

SANTA MONICA-UCLA MEDICAL CENTER & ORTHOPAEDIC
HOSPITAL

DIVISION OF ANESTHESIA

RULES AND REGULATIONS

I. INTRODUCTION

The following Division of Anesthesia Rules and Regulations are adopted as an adjunct to the Medical Staff Rules and Regulations. These Rules and Regulations shall be reviewed annually and revised, as necessary, by the Division of Anesthesia.

The practice of anesthesia at Santa Monica-UCLA Medical Center & Orthopaedic Hospital will be restricted to those physicians who are trained in all facets of anesthesiology, and have completed a minimum three year residency in anesthesia at an approved institution. Also, Board certification by a board recognized by the American Board of Medical Specialists, in their specialty is a requirement of initial staff membership. Applicants who are not Board certified at the time of appointment must become Board certified within five (5) years from the date of graduation from their training program (reference Medical Staff Bylaws: ARTICLE III, Section 2 – Qualifications for Membership)

It is understood that every patient who is scheduled to have anesthesia and surgery has a distinct medical problem. It is expected that all aspects of management will be in accordance with the accepted practices in the community and in accordance with the current concepts of care.

Anesthesiologists function as a group in a spirit of mutual cooperation to ensure the highest quality of patient care. In all other respects anesthesiologists will be considered as private and independent practitioners.

II. ANESTHESIOLOGY

A. Definition

Anesthesiology is the practice of medicine dealing with, but not limited to:

1. The management of procedures for rendering a patient insensible to pain and emotional stress during surgical, obstetrical and certain medical procedures.
2. The support of life functions under anesthetic and surgical manipulations, including:
 - a. The clinical management of the unconscious patient from whatever cause;
 - b. The management of problems with pain relief;
 - c. The management of cardiac and respiratory resuscitation;
 - d. The application of specific methods of respiratory therapy;
 - e. The clinical management of various fluid, electrolyte and metabolic disturbances.

B. Expected Performance

Members of the Anesthesia Division will be expected to perform:

1. Accepted procedures commonly used to render the patient insensible to pain during the performance of surgical, obstetrical and other pain producing clinical maneuvers and to relieve pain-associated medical syndromes.
2. Support of life functions during the administration of anesthesia including induction and intubation procedures.

3. Provide appropriate pre-anesthesia and post-anesthesia management of the patient.
4. Provide consultation relating to various other forms of patient care, such as respiratory therapy, cardiopulmonary resuscitation, and special problems in pain relief.

III. ORGANIZATION

A. The Division Chair will:

1. Be appointed by the Chief of Staff following a recommendation by the Division of Anesthesiology.
2. Be responsible to the Medical Staff Executive Committee (MSE) for all anesthesia care that is provided in the hospital.
3. Appoint a designee to act in his/her absences and fulfill other duties as required.
4. Be responsible for:
 - a. Direction of all anesthesia services;
 - b. Medical direction of the Post-Anesthesia Care Unit (PACU);
 - c. Recommending privileges for all individuals with primary anesthesia responsibilities;
 - d. Monitoring the quality and appropriateness of anesthesia care rendered by anesthesiologists anywhere in the facility including Surgery, Obstetrics, Emergency, Outpatient and special procedure areas;
 - e. Referring to Administration the type and amount of equipment necessary for administering anesthesia and for related resuscitative efforts;
 - f. Development of the regulations concerning anesthesia safety throughout the facility;
 - g. Ensuring retrospective evaluation of the quality of anesthesia care rendered throughout the facility;
 - h. The establishment of a program of continuing education which includes patient care review, morbidity and mortality studies and didactic talks, and is based in part on the results of the evaluation of the anesthesia care rendered in the hospital;
 - i. Monitoring and evaluating the quality improvement activities of the Anesthesia Division;
 - j. Participation in the development and recommendation of policies relating to the function of anesthesiologists and administration of anesthesia in various departments or services of the facility;
 - k. Implementing and enforcing Medical Staff Bylaws, Rules and Regulations within the Division;
 - l. Conducting monthly meetings;
 - m. Performing other functions as required to ensure the efficient and effective operation of the Anesthesia Division;
 - n. Daily scheduling of assignments.

