Chapter 1

Organizing the Department of Anesthesiology

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1 Chapter 1 was last reviewed and updated in February 2015.
2 Peter Dunbar, M.D. and Linda Hertzberg, M.D. were the original authors of this chapter in 2010 with special thanks to Robert E. Johnstone, M.D., J. Kent Garman, M.D., M.S., Tong J Gan, M.D., M.H.S., F.R.C.A and Scott E. Kercheville, M.D. Donald Arnold, M.D. and Richard P. Dutton, M.D., M.B.A. contributed updates to this chapters.
3 Robert Johnstone, M.D. contributed to this chapter section in 2007. Members of the ASA Committee on Quality Management & Departmental Administration (QMDA) reviewed and updated this article in 2014.
1.0 ORGANIZING THE DEPARTMENT OF ANESTHESIOLOGY

A. Mission and Overview

Anesthesia care is the practice of medicine and takes place within organized environments. The American Society of Anesthesiologists® (ASA) has produced a policy statement on the proper organization of an anesthesia department, entitled *The Organization of an Anesthesia Department (2013)*. Policy statements and related materials may be found on the ASA Standards, Guidelines and Statements webpage.

Because of the diversity of local conditions among institutions, the policy statement emphasizes general principles. These include:

- The organization of the anesthesia department should be consistent with the organization of the other clinical departments of the hospital.
- A physician anesthesiologist must be personally responsible to each patient for the provision of anesthesia care, whether personally provided or through supervised residents, anesthesiologist assistants, or nurse anesthetists.
- The anesthesia department must develop a system to assure the availability of a member of the department to each patient.
- Anesthesia privileges should be processed through established medical channels and based on qualifications and competence.
- Department administration must monitor the quality of anesthesia care rendered throughout the hospital, develop regulations concerning anesthesia safety, and provide education to department members. In particular, the Chair of the Department of Anesthesiology is responsible under Interpretive Guidelines from the Center for Medicare & Medicaid Services (CMS) for the safe administration of sedation throughout the hospital.

B. Administrative Organization

Each Anesthesia department should have a chief or director of the department who is either elected by the members or appointed by a clearly delineated process of the medical staff or governing body of the institution. Individuals selected as departmental leaders should possess and demonstrate leadership attributes and a desire to lead. Good leaders enhance the credibility, prestige, and quality of departments. Leaders must develop and communicate the anesthesia department’s priorities, goals, and organization. The best leaders understand people and business, maintain fairness, create clear visions, build trust, and communicate effectively.

The director of the anesthesia department should serve as the hospital’s CMS-mandated Director of Anesthesia Services or may delegate this responsibility to another department member. The director of anesthesia services has the authority and responsibility for directing the administration of all anesthesia services, including anesthesia and analgesia, throughout the hospital (including all departments in all campuses and off-site locations where anesthesia services are provided), as well as responsibility for evaluating the quality and appropriateness of anesthesia patient care as part of the hospital’s Quality Assessment/Performance Improvement program. Other responsibilities of the director of anesthesia services may be found in the ASA document on *The Organization of an Anesthesia Department*.

A small anesthesia department may need no other administrative organization than a director of anesthesia and the department members, and may exist as a department without committee structure, acting as a whole to ensure proper privileging, quality assurance, peer review, compliance, and clinical
coverage of its patient care responsibilities. Larger departments with multiple clinical locations (i.e. full service hospital, inpatient only, ambulatory care, freestanding outpatient, imaging center, doctors office) and sub-specialities may find it advantageous to subdivide areas of responsibility into either site of service divisions (by physical location), or clinical service divisions (by subspecialty) or both.

C. Scope of Services

Scope of services should be clearly defined at each geographic location. Examples of these services include complete anesthesia services, including consultation for patients and other physicians, general anesthesia, spinal and regional anesthesia, obstetric anesthesia, sedation, management of intensive care patients, acute and chronic pain management, quality oversight only, perioperative care etc. Large departments generally have divisions that have their own division chief that cut across geographic locations such as Pain, Cardio-Thoracic, Intensive Care, and Transplant.

In addition, a larger department may find a committee structure useful for the purposes of privileging, quality assurance, peer review, compliance, and other items that may be pertinent on a local level. A large department with multiple sites, divisions, and committees should create a clear organizational chart for sites, subdivisions, committees, and personnel, so that areas of responsibility and authority of individual leaders and members are clearly delineated.

No matter what the size of the department, it is important that the department create formal liaisons and lines of communication with the other departments within its institution.

