The quality and quantity of anesthesiologists’ communications has a bearing on the values, outcomes, and standards of their professional work. Recognizing the importance of communication, the American Society of Anesthesiologists has charged the Committee on Communication to “improve public education as it relates to anesthesiology.”

Good communication is as important to protecting professional integrity as it is to patient safety and satisfaction. For these reasons, it is as important for anesthesiologists to pay attention to the structure and function of professional communication as it is to learn the pharmacokinetics and pharmacodynamics of drugs.

## Communication as a Professional Activity

Anesthesiologists cannot imagine performing their work without resorting to words or numbers. Humans use language to communicate about consciousness subjectively and objectively. Humans accept language as a reality of their environment, often without reflection. Although exploration of language’s links to consciousness is the work of semioticians and poets, the job of using language is everyone’s.

Human collective life depends heavily on language. The neurobiological foundations of language are encoded in our genes, yet its structural and symbolic content is predicated on social context. In turn, language structure, content, and context shift continuously. Word meanings drift. The same word has different meanings in different settings. The word inadvertent, for example, means something different in a medical morbidity and mortality conference than it does in a court of law. Language can create, preserve, or destroy relationships of meaning that extend beyond ourselves. As a result, language gives humans the power to modify life’s circumstances like no other species.

Anesthesiologists face communication challenges that are unique to the circumstances of anesthesia practice. Anesthesiologists’ contact with conscious patients is usually brief. Well-honed communication skills are helpful during such circumstances. Patient anxiety or an atmosphere of rushed care may influence effective preanesthetic communication. Production pressure may cause patients to be treated indifferently or summarily. Diffusion of responsibility within the anesthesia care team can result in confusion about who is the anesthesiologist and who is the nurse anesthetist. Medication-clouded consciousness makes postanesthetic communication challenging.
Communication and Anesthesia Care

Where do opportunities for improved communication exist in the perioperative period? Anesthesia care and the anesthesiologist-patient relationship are divisible into three distinct phases: preanesthesia evaluation, perioperative management, and postanesthesia care. Each phase presents unique communication challenges.

Anesthesiologists’ (and intensivists’) work differs psychologically and philosophically from that of other physicians. The anesthesiologist cares for the patient in a highly individual and intimate way with minimal knowledge of the patient’s personality. During anesthesia the patient is controlled through interventions that reduce consciousness, eliminate language, alter memory, and limit autonomous actions. Throughout, monitors display physiologic responses. The patient is “known” through raw data display during anesthesia. Paradoxically, the patient becomes better known as a biological preparation but not as a personality. This paradox, how it plays out in the anesthesiologist-patient relationship, and how it influences communication is the focus of the remainder of this article.

Preanesthetic Evaluation: Patient as Autonomous Being and Subject of Concern

The preanesthetic evaluation is the first duty of an anesthesiologist to a patient. Ways to provide this important service have received considerable attention. What should be the content of preanesthesia evaluation? Kalfa and Roizen identified six interrelated goals. The first is to assess health and ensure physical readiness for anesthesia-requiring procedures. The second is to devise a mutually agreeable anesthetic plan and to educate the patient about it. The third is to reduce the psychological and physiological consequences of anxiety. The fourth is to plan postoperative care and pain therapy. The fifth is to coordinate patient care in a way that decreases total cost and improves outcomes. The sixth is to obtain informed consent for anesthesia. Achieving each goal requires skilled communication.

Because biological concerns occasion anesthesia, patient physical status is of great interest to the anesthesiologist, sometimes more so than to the patient. The patient’s perspective is often, but not always, centered around personal concerns. Simply put, the patient seeks reassurance that he or she will be cared for properly and humanely during a procedure. As in any medical encounter, expectations for communication differ on either side from the outset. Anesthesiologists’ approaches to communication have evolved to anticipate and address as many patient concerns as possible.