B. Anesthesia Members

1. Membership in the Anesthesia Division shall be composed of those physicians specializing in and limiting their practice to anesthesiology and pain management.
2. Anesthesiologists applying for staff appointment may be interviewed by the Chair of the Anesthesia Division to determine competency. As defined by the American Board of Anesthesiology, a competent anesthesiologist is a physician from whom the following can be expected:
 - a. Technical Facility: Facility in providing all technical services likely to be required in the practice of the specialty.
 - b. Medical Judgment: Ready availability of mature medical judgment applicable to the solution of medical problems associated with the patient's care as they arise in the practice of the specialty.
3. American Society of Anesthesiology (ASA) Documents – Each member of the division shall adhere to the principles outlined in the four documents as currently written and endorsed by the ASA and listed below:
 - a. Anesthesia Services: Procedure and Policy
 - b. Standards for Patient Care in Anesthesiology
 - c. Guidelines for Ethical Practice in Anesthesiology
 - d. Anesthesia Services

C. Chronic Pain Management Section

1. Composition
This section shall be composed of those members of the Anesthesiology Division who practice chronic pain management.
2. Privileges
Members of this section who practice chronic pain management exclusively shall be limited to those privileges which pertain to non-operative pain relief, and may include post-operative pain management, such as patient-controlled analgesia, when the need arises as determined by the Division Chair. Chronic pain management privileges are not limited to the members of this section, and may be held by any member of the Division qualified to do so by training and/or experience.
3. On-Call Coverage
Members of the section must provide for adequate on-call coverage by Medical Staff members who hold the same privileges as the section member.
4. Quality Improvement and Peer Review Activities
These functions shall be performed for the Chronic Pain Management Section by the Anesthesia Committee during its regular meetings devoted to such activities for the entire Division.

IV. **CREDENTIALING**

A. Initial Application

Application processing will be identical to the process used for all other specialties and will include the following:

B. Privileges

1. Anesthesia privileges will be recommended only if written documentation of training and/or experience substantiating competency for those privileges are supplied.
2. An anesthesiologist may perform only those anesthetic procedures for which privileges have been granted as indicated by the anesthesia privilege form.
3. The burden of proof of competency for any requested procedure rests upon the requesting anesthesiologist.
4. The Clinical Privileges for Anesthesiologists Providing Care to Pediatric (Age <12 years) Patients are as follows:

Level 1: Healthy children \geq 2 years
 Complex and critically ill children \geq 6 years

Level 2: Healthy infants and children \geq 2 months
 Complex infants and children \geq 6 months
 Critically ill children \geq 4 years

Level 3: Healthy, complex and critically ill infants and children of
 all ages

Qualifications for pediatric privileges:

Completion of ACGME residency and appropriate experience with anesthesia care of infants and children are necessary and sufficient qualifications for privileges at any level.

In addition, prior general pediatric training will qualify a provider for level 2 privileges. Prior pediatric critical care training, completion of an ACGME pediatric anesthesiology fellowship or equivalent, and advanced training in pediatric neurosurgical, liver transplant or cardiac anesthesia qualify the provider for level 3 privileges.

Maintenance of privileges requires a minimum of 10 cases/year within the category of pediatric patients in the level for which privileges have been previously granted. Proficiency may also be demonstrated through proctoring, or certified by the chief of service or division.

Level 3 privileges may be extended to providers on an *ad hoc* basis provided a level 3 provider is immediately available for consultation. ASA 6 pediatric patients (donors) can be cared for by any provider with pediatric privileges at any level. (Definition of terms: healthy = ASA 1 and 2; Complex = ASA 3; Critically ill = ASA 4 and 5)

5. Physicians requesting privileges for acupuncture must have successfully completed 200 hours of acupuncture training at the UCLA Center for East-West Medicine or completion of a 200 hour AMA Category I certified program.

C. Proctoring

1. General Requirements

- a. Case assignments for proctoring will not be given without satisfactory evidence of willingness of the applicant to participate in the call schedule.
- b. On being newly admitted to the anesthesia division staff, each anesthesiologist is required to be concurrently proctored on five (5) cases.

The Division Chair shall review the completed proctoring forms which are then submitted to the Medical Staff Office. When all of the appropriate forms indicating performance of the necessary cases have been received, they shall be forwarded for approval to the Surgery Department Chair for recommendation to the Medical Staff Executive Committee. Exceptions to the requirement may be allowed only by the authority of the Chief of Staff.

