Anesthesiology and Professionalism

John E. Tetzlaff, M.D.
Director, Center for Anesthesiology Education
The Cleveland Clinic Foundation

The traditional elements of resident education have been technical skills and fund of knowledge. Anesthesiology is no different in this respect. However, elements of physician behavior ("acquired characteristics") have been identified as important elements of a consultant in anesthesiology. Elements of professional performance ("professionalism") are clearly a part of what must be taught and evaluated.

The goal of this presentation is to define professionalism in general terms, develop the unique elements of anesthesiology that define professionalism, discuss specific scenarios within anesthesiology and discuss measurement of professionalism.

Professionalism – the Concept

All physicians in training will naturally focus on acquisition of clinical skills and specialty knowledge. Residents must be expected to acquire the essentials of professionalism, including:

1. **Accountability** – the physician must place the needs of the patient above the physician's self-interest. The physician must recognize the value of being optimally prepared to provide patient care, recognize the need to participate in the health care industry as a whole, respond to the needs of society and to facilitate the optimum performance of colleagues.

2. **Humanism** – the resident must acquire the skills that allow appropriate doctor/patient relationship. Elements include integrity, compassion, and understanding of diversity, excellent communication skills, dependability and full participation in group goals (collegiality).

3. **Physician Well-Being** – the resident must be aware of the need for physical and mental health for physicians to be able to care for patients. They also must be clearly aware of the signs of physician impairment. This includes substance abuse, alcoholism, depression, psychiatric and organic disease and aging. Appropriate techniques for intervention should be taught during residency training.

4. **Ethics** – the absolutes of honesty and integrity must be a part of all residency training. The resident should be expected to demonstrate the highest level of moral and ethical behavior at all times in the clinical and professional setting.

The theoretical concept of professionalism is easy to recognize in its extremes – success and failure. Measurement is more difficult. Some elements of professionalism in general terms include:

1. Altruism
2. A commitment to excellence
3. Sense of duty
4. Integrity and character
5. Tolerance
6. Respect for all human beings
Failure in resident performance regarding the element of professionalism can occur in almost infinite possible ways. Some common-denominators for failure include:

1. Abuse of authority with subordinates
2. Bias
3. Sexual harassment
4. Poor handling of confidential information
5. Arrogance
6. Greed
7. Dishonesty
8. Impairment
9. Laziness
10. Conflict of interest
11. Inappropriate use of resources
12. Scientific – investigation fraud

Professionalism and Anesthesiology

Much of the literature about physician professionalism originates within Internal Medicine. The American Board of Internal Medicine has a long history of interest in the teaching and measurement of professionalism and is at least five years into a major education effort, entitled: “Project Professionalism”, and most recently released a physician charter for professionalism.

Anesthesiology has also recognized the vital importance of professionalism. The American Board of Anesthesiology recognizes the role of behavior in evaluating residents. Gradually, the role of the “acquired characteristics” has increased in importance, and in the present, any resident rated unsatisfactory for acquired characteristics, must be rated unsatisfactory overall.

Even though we clearly place a high value on professionalism in Anesthesiology, it is not often objectively defined. As always, the extremes are easily identified – the model resident is a “poster child” and the difficult resident is often most defined by unprofessional behavior. To objectify professionalism in anesthesiology, it is useful to define professionalism in the primary settings where anesthesiologists interact. These include the interface with patients, surgeons, colleagues and members of the support team.

Professionalism in the Interaction with Patients

In distinction to the internist who has a long-term relationship with patients, the Anesthesiologist has a very brief opportunity to interact with the patient. Because the Anesthesiologist is a consultant (to the surgeon), the patient assumes that details of the present illness, the surgery and medical history are already known to the Anesthesiologist. This is only correct if the information is reviewed prior to preoperative interviews. A rapid assessment of the communication skills of the patient, anxiety level, and ability to understand health care is a required element of the interview, one goal of which is to provide reassurance to the patient. Informed consent must be obtained and the patient’s cooperation with the anesthesia plan confirmed, without terrifying the patient or trivializing their serious concern with their health. Although a detailed assessment of health and co-morbidity may be the underlying agenda, the minimum performance requirement must also leave the patient informed, calm and willing to cooperate.