Responsibilities of department members for medical care may be found in The Organization of an Anesthesia Department. These include, but may not be limited to the following items from that document:

“Since the quality of care in anesthesia depends in large measure upon the role of the physician in rendering such care, the proper definition of the responsibilities of individual physicians in the provision of medical care is the starting point in the organization of an anesthesia department. Such definition should take into account the following principles.

A. Anesthesia care is the practice of medicine. An anesthesiologist must be personally responsible to each patient for the provision of anesthesia care. An anesthesiologist exercises the same independent medical judgment on behalf of the patient as is exercised by other physicians.

B. The anesthesiologist’s responsibilities to the patient should include responsibility for preanesthetic evaluation and care, medical management of the anesthetic procedure and of the patient during surgery, postanesthetic evaluation and care, supervision of resident physicians and medical direction of any nonphysician who assists in providing anesthesia care to the patient. The anesthesiologist should fulfill these responsibilities to the patient in accordance with the ASA Guidelines for the Ethical Practice of Anesthesiology (2013) and Guidelines for Patient Care in Anesthesiology (2011).”

Apart from clinical responsibilities, depending on the type and size of facility, anesthesiologists may also have academic, research, or administrative responsibilities. Each department should create guidance for its members as to how these responsibilities should be met. With regard to administrative responsibilities, The Organization of an Anesthesia Department states:

“The assumption and performance of medically related administrative responsibilities, though for the ultimate benefit of patients, are undertaken on behalf of, and as the agent for, the hospital.
The fact that a physician has medically related administrative responsibilities should not affect that physician’s, or any other physician’s, individual responsibilities to patients or the physician’s rights under the medical staff bylaws.

All members of the department should share in the discharge of medically related administrative responsibilities to the extent necessary or appropriate.”

D. Fundamental Elements

A process for clinical privileging must be in place for all department members who provide patient care services. Privileges should be processed through established medical staff channels, be based solely on qualifications and competence, and be conditioned upon observance of the medical staff bylaws and the rules and regulations governing the anesthesia department. Privileges should be delineated in accordance with the ASA Guidelines for Delineation of Clinical Privileges in Anesthesiology (2013).

The anesthetics administered to a patient and the reaction of the patient must be recorded as a provision of quality care. This can be written on printed forms or entered in electronic records. Documentation of anesthesia should be consistent with the ASA Statement on Documentation of Anesthesia Care (2013). Documentation should also satisfy Medicare billing requirements.

Anesthesiologists live in a compliance-intensive environment. The environment is very complex where new regulations and enforcement regimes often impact anesthesiologists. The ASA Standards, Guidelines and Statements webpage provides guidance to help members comply with regulatory mandates and suggestions. We recommend that members review this page on the website to assist with regulatory compliance.

In addition, ASA has developed templates and resources to help anesthesiologists comply with the CMS Interpretive Guidelines (IGs) for the Hospital Conditions of Participation. These IGs increase the scope of practice of anesthesiologists and reemphasize the role of the director of anesthesia services. Though these resources are ASA committee work products, they are not official ASA documents. They may provide some guidance in any necessary transitions as a result of the modifications to the Interpretive Guidelines.

All anesthetics have risks. Patients have the right to be informed about these risks and to consent or not to the administration of anesthesia. Information needed by a patient for a valid consent generally includes the nature of the anesthesia procedure, identity of the person who will administer the anesthesia, risks of the anesthesia, available alternatives to the anesthesia procedure and allowing the patient to have ample opportunity to ask questions regarding these elements of the discussion. It is controversial as to whether or not informed consent should be documented on a printed form that the patient signs. The ASA Manual on Professional Liability contains an extensive discussion of the issues surrounding informed consent in anesthesia.

The ASA Guidelines for the Ethical Practice of Anesthesiology should be used to guide decision-making in clinical practice. These guidelines also delineate anesthesiologists’ ethical responsibilities to their colleagues, health care facilities, community, and themselves. In addition the ASA has adopted a Protocol for Supporting a Member’s Right to Practice (2013) and a Statement on Economic Credentialing (2013).

There should be a program of continuing education for all personnel having anesthesia privileges. The educational program should include in-service training and be based in part on the results of an evaluation of anesthesia care. Such a program should follow the ASA Guidelines for Minimally Acceptable
Continuing Medical Education in Anesthesiology (2011). Anesthesiologists should use this document as a guide is designing their own individual program of continuing medical education. Such a program should be consistent with departmental policies and local and state regulations.