- c. The proctoring anesthesiologist will evaluate the history, physical examination, x-ray and laboratory interpretations, documentation of informed consent, appropriateness of the anesthetic, judgment, technical skills, post-operative care and medical records. The case will be evaluated and promptly reported on the appropriate evaluation form. The overall evaluation will determine whether the anesthesiologist's performance was satisfactory or unsatisfactory. If unsatisfactory, the reasons and recommendations will be stated.
- d. Physicians requesting privileges for TEE are required to be concurrently proctored on two (2) cases at the earliest opportunity. This requirement is in addition to the five (5) proctored cases as indicated above.

Level	TEE Type/Location	Training & Experience
I	Basic Perioperative TEE -Adults	Intraoperative monitoring of function and volume status. Anesthesiology BE/BC ➤ 50 exams
II	Advanced Perioperative TEE -Adults -Peds	<ul style="list-style-type: none"> • Intraoperative monitoring of function and volume status. • Assessment of valves and shunts <ul style="list-style-type: none"> • Anesthesiology BE/BC • Cardiac Anesthesia Training ➤ 150 exams
III	Advanced Perioperative Pediatric and congenital TEE	<ul style="list-style-type: none"> • All pediatric and adult TEE • Assessment of function, valves, shunts. <ul style="list-style-type: none"> • Anesthesiology BE/BC • Cardiac Anesthesia Fellowship Training • Formal Echo

		<ul style="list-style-type: none"> • Peds and CHD Confirmation of known diagnosis, identification of additional diagnosis. 	Training ➤ 275 exams
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e. Physicians with privileges for acupuncture are required to be proctored on three (3) cases at the earliest opportunity. This requirement is in addition to the five (5) proctored cases as indicated above.

2. Emergency Call

All applicants for general surgical and obstetrical anesthesia privileges must be willing to participate in the on-call schedule on a shared rotation basis. Members must provide for adequate on-call coverage by Medical Staff members who hold the same privileges as the member.

D. Reappointment

1. General Guidelines

Guidelines determining reappointment, promotion or demotion shall include but not be limited to, attendance at Medical Staff and Division meetings, participation in Medical Staff affairs and committees, ethics and conduct, professional competency and judgment in appropriately caring for patients, peer recommendation, use of the hospital's facility for patient care, relations with other staff members, officers and committees, adherence to Medical Staff Bylaws and Rules and Regulations, Department Rules and Regulations, polices and procedures.

V. **STAFFING**

A. Size of Staff

The size of the anesthesia staff shall be large enough to adequately provide 24-hour a day, 7-day a week services as required, ensuring the same quality of care for emergency patients that is available for elective patients. However, in order to retain a high standard of quality of care, the size of the staff shall not be so great that all members cannot continue to retain their professional skills, to remain readily knowledgeable about surgical suite procedures, equipment and personnel, and to maintain the orderly and harmonious management of the staff.

B. Absences and Vacations

When an anesthesiologist plans to be absent, adequate advance notice should be given and approved by the Chair of Anesthesiology Division or designee. Coverage for the absence will be determined by the Chair of Anesthesia or designee. The Chair or designee will determine how many anesthesiologists may be on vacation at one time. At least two weeks notice should be given if the anesthesiologist decides not to take the vacation, otherwise the anesthesiologist may be required to take vacation as requested. It is the responsibility of the anesthesiologist taking vacation to arrange call

coverage among the other members of the department during his/her absence.

C. Scheduling and Assignments

1. To be regularly assigned operating room cases, anesthesiologists must be willing to participate in the rotating on-call schedule and take emergency call. The anesthesiologists on emergency call must be capable of being in the operating suite no longer than thirty minutes from the time they are notified.
2. Patient requests will be honored at the discretion of the Anesthesia Division Chair or designee. There will be no surgeon requests for specific anesthesiologist; however, where the schedule permits surgeons and anesthesiologists who have expressed a desire to work together will be accommodated. Surgeons will be able to exercise a negative request in that they may express to the Division Chair those anesthesiologists with whom they do not wish to work in so far as possible.
3. An anesthesiologist assigned to a room will be responsible for that room until 1500. The anesthesiologist may leave the hospital on completion of assigned cases, but should be readily available until 1500. Arrangements may be made with other unoccupied anesthesiologists for coverage.
4. Once the final surgery schedule has been typed, only the Chair of the Anesthesia Division or designee may make anesthesia changes, however, if the anesthesiologist cannot provide support for a case, a substitute may be arranged.
5. The Chair of the Anesthesia Division or designee will make out the weekend and night call schedule and the OB call schedule for the Division one month in advance.
6. The daily running of the schedule will be the responsibility of the Chair of the Division or designee. All matters pertaining to case assignment and scheduling shall be dealt with by one of these two persons. All other anesthesiologists shall abide by their decisions.
7. On weekends and holidays, the running of the schedule will be the responsibility of the first call anesthesiologist.

