lung

N. Fundamental skills
1. Monitoring devices
2. Bladder catheterization
3. Positioning of the surgical patient
4. Application of pneumatic tourniquets
5. Skin preparation
6. Drapes and draping
7. Operative instrumentation
8. Visualization techniques
9. Hemostasis
10. Suturing techniques
11. Surgical wound dressings
12. Drainage systems
13. Postoperative pain control methods
14. Postoperative x-ray films
15. Special equipment
16. Surgical assisting skills
17. Proper use of O.R. equipment
18. Age appropriate care

O. Complications in surgery
1. Hemorrhage
2. Perforation of viscus or cavity
3. Contamination
4. Exposure, retraction and compression injuries
5. Cardiac events
6. Sudden hypoxia
7. Sudden shock
8. Interruption of surgical supervision
9. Critical equipment failure

P. Ethical and legal considerations
1. Surgeon supervision
2. Anesthesiologist responsibilities
3. Knowing the boundary, ethical and legal
4. Reacting to emergency situations

Q. Interpersonal skills for the O.R. team
1. Stress management
2. Team relationships
3. Assertiveness vs. aggressiveness
4. Recognition of limitations
5. Surgeon/surgical assistant relationship
    a. Role responsibilities
    b. Limitations
    c. Liabilities
    d. Responsibilities for reporting and documentation

Appendix G

American College of Surgeons

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January 29, 2009

Laurie Rains
LAURIE RAINS STRATEGIES
2111 Wilson Boulevard, 7th Floor
Arlington, Virginia 22201

Dear Ms Rains

After careful consideration, the American College of Surgeons is in support of the NSAA Standards for Certified Surgical Assistants/Assistants-at-Surgery as submitted to the Joint Commission.

Sincerely,

PE Collicott

Paul E. Collicott, MD FACS
Director, Member Services
American College of Surgeons
633 N. Saint Clair Street
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AppendixH

Fortis College Didactics Daily Lesson Plans & Mock Surgery work sheet

SURGICAL TECHNOLOGY
DIDACTICS DAILY LESSON PLANS
Wheel 4 ST-401 (180 Hours)

	DAILY TOPICS	INSTRUCTIONAL AND EVALUATION TOOLS	PERFORMANCE OBJECTIVES AND COMPETENCIES
WEEK I	Mock Surgery	Text:	
	Introduction Review: - Application of principles of asepsis (Universal Precautions) - Proper scrubbing techniques - Gowning and gloving - self - other team members - Draping of patient - Sterile field - creation - maintenance - Surgical instrumentation - Basic instrumentation - Specialty instruments - Sutures - OR equipment and supplies - Basic surgical case preparation	Surgical Technology for the Surgical Technologist: A positive Care Approach, (2nd ed.)2004. Memmler's The Human Body in Health & Disease, (10th ed.). Barbara Cohen, 2005. Mosby's Dictionary of Medicine, Nursing, & Health Professions (7th ed.)Tamara Myers, 2006. Miltex Surgical Instruments, Miltex Instrument Co., 2004. **Lab: Mock assignments for next week**	-Practice skills as listed below: 1. Universal Precautions 2. Scrubbing 3. Gowning 4. Gloving 5. Identify Surgical Instruments (basic and specialized 6. How to hand instruments 7. Identify Sutures 8. Identify OR equipment and supplies 9. Basic surgical case prep

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ST-401 Mock Surgery
Lesson Plan
APPROVED: 0307
Page 1 of 9

WEEK 1	Laboratory skills (this format to be used in all mock procedures) -Anatomy and pathophysiology -Indications -Preference card (accordingly) - instrumentation - supplies - equipment - sutures - other -Anesthesia -Positioning -Prepping and draping -Surgical procedure -Transportation to PAR -Clean up (Turn over room) **- General Surgery** **Choose procedures from the list of Basic Interventions**	**Text:** Surgical Technology for the Surgical Technologist: A positive Care Approach, (2nd ed.)2004. Memmler's The Human Body in Health & Disease, (10th ed.). Barbara Cohen, 2005. Mosby's Dictionary of Medicine, Nursing, & Health Professions (7th ed.)Tamara Myers, 2006. Miltex Surgical Instruments, Miltex Instrument Co., 2004 **Laboratory Practicum:** Maximum ratio 12:1 - Surgeon (instructor) - Assistant surgeon - First Scrub - Second Scrub - Circulator (1-2) - Anesthesia provider - Pathologist - Transporters (2)	-Review anatomy and pathophysiology related to the surgical procedure being scrubbed. - List indications for surgical procedure being scrubbed. - Follow directions from the surgeon's preference card before pulling the surgical case. - Demonstrate knowledge of type of anesthesia choice for the surgical procedure being scrubbed. - Apply knowledge on positioning, prepping and draping for general surgical procedures. - Apply knowledge on setting up and maintaining the sterile field. - Demonstrate aseptic technique and surgical conscience in a simulated OR environment while assisting the surgeon on selected procedures.

WEEK 2	- General Surgery Choose procedures from the list of Basic_Interventions	Note: 1- Scrubbed team may rotate during the procedure in order to provide students the opportunity to participate in different scrub roles 2- Assignments on a weekly basis will allow time for the students to research and prepare for their role 3- Students should participate in sterile and non- sterile roles 4- A case log and role participation for each student should be updated daily Quiz Week 2	-Review anatomy and pathophysiology related to the surgical procedure being scrubbed. - List indications for surgical procedure being scrubbed. - Follow directions from the surgeon's preference card before pulling the surgical case. - Demonstrate knowledge of type of anesthesia choice for the surgical procedure being scrubbed. - Apply knowledge on positioning, prepping and draping for general surgical procedures. - Apply knowledge on setting up and maintaining the sterile field. - Demonstrate aseptic technique and surgical conscience in a simulated OR environment while assisting the surgeon on the selected procedures.

WEEK 3	**General Surgery** Choose procedures from the list of Intermediate Interventions	**Practical quiz - Week 3** **Text:** Surgical Technology for the Surgical Technologist: A positive Care Approach, (2nd ed.)2004. Memmler's The Human Body in Health & Disease, (10th ed.). Barbara Cohen, 2005. Mosby's Dictionary of Medicine, Nursing, & Health Professions (7th ed.)Tamara Myers, 2006. Miltex Surgical Instruments, Miltex Instrument Co., 2004 **Quiz - Week 4**	-Review anatomy and pathophysiology related to the surgical procedure being scrubbed. - List indications for surgical procedure being scrubbed. - Follow directions from the surgeon's preference card before pulling the surgical case. - Demonstrate knowledge of type of anesthesia choice for the surgical procedure being scrubbed. - Apply knowledge on positioning, prepping and draping for procedure being scrubbed. - Apply knowledge on setting up and maintaining the sterile field. – Demonstrate skills while assisting the surgeon on the selected procedures
WEEK 4	**OB GYN Surgery** -Choose procedures from the Surgical Interventions Procedures list		

WEEK 5	**G.U. Surgery –** -Choose procedures from the list of Basic Interventions on Surgical Interventions list	**Quiz – Week 5**	-Review anatomy and pathophysiology related to the surgical procedure being scrubbed. - List indications for surgical procedure being scrubbed. - Follow directions from the surgeon's preference card before pulling the surgical case. - Demonstrate knowledge of type of anesthesia choice for the surgical procedure being scrubbed. - Apply knowledge on positioning, prepping and draping for procedure being scrubbed. - Apply knowledge on setting up and maintaining the sterile field. - Understand the principle of urinary catheterization. - Demonstrate skills while assisting the surgeon on the selected procedures

WEEK 6	**Orthopedic Surgery** Choose procedures from the list of Basic and Intermediate Interventions from Surgical Procedures list	**Practical quiz - Week 6**	-Review anatomy and pathophysiology related to the surgical procedure being scrubbed. - List indications for surgical procedure being scrubbed. - Follow directions from the surgeon's preference card before pulling the surgical case. - Demonstrate knowledge of type of anesthesia choice for the surgical procedure being scrubbed. - Apply knowledge on positioning, prepping and draping for procedure being scrubbed. - Apply knowledge on setting up and maintaining the sterile field. - Demonstrate skills while assisting the surgeon on selected procedures

WEEK 7	**ENT and Plastic Surgery** -Choose procedures from the list of Basic Interventions_ from Surgical Procedures list	**Text:** Surgical Technology for the Surgical Technologist: A positive Care Approach, (2nd ed.)2004. Memmler's The Human Body in Health & Disease,(10th ed.). Barbara Cohen, 2005. Mosby's Dictionary of Medicine, Nursing, & Health Professions(7th ed.)Tamara Myers, 2006. Miltex Surgical Instruments, Miltex Instrument Co., 2004 **Quiz - Week 7**	-Review anatomy and pathophysiology related to the surgical procedure being scrubbed. - List indications for surgical procedure being scrubbed. - Follow directions from the surgeon's preference card before pulling the surgical case. - Demonstrate knowledge of type of anesthesia choice for the surgical procedure being scrubbed. - Apply knowledge on positioning, prepping and draping for procedure being scrubbed. - Apply knowledge on setting up and maintaining the sterile field. - Demonstrate skills while assisting the surgeon on selected procedures. Review anatomy and pathophysiology related to the surgical procedure being

WEEK 8	**Thoracic Surgery** -Choose procedures from the list of Basic Interventions from Surgical Procedures list **Vascular Surgery** -Choose 1 procedure from the list of Basic Interventions from Surgical Procedures list **Neuro Surgery** -Choose 1 procedure from the list of Basic Interventions from Surgical Procedures list	**Text:** Surgical Technology for the Surgical Technologist: A positive Care Approach, (2nd ed.)2004. Memmler's The Human Body in Health & Disease, (10th ed.). Barbara Cohen, 2005. Mosby's Dictionary of Medicine, Nursing, & Health Professions (7th ed.)Tamara Myers, 2006. Miltex Surgical Instruments, Miltex Instrument Co., 2004 **Quiz – week 8**	scrubbed. - List indications for surgical procedure being scrubbed. - Follow directions from the surgeon's preference card before pulling the surgical case. - Demonstrate knowledge of type of anesthesia choice for the surgical procedure being scrubbed. - Apply knowledge on positioning, prepping and draping for procedure being scrubbed. - Apply knowledge on setting up and maintaining the sterile field. - Demonstrate skills while assisting the surgeon on selected procedures

WEEK 9	- Mock clearance (assigned procedure) -Anatomy and pathophysiology -Indications -Preference card (accordingly) - instrumentation - supplies - equipment - sutures - other -Anesthesia -Positioning -Prepping and draping -Surgical procedure -Transportation to PAR -Clean up (Turn over room)	**Clearance Assignment:** - **Assign procedure** - **Mock surgery clearance practical exam (60%)** - **Mid term Final (20%)**	- Apply didactic knowledge, aseptic technique and laboratory skills in performing an assigned mock surgery procedure as first scrub solo - Demonstrate knowledge of Universal/Standard precautions, team work and organizational skills

Mock Surgery

*Student Name*_____ *Instructor* _____

General Surgery		*Scrub*	*Circulator*	*Assist*	*Anes*
Date					
	Breast Biopsy				
	Appendectomy				
	Hernia Umbilical Inguinal Incisional Ventral				
	Mastectomy Simple Partial Radical				
	Cholecystectomy Open Laparoscopic				
	Ex. Laporatomy Open Laproscopic				
	Gastrectomy Partial Complete				
	Gastrostomy				

OBGYN					
	D&C				
	Total Abdominal Hysterectomy				
	Tubal Ligation Open Laparoscopic				
	Vaginal Hysterectomy				
	Laparoscopic Assisted Vaginal Hysterectomy				
	Total Abdominal Hysterectomy w/salpingo-oophorectomy				
	Ectopic Pregnancy				

		Scrub	*Circulator*	*Assist*	*Anesth.*
Orthopedics					
	Carpal Tunnel Release				
	Radius Fracture/ORIF				
	Knee Arthroscopy				
	Ankle Fracture				
	Tendon Repair				
ENT					
	Tracheostomy				
	T&A				
	Thyroidectomy Complete Partial Biopsy				
	Myringotomy				
Thoracic					
	Lobectomy				
	Lung Biopsy				
	Bronchoscopy				

Vascular		***Scrub***	***Circulator***	***Assist***	***Anesth.***
	A-V Fistula				
	Carotid Endarterectomy Shunt				
	Femoral Embolectomy				
	Femoral Popliteal Bypass Graft				

Neuro

	Burr Holes				
	Craniectomy				
	Laminectomy				

Urology

	Nephrectomy	Partial	Complete			
	Prostatectomy					
	Cystoscopy					
	Circumcision	Adult	Peds			
	Orchiectomy					

Appendix I

Note: The studies refered to in this section did not compare outcomes between vein harvesting by non-physician assistants and surgeons. Opinions as to the causes of different outcomes in Europe and the United states are purely speculative and not backed up by evidence. Although messages have not been edited, some emails have been removed from the thread, and the order of posts may be out of sequence. Although these messages were posted to a public email listserv, they were intended for a target audience of cardiac surgeons and for an informal discussion. They were not intended to influence policy, and should not be considered well-thought out or measured opinions. **This thread is included to provide insight into actual practice, and the level of supervision of assistants at surgery. However, it should be considered hearsay at best. None of the information, or the identity of the posters, has been verified.** Last names and email addresses have been removed as a courtesy.