Quality assurance processes are covered in another chapter of this manual. However, departments and their members will find it useful to refer to the QMDA Quality Checklist in assessing how well a department is complying with nationally recognized standards.

The Association of Anesthesia Clinical Directors (Aacd) has worked with the Association of Operating Room Nurses (AORN) to develop a Glossary of Times Used for Scheduling and Monitoring of Diagnostic and Therapeutic Procedures. This glossary has been widely adopted by the healthcare information technology industry, and by the National Anesthesia Clinical Outcomes Registry (NACOR) of the Anesthesia Quality Institute (AQI). Definitions from the Procedural Times Glossary are the basis for many of the most common metrics of operating room and practice efficiency.

New drugs, and techniques, enter practice frequently, making lifelong learning necessary to maintain competence. Demonstration of such learning is appropriate for renewal of privileges. Prior to 2000, the American Board of Anesthesiology (ABA) began a program of voluntary recertification which has subsequently evolved into a mandatory recertification program known as Maintenance of Certification in Anesthesiology (MOCA). If Board Certification is used in credentialing then adherence to MOCA requirements may be necessary for credentialing or renewal of privileges. Participation in MOCA should meet emerging state and institutional requirements for maintenance of licensure. A requirement of MOCA is participation in a simulator training course. The ASA Workgroup on Simulation Education produced a White Paper in 2006 related to this requirement. A list of ASA-certified anesthesia simulator centers may be found on the ASA website.

E. On-Line Resources on the Organization of an Anesthesia Department


American Medical Association: www.ama-assn.org

American Society of Anesthesiologists® (ASA): www.asahq.org

ASA Payment and Practice Management: https://www.asahq.org/resources/practice-management

ASA Quality and Regulatory Affairs: https://www.asahq.org/resources/quality-improvement

ASA Standards, Guidelines, Statements and Other Documents

- Guidelines for Delineation of Clinical Privileges in Anesthesiology (2013)
- Guidelines for Minimally Acceptable Continuing Medical Education in Anesthesiology (2011)
- Statement on Documentation of Anesthesia Care, Statement on (2013)
- Statement on Economic Credentialing (2013)
- Ethical Guidelines for the Anesthesia Care of Patients with Do-Not-Resuscitate Orders or Other
Directives that Limit Treatment (2013)
• Guidelines for the Ethical Practice of Anesthesiology (2013)
• The Organization of an Anesthesia Department (2013)
• Guidelines for Patient Care in Anesthesiology (2011)
• Protocol for Supporting a Member’s Right to Practice (2013)

Anesthesia Patient Safety Foundation: www.apsf.org

Anesthesia Quality Institute: www.aqihq.org

Centers for Medicare & Medicaid Services: www.cms.gov

The Joint Commission: http://www.jointcommission.org/

Medical Group Management Association: www.mgma.com

Medicare Anesthesiologists Center (Announcements, Billing and Important Links):
www.cms.hhs.gov/center/anesth.asp

4 AORN requires a subscription to Perioperative Standards and Recommended Practices for access to the Glossary.
1.1 LEADERSHIP AND QUALITY CARE IN ANESTHESIA PRACTICE

Anesthesiologists should select as departmental leaders members who demonstrate leadership attributes and a desire to lead. Leaders must communicate well, judge situations fairly and commit themselves to superior patient care. In most situations, leadership responsibilities are quite demanding and are carried out in addition to clinical work. It is also incumbent upon department members to recognize the importance of department leadership and support those assuming the responsibilities, especially when leadership activities are not financially rewarded. Good leaders enhance the credibility and prestige of departments.

All members of a group should know who leads the group and have mechanisms to communicate with the leader.

Those chosen for leadership positions should have a talent for and a commitment to development in the following areas:

Priorities
Anesthesiology leaders should recognize that anesthesia practice is the practice of medicine and that patient safety is the highest priority of anesthesiologists. They should support both individual members of the department and the group as a whole.

Department Goals
As an initial step in developing a direction or theme for a department, leaders must establish realistic departmental goals that should be consistently pursued. Specific goals for areas such as patient care, quality improvement, career development, research and education and financial management should be developed. Successful leaders revise department goals as circumstances change, and openly and consistently communicate them.

The leader must have the vision and foresight to delay immediate gain in order to attain carefully planned development. An individual department member who can function as the leader should be identified. If such a person is not presently on staff, one should be recruited.