VI. **MEETINGS**

- A. The Anesthesia Division will meet to consider all aspects of anesthesia practice at SM-UCLA. In addition, both didactic and morbidity and mortality meetings will be held to ensure continuing education and retrospective review of problem cases, including monthly review of quality improvement. Minutes of the Division meeting shall be forwarded to the Department of Surgery/Anesthesia Committee.

VII. **FUNDAMENTALS OF ANESTHESIA CARE**

A. Prior to the induction of anesthesia:

1. A pre-anesthesia consultation shall be performed and shall be recorded on the chart. The anesthesiologist shall review the pre-op data when it is available, if possible at least one day pre-operatively.
2. The anesthesiologist shall be familiar with the medical and surgical problems involved.
3. The chart shall have a list of patient allergies, drug history, and previous anesthesia experiences and problems, if any.

4. Pertinent consultations shall be requested and obtained.
 5. Provisions for continuity of care shall be considered and established.
 6. If an interview with the patient is not feasible, then discussion with the surgeon and/or the primary care physician to ascertain medical, anesthetic and drug history shall be performed.
 7. Necessary tests and medications essential to conduct anesthesia shall be ordered.
 8. Appropriate documentation of the choice of anesthesia whether it is general, regional or monitored anesthesia care, as well as a notation of the surgical or obstetrical procedure anticipated shall be performed.
 9. The physical status of the patient based on the ASA 1-5 system shall be noted.
 10. Except in extreme emergency cases, these evaluations shall be recorded prior to the patient's transfer to the operating room and before preoperative medication has been administered.
- B. Immediate pre-anesthetic care of the patient shall be accomplished by the anesthesiologist and shall include at a minimum:
1. Checking the patient's identity.
 2. Checking the site and side of the body to be operated on.
 3. Ensuring that a record of the following is in the patient's medical record:
 - a. Recent history and physical performed and recorded in hospital chart.
 - b. Written informed consent for the contemplated surgery.
 - c. Re-evaluation of the patient prior to induction. This should include patient's vital signs, time of administration and dosage of pre-anesthesia medications, together with an appraisal of any changes noted since earlier evaluation.
 4. Appropriate screening tests, based on the needs of the patient and recorded within 72 hours prior to surgery.
 5. Ascertaining the availability of and having the knowledge of equipment necessary to conduct anesthesia such as: functioning laryngoscope, anesthesia circuits and endotracheal catheters, wide selection of airways and masks, defibrillator and suction.
 6. Laryngoscope, airways, breathing bags, and other anesthesia equipment in direct contact with the patient shall be cleaned after each use when not disposable.
 7. Adequate scavenging devices to collect anesthesia agents will be linked to the anesthesia machines.
 8. The induction of anesthesia will not begin until the attending surgeon is known to be immediately available. Patients may be taken into the operating room to commence invasive lines and to apply other monitoring devices prior to the arrival of the surgeon.
 9. Prior to surgical skin incision, the Anesthesiologist will help participate in a "time out". The anesthesiologist with the nursing staff, scrub tech and a member of the surgical team will actively make sure that the correct patient is having the correct surgery and correct surgical site, and necessary equipment is available. The patient's ID band will be checked against the surgical consent and x-rays if applicable.