Open Heart-L: Open Heart List Serv

(http://mmp.cjp.com/mailman/listinfo/openheart-l)

[HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s

Thread Available At: http://mmp.cjp.com/pipermail/openheart-l/2006-September/thread.html

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Fri Sep 22 09:05:22 EDT 2006

- Previous message: [HSF] EACTS conference
- Next message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- **Messages sorted by:** [date] [thread] [subject] [author]

Dear Forum members

Following recent discussions on low saphenous vein patency rates in US trials, and the high patency rates from studies from Sweden and Australia where the attending surgeon harvested the vein, it occurred to me that vein harvest in the USA is no longer the remit of the doctor and that may in itself explain low patency (not subject of this thread). I then wondered if PAs are harvesting veins 1) who teaches them how to do this 2) do post PA era surgeons actually know how to harvest vein 3) How can a surgeon who is less experienced than a PA in vein harvest help if the PA is in difficulty.

I asked our track fellow, who is 14 months into cardiothoracic training, how many LS vein harvests for CABG he has performed - answer zero. Radial harvest - seen one. Arm vein or short saphenous - "I am sure it is no different from any other vein harvest - we did a view in vascular surgery".

Are we not making a mistake here? How can we say we aretrained surgeons if we cannot harvest conduits for CABG but must rely entirely on others for this? Of course this does not apply to surgeons trained in the pre-endovein

era who would have harvested thousands of veins. For all the current residents I have seen in my brief time in USA, it seems an insult to be anywhere other than the operating surgeons position in the chest. In two years, I have not seen a single track fellow harvest a saphenous vein - indeed I doubt they can do it. What is not uncommon is to see the operating resident unscrubbed chatting in the corridor "waiting for the PA to find vein" because the PA is having difficulty. I think the current trend is a mistake as there is much more to surgery than doing "the operation"; indeed if one reads Barnard's classic description of "the operation" what the operating surgeon technically does was only a very small element.

It is very different - indeed too much to the other extreme - in Europe where I trained. Conduit harvest is the remit of the junior surgeon in training - you develop your skills first on the vein before progressing to the heart. I harvested no less than 500 veins in training and 200 radials. Indeed it is not unusual in Europe for a more senior trainee or attending to harvest the vein or radial to give a junior colleague the opportunity to learn LIMA harvest. Of course in Europe most centers do not have the luxury of PAs.

Is the present trained system in USA not flawed or have we now relegated vein harvest (arguably the most important determinant of long term freedom from intervention) to join phlebotomy and other such 'mundane' procedures as non-physician tasks? Another reason why I would never have a vein graft performed on me in the USA - at least the surgeon knows how to harvest two mammaries (I believe).

Ani

Fri Sep 22 14:51:53 EDT 2006

- Previous message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- Next message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- **Messages sorted by:** [date] [thread] [subject] [author]

Ani,
As usual, you are right on target. One of the cardiac guys in my group joined me out of training 2 years ago. A few months ago, he sheepishly told me he had never harvested a single saphenous vein. What kind of crap is that? These trainees sit around like big shots waiting for the PA to get conduit. What if there's no PA available? More than once, I've dived down to the leg to quickly get a piece of vein in the middle of a clamp when I unexpectedly needed to do a graft (e,g., blocked RCA ostium after shoe horning in an aortic prosthesis into a small annulus). What would the surgeon do if he wasn't adept at harvesting vein? A lot of times, these new trainees could end up being assisted by some general surgeon who also doesn't know squat about harvesting veins. Most importantly, trainees should know the nuances in harvesting vein so that they can recognize a conduit that has been properly harvested and prepared.
Hal

Sat Sep 23 08:01:04 EDT 2006

- Previous message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- Next message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- **Messages sorted by:** [date] [thread] [subject] [author]

I will echo a previous comment. Our PAs are far superior in RA and SVG harvesting.

Our group, three surgeons and 3 PAs, has harvested some 3150 RAs now, most of them endoscopically by the PAs. They are very skilled, and endo RA harvesting is quick and atraumatic.

Of course I could learn, but I do not think I could take an Endo RA or vein at this time.

Endo vein seems just a little more difficult, perhaps I did not use veins much at all till last 6 months or so. The patient satisfaction of not having a long scar on the leg has to be seen to be believed. I am not satisfied with vein harvesting with transverse intermittent incisions, I think it is far more traumatic. Still the healing is far superior to the longitudinal incisions. In many patients this may not matter, but for me, operating on elderly, diabetic, morbidly obese women, one leg complication is too many.

Ajit

Fri Sep 22 18:05:14 EDT 2006

- Previous message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- Next message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- **Messages sorted by:** [date] [thread] [subject] [author]

Ani,
I cannot speak about all the training programs but you are correct in that most residents graduating now do not know how to harvest conduits other than IMA. The first 3 months of my training (At NEMC in Boston 1999-2001) I did mostly vein and radial harvesting. If I had to put a 7-0 for an avulsed branch my chief would let me know of his dissatisfaction. The last 3-6 months I did as much endo vein harvesting as possible just to be comfortable with it and to help out PA's who were also learning to do it.

When I started my practice I started doing vein harvesting here and about 2 years ago started doing endo radial harvesting. I do my own vein and radial harvesting in > 95% of the cases. Some of my partners are also learning and doing a good job. Our residents rather do the IMA and case than harvest vein. I can harvest both in the same time it takes the resident to harvest the IMA so not a whole lot of incentive to change the pattern, especially with limited or no PA support.

Endo vein harvesting is not hard to learn, especially for surgeons in this era of laparascopic training in General Surgery. I strongly feel that as a surgeon one should know how to do all aspects of surgery, you can delegate some portions but you will be in charge and if they are in trouble you should be able to get them out of the hole.

Chand

Sat Sep 23 20:58:21 EDT 2006

- Previous message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- Next message: [HSF] PAs harvesting RAs and SVGs
- **Messages sorted by:** [date] [thread] [subject] [author]

It is a fine line between resident bashing and constructive criticism. I have seen many places where the least critical part, the opening of the chest is done by the more junior people (what can you screw up opening the chest ?) and the vein harvest by the consultant. Thus he/she is certain of the quality of the conduit as well as being responsible for it. Once the vein is out then they turn to taking down the ITA. Now this assumes that SV is being used. Process for radial and ITA can be similar. I find that it is often quicker doing conduit harvest myself and leaving closure to the residents. However, they also feel less valuable if they are not given the responsibility for conduit harvest. When I was training, it was a challenge to produce the best bit of conduit for the procedure.
How often has one of you as a senior consultant taken the time to show a less experienced colleague how you would like the vein taken. Bl..dy infrequently I would suggest.
Take the vein with them helping a few times , then you help them. That way you have only yourself to blame if the quality is poor. (notwithstanding the patient's protoplasm as being the most important factor).

To: OpenHeart-L at lists.hsforum.com<mailto:OpenHeart-L at lists.hsforum.com
Sent: Friday, September 22, 2006 8:55 AM
Subject: Re: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s

In response (or maybe even in defense):

Yes, here in the USA (at least the major places that I have been at) the PA harvest the veins. Most PAs after a while are very good at getting/finding good vein. In fact, some of the PAs that I have worked with are much better than many vascular surgeons that I have also seen harvest vein for various reasons. Yes, we are spoiled but the factors that have brought us to this point are very complex. I will not comment on the training programs in Europe/Asia/etc but here in the US we are all trained in general surgery (board certified in most cases, although that might change) and during this

training we/I have done a lot of Vascular surgery(elective/emergent/trauma/etc) and as such harvesting conduit is not a major problem. Many general surgery residents in the US do a lot of vascular surgery in their practices.

Even during my CT surgery training I often at times (usually due to a lack of an available PA or during emergencies) have "taken vein". Am I good at it? In all honesty probably not great, but I can do it. Can I do Endovein? No way (many PAs have a hard time with it), but that is another topic (hmm - is Endovein the same as open vein vs small incision vein?). In addition I have seen senior attendings have a hard time taking down IMAs - mainly since they dont do it every day. We cant be experts at everything - where do you draw the line? Do you do your own intubations? PA catheters/central line? IABP? Chest tubes? Foley caths? How many of you close your own incisions? (I am sure many do) But, there are practical issues involved here

I think these issues have very little to do with vein patency rates in different countries.

Sat Sep 23 01:17:39 EDT 2006

- Previous message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- Next message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- **Messages sorted by:** [date] [thread] [subject] [author]

Regardless of (PA) years of experience, there is a big difference between a PA and a surgeon taking vein (or indeed doing any task). For the PA, vein harvest is essentially a technical procedure aimed to extract a non-leaking piece of vein (usually within a reasonable time period) and this procedure ends with presentation of said vein to surgeon. For a surgeon taking a vein the aim of the procedure is to provide a conduit for long-term aortocoronary bypass - the entire procedure is not just a technical one but one integral to the entire operation with similar importance to the anastomosis. For the PA the goal is to take the vein out through a small hole , for the surgeon it is to bypass the coronary artery (and the vein harvest is just one step in this). We too have excellent PAs, and I do not attempt to underplay their contribution (not subject of this thread) but a PA is not a substitute for a surgeon. For example, how many PAs have an idea about safe inflation pressure of a vein, or ideal solutions for venous distension or preservation? How many know the pH of normal saline? Their objective is essentially to ensure there are no leaks on the vein, so hydrostatic inflation trauma is a minor consideration. I have seen PAs persist with endovein harvest clearly struggling and causing traction and avulsion trauma to the vein, seemingly forgetting the goal of the entire exercise; the desire to perform surgery through a small hole becoming the overwhelming consideration.

Conduit harvest is part of CABG. Being an expert at CABG must include expertise in vein and arterial harvest (not necessarily endoscopic). Unfortunately we do not attach the same seriousness to vein or radial harvest

as we do to IMA harvest (BTW my PA takes down IMAs - it is not a question of who takes it but the seriousness attached to it).

There is a difference between a PA and a surgeon, if not it would not take 4 times as long to train the latter. A PA is a doctors assistant and not a doctors replacement. They assist us in doing what we do and by replacing what we do. It is a surgeons job to teach and support his PA; to do this we must ourselves be trained in the procedures the PAs do. Until the day vein harvest becomes a non-surgical exercise (maybe we will have to consult a separate service to procure vein for us) it will always be the responsibility of the operating surgeon and to me this seems awkward if the surgeon is responsible for a procedure he has never done. I wonder what will happen in a patient with no arterial conduits and severe LSV varicosities - what will the surgeon do? Maybe call for assistance from a more experienced PA?

Sat Sep 23 17:23:18 EDT 2006

- Previous message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- Next message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- **Messages sorted by:** [date] [thread] [subject] [author]

It is not the person harvesting the vein but their technique and that is determined by their training no matter who they are. Certainly trainees must learn the technique but I would bet that a properly trained PA whose sole task in life is harvesting veins would do a better job than some of the so called surgeons who I have encountered over the years.
As an aside , I do not allow the vein or the radial to be distended or clamped. They are flushed with verapamil, obvious branches and leaks are dealt with and any others are taken care of after the grafts are done or the conduit is connected to inflow.
Don

To: OpenHeart-L at lists.hsforum.com
Sent: Friday, September 22, 2006 7:15:26 AM
Subject: Re: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s

The first operation that a cardiac surgeon done in most other areas were there are no PA's is a saphenous vein harvest. I think it is very important that the technique be followed without excessive traction and distention. I think a period of vascualr surgery training would efinitely be useful to learn to"respect" the vein.
Prasanna

Fri Sep 22 21:30:53 EDT 2006

- Previous message: [HSF] Lack of surgeon experience in Vein Harvest: USA c. 2000s
- Next message: [HSF] EACTS conference

- **Messages sorted by:** [date] [thread] [subject] [author]

Well, I don't do as many pacemakers as some cardiologists, but I always seem to be able to fix their mistakes. The same for my PA. My PA is so good that I don't try very often anymore. I do a lot of endoscopy but not much endoscopic veins. It is probably a wash. A trial that incidently reflects veins harvest and a study of vein harvest are very different things. Notice how little was published about Prevent IV despite the wealth of real world data. We have looked at a small series of RSV with CTA and have above 90% 3-6 month patencies. Does that mean it is better than radials? A very busy senior surgeon made a presentation on surgical tips to a group of us that hearalded from Parkland as did he commented, "We proved that the radial was a bad graft in the 70's, we proved that the radial was a bad graft in the 80's and we proved it in the 90's. Do we need to prove it again?"
What is evidence? More to follow.
Tea

Appendix J : Proposed Statutory Language for the Regulation of Surgical Technologists and Surgical Assistants

Overview

At its November 10, 2010 meeting, the Regulatory Research Committee directed staff to draft proposed statutes regarding certification of surgical technologists and licensure of surgical assistants. Staff drafted proposals that vary on two issues: (1) whether all persons performing in the scrub role should be certified, or only those performing advanced second assisting tasks and (2) whether surgical assistants and surgical technologists should have an independent advisory board under the Board of Medicine or whether they should be included within the Physician Assistant Advisory Board. Each proposed statute varies on other matters, however these are related to the issues described above. Table 1 provides a brief overview of the four versions.

Version	Advisory Board	Scrub Role Certified	Advanced Surgical Tech Certified	LPNs perform advanced surgical tech?
1	SA/ST	Yes	Yes	Yes
2	SA/ST	No	Yes	No
3	PA	No	Yes	No
4	PA	Yes	Yes	Yes

Table 1: Overview of proposed statutes

Regulate the Scrub Role or Advanced Surgical Technology?

The following framework outlines distinct roles within the surgical team:

Scrub Role	Advanced Surgical Technology	First Assistant
• Clean and prep room and equipment • Set up operating room and instrument trays • Assemble medications or solutions • Transport Patient • With circulator, verify chart, patient identity, procedure and site of surgery • Shave and drape patient • Maintain Sterile Field • Perform counts with circulator • Assist surgeon with gown and gloves • Pass instruments • Prepare sterile dressing	• Hold retractors, instruments or sponges • Sponge, suction or irrigate surgical site • Apply electrocautery to clamps • Cut suture material • Connect drains to suction apparatus • Apply dressing to closed wounds • Venipuncture (Inserting IV) • Manipulation of endoscopes within the patient • Skin stapling	• Position patient • Place retractors, instruments or sponges • Cauterization and clamping • Closure and subcutaneous closure • Harvest veins • Placing hemostatic agents • Participate in volume replacement and autotransfusion • Injection of local analgesics • Select and apply dressing to wounds • Assist with securing drainage systems

Table 2: Framework of roles within the Surgical Assistant and Surgical Technologist continuum, and illustrative tasks.