Organization and Delegation of Authority
Leaders should give and expect authority, and command respect among peers within and outside the department. Leaders should organize the department in a manner that maximizes the realization of goals set up by the department. Departmental leaders must be able to identify fellow department members who are able and willing to carry out designated tasks. The department leader should undertake steps to groom these department members for tasks both within the department and in the larger hospital or medical community. Recognition of strengths and weaknesses of department members is necessary for the assignment of the appropriate member to the relevant task. Moreover, the leader must have confidence in the abilities of those delegated authority and allow them to complete their tasks.

Business
The department leader must have a working knowledge of finances, human resource management, governance dynamics, planning, risk management and professional responsibilities. Leaders understand the requirements of accreditation organizations and payers.

The leader must use fair techniques to allocate resources and ensure compliance with department rules, and ensure department members know these allocations and rules. Optimum patient care standards must be maintained and not compromised by monetary conflicts.
Communication
The department leader must be an objective, thoughtful and consistent arbiter in settling both intra- and interdepartmental conflicts. Leaders must be able to maintain confidentiality when indicated. Assignments should be allocated based upon a system designed to maximize the overall performance of department members and, thereby, enhance the function of the department as a whole.

Communication must also extend beyond the department’s boundaries. An anesthesiologist leader should be visible, well known among and respected by leaders of other medical disciplines. Maintaining the standards of the department in dealings with institutional administrators is of paramount importance. The leader should establish and maintain a presence for the department in institutional affairs. These include participation on hospital service committees and with other departments in such areas as continuing quality improvement, educational seminars and research.

Credibility
A leader must be reliable and trustworthy. A leader should refrain from making promises that cannot be kept and not make snap judgments that have to be reverted. Leaders should seek, manage, and share information.

Intellectual Pursuits
The department leader must recognize the importance of lifelong learning and other intellectual endeavors. The leader should encourage and support intellectual curiosity by all department members. The department leader should assist members by allocating the necessary time and resources for the completion of educational and investigational work and recognize its satisfactory achievement.

Separation from Personal Gratification
Advancement and accomplishment of the department must take precedence over personal gain. A successful leader of a good department must be personally and closely involved with the daily functioning of that department. The leader must see that the department responds to the recommendations of The Joint Commission as well as to professional, societal and legal pressures to assure quality in the delivery of health care.

It is the duty of physicians to appoint leaders who will define and achieve superior patient care standards. With the ever increasing involvement of governmental and other bureaucratic agencies in medical affairs, the role of these leaders will only increase in importance.

Style
Leaders interact with people. The emotional style that leaders use for these interactions can be as important as the content of their communications. Leaders who are positive, open, sensitive, balanced, calm and good listeners are likely to succeed. The values leaders display and espouse are important. Values frequently used to describe successful leaders include strength, integrity, respect, creativity, faith, courage, love, trust and humility.

Leadership is evolving from traditional notions of transactional direction, involving chains of command and institutional authority, to transformational agents who create clear visions and inspire others to do their best, while creating new opportunities and building trust and commitment into mission and purpose. Leaders are professionals who work at improving their leadership as well as clinical competencies.

Continuous Improvement
Leaders seek evaluations of their styles and effects, and continuously improve them. Business education
can improve the knowledge and effectiveness of leaders. The ASA offers courses that will help you effectively manage and lead your anesthesia practice.
1.2 ANESTHESIA INFORMATION MANAGEMENT SYSTEM (AIMS)

An Anesthesia Information Management System, or AIMS, is an information system that is used as an automated electronic anesthesia record keeper (connection to patient physiologic monitors and/or the anesthetic machine) which allows the collection and analysis of anesthesia-related perioperative data gathered from monitors, the anesthesia machine, and data input by clinicians. The anesthesia record has undergone radical change in the last decade. Our documentation has gone from handwritten scrawls to sophisticated computer interfaces. No one can argue that the anesthesiologist's time is much better spent in actual patient care rather than acting as a vital-sign 'scribe.' AIMS can enable institutions to more easily meet a variety of increasing regulatory reporting requirements (i.e. pay for performance, ‘meaningful use’). Departments can also ensure compliance with best practices around billing, safety, quality, and facilitate participation in the Anesthesia Quality Institute (AQI).