Professionalism must also extend into the perioperative period. Because the OR is so focused on procedures and efficiency and filled with complex technology, it is easy to neglect the human needs of the
awake patient. Although each case is unique, every patient is entitled to autonomy, modesty and respect. It is important that the resident not completely identify the patient as the object for the next procedure. Absolute respect for the dignity of the patient should never be sacrificed to the need for efficiency. The same level of professional behavior must also extend to the also-procedure oriented post-anesthesia care unit (PACU). This is especially true when PACU is busy since many patient will be able to observe either good or poor professional behavior simultaneously.

Confidentiality is also an element of professionalism that is a right of every patient. Proper anesthesia care requires that all health information; professionalism requires that this information be treated with respect. State and federal laws require the protection of the identity of patients. This requires that residents keep records, charts and case logs from exposure in public places.

A final element of professionalism and patient interaction is dealing with the unhappy customer. Patients have increasing levels of demands for service and when not-satisfied, can be very demanding. The role of the anesthesiologist is to understand, which at times can require tolerance of unfocused and sometimes poorly educated criticism. The essence of professionalism is to deal with aggressive criticism without negative emotion and with a reasonable level of empathy. This kind of interaction can be the most challenging test of the lofty goals of professionalism – an angry, unrealistic customer who is very likely to be never encountered again. The natural human response from the anesthesiologist would be hostile – the professional response is neutral with a modest element of empathy – a lofty goal.

**Professionalism in the Interaction with Surgeons**

The natural tendency in anesthesia providers is to regard surgeons as “the enemy”. This is particularly true for anesthesia residents – they often deal directly with surgical house staff who may only partially understand the clinical situation – or they may be forced to deal directly with staff surgeons who may treat them as less-than full members of the team. Both elements of the surgical team – staff and support-group may be used to problem-solving by confrontation. The surgical residents may be primed toward confrontation by virtue of the expectations of their staff. Conflict is inevitable.

From the purely professional perspective – the surgeon is the primary physician and the anesthesiologists is a consultant. In an absolute sense, the conflict is over the management of “their patient”.

Objectively, it is a fact of perioperative medicine that the anesthesia team assumes a role that focuses on patient safety. In this role, professionalism requires that the anesthesiologist consider the well being of the patient first, and the personal well-being of the anesthesia team member second. In an absolute sense, when the surgical team interacts with the anesthesia team in an inappropriate manner, the anesthesia provider must consider the patient's needs first. In a real sense, this means toleration of ridiculous (or other inappropriate) communication from people who are using sharp instruments on the patient. The most professional response of the anesthesia provider is anything that improves the surgical procedure. Even when the surgical team is unprofessional, the anesthesiologist must act in a way that fosters the best interest of the patient. In the dynamic world of the OR, this may require the anesthesia team member to quietly accept aggressive criticism with minimal response. Unless the response will improve patient care, the professional response is silence. When it comes to anger-the hallmark of anesthesia is a long memory and a separation from retaliation in the patient-care arena.

Surgeons as the primary care providers in the OR are entitled to some elements of professional courtesy. When the anesthesiologist is asked to participate in the perioperative care of a hospitalized patient, the request is for a consultative service. This can result in conflict. The surgeon expects a response that prepares the patient for surgery. Most often this response from the anesthesiology team will define specific goals. This can be the source of conflict. One of the elements of professionalism for the
Anesthesiologist is risk management. How much risk is associated with the proposed surgical procedure is an example of where professionalism can be complicated. There will be patients for elective procedures who will have serious co-morbidity and state that they would prefer to accept the perioperative morbidity in contrast to living with the uncorrected surgical diagnosis. This means that patients with serious co-morbidities may be scheduled for elective surgery and the surgeon may be asking the consulting anesthesia service if the proposed surgery can be performed without an exorbitant degree of risk, this is where professionalism can be at its best or worst.

On the one hand, serious co-morbidity can be identified and recognized as a factor that limits the extent of the surgery. Although the surgeon ultimately chooses the surgical procedure, a consultant will be helpful. Although the subsequent care of the patient may be challenging, this should not be translated into advice to the patient that moves the choice away from surgery or toward another institution.

