American Society of Anesthesiologists®

Statement on Nonoperating Room Anesthesia Services

Developed By: *Committee on Practice Parameters*
Committee of Oversight: *Surgical and Procedural Anesthesia*
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This statement applies to Non-Operating Room Anesthesia (NORA) services defined as care provided by anesthesiology personnel for inpatients/outpatients undergoing diagnostic or therapeutic procedures performed at locations outside an operating room pavilion within the hospital. This statement represents baseline expectations which may be exceeded at any time based on the judgment of the anesthesiologist involved in providing patient care. This statement encourages high quality patient care but cannot guarantee any specific patient outcome. This statement is subject to revision as warranted by the evolution of technology and practice. ASA Standards, Guidelines and Policies should be adhered to in NORA locations except where they are not applicable to the individual patient or care setting.

Perianesthesia services, including perioperative care as it relates to NORA locations, require similar leadership, management, and oversight structures as those in operating rooms. However, such services may be addressed differently by facilities and health systems based on the scale of services provided. Leadership and oversight structures for NORA should consider focusing on the following areas:

- Facilities Design and Equipment
- Environment of Care
- Staffing and Schedule Optimization
- Quality and Safety
- Regulatory Issues

- Supporting Technology and IT Systems Including the Electronic Medical Record
- Finance and Budget
- Materials Management and Sterile Processing

Facilities Design and Equipment:

- The Director of Anesthesia Services or his/her designee shall be involved in the planning and establishing of a NORA service. Their involvement shall include planning and designing stages related to new construction or the re-modeling and/or re-purposing of existing procedure rooms.
- Applicable elements of the ASA Operating Room Design Manual should be incorporated in the planning process.
- Procedural suites and other locations where NORA services are provided shall be established as close to the main operating room pavilion as possible when feasible. If the former is not feasible, then such locations should be established in close proximity to each other to improve the safety, effectiveness, efficiency, and timeliness of delivering care for all patients receiving anesthesiology services.
- Each procedure room must have the following:

1. A reliable source of oxygen adequate for the length of the procedure, including a backup supply. Prior to administering any anesthetic, the anesthesiologist should consider the capabilities, limitations and accessibility of both the primary and backup oxygen sources. Oxygen piped from a central source, meeting applicable codes, is strongly encouraged. The backup system should include the equivalent of at least a full E cylinder.
2. An adequate and reliable source of suction.
3. In locations where inhalation anesthetics are administered, an adequate and reliable system for scavenging waste anesthetic gases.
4. Sufficient electrical outlets to satisfy anesthesia machine (when present), any present or needed anesthesia equipment (syringe pumps, videolaryngoscopes, etc), and monitoring equipment requirements, including clearly labeled outlets connected to an emergency power supply. In any anesthetizing location determined by the health care facility to be a “wet location” (e.g., cystoscopy, arthroscopy, or a birthing room in labor and delivery), either isolated electric power or electric circuits with ground fault circuit interrupters should be provided.*
5. Adequate illumination of the patient, anesthesia machine (when present) and monitoring equipment. In addition, a form of battery-powered illumination other than a

laryngoscope should be immediately available.

6. Sufficient space to accommodate necessary equipment and personnel and to allow expeditious access to the patient, anesthesia machine (when present) and monitoring equipment.

Environment of Care:

- Each procedure room must have adequate anesthesia drugs, intravenous fluids, and other supplies and equipment for the intended anesthesia care.
- Each procedure room must have the adequate monitoring equipment, including capnography, to allow adherence to the ASA *Standards for Basic Anesthetic Monitoring*.
- An anesthesia machine equivalent in function to those anesthesia machines used in operating rooms must be available and maintained to current operating room standards when inhalation anesthesia is to be administered.
- Appropriate post-anesthesia management shall be provided as described in the ASA *Standards for Postanesthesia Care*. When feasible, each NORA location should have a dedicated onsite or nearby Post Anesthesia Care Unit (PACU). When this is not possible, in addition to the anesthesiologist, adequate number of trained staff and appropriate equipment should be available to safely transport the patient to a post anesthesia care unit.
- In each NORA location, there should be the same type and level of pharmaceuticals and point of care testing capabilities as in the main operating room dictated by the types of procedures performed in a given location.