Professional competence and readiness to meet patient needs during anesthesia should also be communicated. Verbal and nonverbal practices that communicate caring may reduce stress and medication requirements. Egbert et al. concluded that a thorough description of perioperative events serves as a potent anxiolytic when compared with no encounter or barbiturate sedation alone. Leigh et al. demonstrated that an information booklet is not as effective as a preanesthetic encounter with an anesthesiologist. Preanesthetic videos may improve the effectiveness of traditional preanesthetic consultation practices.

Communication tailored to patient need has benefits. Patients with coping styles that are information-avoidant have lower preprocedural arousal levels. Arousal is most reduced when patient coping style and information...
needs are matched. This observation suggests communication choices can have potent effects on the patient’s responses whether matched to patient expectations or not.

Anesthesiologist–patient communication notwithstanding, the benefits of pharmacologic intervention are undeniable. Benefits may include anxiolysis, sedation, analgesia, amnesia, control of gastric acid secretion, control of salivation, attenuation of autonomic nervous system effects, reduction of total anesthesia requirements, and protection against specific allergic reactions. That these benefits may be achieved more predictably with drugs than communication contributes to reliance on the former over the latter for these purposes.

Contemporary practice patterns demand more ambulatory preparation for procedures than in the past. Current patterns of outpatient preanesthetic preparation cannot always meet the aforementioned goals. Production pressures in preanesthesia clinics and use of telephone or telemedicine techniques can undermine communication as easily as waiting until the preinduction review of the patient’s status to discuss important concerns. Emphasis on rights-based language in the course of preanesthetic communication may leave little room to determine and respond appropriately to individual coping styles, let alone adequately address the patient’s deepest personal concerns. That anesthesiologists self-select to work predominantly in nonclinic settings also compounds communication challenges.

Conversely, most patients lack specific knowledge of anesthesia. What questions to ask or basic information to seek is unknown to most patients. Many lack the education required to make sense of technical terms even when translated into plain language. Language barriers may exist. Once presented with verbal information supplemented with written and visual information, compliance with instructions remains problematic for significant numbers of patients.

Thus, impediments exist that limit anesthesiologist–patient communication effectiveness in both directions. Both parties, in different ways, must cope with a sense of powerlessness and frustration. The advantage—despite consumerist trends and changing healthcare service management structures (e.g., Health Maintenance Organizations, Preferred Provider Organizations)—still resides predominantly with the physician. Because it is the physician’s services and expertise that are sought, a special obligation resides with the physician.

The etiquette governing communication in the professional consultation is at once stringent and delicate. The physician is empowered by virtue of knowledge, while the patient is submissive because of need. . . . Power may be exercised, but it has to be done with tact and respect.

In essence, this quote conveys the core sense of the Hippocratic ethic that has dominated medicine. Knowledge confers power, power responsibility. To do no harm also means to speak and act with restraint.

**Perioperative Management: From Subject of Concern to Object of Attention**

**Preinduction.** As the patient nears induction and maintenance of anesthesia, personal concerns may increase over what is evident during preanesthesia evaluation. These may be unvoiced. The anesthesiologist must be prepared to communicate about issues often not related to the planned procedure the patient is about to undergo.

Deep personal concerns—those that relate to the patient’s “state of being” or “ontology”—are not likely to command the attention of most anesthesiologists. However, such concerns exist and may loom large for the patient. Often patients who focus on such concerns out of proportion to the anesthesiologist’s comfort risk being pejoratively labeled as “nuts” or “flakey.” One anecdote relayed to the authors regards a patient, a person with a Ph.D. in pharmacology, who refused general anesthesia because of fear that s/he will “cease to exist” during anesthesia. Indeed, the patient not only fears loss of autonomy but dissolution of sense of being.

This concern is not as irrational as it might seem. Our society values consciousness as a marker of individual identity and worth. The definition of brain death is predicated on this connection. Fear of loss of consciousness thus acquires rational meaning. For people who wish to control the “ontologic” facts they believe define them, such a consideration may shape the nature of the anesthesia care plan.