Consultative services are an essential element of professionalism. As the perioperative medicine expect, the anesthesiologist is uniquely prepared to facilitate patient care for the surgical patient. Risk assessment, optimization and post-surgical patient care are excellent examples. Many institutions recognize the unique skills of the anesthesiologist to manage the running of the operating rooms. As such, many anesthesia departments run the operating room, manage the OR schedule and have staff designated as the OR Director. Other hospital-wide activities and committees are well suited to the skill-set of the anesthesiologist, including risk management, transfusion review, pharmacy and therapeutics, etc. Most anesthesia departments will recognize their commitment to professionalism and provide qualified staff for these roles.

**Professionalism in the Interaction with Colleagues**

Professionalism is measured clearly in the interactions between residents, between residents and staff and with the department. Anesthesiology departments are a team and professionalism requires team work. An assumed element of professionalism in anesthesiology is the unstated requirement that everyone does their job everyday. Punctuality is an absolute requirement. Dependability means knowing what to do, preparing and executing tasks. Being able to trust the work of a colleague is essential to the daily running of a department. Honesty and objectivity are universal expectations. Sharing work, helping a colleague, minimizing complaints and problem solving are essential attributes of professionalism.

Professionalism is also demonstrated in the use of valuable resources. Respect for equipment, reasonable use of the time of support people and a commitment to avoid waste are essential elements of professionalism. It is an ethical requirement that in the case of treatment equivalency, the best economic choice is required, although teaching learning modifies this absolute. An element of professionalism requires each anesthesiologist to become a student of pharmacoeconomics – the discipline that looks at economic outcomes. A single expensive intervention can result in considerable cost reduction; a less expensive treatment option can significantly increase the total cost of care. Pharmacoeconomics is the never-ending struggle to balance short and long-sightedness in the battle to deal with cost.

Professionalism in the anesthesiologist requires a commitment to education. While in training, the motivation can be obvious – in-training exams, board certification. But true professionalism requires the commitment to learning – a natural extension is life-long learning. Although motivated on a simple level by time-limited board certification, the sustained commitment to learning is an element of professionalism readily apparent to colleagues.

The evolution of scientific information is based on investigation and honest reporting of outcomes. For any anesthesiologist involved in research in any way – professionalism requires not only absolute honesty, but a commitment to understand the rules. If not presently required, eventually all
anesthesiology residents will be required to complete research ethics courses. Conflict-of-interest (COI) policies are examples of documents that should be evaluated. Avoidance of any activity with COI issues or even the suggestion of possible COI is an essence of professionalism. But this requirement goes further, the anesthesiologist must learn to read the literature and identify flawed scientific method, commercialism and COI in scientific literature and avoid changing clinical behavior based on these elements. Examples of plagiarism and ghost-writing in scientific papers reported in anesthesiology within the last five years are obvious examples.

Professionalism in anesthesiology requires a clear understanding of the risk of substance abuse and the impaired physician that are unique to anesthesiology. Education about substance abuse risks in anesthesiology is essential to prevention. Recognition of the impaired physician and the appropriate response is an unfortunate element of anesthesiology. Professionalism in anesthesiology requires some familiarity with these unpleasant subjects.

Because of the shared environment and the impact of many kinds of legislation on the practice of anesthesiology, each provider must understand the law. Fraud and denial of reimbursement are the two extremes. Each provider has a role in the overall success with compliance.

Professionalism in the Interaction with Members of the Support Team

The physician as the “captain of the ship” or “healthcare monarch” is a model that has become passe. Partnership with all members of the team for a common objective is the new way—driven by economics, regulation and the common sense that has been demonstrated by these driving forces. The ability to work in partnership with all levels of the health care team is an essential element of professionalism for the anesthesiologist. As the leader of the perioperative team, the anesthesiologist sets the tone—either confrontation or cooperation. Despite the political conflict between anesthesiologists and CRNAs, the tone of professionalism should be set by the anesthesiologist. Resident behavior should be learned from observation of optimum behavior by staff.
Annotated Bibliography


The American Board of Internal Medicine
“Professionalism contract”


Ethics in clinical medicine


Clinical issues used to measure professionalism


Collapse of a group practice dissected


Professionalism in academic medicine


Economic pressure on professional behavior


Expectations of the public in relation to rapid expansion of technology and regulation of health care.

