

## **ADVISORY OPINION OF THE CODE OF ETHICS**

Subject: Live Surgery

Issues Raised: What are the ethical and practical issues of performing live surgery and what is

the ophthalmologist's responsibility to safeguard patient autonomy, privacy,

and confidentiality when performing live surgery?

Applicable Rules: Rule 1. Competence

Rule 2. Informed Consent

Rule 6. Pretreatment Assessment Rule 7. Delegation of Services Rule 8. Postoperative Care

Rule 9. Medical and Surgical Procedures Rule 11. Commercial Relationships Rule 13. Communications to the Public

Rule 15. Conflict of Interest Rule 17. Confidentiality

# Background

"Live surgery" is defined for the purposes of this Advisory Opinion as any surgical procedure on an individual person and used as an educational activity to contribute to the generalizable knowledge and skill of ophthalmologists that is recorded or broadcast in real time using any medium (e.g., online streaming, video) to professional medical audiences and accompanied or not by interactive communication. This definition includes teaching surgical techniques by live surgery observation in the surgeon's own operating room and small meetings where live surgeries are followed by discussion of surgical procedures. The ethical issues involved in ophthalmologists traveling internationally to perform live surgery on individuals from the local population and broadcasts of the surgery to large audiences at professional meetings are unique and complex, and they are addressed below according to each of the applicable rules and factors.

Ethical concerns related to the performance of live surgery include the ophthalmologist's competence to perform the procedure, appropriate informed consent in the language of the patient, patient selection, preoperative assessment of the patient, the responsibilities for postoperative care and appropriate delegation of care when necessary, the appropriateness of the location for the surgery, commercial relationships that might impact the decision to perform the surgery, marketing, conflicts of interest that might affect clinical judgment, concerns for how complications will be handled during live surgery, and patient confidentiality. Proper care of the patient must be foremost in any consideration of a live surgical demonstration, including maintaining safeguards to preserve patient safety, autonomy, privacy, and confidentiality. Performing surgery that is not in the best interest of the patient, by virtue of scheduling, candidacy, or because of potential conflicts of interest, is unethical.

### General Discussion

Incorporating new techniques or technology into one's practice by way of observing a live surgery performance is a time-honored tradition in the history of medicine and medical education. The benefit of observing a skilled mentor cannot be overstated. Live surgical performances offer a unique educational experience for ophthalmologists to enhance their surgical skills and disseminate information. In selecting a patient for live surgery, local physicians often choose a complex case for the visiting surgeon. However, if the intent of the surgery is to transfer skills to the observing surgeons, then a case that is more typical of the surgeries that local physicians perform is likely more appropriate.

Appropriate patient selection is a particularly important factor. Patient personality and the patient's anticipated level of cooperation with the expected technical difficulty of the procedure should be considered. It should also be determined whether the patient is an appropriate candidate for the procedure when the live surgery is scheduled. If the performance is scheduled for a future date, the possibility exists for there to be an unnecessary delay in treatment. Conversely, if an appropriate patient has not been selected in advance of the surgery, one might be chosen to fit the scheduled date of the surgery rather than because that person is a suitable candidate.

The ophthalmologist should determine whether the additional stress of a live surgical broadcast might be disruptive to his or her cognitive process and ability to respond to unexpected occurrences. Inherent distractions in the performance of live surgery include the potential for frequent interruptions from the audience as they ask questions and request clarification as the procedure progresses. The surgeon's attention may also be distracted because he or she may be operating with unfamiliar staff and using instruments or devices. Even if the surgeon is using his or her own staff, the surgeon will want to brief the team on the live performance. Consequently, the ophthalmologist should consider a presurgery meeting with the medical team and the recording team to discuss the procedure, patient safety, and confidentiality. Additionally, prior to recording the live surgery, the ophthalmologist may wish to perform at least one surgery in an unfamiliar operating room to ensure that all steps of the planned live surgery proceed as smoothly as possible.

When determining whether a live surgery performance is in the patient's best interest as well in the ophthalmologist's own professional interest, the ophthalmologist should check with his or her professional liability carrier since the performance may increase liability exposure.

Live Surgery Performed Internationally on Local Populations
The ethical issues inherent in the performance of live surgery in an international setting on individuals from the local population include all those noted above plus the unique issues noted below.