A. Benefits to Using an AIMS

Most groups and institutions have moved to, or are considering, some form of AIMS. While there are often significant costs involved to implement AIMS, anesthesiologists and institutions are finding many avenues, including monetary, to obtain a return on the investment (ROI). Several articles have detailed how using AIMS helps practices realize these ROIs:

**Benchmarking, Identification of Best Practice and Translational Research**

An AIMS helps to develop evidence-based medicine guidelines from data sets of empirical clinical practice. AIMS also have the ability to link intraoperative data to outcomes data, such as through the National Surgical Quality Improvement Program (NSQIP) and to share data through national research consortiums and registries such as the Anesthesia Quality Institute and the Multicenter Perioperative Outcomes Group.


Compliance (Regulatory)
Different layers of legal, regulatory and accreditation requirements should be considered by anesthesia professionals. AIMS systems may be used to practices and anesthesia professionals up-to-date on regulatory, accrediting and compliance issues.


Cost Containment
AIMS is a tool for controlling resource management in the operating room and has the ability to decrease drug cost and utilization and allow for more accurate accounting of anesthesia supplies and medications.

- Coleman RL, Sanderson IC, Lubarsky DA. Anesthesia information management systems as a cost containment tool. *CRNA* 1997;8:77-83.


Documentation

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Ensuring proper documentation through an AIMS has the benefit of capturing more accurate clinical data, notifying the user of missing documentation and reducing incidence of illegible notes. AIMS supports risk management activities and enhances legal fortification.


**Operations Management**

Implementing an AIMS has the ability to improve the anesthesia department’s administrative role in the perioperative setting, generate a real-time surgical whiteboard to improve situation awareness and lead to operating room modeling for administrative decision support. For staffing, AIMS may facilitate reductions in staffing costs, improve staff scheduling and decrease the workload on billing personnel when reviewing anesthesia records.


Quality of Care
At a minimum, AIMS can facilitate implementation and adherence to departmental protocols, support anesthesiologists implementing evidence-based medicine, and be used as a tool for providing point-of-care clinical decision support. AIMS may also provide timely clinical feedback to impact clinical behavior, automatically conducting risk calculation and providing anesthetic management recommendations. AIMS may also be one of many tools used by practitioners to prevent adverse intraoperative events.


**Reimbursement**

Using AIMS allows for a merging of financial systems with clinical documentation leading to greater efficiency. AIMS will enhance anesthesia billing and charge capture and has the potential to increase hospital reimbursement.


**Safety**

AIMS allows for the anesthesiology department to implement drug diversion surveillance, be notified of location errors and enhance situational awareness in the operating room.


**B. AIMS Features**

Automated and computerized systems are among the most rapidly evolving areas of healthcare. There are many options now and more on the horizon. When evaluating a system for purchase, there are many considerations:

• Assessment of current infrastructure
• Capability of supporting a system
• Cost of the project and maintenance
• How best to implement the system
• Education of staff (both initial and on-going)
• What support will the vendor supply
• Who will provide long-term troubleshooting and upgrades

**C. AIMS Vendors**

These deliberations distill to the primary consideration - that of choosing a vendor. There are many options available. The following list is not complete and is, in no way, an endorsement of any specific vendor. It is only offered as a starting point for your research. The list below is alphabetic by company.

• **Cerner** – SurgiNet
• **Drager** – Innovian® Anesthesia
• **Epic** – Epic Anesthesia Information Management System
While AIMS has great potential value (as cited above), it requires investment in both monetary and human capital. The initial and on-going cost will depend on the size of your institution and is so individualized that providing an estimate here would only be misleading. However, one can expect to spend, at a minimum, several hundred thousand dollars. In addition, it will require someone’s time and concerted effort to troubleshoot, maintain, and up-grade the system. One cannot rely on the vendor for this/these individual(s). This person must be on-site and act as a liaison to the vendor and conduit for information and updates.

Lastly, the three most important pieces of advice when considering and evaluating a vendor:
1. View as many systems as possible.
2. Evaluate the stability of the vendor – are they positioned to provide long-term support and are they well capitalized?
3. Visit institutions that are actually using the AIMS in patient care. Speak with those who daily input information, talk with the quality officer, make sure it’s a good fit for you and your practice prior to purchase. Believe it or not, vendors often paint an idyllic picture of their operating system. Talking with those who actually use the system provides a realistic filter of vendor claims.

This short primer is only a starting point for evaluating and possible purchase of an AIMS. While a system can provide great benefit, it requires major political and financial investments. Because of this commitment, pre-purchase evaluation must receive an equally thorough commitment of time and money to ensure a system that will work for you and your intuition.

D. General Resources and Articles on AIMS