This illustrative framework recognizes a continuum from the scrub role to the first assistant role. This continuum is often pursued by surgical technologists as they advance through their careers. Surgical Technologists perform in the scrub role, and also perform tasks

commonly known as the "second assistant" role. Since these tasks are performed by surgical technologists, staff has labeled these tasks "advanced surgical technology" to avoid confusion with the first assistant position. Surgical technologists should not first assist without additional training and, should one of the proposed statutes pass, a license as a surgical assistant.

Versions one and four treat the scrub role and advanced surgical technology as a single role within the surgical team. Versions two and three only require certification for advanced surgical technology. All four bills contain grandfathering provisions for both surgical assistants and surgical technologists and prohibit personnel from performing in procedures unless privileged by the medical staff of a licensed hospital.

Regulating the Scrub Role

Versions one and four join advanced surgical technology with the scrub role. They require that unlicensed personnel working in the scrub role be certified as Certified Surgical Technologists by the National Board of Surgical Technologists and Surgical Assistants or have completed an appropriate military or hospital based training program approved by the Board of Medicine. Licensed Practical Nurses do not require an additional certification. Anyone qualified to perform in the scrub role may perform advanced surgical technology. Students enrolled in approved training programs would be able to practice under supervision. The statutes allow hospitals to create their own training programs, subject to approval by the Board of Medicine.

Regulating Advanced Surgical Technology Only

Versions two and three only regulate tasks defined as Advanced Surgical Technology. LPNs and unlicensed personnel may perform in the scrub role, but they must be either certified as Certified Surgical Technologists by the National Board of Surgical Technologists and Surgical Assistants or have completed an appropriate military training program to perform Advanced Surgical Technology. The Board of Medicine maintains a list of Advanced Surgical Technology tasks. The definition of Advanced Surgical Technology in both versions focuses on manipulation of instruments in contact with subcutaneous tissues:

"Advanced Surgical Technology" means advanced technical tasks that involve manipulation or control of instruments in contact with subcutaneous tissues performed by persons other than the surgeon or the assistant-at-surgery. Such tasks include holding retractors or other instruments placed by the surgeon or assistant-at-surgery, sponging, suctioning or irrigating, applying electrocautery to clamps or other instruments, connecting drains to suction apparatus, venipuncture (inserting intravenous line), manipulation of endoscopes, skin stapling and other tasks identified by the Board. These technical tasks require specialized skills and knowledge.

Advisory Board Structure

Considering the nature of their practice, the Board of Medicine is suited to regulate surgical assistants and to perform duties related to regulating the scrub role or advanced surgical

technology. Staff considered two options for advising the Board of Medicine on regulation of surgical assistants and surgical technologists. Surgical Assistants and Surgical Technologists may be added to the Advisory Board of Physician Assistants, or they may form a separate advisory board. In either case, the Advisory Board would advise the Board of Medicine on regulation of surgical assistants and surgical technologists, including approval of private certifications, educational programs and military training programs. Depending on the method of regulation chosen for surgical technologists, the advisory board would also provide advice on the list of advanced surgical technology tasks or approved hospital-based training programs.

Estimate of Numbers

The Bureau of Labor Statistics estimates that 1940 surgical technologists were employed in Virginia in May of 2008. This figure does not include self-employed (contracting) surgical technologists. Additionally, it may include many employed surgical assistants. The BLS expects hospitals, surgeons and other employers to employ 24 percent more surgical technologists nationwide in 2016 than in 2006, much faster than the average occupational growth rate of about 7 to 13 percent.[87] The Virginia Workforce Connection (VAWC) of the Virginia Employment Commission (VEC) expects a similar growth rate in Virginia, with the number of surgical technologist jobs increasing from 1,897 in 2006 to 2,362 in 2016, a 24.5 percent increase.[88]

The number of surgical assistants practicing in Virginia is difficult to estimate. In public comment, the Virginia Association of Surgical Assistants indicated it had 242 members. The National Surgical Assistants Association lists 203 Certified Surgical Assistants in Virginia. The American Board of Surgical Assistants lists 56 Surgical Assistants-Certified with addresses in Virginia. Additionally, many surgical technologists may perform tasks associated with first assisting, and certify as Certified First Assistants. Staff roughly estimates that there may be as many as 500 unlicensed persons practicing as assistants-at-surgery in Virginia.

[87] Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2008-09 Edition*, Surgical Technologists, on the Internet at http://www.bls.gov/oco/ocos106.htm**.** Accessed June 15, 2009.
[88] Virginia Workforce Connection "Occupational Employment Projections in Virginia for Surgical Technologists for a base year of 2006 and a projected year of 2016." Accessed through Occupational Employment and Projections at http://www.vawc.virginia.gov/analyzer/session/session.asp?cat=OCC on June 16, 2001.

Board of Medicine Advisory Board Structure

By statute, the Virginia Board of Medicine (BOM) consists of one medical physician from each of Virginia's eleven congressional districts, one osteopathic physician, one podiatrist, one chiropractor and four citizen members. Except for seats reserved for citizen members, the statue directs the Medical Society of Virginia to provide the Governor a list of three recommendations for any vacant seats. The Governor, however, is not bound to select from among this list. Members sit for four-year terms.

Advisory Board	**Number of Licensees***	**Current Licensees***
Acupuncture	489	398
Radiological Technology	6319	3927
Radiological Technologists	*4951*	*3131*
Radiological Technologists Limited	*1368*	*796*
Occupational Therapy	3931	3306
Occupational Therapist	*3330*	*2705*
Occupational Therapist Assistant	*601*	*601*
Respiratory Care	4555	3451
Athletic Training	1373	942
Physician Assistants	2311	1869
Midwifery	45	37
Average	**2718**	**1990**
Average excluding Midwifery	**3163**	**2316**
BLS estimate of Surgical Technologists in Virginia, May 2008		1940*
Rough estimate of Surgical Assistants in Virginia		500

Table 3: The number of licensees for the Board of Medicine's advisory boards.
* This estimate likely includes surgical assistants

Seven Advisory Boards related to allied health professions advise the BOM on matters pertaining to allied health professions regulated by the Board (see Table 3). On average, these advisory boards serve 2718 licensees. These boards range in size by number of licensees from 45 for the Midwifery Advisory Board to 6,319 for the Radiological Technology Advisory Board. Due to the small number of licensees, the Midwifery Advisory Board is an extreme outlier, representing less than 2 percent of the average (arithmetic mean) for all Advisory Boards. Excluding Midwifery, the mean number of licensees rises to 3163. The Acupuncture Advisory Board is the second smallest advisory board, serving 489 licensees.

A Separate Advisory Board

Versions one and two of the proposed statute create an independent advisory board. This Advisory Board consists of five members: two licensed surgical assistants, one Certified Surgical Assistant, one physician who supervises a surgical assistant and one citizen at large. This would create a separate advisory board able to advise the Board of Medicine on matters relating to surgery.

Physician Assistant Advisory Board

The Physician Assistant Advisory Board consists of five members: three licensed physician assistants with at least three years experience, one licensed physician who supervises a physician assistant and one citizen-at-large. The Physician Assistant Advisory Board advises the Board of Medicine on matters relating to physician assistants. While the profession of physician assistant historically held a prominent role for "Surgeon's Assistants", it has tended towards

primary care roles over surgical assisting roles. The American Academy of Physician Assistants reports that 25.1 percent of Physician Assistants practice in general surgery or within the surgical subspecialties.

As of September, the Board of Medicine licensed 2311 physician assistants (1869 current). If surgical assistants and surgical technologists were added to the Advisory Board's duties, the number of professionals under the Advisory Board's area of expertise would roughly double, however only surgical assistants would be licensed. Versions three and four of the proposed statutes add two members to the advisory board: one licensed surgical assistant, and one licensed surgical assistant who is also a certified surgical technologist. This would place all non-physician practitioners who act as surgical assistants or surgical technologists and who are regulated by the Board of Medicine within one advisory board.

Fiscal Impact

The finance department developed financial impact estimates for 500 licensees. This number of licensees would not require an additional full time employee, and would have a small impact on the Department of Health Profession's budget, totaling approximately $7,030 annually. Support for an independent advisory board would add an additional $5,000 annually (See Table 3). Using current fee structures for all Board of Medicine licensees ($135 per biennium), revenues from 500 licenses would exceed $67,500 per biennium, or $33,750 per year.

Grandfathering or other provisions may cause the number of licensees to be low initially, and any new program may operate at a loss before revenue ramps up. Additionally, Board of Medicine staff have indicated that current staffing per licensee is low relative other states. Although surgical assistants and surgical technologists alone may not require additional staff, they will be along with the polysomnography program and accelerate the need for additional staff.

Direct Cost	Annual Costs
Office Supplies\Postage	$1,400
Indirect\Allocated Cost	
Data Center	-
Human Resources	-
Finance	$970
Directors Office	$530
Enforcement	$2,560
Administrative Proceedings	$1,160
Impaired Practitioners	Negligible
Attorney General	Negligible
Board of Health Professions	$310
Program Development and Implementation	$100
Total	**$7,030**
Independent Advisory Board Support	$5,000
Total w/ Ind. Adv. Board	**$12,030**

Table 3: Costs associated with regulation of surgical assistants and surgical technologists

Training & Education

Some elements related to training and education are common to each of the versions of the proposed legislation:

The Regulatory Research Committee received comment from several current and former members of the armed services trained as surgical technologists or surgical assistants who practice in the military or in civilian hospitals. These service members and veterans noted that military training programs often do not seek accreditation from civilian accreditation agencies due to cost or administrative matters. Currently, the NBSTSA CST certification requires graduation from a CAAHEP or ABHES accredited surgical assistant program, precluding

military trained surgical technologists from certification. The proposed statutes allow the practice of surgical technologists from Board of Medicine approved military-training programs.

Surgically-trained surgical assistants from the armed forces (Special Forces, Hospital Corpsman, etc) are eligible for NSAA CSA certification, but not for other prominent surgical assistant certifications. The proposed statutes require certification, but allow the Board of Medicine to approve military training programs. Additionally, since there is concern about the quantity and quality of clinical training associated with some CAAHEP accredited programs, the proposed statutes allow the Board of Medicine to approve individual training programs, rather than a blanket acceptance of CAAHEP programs

Proposed Statutes

The rest of this document consists of the texts of the proposed statutes. Despite accomplishing many of the same things, the language of each version varies due to the particular needs of each version. Some members of the public have expressed a desire for separate bills for each profession. Staff believes that the proposed statutes for these professions are complementary, and a single statute is more concise and coherent than separate statutes. Nevertheless, each program is severable from these combined statutes, and the items related to each profession will work as "stand alone" programs with minor amendments.

Appendix K

VERSION 1

SURGICAL ASSISTANT BOARD

SCRUB ROLE CERTIFIED

~~§§ 54.1-2942. through 54.1-2948.~~

~~Repealed by Acts 2000, c. 688, cl. 2.~~

§ 54.1-2942. Surgical Personnel; definitions

As used in this section:

"Assistant-at-Surgery" means a person who directly assists a qualified surgeon by performing significant surgical tasks. These tasks include final positioning of the patient, manipulating tissue, placing sponges, clamps or other instruments, manipulating or inserting sutures, placing local hemostatic agents, injecting local anesthetic as directed by the surgeon, harvesting veins, implanting devices, and other surgical tasks. The assistant-at-surgery uses professional judgment to anticipate the needs of the surgeon, identify and prevent potential problems, and to act as a second set of eyes and hands to the surgeon. The assistant-at-surgery is also referred to as the "First Assistant".

"Scrub Role" means the duties and responsibilities commonly assumed by persons supporting the circulating nurse before, during and after surgical procedures. During surgery, persons filling the scrub role support surgery from within the sterile field. Tasks associated with the scrub role include managing surgical instruments, maintaining the sterile field, assisting with patient safety verifications, holding retractors, sponging, irrigating and other tasks. The person filling the scrub role is often referred to as the "scrub", "first scrub" or "scrub person".

"Surgical Assistant" means a person who performs as an assistant-at-surgery who has complied with the regulations pertaining to licensure prescribed by the Board, and who has been issued a license as a surgical assistant by the Board, and who is not otherwise licensed and qualified to act as an assistant-at-surgery under the provisions of this Chapter or the provisions of Chapter 30 of this Title, or the provisions of Chapter 27 of this Title.

"Surgical Technology" means maintaining surgical instruments and patient safety from within the sterile field during surgical procedures, including related pre and post-operative tasks. Surgical technology requires technical knowledge and expertise.

§ 54.1-2942.1. License required; title protection.

A. It shall be unlawful for a person to practice or to hold himself out as practicing as an assistant-at-surgery or first assistant unless he is licensed under the provisions of this Chapter or the provisions of Chapter 30 of this Title, or the provisions of Chapter 27 of this Title and is practicing within the usual scope of his professional activities.

B. A licensed practical nurse shall not practice as an assistant-at-surgery unless in accordance with § 54.1-2943.2.

C. It shall be unlawful for any person not holding a current and valid license from the Board of Medicine to practice as a surgical assistant or to assume the title, "Surgical Assistant" or "Licensed Surgical Assistant" or to use, in conjunction with his name, the letters "LSA".

§ 54.1-2943. Requirements for licensure as a surgical assistant.