Kalb PE. Healthcare fraud and abuse. JAMA 1999;282:1163-8

Expansion of healthcare fraud legislation


Weak guidelines are worse than none.


Humanism


Ethics, professionalism and managed-care

Roberts LW. An invitation for medical educators to focus on ethical and policy issues in research and scholarly practice. Acad Med 2001;76:876-85.

Swick HM. Academic medicine must deal with the clash of business and professional values. Acad Med 1998;73:751-5.

Economic pressure in professionalism

Teaching professionalism matters


Human research ethics


Value-added healthcare


Bias and healthcare


Cultural barriers


Communication skills and professionalism


Communication and humanism


Sensitivity to cultural diversity


Cultural sensitivity


Sensitivity improves care


Tolerance versus detailed cultural training


Academic medical centers influence by commercial ties

Blake RL, Early EK. Patients attitudes about gifts to physicians from pharmaceutical companies. J Am Bd Fam practice 1995;8:457-64.

Patients believe gifts to physicians by commercial companies after care
Barton L. Ethics, profits and patients: when pharmaceutical companies sponsor medical meetings. J Hosp marketing 1993;8:77-82.


Industry and investigator “groups” and influence


Personal finances and conflict of interest with/research


Survey, most universities had faculty with conflict of interest, few had specific policy


Institutional-level conflict of interest


AMA Guidelines protecting human subjects from conflict of interest


Recommend that investigators not have equity in study items


Restrict reps – change behavior


Physician S incentives to care. Should patients be told?

Morin K. Managing conflicts of interest in the conduct of clinical trials. JAMA 2002;287:78-84.

Institutional control of investigator incentives to enroll patients in studies.


Drug-industry outsourcing of drug trials-influence outcome?


Physicians are reluctant to discuss cost of care with patients.


Most manipulate “for” patients vs “against”


Barriers in physician behavior to error reduction

Battles JB, Shea CE. A system of analyzing medical errors to improve GME curricula and programs. Acad Med.

Reasons for lying, partial-truth

Boyte WR, Brass H, Calman NS. No one needs to know; Casey’s legacy; a question of quality. Health Affairs 2001;20:243-62.

Moral dilemma about truth with medical error

Eisenberg JM. Continuing education meets the learning organization; the challenge of a systems approach to patient safety. J Cont Ed in the health Prof 2000;20:197-207.

CME can reduce error


Not perceived as deception


Establishing reasonably obtainable goals and reporting


Early injury review, careful documentation, full-candid disclosure


More adverse events in for-profit hospitals

Wu AW. To tell the truth: ethical and practical issues in disclosing medical mistakes to patients. J Gen Intern Med 1997;12:770-5.

Moral issues with disclosing error


Unionization


Anti-union opinion


Pro-union


**Accountability**


**Accountability**


**Accountability**


**Fraud in Research**


**Fraud in Research**


**Impaired Professionals**
A colleague in orthopedic surgery sends one of his patients to the preanesthesia testing clinic for evaluation. She is a 56-year-old, 70-Kg female with severe right hip pain related to progressive loosening of a previously implanted total hip arthroplasty (THA). She presents a past medical history of hypertension, coronary artery disease and penicillin allergy. The total hip implantation occurred 14 years prior to the present visit, and since then the patient has become a Jehovah's witness, and absolutely refuses blood transfusion. The surgeon is asking you if revision of the THA can be done safely.

Question 1: As a consultant in anesthesiology you should:
A) focus on the anesthetic agents with minimal attention to surgical techniques
B) identify whether the surgery is an emergency, and if not discourage the patient from surgery
C) discuss the advantages on some anesthesia choices on the outcome of this case
D) obtain a court-order to administer blood or blood products if indicated

The surgeon makes himself available by phone to define the orthopedic issues. When the patient presented with hip pain, her work up started with a focus on etiology. Infection was determined to be unlikely. Radiographic evidence suggested loosening as the etiology of the pain. Review of the operative record reveals a cemented THA. The surgical plan includes removal of the THA, the old cement and placement of a cemented, long-stem THA. The expectation is that blood loss will be significant.