The impact of anesthesia on consciousness, autonomous action, and self-defined identity is not a trivial matter. With induction of general anesthesia, the anesthesiologist alters consciousness and suspends the biological possibility of expressive language and intentional action. For a period of time, the patient’s cortical, subcortical, autonomic, and neuromuscular response capacities are manipulated. The patient is treated largely as a biological entity or object of attention. In a sense, two interrelated identities, one psychological and one physiologic, are functionally separated. Metaphorically, it is as if the patient’s psychological “fingerprint” is removed from their physiologic “hand.” The physiologic responses displayed on anesthesia monitors and the body...
they arise from recall preexisting but suspended ontologic factors. However, the patient is no longer free to express or act on any aspect of their identity. By assuming responsibility for the patient, the anesthesiologist enters a covenant—fashioned during preanesthetic communication—that implies protection of psychological identity through care of physiologic identity.

As general anesthesia ends, the patient gradually returns to a state of consciously regulated autonomy. Again, metaphorically, the psychological “fingerprint” rejoins the physical “hand.” Autonomous action becomes possible. “Awake,” the patient remakes a claim to a self-defined identity that remains subserved by unconsciously regulated biological factors. That the patient may emerge a truly different person after anesthesia—both ontologically and physiologically—is something anesthesiologists should be prepared to address. The meaning of periprocedural events differ for the patient compared with the medical professional. For the patient, events have a personal meaning; for the provider they may have mostly a medical meaning. Such a gap must be crossed during periprocedural communication.

**Induction.** In preparation for induction, elements of self-defined patient identity are reduced. Clothing, jewelry, possessions, health information, and physical control are yielded to strangers. A journey is begun from holding area to procedure location. With the shift to outpatient procedures and “morning of” admissions, many patients are not sedated before beginning their journey. He or she may be meeting the anesthesiologist, nurse anesthetist, and other care team members for the first time.

Once final record checks are made and questions answered, fears aired, and loved ones left, movement toward the induction and procedure site commences. Although getting underway is usually a relief, some patients fear the journey will be their last. Alert patients talk about topics ranging from feeling foolish in hospital clothes to expressing their most personal hopes and goals for after the procedure. Once moved to the procedure table, safety strapped, and attached to monitors by masked, gloved, and anonymous personnel, relinquishment of self-defined identity nears completion. Patients have compared lying with arms out to the position of crucifixion. Others joke about enjoying the effects of anxiolytic and narcotic drugs. Many remain quiet and passive. One author’s patient, before induction, said, “This whole thing reminds me of an execution death by lethal injection I seen (sic) on Court TV.” Another, as an induction dose of propofol flowed in the intravenous line, shouted, “No! Stop!”

How can communication be improved during induction? One stratagem is for the anesthesiologist to consciously assume the role of personal guide. Besides offering small talk, the anesthesiologist describes sensations and unfamiliar sights. At the same time, s/he modulates the room environment to meet the patient’s needs. “Slide over to this bed—you’ll feel a gap—and bring your covers with you.” Or “This blood pressure cuff is automatic—you’ll feel it get tight the first time it takes your pressure.” Or “Cold, gooey EKG pads.” All are expressions of fact that show respect for the patient as a sensate being. Communication of respect builds trust. Indeed, as if to check the trust being built, the most frequent question asked at this stage is, “OK?” Thus, a form of reciprocal verbal anxiolysis occurs that serves as much importance to the anesthesiologist as the patient.

Commonly, an amnestic drug is given during preparation. It is mistakenly assumed the patient will remember nothing after administration. This assumption may cause care team members to relax previously closely monitored communication standards. Even large doses of amnestic drugs may fail to produce amnesia, as one of the authors (V. J. K.) has personally experienced. Nonetheless, patient appearance of alertness signals the anesthesiologist to continue to inform and reassure the patient. Apparent consciousness, not anticipated amnesia, should determine the quality of communication. Even when the patient appears unconscious, the anesthesiologist and care team members should speak as if the patient will remember.