A. The Board shall promulgate regulations establishing requirements for licensure as a surgical assistant which shall include,

1. Successful completion of a surgical assistant program approved by the Board, or,

2. Successful completion of training provided by the Uniformed Services of the United States of America that included clinical training as a surgeon or assistant-at-surgery and is approved by the Board, or,

3. Successful completion of a foreign medical program that included clinical training as a surgeon or assistant-at-surgery and is approved by the Board, and

4. Successful completion of a surgical assistant certification exam approved by the Board, and

5. Documentation that the applicant for licensure has not had his license or certification as a practitioner of the healing arts suspended or revoked and is not the subject of any disciplinary proceedings in the Commonwealth of Virginia or any other jurisdiction.

B. The Board shall issue a license to practice as a surgical assistant to persons who meet the requirements of the Board.

§ 54.1-2943.1. Restrictions on Practice of Surgical Assistants.

A. A surgical assistant shall perform as an assistant-at-surgery only under the direct supervision of a licensed doctor of medicine, doctor of osteopathy, doctor of podiatry, oral or maxillofacial surgeon, or dentist who is competent to perform surgery and is immediately available within the surgical suite.

B. A surgical assistant shall act as an assistant-at-surgery only in procedures for which he is privileged by the medical staff of an hospital or an outpatient surgical hospital that is licensed in accordance with § 32.1-123 through § 32.1-137.

§ 54.1-2943.2. Exceptions.

Nothing in this chapter shall prohibit:

A. The practice of a surgical assistant as an integral part of a program of study by students enrolled in an education program approved by the Board. Any student enrolled in approved education programs shall be identified as a "Student Surgical Assistant" and shall only assist-at-surgery under the direct supervision of an appropriate clinical instructor recognized by the education program.

B. A licensed physician assistant, podiatrist assistant, nurse practitioner, clinical nurse specialist, dental hygienist or registered nurse from practicing as assistant-at-surgery when practicing within the usual scope of his professional activities.

C. Any person who provides documentation that he has participated as an assistant-at-surgery in at least 100 surgical procedures within the five-year period prior to July 31, 2010 from practicing as an assistant-at-surgery in those procedures for which he is trained and competent.

§ 54.1-2944. Certification Required for Surgical Technology.

A. It shall be unlawful for a person to perform in the scrub role unless he has:

1. Passed the examination for Certified Surgical Technologists provided by the National Board of Surgical Technology and Surgical Assisting or its successor and maintained a current certification, or,

2. Successfully completed a training program provided by the Uniformed Services of the United States of America that included appropriate clinical training as a surgical technologist and is approved by the Board, or,

3. Successfully completed a surgical technologist training program within a Virginia hospital licensed in accordance with § 32.1-123 through § 32.1-137and approved by the Board, and,

4. Maintained continuing education requirements as directed by the Board, and,

5. Is privileged by the medical staff of an hospital or outpatient surgical hospital that is licensed in accordance with § 32.1-123 through § 32.1-137.

B. It shall be unlawful for any health care facility licensed in the Commonwealth of Virginia to knowingly employ, direct or privilege any person not meeting the requirements of § 54.1-2944(A) to perform in the scrub role, or to contract with such persons for the purpose of performing in the scrub role.

C. It is the duty of any person qualified to perform in the scrub role to inform any employing, contracting, supervising or privileging entities of any changes in his status that would preclude him from legally performing in the scrub role under the provisions of this chapter.

§ 54.1-2944.2. Exceptions.

Nothing in this section shall prohibit:

A. Any person who can provide documentation that he has performed in the scrub role for at least twelve months during the five-year period prior to July 1, 2011 from continuing to perform in the scrub role in procedures that he is trained and competent to perform.

B. A licensed practitioner from performing in the scrub role when practicing within the usual scope of his professional activities.

C. The practice of a surgical technologist as an integral part of a program of study by students enrolled in an education program or hospital based training program approved by the Board. Any student enrolled in approved education programs or hospital based training programs shall be identified as a "Student Surgical Technologist" and shall only perform in the scrub role under the direct supervision of an appropriate clinical instructor recognized by the education program or hospital based training program.

§ 54.1-2944.2. Duties of the Board regarding Surgical Technology.

A. The Board shall develop criteria for the approval of hospital-based training programs.

B. Include programs meeting the Board's criteria on the list of approved hospital-based training programs.

§ 54.1-2945. Advisory Board on Surgical Assistants and Surgical Technology; membership; qualifications.

The Advisory Board on Surgical Assistants shall consist of five members to be appointed by the Governor for four-year terms, as follows: one member shall be a licensed surgical assistant who has practiced his profession in Virginia for not less than three years prior to their appointments; one shall be a surgical technologist qualified to perform in the scrub role under the provisions of this chapter who has practiced his profession in Virginia for not less than three years; one shall be a licensed surgical assistant who is also a Certified Surgical Technologist certified by the National Board for Surgical Assisting and Surgical Technology; one shall be a physician who supervises at least one surgical assistant; and one shall be a citizen member appointed from the Commonwealth at-large. Vacancies occurring other than by expiration of term shall be filled for the unexpired term. No person shall be eligible to serve on the Advisory Board for more than two successive terms.

§ 54.1-2945.1 Duties of the Advisory Board on Surgical Assistants and Surgical Technology.

The Advisory Board on Surgical Assistants and Surgical Technology shall, under the authority of the Board:

A. Recommend to the Board for its enactment into regulation the criteria for licensure as a surgical assistant and the standards of professional conduct for holders of licenses.

B. Recommend to the Board regulations and procedures that will facilitate the safe and appropriate practice of competent surgical assistants and surgical technologists trained within the Uniformed Services of the United States of America.

C. Recommend to the Board for its enactment into regulation the criteria for approval of hospital-based training programs.

D. The Advisory Board shall also assist in such other matters dealing with assistants-at-surgery and surgical technology as the Board may in its discretion direct.

§§ 54.1-2946 through 54.1-2948.

Repealed by Acts 2000, c. 688, cl. 2.

VERSION 2

SURGICAL ASSISTANT BOARD

ADVANCED SURGICAL TECHNOLOGY CERTIFIED

~~§§ 54.1-2942. through 54.1-2948.~~

~~Repealed by Acts 2000, c. 688, cl. 2.~~

§ 54.1-2942. Surgical Personnel; definitions

As used in this section:

"Advanced Surgical Technology" means advanced technical tasks that involve manipulation or control of instruments in contact with subcutaneous tissues performed by persons other than the surgeon or the assistant-at-surgery. Such tasks include holding retractors or other instruments placed by the surgeon or assistant-at-surgery, sponging, suctioning or irrigating, applying electrocautery to clamps or other instruments, connecting drains to suction apparatus, venipuncture (inserting intravenous line), manipulation of endoscopes, skin stapling and other tasks identified by the Board. These technical tasks require specialized skills and knowledge.

"Assistant-at-Surgery" means a person who directly assists a qualified surgeon by performing significant surgical tasks. These tasks include final positioning of the patient, manipulating tissue, placing sponges, clamps or other instruments, manipulating or inserting sutures, placing local hemostatic agents, injecting local anesthetic as directed by the surgeon, harvesting veins, implanting devices, and other surgical tasks. The assistant-at-surgery uses professional judgment to anticipate the needs of the surgeon, identify and prevent potential problems, and to act as a second set of eyes and hands to the surgeon. The assistant-at-surgery is also referred to as the "First Assistant".

"Scrub Role" means the duties and responsibilities commonly assumed by persons supporting the circulating nurse before, during and after surgical procedures. During surgery, persons filling the scrub role support surgery from within the sterile field. Tasks associated with the scrub role include managing surgical instruments, maintaining the sterile field, performing counts, assisting with safety checklists, assisting with safety verifications and other tasks. The person filling the scrub role is often referred to as the "scrub", "first scrub" or "scrub person".

"Surgical Assistant" means a person who performs as an assistant-at-surgery who has complied with the regulations pertaining to licensure prescribed by the Board, and who has been issued a license as a surgical assistant by the Board, and who is not otherwise licensed and qualified to act as an assistant-at-surgery under the provisions of this Chapter or the provisions of Chapter 30 of this Title, or the provisions of Chapter 27 of this Title.

"Surgical Technology" means maintaining surgical instruments and patient safety from within the sterile field during surgical procedures, including related pre and post-operative tasks. Surgical technology requires technical knowledge and expertise.

§ 54.1-2942.1. License required; title protection.

A. It shall be unlawful for a person to practice or to hold himself out as practicing as an assistant-at-surgery or first assistant unless he is licensed under the provisions of this Chapter or the provisions of Chapter 30 of this Title, or the provisions of Chapter 27 of this Title and is practicing within the usual scope of his professional activities.

B. A licensed practical nurse shall not practice as an assistant-at-surgery unless in accordance with § 54.1-2943.2.

C. It shall be unlawful for any person not holding a current and valid license from the Board of Medicine to practice as a surgical assistant or to assume the title, "Surgical Assistant" or "Licensed Surgical Assistant" or to use, in conjunction with his name, the letters "LSA".

§ 54.1-2943. Requirements for licensure as a surgical assistant.

A. The Board shall promulgate regulations establishing requirements for licensure as a surgical assistant which shall include,

1. Successful completion of a surgical assistant program approved by the Board, or,

2. Successful completion of training provided by the Uniformed Services of the United States of America that included clinical training as a surgeon or assistant-at-surgery and is approved by the Board, or,

3. Successful completion of a foreign medical program that included clinical training as a surgeon or assistant-at-surgery and is approved by the Board, and

4. Successful completion of a surgical assistant certification exam approved by the Board, and

5. Documentation that the applicant for licensure has not had his license or certification as a practitioner of the healing arts suspended or revoked and is not the subject of any disciplinary proceedings in the Commonwealth of Virginia or any other jurisdiction.

B. The Board shall issue a license to practice as a surgical assistant to persons who meet the requirements of the Board.

§ 54.1-2943.1. Restrictions on Practice of Surgical Assistants.

A. A surgical assistant shall perform as an assistant-at-surgery only under the direct supervision of a licensed doctor of medicine, doctor of osteopathy, doctor of podiatry, oral or

maxillofacial surgeon, or dentist who is competent to perform surgery and is immediately available within the surgical suite.

B. A surgical assistant shall act as an assistant-at-surgery only in procedures for which he is privileged by the medical staff of an hospital or an outpatient surgical hospital that is licensed in accordance with § 32.1-123 through § 32.1-137.

§ 54.1-2943.2. Exceptions.

Nothing in this chapter shall prohibit:

A. The practice of a surgical assistant as an integral part of a program of study by students enrolled in an education program approved by the Board. Any student enrolled in approved education programs shall be identified as a "Student Surgical Assistant" and shall only assist-at-surgery under the direct supervision of an appropriate clinical instructor recognized by the education program.

B. A licensed physician assistant, podiatrist assistant, nurse practitioner, clinical nurse specialist, dental hygienist or registered nurse from practicing as assistant-at-surgery when practicing within the usual scope of his professional activities.

C. Any person who provides documentation that he has participated as an assistant-at-surgery in at least 100 surgical procedures within the five-year period prior to July 31, 2010 from practicing as an assistant-at-surgery in those procedures for which he is trained and competent.

§ 54.1-2944. Certification Required for Advanced Surgical Technology.

A. It shall be unlawful for a licensed practical nurse or an unlicensed health worker to perform advanced surgical technology unless he has:

1. Passed the examination for Certified Surgical Technologists provided by the National Board of Surgical Technology and Surgical Assisting or its successor and maintained a current certification, or,

2. Successfully completed a training program provided by the Uniformed Services of the United States of America that included appropriate clinical training as a surgical technologist and is approved by the Board, and,

3. Maintained continuing education requirements as directed by the Board, and,

4. Is privileged by the medical staff of an hospital or outpatient surgical hospital that is licensed in accordance with § 32.1-123 through § 32.1-137.

B. It shall be unlawful for any health care facility licensed in the Commonwealth of Virginia to knowingly employ, direct or privilege any person not meeting the requirements of § 54.1-

2944(A) to perform Advanced Surgical Technology, or to contract with such persons for the purpose of performing Advanced Surgical Technology.

C. It is the duty of any person qualified to perform advanced surgical technology to inform any employing, contracting, supervising or privileging entities of any changes in his status that would preclude him from legally performing advanced surgical technology under the provisions of this chapter.

§ 54.1-2944.2. Exceptions.

Nothing in this section shall prohibit:

A. A person who is trained and competent from performing in the scrub role.

B. Any person who can provide documentation that he has performed Advanced Surgical Technology for at least twelve months during the five-year period prior to July 1, 2010 from continuing to perform the Advanced Surgical Technology tasks that he is trained and competent to perform.

C. A licensed practitioner from performing advanced surgical technology when practicing within the usual scope of his professional activities.

D. The practice of a surgical technologist as an integral part of a program of study by students enrolled in an education program approved by the Board. Any student enrolled in approved education programs shall be identified as a "Student Surgical Technologist" and shall only perform advanced surgical technology under the direct supervision of an appropriate clinical instructor recognized by the education program.

§ 54.1-2944.2. Duties of the Board regarding Surgical Technology.

The Board shall maintain a list of Advanced Surgical Technology tasks. Advanced Surgical Technology tasks shall:

A. Meet the definition of Advanced Surgical Technology in § 54.1-2942.

B. Not require independent judgment or autonomous action by the person performing these tasks.

§ 54.1-2945. Advisory Board on Surgical Assistants and Advanced Surgical Technology; membership; qualifications.

The Advisory Board on Surgical Assistants shall consist of five members to be appointed by the Governor for four-year terms, as follows: two members shall be licensed surgical assistants who have practiced their professions in Virginia for not less than three years prior to their appointments; one shall be a Certified Surgical Technologist certified by the National Board for Surgical Assisting and Surgical Technology who has practiced his profession in Virginia for not

less than three years; one shall be a physician who supervises at least one surgical assistant; and one shall be a citizen member appointed from the Commonwealth at-large. Vacancies occurring other than by expiration of term shall be filled for the unexpired term. No person shall be eligible to serve on the Advisory Board for more than two successive terms.