Question 2: The anesthesiologist should tell the patient:
A) There is no way to decrease the risk associated with perioperative blood loss
B) Although mortality is a serious issue, major morbidity must be discussed as a possible outcome
C) The she is the only person who will be involved in decisions about blood and blood products
D) To ask her minister to help her decide whether to proceed with the surgery
Answer B

Question 3: On the day of surgery, the anesthesiologist assigned to the OR is made aware of the refusal of blood/blood products and has some concerns. The anesthesiologist:
A) cannot refuse to anesthetize the patient
B) should require regional anesthesia to reduce blood loss
C) must provide equivalent, alternative care in a timely fashion as a requirement to refuse to provide
D) should avoid dealing with the patient's family about the refusal issues
Answer C

Question 4: The surgery is complicated by uncontrolled arterial bleeding during femoral neck preparation related to bleeding from the profunda femoris artery. Severe anemia occurs with acidosis. Hemodynamic instability necessitates intubation and sedation. In the PACU and later, the surgical intensive care unit (SICU):
A) hourly measurement of the hematocrit is required
B) the husband may consent to transfusion of blood products
C) the patient may consent to transfusion
D) the patient's minister may consent to transfusion
Answer B
Question 5: A CA-1 anesthesiology resident reviews the call schedule written by the chief resident for the next month. On review, the resident notes more call assignments than previous months. The most professional response is:

A) write a memo to the department chairman which identifies unprofessional behavior by the chief resident  
B) calculate the totals for each resident and demand a revision of the schedule from the chief resident to eliminate unfair treatment  
C) call-in sick to eliminate excessive call  
D) ask the chief resident if there are unusual elements for the month in question and if these will be equalized in the future.

Answer D

Question 6: When the Residency Director (RD) is made aware of this discrepancy in the call schedule by the very angry resident, the correct action by the RD is:

A) change the call schedule  
B) decrease the number of residents on call for enough days to equalize the schedule  
C) confront the chief resident for unprofessional behavior  
D) refer the resident back to the chief resident, recommending respectful behavior

Answer D

An anesthesiologist is employed by a large group practice in a large, tertiary hospital. The buying group for the medical center decides to make a drug-substitution within a class of drugs frequently used during anesthesiology.

Question 7: To determine if this substitution will have any adverse consequences in the perioperative period for the anesthesiology resident, the anesthesiologist should:

A) invite the company representative for the new drug to give grand rounds  
B) read the published study that establishes the economic efficacy of the substitution, and accept the conclusions because the study was funded by the company  
C) invite the company representative from the previous drug to present grand rounds, in order to collect objective information to challenging the buying group  
D) review the complete current literature about the drug class and consult with the Hospital Pharmacy and Therapeutics Committee.

Answer D

Question 8: In order for the Hospital Pharmacy and Therapeutics Committee to approve a drug substitution within a class of drugs:

A) the new drug should cost less per milligram  
B) the new drug should cost less per dose, at the dose recommended by the manufacturer  
C) good scientific studies must demonstrate equivalent therapeutic effect at doses that are economically favorable

D) the need for repeat treatment is irrelevant

Answer C

Your anesthesiology group needs to purchase new anesthesia machines for a new anesthetizing location.

Question 9: To choose among machines and manufacturers, the decision should be based on:

A) the lowest, absolute cost  
B) manufacturer subsidy of the departmental research fund
C) evidence of safety of the machine combined with the initial cost and the cost of maintenance over the life of the machine
D) discounts on the most expensive inhalation agents after purchase of the machine

**Answer C**

A CA-1 anesthesiology resident notices a change in the behavior of a classmate. The apparent social withdrawal, moody behavior and repeated volunteering for the extra night and weekend work raises the possibility of drugs abuse.