During induction, references to sleep are frequent. Through references to sleep, the restorative properties of sleep are invoked and the reversible nature of anesthesia reinforced. Adult patients intuitively understand that sleep and anesthesia differ, but use of the sleep metaphor while inducing children is particularly problematic. During inhalational induction, communication is in a soft hypnotizing tone accompanied by gentle touch. Because sound is amplified as the muscles controlling tympanic membrane tension relax, noise distortion coupled with disinhibition may provoke a surge of anxiety. Silence should be sought in the anesthetizing location. With pediatric patients, inhalation induction is facilitated by prior administration of oral midazolam. A hypnotizing story or fantasy, one that the child can help construct, may be used to smooth the transition from consciousness. Parental presence may be helpful. However, no stratagem is foolproof. Recent research suggests that premedication is better at alleviating pediatric pa-
tient anxiety than parental presence or comforting measures alone.25

**Maintenance.** Induction alters many things simultaneously. Patient physiology is transformed. Medical personnel’s perception of the patient is altered. Patient personality is no longer apparent. The atmosphere of the room changes. Noise levels increase, conversations cover a wider range of topics, communication becomes simultaneously less deliberate and technical with the patient unconscious. The patient moves from being a subject of concern to an object of attention. In covenantal terms, the patient is cared for in a way that recalls prior autonomy and assumes future autonomy.

Richard Selzer commented on the patient’s changed appearance during anesthesia. In his short story, “Witness,” about a severely retarded boy undergoing an emergency operation, Selzer wrote, “Under anesthesia he looks completely normal. So! It is only wakefulness that diminishes him.”26 Anesthesia is not the only cause of this perceptual shift. Foucault wrote, “...the great break in the history of Western medicine dates precisely from the moment clinical experience became the anatomo-clinical gaze.”27 The complexity of this shift is understood by consideration of the perceptual shift that accompanied the clandestine practice of corpse dissection. Through dissection, diseased organs could be visualized and linked to clinical states. This resulted in the functionally useful “anatomo-clinical gaze,” an objectifying mental tool physicians use in most aspects of patient care. Relying on monitors for evidence of patient response reinforces this stance during anesthesia. Little else reminds those working that a person and not a clinical object is being worked on. Communication patterns used when the patient is anesthetized tend to reflect this change.

How does this perceptual shift affect communication? Does what is said when the patient is anesthetized matter? Is the patient who lacks awareness affected by other’s communication patterns?

Technical communication patterns enhance efficient work. Communication takes on an exclusionary dimension once the patient is anesthetized. Specialized jargon differentiates team members from non–team members. Even if aware, the patient might not make sense of much that is said. Useful to a limit, jargon affords immediate recognition by “those in the know” of what is happening at a given technical moment. Who speaks, how, when, and to whom are defined by the rituals and unwritten rules of professional communication.

Negative aspects of this specialized discourse also exist. What makes sense in one context may be nonsense or misinterpreted in another. This can contribute to devastating events. Serious harm can occur when an unrecognized or poorly communicated critical incident takes place.28 Gaba noted, “It is probable that the tendency of some anesthesiologists not to bother or contradict surgeons, or the reluctance of some nurse anesthetists or residents not to call their supervisors, has led to catastrophe...”29 Overscrupulous attention to “the rules” of specialized discourse, coupled with the perceptual shift regarding patient status, may numb professional awareness of the real procedure goal—restoration of the patient to a state of autonomous function—and not the procedure itself.

Linked to how the anesthetized patient is perceived are changes in how the patient is discussed. Pronouns, not proper names, are commonly used, and not always correctly. Metonymy—the substitution of one word or phrase for a related concept (especially the use of a part to represent the whole)—is very common anytime a patient is unaware of being discussed.30 Metonymic speech is important in technical communication. It quickly and efficiently encapsulates complex ideas. For example, the metonyms “vasculopathy” and “premie” conjure images of patients with associated constellations of specific medical problems. However, metonymy also reduces patient humanness. The metonymically identified patient is easier to blame for difficulties related to preexisting biological conditions. When the anesthesiologist says, “He’s a hypertensive; he’s hard to control,” what is meant is that the anesthesiologist is having difficulty keeping the patient’s blood pressure in the desired range. By creating a false external locus for blame, metonymy may tempt providers to overlook the effects of their actions in a given clinical situation.