§ 54.1-2945.1 Duties of the Advisory Board on Surgical Assistants and Advanced Surgical Technology.

The Advisory Board on Surgical Assistants and Advanced Surgical Technology shall, under the authority of the Board:

A. Recommend to the Board for its enactment into regulation the criteria for licensure as a surgical assistant and the standards of professional conduct for holders of licenses.

B. Recommend to the Board regulations and procedures that will facilitate the safe and appropriate practice of competent surgical assistants and surgical technologists trained within the Uniformed Services of the United States of America.

C. Recommend to the Board for its inclusion on the list of Advanced Surgical Technology tasks that meet the requirements of § 54.1-2944.2.

D. The Advisory Board shall also assist in such other matters dealing with assistants-at-surgery and surgical technology as the Board may in its discretion direct.

§§ 54.1-2946 through 54.1-2948.

Repealed by Acts 2000, c. 688, cl. 2.

VERSION 3

PHYSICIAN ASSISTANT BOARD

ADVANCED SURGICAL TECHNOLOGY CERTIFIED

§ 54.1-2900. Definitions.

As used in this chapter, unless the context requires a different meaning:

"Acupuncturist" means individuals approved by the Board to practice acupuncture. This is limited to "licensed acupuncturist" which means an individual other than a doctor of medicine, osteopathy, chiropractic or podiatry who has successfully completed the requirements for licensure established by the Board (approved titles are limited to: Licensed Acupuncturist, Lic.Ac., and L.Ac.).

"Advanced Surgical Technology" means advanced technical tasks that involve manipulation or control of instruments in contact with subcutaneous tissues performed by persons other than the surgeon or the assistant-at-surgery. Such tasks include holding retractors or other instruments placed by the surgeon or assistant-at-surgery, sponging, suctioning or irrigating, applying electrocautery to clamps or other instruments, connecting drains to suction apparatus, venipuncture (inserting intravenous line), manipulation of endoscopes, skin stapling and other tasks identified by the Board. These technical tasks require specialized skills and knowledge.

"Assistant-at-Surgery" means a person who directly assists a qualified surgeon by performing significant surgical tasks. These tasks include final positioning of the patient, manipulating tissue, placing sponges, clamps or other instruments, manipulating or inserting sutures, placing local hemostatic agents, injecting local anesthetic as directed by the surgeon, harvesting veins, implanting devices, and other surgical tasks. The assistant-at-surgery uses professional judgment to anticipate the needs of the surgeon, identify and prevent potential problems, and to act as a second set of eyes and hands to the surgeon. The assistant-at-surgery is also referred to as the "First Assistant".

"Auricular acupuncture" means the subcutaneous insertion of sterile, disposable acupuncture needles in predetermined, bilateral locations in the outer ear when used exclusively and specifically in the context of a chemical dependency treatment program.

"Board" means the Board of Medicine.

"Healing arts" means the arts and sciences dealing with the prevention, diagnosis, treatment and cure or alleviation of human physical or mental ailments, conditions, diseases, pain or infirmities.

"Medical malpractice judgment" means any final order of any court entering judgment against a licensee of the Board that arises out of any tort action or breach of contract action for personal

injuries or wrongful death, based on health care or professional services rendered, or that should have been rendered, by a health care provider, to a patient.

"Medical malpractice settlement" means any written agreement and release entered into by or on behalf of a licensee of the Board in response to a written claim for money damages that arises out of any personal injuries or wrongful death, based on health care or professional services rendered, or that should have been rendered, by a health care provider, to a patient.

"Occupational therapy assistant" means an individual who has met the requirements of the Board for licensure and who works under the supervision of a licensed occupational therapist to assist in the practice of occupational therapy.

"Physician assistant" means an individual who has met the requirements of the Board for licensure and who works under the supervision of a licensed doctor of medicine, osteopathy, or podiatry.

"Practice of acupuncture" means the stimulation of certain points on or near the surface of the body by the insertion of needles to prevent or modify the perception of pain or to normalize physiological functions, including pain control, for the treatment of certain ailments or conditions of the body and includes the techniques of electroacupuncture, cupping and moxibustion. The practice of acupuncture does not include the use of physical therapy, chiropractic, or osteopathic manipulative techniques; the use or prescribing of any drugs, medications, serums or vaccines; or the procedure of auricular acupuncture as exempted in § 54.1-2901 when used in the context of a chemical dependency treatment program for patients eligible for federal, state or local public funds by an employee of the program who is trained and approved by the National Acupuncture Detoxification Association or an equivalent certifying body.

"Practice of athletic training" means the prevention, recognition, evaluation, and treatment of injuries or conditions related to athletic or recreational activity that requires physical skill and utilizes strength, power, endurance, speed, flexibility, range of motion or agility or a substantially similar injury or condition resulting from occupational activity immediately upon the onset of such injury or condition; and subsequent treatment and rehabilitation of such injuries or conditions under the direction of a licensed physical therapist and the patient's physician or under the direction of any doctor of medicine, osteopathy, chiropractic, podiatry, or dentistry, while using heat, light, sound, cold, electricity, exercise or mechanical or other devices.

"Practice of chiropractic" means the adjustment of the 24 movable vertebrae of the spinal column, and assisting nature for the purpose of normalizing the transmission of nerve energy, but does not include the use of surgery, obstetrics, osteopathy or the administration or prescribing of any drugs, medicines, serums or vaccines.

"Practice of medicine or osteopathic medicine" means the prevention, diagnosis and treatment of human physical or mental ailments, conditions, diseases, pain or infirmities by any means or method.

"Practice of occupational therapy" means the evaluation, analysis, assessment, and delivery of education and training in activities of daily living (ADL); the design, fabrication, and application of orthoses (splints); guidance in the selection and use of adaptive equipment; therapeutic activities to enhance functional performance; prevocational evaluation and training; and consultation concerning the adaptation of physical environments for individuals who have disabilities.

"Practice of podiatry" means the medical, mechanical and surgical treatment of the ailments of the human foot and ankle, but does not include amputation of the foot proximal to the transmetatarsal level through the metatarsal shafts. Amputations proximal to the metatarsal-phalangeal joints may only be performed in a hospital or ambulatory surgery facility accredited by an organization listed in § 54.1-2939. The Board of Medicine shall determine whether a specific type of treatment of the foot and ankle is within the scope of practice of podiatry.

"Practice of radiologic technology" means the application of x-rays to human beings for diagnostic or therapeutic purposes.

"Practice of respiratory care" means the (i) administration of pharmacological, diagnostic, and therapeutic agents related to respiratory care procedures necessary to implement a treatment, disease prevention, pulmonary rehabilitative, or diagnostic regimen prescribed by a practitioner of medicine or osteopathic medicine; (ii) transcription and implementation of the written or verbal orders of a practitioner of medicine or osteopathic medicine pertaining to the practice of respiratory care; (iii) observation and monitoring of signs and symptoms, general behavior, general physical response to respiratory care treatment and diagnostic testing, including determination of whether such signs, symptoms, reactions, behavior or general physical response exhibit abnormal characteristics; and (iv) implementation of respiratory care procedures, based on observed abnormalities, or appropriate reporting, referral, respiratory care protocols or changes in treatment pursuant to the written or verbal orders by a licensed practitioner of medicine or osteopathic medicine or the initiation of emergency procedures, pursuant to the Board's regulations or as otherwise authorized by law. The practice of respiratory care may be performed in any clinic, hospital, skilled nursing facility, private dwelling or other place deemed appropriate by the Board in accordance with the written or verbal order of a practitioner of medicine or osteopathic medicine, and shall be performed under qualified medical direction.

"Qualified medical direction" means, in the context of the practice of respiratory care, having readily accessible to the respiratory care practitioner a licensed practitioner of medicine or osteopathic medicine who has specialty training or experience in the management of acute and chronic respiratory disorders and who is responsible for the quality, safety, and appropriateness of the respiratory services provided by the respiratory care practitioner.

"Radiologic technologist" means an individual, other than a licensed doctor of medicine, osteopathy, podiatry, or chiropractic, or a dentist licensed pursuant to Chapter 27 (§ 54.1-2700 et seq.) of this title, who (i) performs, may be called upon to perform, or who is licensed to perform a comprehensive scope of diagnostic radiologic procedures employing equipment which emits ionizing radiation and (ii) is delegated or exercises responsibility for the operation of radiation-generating equipment, the shielding of patient and staff from unnecessary radiation, the

appropriate exposure of radiographs or other procedures which contribute to any significant extent to the site or dosage of ionizing radiation to which a patient is exposed.

"Radiologic technologist, limited" means an individual, other than a licensed radiologic technologist, dental hygienist or person who is otherwise authorized by the Board of Dentistry under Chapter 27 (§ 54.1-2700 et seq.) of this title and the regulations pursuant thereto, who performs diagnostic radiographic procedures employing equipment which emits ionizing radiation which is limited to specific areas of the human body.

"Radiologist assistant" means an individual who has met the requirements of the Board for licensure as an advanced-level radiologic technologist and who, under the direct supervision of a licensed doctor of medicine or osteopathy specializing in the field of radiology, is authorized to (i) assess and evaluate the physiological and psychological responsiveness of patients undergoing radiologic procedures; (ii) evaluate image quality, make initial observations, and communicate observations to the supervising radiologist; (iii) administer contrast media or other medications prescribed by the supervising radiologist; and (iv) perform, or assist the supervising radiologist to perform, any other procedure consistent with the guidelines adopted by the American College of Radiology, the American Society of Radiologic Technologists, and the American Registry of Radiologic Technologists.

"Respiratory care" means the practice of the allied health profession responsible for the direct and indirect services, including inhalation therapy and respiratory therapy, in the treatment, management, diagnostic testing, control and care of patients with deficiencies and abnormalities associated with the cardiopulmonary system under qualified medical direction.

"Scrub Role" means the duties and responsibilities commonly assumed by persons supporting the circulating nurse before, during and after surgical procedures. During surgery, persons filling the scrub role support surgery from within the sterile field. Tasks associated with the scrub role include managing surgical instruments, maintaining the sterile field, performing counts, assisting with safety checklists, assisting with safety verifications and other tasks. The person filling the scrub role is often referred to as the "scrub", "first scrub" or "scrub person".

"Surgical Assistant" means a person who performs as an assistant-at-surgery who has complied with the regulations pertaining to licensure prescribed by the Board, and who has been issued a license as a surgical assistant by the Board, and who is not otherwise licensed and qualified to act as an assistant-at-surgery under the provisions of this Chapter or the provisions of Chapter 30 of this Title, or the provisions of Chapter 27 of this Title.

"Surgical Technology" means maintaining surgical instruments and patient safety from within the sterile field during surgical procedures, including related pre and post-operative tasks. Surgical technology requires technical knowledge and expertise.

(Code 1950, § 54-273; 1950, p. 110; 1958, c. 161; 1960, c. 268; 1966, c. 657; 1970, c. 69; 1973, c. 529; 1975, cc. 508, 512; 1977, c. 127; 1980, c. 157; 1986, c. 439; 1987, cc. 522, 543; 1988, cc. 737, 765; 1991, c. 643; 1994, c. 803; 1995, c. 777; 1996, cc. 152, 158, 470, 937, 980; 1998, cc.

319, 557, 593; 1999, cc. 639, 682, 747, 779; 2000, cc. 688, 814; 2001, c. 533; 2004, c. 731; 2007, c. 861; 2008, cc. 64, 89; 2009, cc. 83, 507.)

§ 54.1-2949. License required.

It shall be unlawful for a person to practice or to hold himself out as practicing as a physician's, *surgeon's, surgical* or podiatrist's assistant unless he holds a license as such issued by the Board.

(1988, c. 765.)

§ 54.1-2949.1. Certification Required for Advanced Surgical Technology.

A. It shall be unlawful for a licensed practical nurse or an unlicensed health worker to perform advanced surgical technology unless he has:

1. Passed the examination for Certified Surgical Technologists provided by the National Board of Surgical Technology and Surgical Assisting or its successor and maintained a current certification, or,

2. Successfully completed a training program provided by the Uniformed Services of the United States of America that included appropriate clinical training as a surgical technologist and is approved by the Board, and,

3. Maintained continuing education requirements as directed by the Board, and,

4. Is privileged by the medical staff of an hospital or outpatient surgical hospital that is licensed in accordance with § 32.1-123 through § 32.1-137.

B. It shall be unlawful for any health care facility licensed in the Commonwealth of Virginia to knowingly employ, direct or privilege any person not meeting the requirements of § 54.1-2949.1(A) to perform Advanced Surgical Technology, or to contract with such persons for the purpose of performing Advanced Surgical Technology.

C. It is the duty of any person qualified to perform advanced surgical technology to inform any employing, contracting, supervising or privileging entities of any changes in his status that would preclude him from legally performing advanced surgical technology under the provisions of this chapter.

§ 54.1-2949.2. Exceptions.

Nothing in this section shall prohibit:

A. A person who is trained and competent from performing in the scrub role.

B. Any person who can provide documentation that he has performed Advanced Surgical Technology for at least twelve months during the five-year period prior to July 1, 2010 from

continuing to perform the Advanced Surgical Technology tasks that he is trained and competent to perform.

C. A licensed practitioner from performing advanced surgical technology when practicing within the usual scope of his professional activities.

D. The practice of a surgical technologist as an integral part of a program of study by students enrolled in an education program approved by the Board. Any student enrolled in approved education programs shall be identified as a "Student Surgical Technologist" and shall only perform advanced surgical technology under the direct supervision of an appropriate clinical instructor recognized by the education program.

§ 54.1-2949.3. Duties of the Board regarding Surgical Technology.