10. The proper, adequate and continuous use of all practical forms of visual, tactile, auditory, mechanical and electrical means of monitoring the patient should be utilized. Blood pressure, EKG, oxygen saturation monitoring and oxygen analyzer are mandatory while the use of auditory monitoring with either a precordial or esophageal stethoscope is recommended. End-tidal CO₂ monitoring shall be performed for all intubated patients and mask patients, where possible.
11. The accurate and legible recording of all pertinent events taking place before, during the induction of, maintenance of, and emergency from anesthesia including the dosage and duration of all anesthetic agents, other drugs, intravenous fluids and blood or blood components shall be performed concurrently with such activities.
12. An anesthesiologist or an anesthesiology resident shall be in attendance with the patient throughout the operation in compliance with federal Medicare and Accreditation Council for Graduate Medical Education standards. An anesthesiologist may be relieved provided the relieving anesthesiologist is made fully cognizant of the medical and surgical history of the patient, the type of anesthesia being utilized, and any problems which may have occurred during the anesthetic. Continuous direct care will be provided to the patient from the time of induction until that patient may be safely transferred to the care of ICU, PACU or ACU personnel.
13. A member of the Division may not attend more than one patient simultaneously except if working with personnel in training, in the event of an emergency, or in the event of continuous labor epidural. If a member is working independently, absence from the operating room during an anesthetic procedure for which the physician is responsible, except in an emergency, shall be sufficient cause for recommendation of expulsion from the staff.
14. When a patient is discharged directly either to the Ambulatory Care Unit or to the floor, bypassing PACU, the patient should meet or exceed PACU discharge criteria.

C. An anesthesiologist shall participate in the post-anesthesia care of the patient.

This shall include as a minimum:

1. Evaluation of the patient for special post-anesthetic management at the completion of anesthesia.
2. Assuring that the patient is transferred to PACU, ICU, ACU or floor where properly trained personnel will monitor all necessary physiological parameters.
3. Informing personnel caring for patient in the immediate post-anesthetic period of any specific problems presented by each patient.
4. Remaining with the patient as long as necessary.
5. At least one notation in the PACU record concerning the patient's level of consciousness and vital signs.
6. An anesthesiologist will be responsible for the discharge of patients from the PACU. This need not be the anesthesiologist who actually performed the anesthetic.
7. Discharge of patients from PACU by any of the following:
 - a. Instructing PACU personnel to follow previous written criteria.

- b. Requesting PACU personnel to bring the chart to write the appropriate discharge order.
 - c. Physically going back to PACU and discharging the patient.
 - d. Requesting to be phoned by PACU personnel for a discharge order when said personnel have assessed that discharge criteria have been met.
8. Only a physician, and preferably the anesthesiologist doing the case, shall extubate patients in PACU.
 9. An unstable patient in PACU dictates the anesthesiologist's constant presence. A new case shall not be started while a patient is in critical condition. The anesthesiologist shall either delay the next elective case or arrange for another anesthesiologist to do the case.
 10. All anesthesiologists shall be aware of the PACU protocol.

D. Post-Anesthesia Visits

1. The anesthesiologist shall make at least one visit with the patient during the early post-anesthetic period (not to exceed 48 hours, unless the patient has already been discharged), with an appropriate notation on the patient's chart which includes the presence or absence of anesthesia-related complications. Each post-anesthesia note shall specify date and time. The anesthesiologist shall arrange for management of anesthesia-related complications

VIII. **OTHER ANESTHESIA CARE**

A. Obstetrical Anesthesia

1. Except as emergency or near emergency situations make it impractical, there should be no difference from the care provided surgical patients as described above.
2. An anesthesiologist shall be present at all deliveries if a physician requests it.
3. The anesthesiologist on OB call shall be immediately available to cover all OB responsibilities. If for any time the anesthesiologist will be unavailable, arrangements for substitute coverage must be made and communicated to the Labor and Delivery room.
4. One anesthesiologist will be assigned solely to OB call. Only in an extreme surgical emergency may that anesthesiologist anesthetize other patients in the main operating room. In all other instances, unavailability, for however brief a time, will dictate the necessity of having another anesthesiologist available in the hospital to cover OB.
5. Non-anesthesiologist physicians may only give local, paracervical and pudendal anesthesia. All other forms of anesthesia, i.e., general, saddleblocks, etc., must be given by an anesthesiologist, except in emergencies.
6. It is the responsibility of the anesthesiologist on OB call to be aware of the situation in Labor and Delivery at all times.
7. When continuous epidural analgesia for labor is employed, the anesthesiologist will be in the delivery suite for 20 minutes after initiation and after each "top-up" of the epidural. Thereafter, the anesthesiologist will be in close proximity throughout the duration of the epidural. An anesthesiologist may take over the administration of a continuous epidural from another anesthesiologist. The attending physician or designee must be available within ten minutes at all times.