Does what is said when the patient is anesthetized matter to the patient? Not only are the mechanisms of anesthesia unclear, but what happens within the anesthetized brain is unclear. Distinctive neurologic functions, explicit and implicit memory, are affected differently by anesthesia. The possibility of either type of memory raises ethical questions about communication during and after anesthesia.

Awareness and explicit memory or recall is fortunately uncommon. Closed claims analysis reveals that of 4,183 claims, 79 awareness claims accounted for approximately 2% of all claims. Awake paralysis accounted for 18 of 79 and recall for 61 of 79 such claims.31 When it occurs it is a source of patient anguish and potential litigation. Recognition that anesthetized patients may
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hear and recall events without the anesthesiologist being aware is part of professional lore. The first patient “success¬fully” anesthetized had intraoperative recall.32 The picture regarding implicit memory is still developing. Merikle and Daneman’s33 metaanalysis of data from 44 studies involving 2,517 patients did not reveal evidence that positive suggestion presented during anesthesia had measurable effects on postoperative outcomes. However, they found that specific information was retained and could be elicited as long as testing was not delayed beyond 36 h after anesthesia. Münte et al.34 and Lube et al.35 found evidence that implicit memory is formed during anesthesia and sedative hypnosis conditions. In an editorial accompanying these two articles, Veselis stated, “The specter of shadowy memories appearing weeks after an anesthetic event that, in time, develop beyond 36 h after anesthesia. Mu¨nte . . .does not preclude either inattention to the details of specifically requested tasks or lack of recall of events.” During any circumstance, evidence suggests recall during anesthesia can be terrible.39

Emergence. Emergence precedes consciousness and reclamation of autonomy by the patient. It is a demanding time for the anesthesiologist. The patient’s return to person status requires coordination of multiple tasks. Communication patterns reflect this. As awareness returns, the patient is reassured often, although the probability of memory may remain low. “Fast-tracking” anesthetic protocols strive to reduce the time difference between anesthesia, awareness, and autonomy.

Good communication during emergence benefits the anesthesiologist. Although the patient is addressed, much of what is said signals those present that emergence is proceeding according to plan. “You’re waking up, Bob. Take a deep breath. Lift your head, squeeze my hand, and I’ll take out your breathing tube, Mr. Jones.” During emergence, physiologic events—pain, autonomic responses, and reflex actions—are further modulated, usually with medications. From a communication standpoint, return to the rubric of formal physician–patient discourse occurs in advance of the return of full awareness and autonomy. Communication about preparation for the next case is frequently concurrent with communication during emergence. Thus, attention may be tem-

porarily diverted from the patient with the associated risk of a critical event occurring during this period.

Postanesthesia Care: Autonomy Regained and Contract Fulfilled

Recovery. With transport to the postanesthesia care unit (PACU), the anesthesiologist gives a report and transfers direct care of the patient to a specialized nurse while retaining responsibility for the patient’s well-being. Communication of patient, procedural, and anesthetic information occurs in a summary fashion. Although formulaic,40 the content of the report is as unique as the patient who was cared for. The PACU report marks closure of a phase of care but not the end of overall care or responsibility. Before discharge, the anesthesiologist communicates with the PACU nurse about the patient’s condition and the logistics of discharge from the unit.

Communication with the patient in the PACU is step-wise and conditional. Formal (or previously agreed on) name use resumes. Privacy is partially restored. Patients in various states of alertness see and hear others in the recovery room. Commands and questions are addressed to the patient: “Take a deep breath.” “Don’t sit up.” “Do you feel sick to your stomach?” The patient is reoriented, sometimes repeatedly, to time and place. Communication is key to treatment of uncomplicated emergence delirium, but its limits are respected. Medication is an appropriate option when all serious causes for disorientation have been excluded and verbal reassurance has failed.

Communication about procedure outcomes should be limited in the PACU. Concern about continued anxiety, impaired awareness, and memory function recommends deferring comments with important medical and personal content until proof of recall is established. Infringement on the proceduralist–patient relationship, delivery of inaccurate information, and reluctance to bear bad news limit communication to generic reassurances such as, “You’re doing fine, your surgeon will talk with you later.”