The Board shall maintain a list of Advanced Surgical Technology tasks. Advanced Surgical Technology tasks shall:

A. Meet the definition of Advanced Surgical Technology in § 54.1-2900.

B. Not require independent judgment or autonomous action by the person performing these tasks.

§ 54.1-2950. Requisite training and educational achievements of *physician's and podiatrist's* assistants.

The Board shall establish a testing program to determine the training and educational achievements of the *physician's or podiatrist's* assistant or the Board may accept other evidence, such as experience or completion of an approved training program, in lieu of testing and shall establish this as a prerequisite for approval of the licensee's application.

Pending the outcome of the next examination administered by the National Commission ~~for~~ *on* Certification of Physician Assistants, the Board may grant provisional licensure to graduates of physician or podiatrists' assistants curricula which are approved by the ~~Committee on Allied Health Education and Accreditation of the American Medical Association~~ *Accreditation Review Commission on Education for the Physician Assistant, Inc.* or the ~~Committee on Education of the American Podiatry Association.~~ *Council on Podiatric Medical Education of the American Podiatric Medical Association.* Such provisional licensure shall be granted at the discretion of the Board.

(1973, c. 529, § 54-281.7; 1984, c. 46; 1988, c. 765; 1997, c. 806.)

§ 54.1-2950.1. Advisory Board on Physician *and Surgical* Assistants; membership; qualifications.

A. The Advisory Board on Physician *and Surgical* Assistants shall consist of ~~five~~ *seven* members to be appointed by the Governor for four-year terms, as follows: three members shall be licensed

physician assistants who have practiced their professions in Virginia for not less than three years prior to their appointments; *one shall be a licensed surgical assistant who has practiced his profession in Virginia for not less than three years prior to his appointment; one shall be a licensed surgical assistant who is also certified surgical technologist who has practiced his profession for not less than three years prior to his appointment;* one shall be a physician who supervises at least one physician assistant *or surgical assistant*; and one shall be a citizen member appointed from the Commonwealth at-large. Vacancies occurring other than by expiration of term shall be filled for the unexpired term. No person shall be eligible to serve on the Advisory Board for more than two successive terms.

B. In addition to its usual duties, the Advisory Board on Physician and Surgical Assistants shall, under the Authority of the Board:

1. Recommend to the Board for its enactment into regulation the criteria for licensure as a surgical assistant and the standards of professional conduct for holders of licenses.

2. Recommend to the Board regulations and procedures that will facilitate the safe and appropriate practice of competent surgical assistants and surgical technologists trained within the Uniformed Services of the United States of America.

3. Recommend to the Board for its inclusion on the list of Advanced Surgical Technology tasks that meet the requirements of § 54.1-2949.3.

4. The Advisory Board shall also assist in such other matters dealing with assistants-at-surgery and surgical technology as the Board may in its discretion direct.

(1998, c. 319; 2002, c. 698.)

§ 54.1-2951.

Repealed by Acts 1998, c. 319.

§ 54.1-2951.1. Requirements for licensure as a physician assistant.

A. The Board shall promulgate regulations establishing requirements for licensure as a physician assistant which shall include, but not be limited to, the following:

1. Successful completion of a physician assistant program ~~or surgeon assistant program~~ accredited by the ~~American Medical Association or a committee of the American Medical Association established to approve or accredit allied health education programs~~ *Accreditation Review Commission on Education for the Physician Assistant, Inc.*;

2. Passage of the certifying examination administered by the National Commission on Certification of Physician Assistants; and

3. Documentation that the applicant for licensure has not had his license or certification as a physician assistant suspended or revoked and is not the subject of any disciplinary proceedings in another jurisdiction.

B. Prior to initiating practice with a supervising physician, the physician assistant shall notify the Board and provide information which shall include, but not be limited to, the following:

1. The name, address, telephone number and any changes thereto, of the physician or physicians who will supervise the assistant in the relevant practice setting; and

2. A description of the practice and the way in which the physician assistant will be utilized.

(1998, c. 319.)

§ 54.1-2951.2. Issuance of a license.

The Board shall issue the license to the physician assistant to practice under the supervision of a licensed doctor of medicine, osteopathy, or podiatry, in accordance with § 54.1-2951.1.

(1998, c. 319.)

§ 54.1-2951.3. Requirements for licensure as a surgical assistant.

A. The Board shall promulgate regulations establishing requirements for licensure as a surgical assistant which shall include,

1. Successful completion of a surgical assistant program approved by the Board, or,

2. Successful completion of training provided by the Uniformed Services of the United States of America that included clinical training as a surgeon or assistant-at-surgery and is approved by the Board, or,

3. Successful completion of a foreign medical program that included clinical training as a surgeon or assistant-at-surgery and is approved by the Board, and

4. Successful completion of a surgical assistant certification exam approved by the Board, and

5. Documentation that the applicant for licensure has not had his license or certification as a practitioner of the healing arts suspended or revoked and is not the subject of any disciplinary proceedings in the Commonwealth of Virginia or any other jurisdiction.

B. The Board shall issue a license to practice as a surgical assistant to persons who meet the requirements of the Board.

~~**§ 54.1-2951.3.**~~ **§ 54.1-2951.4. Restricted volunteer license for certain physician assistants.**

A. The Board may issue a restricted volunteer license to a physician assistant who meets the qualifications for licensure for physician assistants. The Board may refuse issuance of licensure pursuant to § 54.1-2915.

B. A person holding a restricted volunteer license under this section shall:

1. Only practice in public health or community free clinics approved by the Board;

2. Only treat patients who have no insurance or who are not eligible for financial assistance for medical care; and

3. Not receive remuneration directly or indirectly for practicing as a physician assistant.

C. A physician assistant with a restricted volunteer license issued under this section shall only practice as a physician assistant and perform certain delegated acts which constitute the practice of medicine to the extent and in the manner authorized by the Board if:

1. A physician who supervises physician assistants is available; or

2. The physician supervising any physician assistant periodically reviews the relevant patient records.

D. A restricted volunteer license granted pursuant to this section shall be issued to the physician assistant without charge, shall expire twelve months from the date of issuance, and may be renewed annually in accordance with regulations promulgated by the Board.

E. A physician assistant holding a restricted volunteer license issued pursuant to this section is subject to the provisions of this chapter and the regulations promulgated under this chapter unless otherwise provided for in this section.

(1998, c. 319; 2005, c. 163.)

§ 54.1-2952. Supervision of *physician and podiatrist* assistants by licensed physician, or podiatrist; services that may be performed by *physician and podiatrist* assistants; responsibility of licensee; employment of *physician and podiatrist* assistants.

A. A physician or a podiatrist licensed under this chapter may apply to the Board to supervise assistants and delegate certain acts which constitute the practice of medicine to the extent and in the manner authorized by the Board. The physician shall provide continuous supervision as required by this section; however, the requirement for physician supervision of assistants shall not be construed as requiring the physical presence of the supervising physician during all times and places of service delivery by assistants. Each team of supervising physician and physician assistant shall identify the relevant physician assistant's scope of practice, including, but not limited to, the delegation of medical tasks as appropriate to the physician assistant's level of competence, the physician assistant's relationship with and access to the supervising physician, and an evaluation process for the physician assistant's performance.

No licensee shall be allowed to supervise more than two assistants at any one time.

Any professional corporation or partnership of any licensee, any hospital and any commercial enterprise having medical facilities for its employees which are supervised by one or more physicians or podiatrists may employ one or more assistants in accordance with the provisions of this section.

Activities shall be delegated in a manner consistent with sound medical practice and the protection of the health and safety of the patient. Such activities shall be set forth in a written practice supervision agreement between the assistant and the supervising health care provider and may include health care services which are educational, diagnostic, therapeutic, preventive, or include treatment, but shall not include the establishment of a final diagnosis or treatment plan for the patient unless set forth in the written practice supervision agreement. Prescribing or dispensing of drugs may be permitted as provided in § 54.1-2952.1. In addition, a licensee is authorized to delegate and supervise initial and ongoing evaluation and treatment of any patient in a hospital, including its emergency department, when performed under the direction, supervision and control of the supervising licensee. When practicing in a hospital, the assistant shall report any acute or significant finding or change in a patient's clinical status to the supervising physician as soon as circumstances require, and shall record such finding in appropriate institutional records. The assistant shall transfer to a supervising physician the direction of care of a patient in an emergency department who has a life-threatening injury or illness. The supervising physician shall review, prior to the patient's discharge, the services rendered to each patient by a physician assistant in a hospital's emergency department. An assistant who is employed to practice in an emergency department shall be under the supervision of a physician present within the facility.

Further, unless otherwise prohibited by federal law or by hospital bylaws, rules, or policies, nothing in this section shall prohibit any physician assistant who is not employed by the emergency physician or his professional entity from practicing in a hospital emergency department, within the scope of his practice, while under continuous physician supervision as required by this section, whether or not the supervising physician is physically present in the facility. The supervising physician who authorizes such practice by his assistant shall (i) retain exclusive supervisory control of and responsibility for the assistant and (ii) be available at all times for consultation with both the assistant and the emergency department physician. Prior to the patient's discharge from the emergency department, the assistant shall communicate the proposed disposition plan for any patient under his care to both his supervising physician and the emergency department physician. No person shall have control of or supervisory responsibility for any physician assistant who is not employed by the person or the person's business entity.

B. No assistant shall perform any delegated acts except at the direction of the licensee and under his supervision and control. No physician assistant practicing in a hospital shall render care to a patient unless the physician responsible for that patient has signed the protocol, pursuant to regulations of the Board, to act as supervising physician for that assistant. Every licensee, professional corporation or partnership of licensees, hospital or commercial enterprise that employs an assistant shall be fully responsible for the acts of the assistant in the care and treatment of human beings.

(1973, c. 529, §§ 54-281.4, 54-281.5; 1975, cc. 508, 565; 1985, c. 316; 1988, c. 765; 1992, c. 793; 1996, c. 779; 2000, cc. 467, 497; 2002, c. 387; 2005, c. 662; 2008, c. 281.)

§ 54.1-2952.1. Prescription of certain controlled substances and devices by licensed physician assistant.

A. In accordance with the provisions of this section and pursuant to the requirements of Chapter 33 (§ 54.1-3300 et seq.) of this title, a licensed physician assistant shall have the authority to prescribe controlled substances and devices as set forth in Chapter 34 (§ 54.1-3400 et seq.) of this title as follows: (i) Schedules V and VI controlled substances on and after July 1, 2001, (ii) Schedules IV through VI controlled substances on and after January 1, 2003, (iii) Schedule III through VI controlled substances on and after July 1, 2004, and (iv) Schedules II through VI controlled substances on and after July 1, 2007.

A licensed physician assistant shall have such prescriptive authority upon the provision to the Board of Medicine of such evidence as it may require that the assistant has entered into and is, at the time of writing a prescription, a party to a written agreement with a licensed physician or podiatrist which provides for the direction and supervision by such licensee of the prescriptive practices of the assistant. Such written agreements shall include the controlled substances the physician assistant is or is not authorized to prescribe and may restrict such prescriptive authority as deemed appropriate by the physician or podiatrist providing direction and supervision.

B. It shall be unlawful for the assistant to prescribe controlled substances or devices pursuant to this section unless such prescription is authorized by the written agreement between the licensee and the assistant.

C. The Board of Medicine, in consultation with the Board of Pharmacy, shall promulgate such regulations governing the prescriptive authority of physician assistants as are deemed reasonable and necessary to ensure an appropriate standard of care for patients.
The regulations promulgated pursuant to this section shall include, at a minimum, (i) such requirements as may be necessary to ensure continued physician assistant competency that may include continuing education, testing, and/or any other requirement, and shall address the need to promote ethical practice, an appropriate standard of care, patient safety, the use of new pharmaceuticals, and appropriate communication with patients; (ii) requirements for periodic site visits by supervising licensees who supervise and direct assistants who provide services at a location other than where the licensee regularly practices; and (iii) a requirement that the assistant disclose to his patients the name, address and telephone number of the supervising licensee and that he is a physician assistant. A separate office for the assistant shall not be established.

D. This section shall not prohibit a licensed physician assistant from administering controlled substances in compliance with the definition of "administer" in § 54.1-3401 or from receiving and dispensing manufacturers' professional samples of controlled substances in compliance with the provisions of this section.

(1992, c. 793; 1997, c. 806; 1999, c. 745; 2001, c. 465; 2003, c. 510; 2007, c. 16.)

§ 54.1-2952.2. Practice of Surgical Assistants.

A. A surgical assistant shall perform only as an assistant-at-surgery under the direct supervision of a licensed doctor of medicine, doctor of osteopathy, doctor of podiatry, oral or maxillofacial surgeon, or dentist who is competent to perform surgery and is immediately available within the surgical suite.

B. A surgical assistant shall act as an assistant-at-surgery only in procedures for which he is privileged by the medical staff of an hospital or an outpatient surgical hospital that is licensed in accordance with § 32.1-123 through § 32.1-137.

C. Nothing in this section shall prohibit:

1. The practice of a surgical assistant as an integral part of a program of study by students enrolled in an education program approved by the Board. Any student enrolled in approved education programs shall be identified as a "Student Surgical Assistant" and shall only assist-at-surgery under the direct supervision of an appropriate clinical instructor recognized by the education program.

2. A licensed physician assistant, podiatrist assistant, nurse practitioner, clinical nurse specialist, dental hygienist or registered nurse from practicing as assistant-at-surgery when practicing within the usual scope of his professional activities.

3. Any person who provides documentation that he has participated as an assistant-at-surgery in at least 100 surgical procedures within the five-year period prior to July 31, 2010 from practicing as an assistant-at-surgery in those procedures for which he is trained and competent.

§ 54.1-2953. Renewal, revocation, suspension and refusal.