Staffing and Schedule Optimization:

- In each NORA location, there must be adequate staff trained to support the anesthesiologist and other members of the Anesthesia Care Team in the delivery of safe patient care.
- Hospitals should consider opportunities for system-based triage of patients to mode of service delivery (anesthesiology services vs. non-anesthesia procedural sedation services) when appropriate and feasible.
- Similar principles of systems thinking, capacity coordination, and data analytics utilized in the facility or health system to drive optimization of perioperative services delivery, should be applied to the provision of NORA services.
- Cases should be scheduled in the same manner utilized in the main operating room pavilion to facilitate integration into the facility-used electronic anesthesia record system when possible.

- Case scheduling should be done in a manner to enable personnel assignments, improve efficiency, and provide the means to track clinician clinical activity, when possible. At a minimum, anesthesiology leadership should have constant awareness of locations of all cases involving anesthesia personnel, including after hours and weekend cases.

- Cases should be scheduled without interruptions imposed by non-anesthesia (procedural sedation) cases.

- Manage schedules and operations to minimize over-utilized and under-utilized time.

- Scheduling inpatient and outpatient complex procedures during standard resource hours and preferably earlier in the day to provide appropriate clinical and ancillary resources to support safe and effective care.

Quality and Patient Safety:

- Patient safety practices implemented in the operating room must be replicated in NORA locations, such as patient identification, procedure and laterality verification, relevant checklists, etc.

- ASA *Basic Standards for Preanesthesia Care* should be followed as appropriate.

- Near misses and adverse events should be analyzed periodically and be subjected to the same robust quality improvement process utilized in the main operating room pavilion. Such analysis may include mortality, unplanned ICU admissions, cardiac arrests, failed intubations., etc.

- Each procedure room must have basic resuscitative equipment, including a self-inflating hand resuscitator bag capable of administering at least 90 percent oxygen as a means to deliver positive pressure ventilation.

- Each NORA location must have an emergency cart with a defibrillator, emergency drugs, and other equipment adequate to provide basic and advanced cardiopulmonary resuscitation.

- Each NORA location using X-ray imaging must have adequate, up-to-date, protective lead wrap-around aprons, thyroid shields, and mobile clear lead glass shields for the anesthesiologist and other anesthesia team members' protection.

- Every NORA location must have access to difficult airway management equipment and, when indicated, malignant hyperthermia management protocol and supplies.

- The lead anesthesiologist for each area should be involved in writing policies and standard operating procedures including different aspects of care (see ASA *Statement on Practice*

Parameters, ASA *Basic Standards for Preanesthesia Care*, ASA *Standards for Basic Anesthetic Monitoring*, ASA *Standards for Postanesthesia Care*).

- The process for activating a code and/or rapid response should be determined and made clear to all concerned parties (e.g., backup anesthesiology, Intensive Care Unit, or Emergency Department teams) prior to starting services at a NORA location. Mock code drills or procedure-specific simulations are strongly recommended to identify gaps in personnel, equipment, and logistics before an actual emergency arises.

- Each NORA location should establish and follow relevant operational and quality metrics.

Regulatory Issues:

For each location,

- Applicable building and safety codes and facility standards, where they exist, should be observed.

- Applicable accreditation organization standards must be followed.

Supporting Technology and IT Systems Including the Electronic Medical Record:

- Each NORA location should establish a reliable means of two-way communication to request assistance.

- Each NORA location should have the same access to electronic medical record and anesthesia record system utilized in the main operating room.

Finance and Budget:

- Planning for new or expanding NORA services should be supported by a business plan developed by facility staff including representation from the requesting department and the department of anesthesiology.

- NORA services should provide safe and effective care. When anesthesiology professional revenue does not support the costs to deliver care, maintenance of operations requires considerations that include operational and scheduling efficiency and institutional financial support.

Materials Management and Sterile Processing:

- The same material management and sterile processing steps and plans utilized in the main operating room should be replicated in NORA locations.

Last updated by: Governance

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