B. Consultative Services

Members of the Anesthesia Division shall be available to provide consultative services as requested in other areas of the hospital to include:

- a. Consultation with the Respiratory Therapy Department and the Critical Care Units.
- b. Consultative services to patients acutely requiring management of: 1) airway problems, 2) respiratory insufficiency, 3) circulatory insufficiency, 4) fluid, electrolyte and acid-base disorders, 5) the unconscious patient, regardless of etiology, 6) pain relief.

C. Resuscitation Procedures

Anesthesiologists shall be involved in coordinating, teaching, and actively participating in the resuscitation efforts utilized in the hospital.

D. Sedation Analgesia by Non-Anesthesiologists

Anesthesiologists shall be involved in developing uniform standards for sedation analgesia throughout the hospital and participate in quality assurance review of such activities. Anesthesiologists shall contribute to training and credentialing of non-anesthesiologists as indicated.

IX. **DISCIPLINARY ACTION**

It is recommended that complaints concerning an anesthesiologist be submitted to the Chair of the Anesthesia Division in writing and reviewed with the Anesthesia Committee. Any recommendation for disciplinary action will be in strict accordance with the Bylaws as they pertain to any member of the Medical Staff.

X. **HEALTH**

- A. It is each anesthesiologist's responsibility to report to the Division Chair any condition that may interfere with the ability to safely administer anesthesia.
- B. In the event of any occupational injury, immediate first aid/resuscitation shall be given and as soon as possible the anesthesiologist shall report to Occupational Health, or the Emergency Department on off-hours, for documentation, treatment and follow-up.

XI. **INFECTION CONTROL**

A. Attire

1. All personnel are required to wear scrub clothes and caps covering the hair in restricted areas of the surgery suite at all times.
2. Surgical attire may be worn within the Medical Center provided they are not contaminated.
3. Masks shall cover the mouth and nose, be worn in all sterile areas even when there is no patient in the room, and be changed before each case.
4. Hands shall be washed between cases with an antiseptic solution.

B. Equipment

1. Disposable syringes and needles, and other disposable items shall be discarded after each use using universal precautions.
2. Laryngoscope blades shall be cleaned after each use by anesthesia personnel.
3. Bacterial filters shall be placed when appropriate on inspiratory side of the circuit and changed with each use.

4. Gas Machine
 - a. The machine should be cleaned between cases with a cloth moistened with germicidal solution.
 - b. Preliminary cleaning with soap and water may be necessary if the machine is grossly contaminated.
 - c. Casters shall be cleaned routinely.
 - d. Domes shall be cleaned daily.
5. Soda Lime
 - a. Soda lime should be discarded after use on an infectious patient, the canister thoroughly disinfected and dried well.
 - b. Upon request of the anesthesiologist, the soda lime canister will be ethylene oxide sterilized and aerated.
6. Endotracheal tubes and anesthesia breathing circuits of the disposable type shall be used whenever possible.
7. Non-disposable equipment which comes in contact with the patient's airway shall be thoroughly cleaned by soap and water, sterilized by autoclave, ethylene oxide or activated glutaraldehyde, as appropriate.

C. Guidelines for Use of Engineered Sharps

These guidelines are provided to assist the anesthesia practitioners in determining availability and required use of Engineered Sharps.

1. **General Requirements:** When Engineered Sharps are made available, they shall be used for injury protection, unless, in the reasonable clinical judgment of the health care professional they will compromise patient safety or the success of the procedure involving the patient.
2. **Use of Conventional Needles:** Clean, conventional needles may be used for draws of medications and medication mixing. A needleless system should be utilized to administer the medications intravenously (e.g. via stopcocks).
3. **Use of Safety Needles:** Engineered needles should be used for all percutaneous techniques (e.g. blood draws & IM medications).
4. **Safety needles should be used for percutaneous blood draws.** A needle-free technique should be utilized to transfer blood from a syringe into the blood tubes. Alternatively, a blood collection assembly could be used to draw blood directly into the blood tube (Vacutainer system)
5. **Use of Safety IV Catheters:** Safety catheters should be used for all peripheral IV accesses.
6. **Use of Conventional Spinal, Epidural and Nerve Block Sharps:** As of this publication, no engineered safety devices are available on the market. Thus conventional methods should be used, until safety kits are introduced.
7. **Arterial and Central Line Placement:** As of this publication, engineered safety product availability is limited. When feasible, safety catheters, safety scalpels and staples (vs. sutures) should be utilized.

Chair, Surgery/Anesthesia Department

Chair, Medical Staff Executive Committee

Governing Body (designee)