The approval of the Board for the employment of ~~an~~ *a physician or podiatrist* assistant shall expire at the end of one year. A new application shall be submitted for approval, supplying such information as the Board may require, at the time and in the manner prescribed by the Board.

The Board may revoke, suspend or refuse to renew an approval for any of the following:

1. Any reason stated in this chapter for revocation or suspension of the license of a practitioner;

2. Failure of the supervising licensee to supervise the assistant or failure of the employer to provide a licensee to supervise the assistant;

3. The assistant's engaging in acts beyond the scope of authority as approved by the Board;

4. Negligence or incompetence on the part of the assistant or the supervising licensee in his use of the assistant;

5. Violating or cooperating with others in violating any provision of this chapter or the regulations of the Board; or

6. A change in the Board's requirements for approval with which the assistant or the licensee does not comply.

(1973, c. 529, §§ 54-281.8, 54-281.9; 1985, c. 316; 1988, c. 765.)

VERSION 4

PHYSICIAN ASSISTANT BOARD

SCRUB ROLE CERTIFIED

§ 54.1-2900. Definitions.

As used in this chapter, unless the context requires a different meaning:

"Acupuncturist" means individuals approved by the Board to practice acupuncture. This is limited to "licensed acupuncturist" which means an individual other than a doctor of medicine, osteopathy, chiropractic or podiatry who has successfully completed the requirements for licensure established by the Board (approved titles are limited to: Licensed Acupuncturist, Lic.Ac., and L.Ac.).

"Assistant-at-Surgery" means a person who directly assists a qualified surgeon by performing significant surgical tasks. These tasks include final positioning of the patient, manipulating tissue, placing sponges, clamps or other instruments, manipulating or inserting sutures, placing local hemostatic agents, injecting local anesthetic as directed by the surgeon, harvesting veins, implanting devices, and other surgical tasks. The assistant-at-surgery uses professional judgment to anticipate the needs of the surgeon, identify and prevent potential problems, and to act as a second set of eyes and hands to the surgeon. The assistant-at-surgery is also referred to as the "First Assistant".

"Auricular acupuncture" means the subcutaneous insertion of sterile, disposable acupuncture needles in predetermined, bilateral locations in the outer ear when used exclusively and specifically in the context of a chemical dependency treatment program.

"Board" means the Board of Medicine.

"Healing arts" means the arts and sciences dealing with the prevention, diagnosis, treatment and cure or alleviation of human physical or mental ailments, conditions, diseases, pain or infirmities.

"Medical malpractice judgment" means any final order of any court entering judgment against a licensee of the Board that arises out of any tort action or breach of contract action for personal injuries or wrongful death, based on health care or professional services rendered, or that should have been rendered, by a health care provider, to a patient.

"Medical malpractice settlement" means any written agreement and release entered into by or on behalf of a licensee of the Board in response to a written claim for money damages that arises out of any personal injuries or wrongful death, based on health care or professional services rendered, or that should have been rendered, by a health care provider, to a patient.

"Occupational therapy assistant" means an individual who has met the requirements of the Board for licensure and who works under the supervision of a licensed occupational therapist to assist in the practice of occupational therapy.

"Physician assistant" means an individual who has met the requirements of the Board for licensure and who works under the supervision of a licensed doctor of medicine, osteopathy, or podiatry.

"Practice of acupuncture" means the stimulation of certain points on or near the surface of the body by the insertion of needles to prevent or modify the perception of pain or to normalize physiological functions, including pain control, for the treatment of certain ailments or conditions of the body and includes the techniques of electroacupuncture, cupping and moxibustion. The practice of acupuncture does not include the use of physical therapy, chiropractic, or osteopathic manipulative techniques; the use or prescribing of any drugs, medications, serums or vaccines; or the procedure of auricular acupuncture as exempted in § 54.1-2901 when used in the context of a chemical dependency treatment program for patients eligible for federal, state or local public funds by an employee of the program who is trained and approved by the National Acupuncture Detoxification Association or an equivalent certifying body.

"Practice of athletic training" means the prevention, recognition, evaluation, and treatment of injuries or conditions related to athletic or recreational activity that requires physical skill and utilizes strength, power, endurance, speed, flexibility, range of motion or agility or a substantially similar injury or condition resulting from occupational activity immediately upon the onset of such injury or condition; and subsequent treatment and rehabilitation of such injuries or conditions under the direction of a licensed physical therapist and the patient's physician or under the direction of any doctor of medicine, osteopathy, chiropractic, podiatry, or dentistry, while using heat, light, sound, cold, electricity, exercise or mechanical or other devices.

"Practice of chiropractic" means the adjustment of the 24 movable vertebrae of the spinal column, and assisting nature for the purpose of normalizing the transmission of nerve energy, but does not include the use of surgery, obstetrics, osteopathy or the administration or prescribing of any drugs, medicines, serums or vaccines.

"Practice of medicine or osteopathic medicine" means the prevention, diagnosis and treatment of human physical or mental ailments, conditions, diseases, pain or infirmities by any means or method.

"Practice of occupational therapy" means the evaluation, analysis, assessment, and delivery of education and training in activities of daily living (ADL); the design, fabrication, and application of orthoses (splints); guidance in the selection and use of adaptive equipment; therapeutic activities to enhance functional performance; prevocational evaluation and training; and consultation concerning the adaptation of physical environments for individuals who have disabilities.

"Practice of podiatry" means the medical, mechanical and surgical treatment of the ailments of the human foot and ankle, but does not include amputation of the foot proximal to the transmetatarsal level through the metatarsal shafts. Amputations proximal to the metatarsal-phalangeal joints may only be performed in a hospital or ambulatory surgery facility accredited by an organization listed in § 54.1-2939. The Board of Medicine shall determine whether a specific type of treatment of the foot and ankle is within the scope of practice of podiatry.

"Practice of radiologic technology" means the application of x-rays to human beings for diagnostic or therapeutic purposes.

"Practice of respiratory care" means the (i) administration of pharmacological, diagnostic, and therapeutic agents related to respiratory care procedures necessary to implement a treatment, disease prevention, pulmonary rehabilitative, or diagnostic regimen prescribed by a practitioner of medicine or osteopathic medicine; (ii) transcription and implementation of the written or verbal orders of a practitioner of medicine or osteopathic medicine pertaining to the practice of respiratory care; (iii) observation and monitoring of signs and symptoms, general behavior, general physical response to respiratory care treatment and diagnostic testing, including determination of whether such signs, symptoms, reactions, behavior or general physical response exhibit abnormal characteristics; and (iv) implementation of respiratory care procedures, based on observed abnormalities, or appropriate reporting, referral, respiratory care protocols or changes in treatment pursuant to the written or verbal orders by a licensed practitioner of medicine or osteopathic medicine or the initiation of emergency procedures, pursuant to the Board's regulations or as otherwise authorized by law. The practice of respiratory care may be performed in any clinic, hospital, skilled nursing facility, private dwelling or other place deemed appropriate by the Board in accordance with the written or verbal order of a practitioner of medicine or osteopathic medicine, and shall be performed under qualified medical direction.

"Qualified medical direction" means, in the context of the practice of respiratory care, having readily accessible to the respiratory care practitioner a licensed practitioner of medicine or osteopathic medicine who has specialty training or experience in the management of acute and chronic respiratory disorders and who is responsible for the quality, safety, and appropriateness of the respiratory services provided by the respiratory care practitioner.

"Radiologic technologist" means an individual, other than a licensed doctor of medicine, osteopathy, podiatry, or chiropractic, or a dentist licensed pursuant to Chapter 27 (§ 54.1-2700 et seq.) of this title, who (i) performs, may be called upon to perform, or who is licensed to perform a comprehensive scope of diagnostic radiologic procedures employing equipment which emits ionizing radiation and (ii) is delegated or exercises responsibility for the operation of radiation-generating equipment, the shielding of patient and staff from unnecessary radiation, the appropriate exposure of radiographs or other procedures which contribute to any significant extent to the site or dosage of ionizing radiation to which a patient is exposed.

"Radiologic technologist, limited" means an individual, other than a licensed radiologic technologist, dental hygienist or person who is otherwise authorized by the Board of Dentistry under Chapter 27 (§ 54.1-2700 et seq.) of this title and the regulations pursuant thereto, who

performs diagnostic radiographic procedures employing equipment which emits ionizing radiation which is limited to specific areas of the human body.

"Radiologist assistant" means an individual who has met the requirements of the Board for licensure as an advanced-level radiologic technologist and who, under the direct supervision of a licensed doctor of medicine or osteopathy specializing in the field of radiology, is authorized to (i) assess and evaluate the physiological and psychological responsiveness of patients undergoing radiologic procedures; (ii) evaluate image quality, make initial observations, and communicate observations to the supervising radiologist; (iii) administer contrast media or other medications prescribed by the supervising radiologist; and (iv) perform, or assist the supervising radiologist to perform, any other procedure consistent with the guidelines adopted by the American College of Radiology, the American Society of Radiologic Technologists, and the American Registry of Radiologic Technologists.

"Respiratory care" means the practice of the allied health profession responsible for the direct and indirect services, including inhalation therapy and respiratory therapy, in the treatment, management, diagnostic testing, control and care of patients with deficiencies and abnormalities associated with the cardiopulmonary system under qualified medical direction.

"Scrub Role" means the duties and responsibilities commonly assumed by persons supporting the circulating nurse before, during and after surgical procedures. During surgery, persons filling the scrub role support surgery from within the sterile field. Tasks associated with the scrub role include managing surgical instruments, maintaining the sterile field, assisting with patient safety verifications, holding retractors, sponging, irrigating and other tasks. The person filling the scrub role is often referred to as the "scrub", "first scrub" or "scrub person".

"Surgical Assistant" means a person who performs as an assistant-at-surgery who has complied with the regulations pertaining to licensure prescribed by the Board, and who has been issued a license as a surgical assistant by the Board, and who is not otherwise licensed and qualified to act as an assistant-at-surgery under the provisions of this Chapter or the provisions of Chapter 30 of this Title, or the provisions of Chapter 27 of this Title.

"Surgical Technology" means maintaining surgical instruments and patient safety from within the sterile field during surgical procedures, including related pre and post-operative tasks. Surgical technology requires technical knowledge and expertise.

(Code 1950, § 54-273; 1950, p. 110; 1958, c. 161; 1960, c. 268; 1966, c. 657; 1970, c. 69; 1973, c. 529; 1975, cc. 508, 512; 1977, c. 127; 1980, c. 157; 1986, c. 439; 1987, cc. 522, 543; 1988, cc. 737, 765; 1991, c. 643; 1994, c. 803; 1995, c. 777; 1996, cc. 152, 158, 470, 937, 980; 1998, cc. 319, 557, 593; 1999, cc. 639, 682, 747, 779; 2000, cc. 688, 814; 2001, c. 533; 2004, c. 731; 2007, c. 861; 2008, cc. 64, 89; 2009, cc. 83, 507.)

§ 54.1-2949. License required.

It shall be unlawful for a person to practice or to hold himself out as practicing as a physician's, *surgeon's, surgical* or podiatrist's assistant unless he holds a license as such issued by the Board.

(1988, c. 765.)

§ 54.1-2944. Certification Required for Surgical Technology.

A. It shall be unlawful for a person to perform in the scrub role unless he has:

1. Passed the examination for Certified Surgical Technologists provided by the National Board of Surgical Technology and Surgical Assisting or its successor and maintained a current certification, or,

2. Successfully completed a training program provided by the Uniformed Services of the United States of America that included appropriate clinical training as a surgical technologist and is approved by the Board, or,

3. Successfully completed a surgical technologist training program within a Virginia hospital licensed in accordance with § 32.1-123 through § 32.1-137and approved by the Board, and,

4. Maintained continuing education requirements as directed by the Board, and,

5. Is privileged by the medical staff of an hospital or outpatient surgical hospital that is licensed in accordance with § 32.1-123 through § 32.1-137.

B. It shall be unlawful for any health care facility licensed in the Commonwealth of Virginia to knowingly employ, direct or privilege any person not meeting the requirements of § 54.1-2944(A) to perform in the scrub role, or to contract with such persons for the purpose of performing in the scrub role.

C. It is the duty of any person qualified to perform in the scrub role to inform any employing, contracting, supervising or privileging entities of any changes in his status that would preclude him from legally performing in the scrub role under the provisions of this chapter.

§ 54.1-2944.2. Exceptions.

Nothing in this section shall prohibit:

A. Any person who can provide documentation that he has performed in the scrub role for at least twelve months during the five-year period prior to July 1, 2011 from continuing to perform in the scrub role in procedures that he is trained and competent to perform.

B. A licensed practitioner from performing in the scrub role when practicing within the usual scope of his professional activities.

C. The practice of a surgical technologist as an integral part of a program of study by students enrolled in an education program or hospital based training program approved by the Board. Any student enrolled in approved education programs or hospital based training programs shall be identified as a "Student Surgical Technologist" and shall only perform in the scrub role under

the direct supervision of an appropriate clinical instructor recognized by the education program or hospital based training program.

§ 54.1-2944.2. Duties of the Board regarding Surgical Technology.

A. The Board shall develop criteria for the approval of hospital-based training programs.

B. Include programs meeting the Board's criteria on the list of approved hospital-based training programs.

§ 54.1-2950. Requisite training and educational achievements of *physician's and podiatrist's* assistants.

The Board shall establish a testing program to determine the training and educational achievements of the *physician's or podiatrist's* assistant or the Board may accept other evidence, such as experience or completion of an approved training program, in lieu of testing and shall establish this as a prerequisite for approval of the licensee's application.