**Question 10:** The best course of action is:
A) to confront the colleague in the OR
B) to write a letter to the Department Chairman accusing the resident of drug abuse
C) after confirmation of the observed changes with another classmate in complete confidence, bring the concern to the Residency Director, for proper investigation and intervention, if needed
D) observe this resident intermittently for one year prior to any action

**Answer C**

**Question 11:** Correct confirmation of opioid dependence occurs most often by:
A) self-report by the resident
B) drug audit
C) questioning the suspect
D) evidence of changes in the home life of the suspect

**Answer B**

**Question 12:** Re-entry into anesthesiology residency after treatment for opioid dependence is:
A) successful in a majority of candidates
B) rarely successful after one relapse
C) safe
D) independent of the practice site

**Answer B**

During the first hour of a surgical procedure, the staff surgeon inquires if antibiotics have been given. The anesthesiology resident informs the surgeon that there were no preoperative orders written to give antibiotics, and confirms that none were given. The resident offers to give whatever the team wants. Rather than respond, the surgeon becomes angry and begins to verbally criticize the anesthesia resident.

**Question 13:** The best course of action is to:
A) verbally remind the surgeon that the mistake was his and answer every criticism with a criticism of surgeons
B) push any antibiotic in the OR rapidly
C) call staff
D) ask the OR nurse for an incident report

**Answer C**

The anesthesiologist is asked to see a 42-year-old male with metastatic melanoma. The primary lesion was the right chest, but metastases to lung and liver have been identified. The primary lesion was excised but has recurred and invaded the right upper extremity. The brachial plexus is involved in the axilla, and continuous pain is the result. The lesion has ulcerated over the deltoid and will not heal. Initial surgical
play was a forequarter amputation, but this was delayed but an episode of coughing that led to significant hemoptysis. Based on this event, the patient requested DNR status. The pulmonary consultant has identified that positive pressure ventilation was very likely to cause fatal hemoptysis. The patient has identified to the orthopedic surgeon that the arm pain is intolerable and he would accept the risk of death to be able to live the remainder of his life without the arm pain.

Question 14: The anesthesiologist:
A) may refuse to care for this patient without any obligation
B) must cancel the DNR order to go to the OR
C) although not optimum, the anesthetic could be mask ventilation with spontaneous ventilation, if the risk/benefit ratio is presented in advance to the patient
D) should cancel this case
Answer C

Question 15: If the decision to help this patient is accepted by the surgical team, the anesthesiologist
A) should meet the patient for the first time in the OR to avoid conflict
B) should clearly define what anesthetic procedures will be used and which will not
C) because it would be risky, the anesthesiologist should not attempt a conduction block to provide excellent postoperative analgesia
D) should not discuss the specific details of the surgery with surgeon in advance, to avoid OR tension
Answer B

True or False

16. It is appropriate to call the chief resident from the OR while providing a routine general anesthetic on a healthy patient.
False

17. The care of the fiberoptic intubation gear after use is not the responsibility of the OR anesthesia team.
True

18. Use of the lowest possible total gas flow during use of desflurane for adult general anesthesia is appropriate.
True

19. When the anesthesia aide puts the circuit onto the machine prior to the first round anesthetic, this eliminates the requirement for a full machine checkout by the anesthesia team.
False

20. ACLS and BLS certification is required for CA-3 residents.
True

21. Membership in the American Society of Anesthesiologists is a highly desirable choice.
True

22. Conflict between physician and nurse-anesthetists is inevitable and should be initiated by the physician.
False
23. A study funded by the company who developed a drug is less credible than one with similar design without financial support.
True

24. Company support for a speaker at a continuing education conference should be disclosed by the speaker and the course prior to any presentation.
True

25. A researcher should be allowed to be principal investigator for a protocol designed to study a device being developed by a company in which the researcher has equity.
False

26. If a resident calls-in sick on a day when assigned to the on-call team, it is reasonable for the chief resident to trade that call with another resident for a less favorable call assignment.
True

27. A morning coffee break is an entitlement, and should be demanded if not given by 11:00 a.m.
False

28. Regular scientific analysis of the on-call schedule to measure fairness is a desirable characteristic of members of a group practice.
False

29. The additional effort to review a large archival chart is unnecessary as long as the health history is reviewed verbally with the patient.
False

30. It is reasonable to require a member of the surgical team to help transport a patient postoperatively to the intensive care unit.
True

Tetzlaff/Lectures/Questions602.doc

Tetzlaff/lectures/Anesthesia&Professionalism.doc