Although outpatients are discharged home, hospitalized patients can be visited on the ward a day or so after anesthesia. This visit gives the anesthesiologist an opportunity to answer questions, seek evidence for injuries or complications related to anesthesia, and document completion of care. Shocking news may sometimes be revealed.41 Anesthesiologists should not expect more from the visit than it can provide. Zvara et al.42 found that repeated postoperative visits neither improved patient memory of the anesthesiologist’s name nor influenced
patient perception of or satisfaction with anesthesia services. Indeed, Macario et al.\textsuperscript{43} suggested that patient satisfaction is dependent on the anesthesiologist designing an anesthesia regimen that closely fits the patient’s preferences as identified during the preanesthesia assessment visit. Recovery phase communication can help measure success in this regard.

Outpatient discharge protocols diminish the opportunity for postanesthetic anesthesiologist–patient communication. Commonly, closure of the anesthesiologist–patient relationship occurs with patient discharge. Patients and their “responsible adults” are given verbal and written instructions for home use, including instructions about contacting the anesthesia service if required. Telephone follow-up by the anesthesiologist is ideal but not always practical.

**Special Circumstances.** Postanesthesia communication is mandatory when a critical event has occurred. The anesthesiologist should face the patient and/or family, be honest and informative, and convey a sense of caring. When a death occurs, the words “death” and “died” should be used, and euphemisms such as “expired” or “passed away” should be avoided.\textsuperscript{44} Poor communication skills may increase litigious actions and malpractice suits.\textsuperscript{45}

The art to breaking bad news can be learned. Attention to proper physical setting is important. Formal introductions, appropriate expressions of sorrow and sympathy, and use of direct language improve communication. Genuine responses to the survivors’ reactions and needs are essential. Keeping open channels for communication allows information exchange as required. Offers of appropriate social and clergy service can contribute to successful communication.\textsuperscript{46}

After a tragedy, the anesthesiologist also needs support. Professional failure may loom large. Case presentation at a departmental conference may not leave feelings of collegial support. Hospital lawyers and quality assurance committees may restrict communication about the case. Enforced silence becomes isolating, even frightening. The healer needs healing after a tragedy, and supportive services should be initiated.\textsuperscript{47}

**Conclusion: Communicating Professionalism**

Patient care is where professionalism receives its first expression. Like all physicians, anesthesiologists communicate health and safety concepts using technical language and caring through specific actions. Technical language does not always suit the patient’s communication needs, and some actions remain mysterious and frightening. Because anesthesiologists’ interactions with conscious, verbal patients are within compressed time frames and narrow clinical conditions, clear, succinct, respectful communication is essential.

Anesthesia is charged with ontologic, medical, ethical, and legal issues. Anesthesiologist–patient communication must span many gaps. It is tempting to discount communication if keeping patients alive and waking them up again are the only professional goals. Howe et al.,\textsuperscript{48} studying anesthesia for Aboriginal Australians, found that cultural and language barriers influenced preanesthetic history-taking and postanesthetic pain management but presented no data to show these barriers influenced the outcome of intraoperative care. The unconscious patient admitted through the emergency department directly to the operating room is another example. Inability to communicate with the patient creates a barrier to care that is not insurmountable. With little known about the patient, much about them must be inferred. Care is directed according to objective evidence of physiologic status based on tests, instruments, and monitor readings coupled with a sense of the probabilities and possibilities intrinsic to the situation. Does this mean communication is not important? Here, as in care of the alert patient, the art of anesthesia is governed by professionalism.

Although good communication skills are essential to good anesthesia practice, anesthesiologists should not limit professionalism to the procedural setting. Patient care and non–patient care activities require different sets of communication skills. The communication requirements for obstetric and regional anesthesia differ in some respects from those associated with general anesthesia. Facility with a variety of communication skills signifies highly developed professionalism. It is commitment to professionalism that continually calls physicians back to full consideration of their roles in individual and public health. It is this commitment that defines them as persons capable of “speaking forth,” the literal meaning of “profession.”\textsuperscript{50}

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