Pending the outcome of the next examination administered by the National Commission ~~for~~ *on* Certification of Physician Assistants, the Board may grant provisional licensure to graduates of physician or podiatrists' assistants curricula which are approved by the ~~Committee on Allied Health Education and Accreditation of the American Medical Association~~ *Accreditation Review Commission on Education for the Physician Assistant, Inc.* or the ~~Committee on Education of the American Podiatry Association.~~ *Council on Podiatric Medical Education of the American Podiatric Medical Association.* Such provisional licensure shall be granted at the discretion of the Board.

(1973, c. 529, § 54-281.7; 1984, c. 46; 1988, c. 765; 1997, c. 806.)

§ 54.1-2950.1. Advisory Board on Physician *and Surgical* Assistants; membership; qualifications.

A. The Advisory Board on Physician *and Surgical* Assistants shall consist of ~~five~~ *seven* members to be appointed by the Governor for four-year terms, as follows: three members shall be licensed physician assistants who have practiced their professions in Virginia for not less than three years prior to their appointments; *one shall be a licensed surgical assistant who has practiced his profession in Virginia for not less than three years prior to his appointment; one shall be a licensed surgical assistant who is also Certified Surgical Technologist who has practiced his profession for not less than three years prior to his appointment;* one shall be a physician who supervises at least one physician assistant *or surgical assistant*; and one shall be a citizen member appointed from the Commonwealth at-large. Vacancies occurring other than by expiration of term shall be filled for the unexpired term. No person shall be eligible to serve on the Advisory Board for more than two successive terms.

B. In addition to its usual duties, the Advisory Board on Physician and Surgical Assistants shall, under the Authority of the Board:

1. Recommend to the Board for its enactment into regulation the criteria for licensure as a surgical assistant and the standards of professional conduct for holders of licenses.

2. Recommend to the Board regulations and procedures that will facilitate the safe and appropriate practice of competent surgical assistants and surgical technologists trained within the Uniformed Services of the United States of America.

3. Recommend to the Board for its enactment into regulation the criteria for approval of hospital-based training programs.

4. The Advisory Board shall also assist in such other matters dealing with assistants-at-surgery and surgical technology as the Board may in its discretion direct.

(1998, c. 319; 2002, c. 698.)

§ 54.1-2951.

Repealed by Acts 1998, c. 319.

§ 54.1-2951.1. Requirements for licensure as a physician assistant.

A. The Board shall promulgate regulations establishing requirements for licensure as a physician assistant which shall include, but not be limited to, the following:

1. Successful completion of a physician assistant program ~~or surgeon assistant program~~ accredited by the ~~American Medical Association or a committee of the American Medical Association established to approve or accredit allied health education programs~~ *Accreditation Review Commission on Education for the Physician Assistant, Inc.*;

2. Passage of the certifying examination administered by the National Commission on Certification of Physician Assistants; and

3. Documentation that the applicant for licensure has not had his license or certification as a physician assistant suspended or revoked and is not the subject of any disciplinary proceedings in another jurisdiction.

B. Prior to initiating practice with a supervising physician, the physician assistant shall notify the Board and provide information which shall include, but not be limited to, the following:

1. The name, address, telephone number and any changes thereto, of the physician or physicians who will supervise the assistant in the relevant practice setting; and

2. A description of the practice and the way in which the physician assistant will be utilized.

(1998, c. 319.)

§ 54.1-2951.2. Issuance of a license.

The Board shall issue the license to the physician assistant to practice under the supervision of a licensed doctor of medicine, osteopathy, or podiatry, in accordance with § 54.1-2951.1.

(1998, c. 319.)

§ 54.1-2951.3. Requirements for licensure as a surgical assistant.

A. The Board shall promulgate regulations establishing requirements for licensure as a surgical assistant which shall include,

1. Successful completion of a surgical assistant program approved by the Board, or,

2. Successful completion of training provided by the Uniformed Services of the United States of America that included clinical training as a surgeon or assistant-at-surgery and is approved by the Board, or,

3. Successful completion of a foreign medical program that included clinical training as a surgeon or assistant-at-surgery and is approved by the Board, and

4. Successful completion of a surgical assistant certification exam approved by the Board, and

5. Documentation that the applicant for licensure has not had his license or certification as a practitioner of the healing arts suspended or revoked and is not the subject of any disciplinary proceedings in the Commonwealth of Virginia or any other jurisdiction.

B. The Board shall issue a license to practice as a surgical assistant to persons who meet the requirements of the Board.

~~§ 54.1-2951.3.~~ § 54.1-2951.4. Restricted volunteer license for certain physician assistants.

A. The Board may issue a restricted volunteer license to a physician assistant who meets the qualifications for licensure for physician assistants. The Board may refuse issuance of licensure pursuant to § 54.1-2915.

B. A person holding a restricted volunteer license under this section shall:

1. Only practice in public health or community free clinics approved by the Board;

2. Only treat patients who have no insurance or who are not eligible for financial assistance for medical care; and

3. Not receive remuneration directly or indirectly for practicing as a physician assistant.

C. A physician assistant with a restricted volunteer license issued under this section shall only practice as a physician assistant and perform certain delegated acts which constitute the practice of medicine to the extent and in the manner authorized by the Board if:

1. A physician who supervises physician assistants is available; or

2. The physician supervising any physician assistant periodically reviews the relevant patient records.

D. A restricted volunteer license granted pursuant to this section shall be issued to the physician assistant without charge, shall expire twelve months from the date of issuance, and may be renewed annually in accordance with regulations promulgated by the Board.

E. A physician assistant holding a restricted volunteer license issued pursuant to this section is subject to the provisions of this chapter and the regulations promulgated under this chapter unless otherwise provided for in this section.

(1998, c. 319; 2005, c. 163.)

§ 54.1-2952. Supervision of *physician and podiatrist* assistants by licensed physician, or podiatrist; services that may be performed by *physician and podiatrist* assistants; responsibility of licensee; employment of *physician and podiatrist* assistants.

A. A physician or a podiatrist licensed under this chapter may apply to the Board to supervise assistants and delegate certain acts which constitute the practice of medicine to the extent and in the manner authorized by the Board. The physician shall provide continuous supervision as required by this section; however, the requirement for physician supervision of assistants shall not be construed as requiring the physical presence of the supervising physician during all times and places of service delivery by assistants. Each team of supervising physician and physician assistant shall identify the relevant physician assistant's scope of practice, including, but not limited to, the delegation of medical tasks as appropriate to the physician assistant's level of competence, the physician assistant's relationship with and access to the supervising physician, and an evaluation process for the physician assistant's performance.

No licensee shall be allowed to supervise more than two assistants at any one time.

Any professional corporation or partnership of any licensee, any hospital and any commercial enterprise having medical facilities for its employees which are supervised by one or more physicians or podiatrists may employ one or more assistants in accordance with the provisions of this section.

Activities shall be delegated in a manner consistent with sound medical practice and the protection of the health and safety of the patient. Such activities shall be set forth in a written practice supervision agreement between the assistant and the supervising health care provider and may include health care services which are educational, diagnostic, therapeutic, preventive, or include treatment, but shall not include the establishment of a final diagnosis or treatment plan

for the patient unless set forth in the written practice supervision agreement. Prescribing or dispensing of drugs may be permitted as provided in § 54.1-2952.1. In addition, a licensee is authorized to delegate and supervise initial and ongoing evaluation and treatment of any patient in a hospital, including its emergency department, when performed under the direction, supervision and control of the supervising licensee. When practicing in a hospital, the assistant shall report any acute or significant finding or change in a patient's clinical status to the supervising physician as soon as circumstances require, and shall record such finding in appropriate institutional records. The assistant shall transfer to a supervising physician the direction of care of a patient in an emergency department who has a life-threatening injury or illness. The supervising physician shall review, prior to the patient's discharge, the services rendered to each patient by a physician assistant in a hospital's emergency department. An assistant who is employed to practice in an emergency department shall be under the supervision of a physician present within the facility.

Further, unless otherwise prohibited by federal law or by hospital bylaws, rules, or policies, nothing in this section shall prohibit any physician assistant who is not employed by the emergency physician or his professional entity from practicing in a hospital emergency department, within the scope of his practice, while under continuous physician supervision as required by this section, whether or not the supervising physician is physically present in the facility. The supervising physician who authorizes such practice by his assistant shall (i) retain exclusive supervisory control of and responsibility for the assistant and (ii) be available at all times for consultation with both the assistant and the emergency department physician. Prior to the patient's discharge from the emergency department, the assistant shall communicate the proposed disposition plan for any patient under his care to both his supervising physician and the emergency department physician. No person shall have control of or supervisory responsibility for any physician assistant who is not employed by the person or the person's business entity.

B. No assistant shall perform any delegated acts except at the direction of the licensee and under his supervision and control. No physician assistant practicing in a hospital shall render care to a patient unless the physician responsible for that patient has signed the protocol, pursuant to regulations of the Board, to act as supervising physician for that assistant. Every licensee, professional corporation or partnership of licensees, hospital or commercial enterprise that employs an assistant shall be fully responsible for the acts of the assistant in the care and treatment of human beings.

(1973, c. 529, §§ 54-281.4, 54-281.5; 1975, cc. 508, 565; 1985, c. 316; 1988, c. 765; 1992, c. 793; 1996, c. 779; 2000, cc. 467, 497; 2002, c. 387; 2005, c. 662; 2008, c. 281.)

§ 54.1-2952.1. Prescription of certain controlled substances and devices by licensed physician assistant.

A. In accordance with the provisions of this section and pursuant to the requirements of Chapter 33 (§ 54.1-3300 et seq.) of this title, a licensed physician assistant shall have the authority to prescribe controlled substances and devices as set forth in Chapter 34 (§ 54.1-3400 et seq.) of this title as follows: (i) Schedules V and VI controlled substances on and after July 1, 2001, (ii) Schedules IV through VI controlled substances on and after January 1, 2003, (iii) Schedule III

through VI controlled substances on and after July 1, 2004, and (iv) Schedules II through VI controlled substances on and after July 1, 2007.

A licensed physician assistant shall have such prescriptive authority upon the provision to the Board of Medicine of such evidence as it may require that the assistant has entered into and is, at the time of writing a prescription, a party to a written agreement with a licensed physician or podiatrist which provides for the direction and supervision by such licensee of the prescriptive practices of the assistant. Such written agreements shall include the controlled substances the physician assistant is or is not authorized to prescribe and may restrict such prescriptive authority as deemed appropriate by the physician or podiatrist providing direction and supervision.

B. It shall be unlawful for the assistant to prescribe controlled substances or devices pursuant to this section unless such prescription is authorized by the written agreement between the licensee and the assistant.

C. The Board of Medicine, in consultation with the Board of Pharmacy, shall promulgate such regulations governing the prescriptive authority of physician assistants as are deemed reasonable and necessary to ensure an appropriate standard of care for patients.
The regulations promulgated pursuant to this section shall include, at a minimum, (i) such requirements as may be necessary to ensure continued physician assistant competency that may include continuing education, testing, and/or any other requirement, and shall address the need to promote ethical practice, an appropriate standard of care, patient safety, the use of new pharmaceuticals, and appropriate communication with patients; (ii) requirements for periodic site visits by supervising licensees who supervise and direct assistants who provide services at a location other than where the licensee regularly practices; and (iii) a requirement that the assistant disclose to his patients the name, address and telephone number of the supervising licensee and that he is a physician assistant. A separate office for the assistant shall not be established.

D. This section shall not prohibit a licensed physician assistant from administering controlled substances in compliance with the definition of "administer" in § 54.1-3401 or from receiving and dispensing manufacturers' professional samples of controlled substances in compliance with the provisions of this section.

(1992, c. 793; 1997, c. 806; 1999, c. 745; 2001, c. 465; 2003, c. 510; 2007, c. 16.)

§ 54.1-2952.2. Practice of Surgical Assistants.

A. A surgical assistant shall perform only as an assistant-at-surgery under the direct supervision of a licensed doctor of medicine, doctor of osteopathy, doctor of podiatry, oral or maxillofacial surgeon, or dentist who is competent to perform surgery and is immediately available within the surgical suite.

B. A surgical assistant shall act as an assistant-at-surgery only in procedures for which he is privileged by the medical staff of an hospital or an outpatient surgical hospital that is licensed in accordance with § 32.1-123 through § 32.1-137.

C. Nothing in this section shall prohibit:

1. The practice of a surgical assistant as an integral part of a program of study by students enrolled in an education program approved by the Board. Any student enrolled in approved education programs shall be identified as a "Student Surgical Assistant" and shall only assist-at-surgery under the direct supervision of an appropriate clinical instructor recognized by the education program.

2. A licensed physician assistant, podiatrist assistant, nurse practitioner, clinical nurse specialist, dental hygienist or registered nurse from practicing as assistant-at-surgery when practicing within the usual scope of his professional activities.

3. Any person who provides documentation that he has participated as an assistant-at-surgery in at least 100 surgical procedures within the five-year period prior to July 31, 2010 from practicing as an assistant-at-surgery in those procedures for which he is trained and competent.

§ 54.1-2953. Renewal, revocation, suspension and refusal.

The approval of the Board for the employment of ~~an~~ *a physician or podiatrist* assistant shall expire at the end of one year. A new application shall be submitted for approval, supplying such information as the Board may require, at the time and in the manner prescribed by the Board.

The Board may revoke, suspend or refuse to renew an approval for any of the following:

1. Any reason stated in this chapter for revocation or suspension of the license of a practitioner;

2. Failure of the supervising licensee to supervise the assistant or failure of the employer to provide a licensee to supervise the assistant;

3. The assistant's engaging in acts beyond the scope of authority as approved by the Board;

4. Negligence or incompetence on the part of the assistant or the supervising licensee in his use of the assistant;

5. Violating or cooperating with others in violating any provision of this chapter or the regulations of the Board; or

6. A change in the Board's requirements for approval with which the assistant or the licensee does not comply.

(1973, c. 529, §§ 54-281.8, 54-281.9; 1985, c. 316; 1988, c. 765.)