The ophthalmologist who travels internationally to perform live surgery as an educational activity to contribute to generalizable knowledge and skill of ophthalmologists should do the following:

- Carefully assess his or her motivations to ensure that participation in the live surgical event is primarily for educational purposes and is not unduly influenced by a commercial or industry relationship, the potential for increased professional reputation/recognition or surgical acumen, or the potential for publication following the trip.
- Determine what credentialing is required prior to traveling to the country where the surgery will be performed. All required documentation should be provided, and approval obtained prior to the performance of surgery in the country.
- Consult with his or her liability carrier to ensure that liability coverage will be provided.
- Become familiar with the surgical site in advance of the event. In international settings, the surgical suite, staff, instrumentation, sterilization, lighting, voltage, and even the size of the surgical gloves available will likely be different from that with which the operating surgeon is comfortable. These elements may complicate the surgical plan.
- Evaluate the patient, or review another health care provider's evaluation, to confirm accuracy in the documentation of findings and recommended treatment plan.
- Obtain a fully informed consent from the patient. In an international setting where language and customs will be different than those in the United States, obtaining such a consent may prove difficult. Particular attention must be paid to 1) an assessment of the patient's competence to decide, 2) the disclosure of relevant information in a manner appropriate to the customs and culture of the country, 3) a realistic assessment of the patient's comprehension of the discussion, and 4) obtaining consent from the patient or a surrogate. It should be emphasized that an element of coercion may be present in this setting, whereby the patient may believe or have been led to believe that he or she may be receiving this care only by virtue of agreeing to the live surgery.

- Include the postoperative care plan as part of the informed consent process and ensure that it is understood and agreed to by the patient. The operating surgeon is responsible for the postoperative care of the patient. Portions of the postoperative care may be delegated to other appropriately trained individuals that the operating surgeon knows to be competent to perform the delegated tasks.

Live Surgery for Large Audiences at Professional Meetings

The ethical issues inherent in the performance of live surgery for large audiences at professional meetings includes all those noted above plus the additional, unique issues noted below.

The ophthalmologist who intends to perform live surgery as an educational activity to contribute to generalizable knowledge and skill of ophthalmologists should do the following:

- Carefully assess his or her motivations to ensure that participation in the live surgical event is primarily for educational purposes and is not unduly influenced by an economic interest in, commitment to, or benefit from a commercial or industry relationship.
- Consider whether an enhanced professional reputation/recognition, surgical acumen, and potential opportunity to publish following the event might also influence his or her professional judgment concerning the well-being of the patient.
- Ensure that the scheduling is appropriate. The format of large meetings may impose inflexible scheduling of the surgical event, which may affect surgical outcomes. Performing live surgery in a time-restricted setting is not recommended.
- Obtain the patient's informed consent and include information about the size of the audience, the greater potential for breaches of confidentiality, the disposition of any recorded materials, and the uniqueness of the surgery occurring in a live setting.
- Assess whether the size of the larger meeting may inherently offer less educational value than smaller meetings due to impaired visualization of the surgical procedure and minimal possibilities for individual interaction with the surgeon.
- Evaluate the patient to accurately document the findings and treatment plan, obtain the informed consent, including making arrangements for postoperative care of the patient and performing those aspects of the postoperative care within his or her unique competence.

The following recommendations for the performance of live surgery, based on the applicable rules of the Academy's Code of Ethics, are made to educate the ophthalmologist and to protect patients. Ultimately, it is the responsibility of the ophthalmologist to act in the best interest of the patient, regardless of where the surgery is performed.

*Rule 1. Competence.* The ophthalmologist should be competent to perform the intended procedure. Live surgery, outside of the ophthalmologists' own surgical suite where the primary purpose of the event is to educate residents and others learning new techniques, is only appropriate for surgeons very experienced with technique.

Rule 2. Informed Consent. Of special consideration is the process of providing appropriate informed consent. Appropriate informed consent is an ethical requirement in all surgery. Ophthalmologists should recognize the special nature of live surgery and the potential ramifications for the patient in this alternative care setting. The informed consent should include, but not be limited to, the voluntary nature of the live surgery; the intended purpose and audience of the surgery; the potential risks, benefits, and alternatives to the live surgery, including the possibility of added risk because of physician and patient distraction during the surgery; and the possibility of breaches of confidentiality and the security of private health information. A surrogate's informed consent may not be appropriate in this situation.

The patient should be made aware of the role of all members of the surgical team, and there should be clarification of the legal liabilities of both the surgeon and the facility where the live surgery will be performed.

Coercion of the patient must be avoided. The possibility of having a renowned surgeon perform the surgery might place undue pressure on the patient to consent. A patient's decision to withdraw prior consent must be respected.

*Rule 6. Pretreatment Assessment.* The ophthalmologist should carefully consider whether the patient chosen for the surgery is appropriate for the both the procedure and the experience. An evaluation of the patient by the operating surgeon to ensure accuracy of the documented findings and recommendation for treatment is essential.

Rules 7 and 8. Delegation of Services and Postoperative Care. Postoperative care of the patient who undergoes live surgery should not vary from the postoperative care provided to a patient in the ophthalmologist's routine practice. If delegation is intended, the patient and the person to whom the care is delegated must agree to the delegation in advance of the procedure. The alternative care provider must be adequately trained, supervised, and able to perform the delegated procedures by virtue of state laws, per Rules 7 and 8 of the Code of Ethics.

Rule 9. Medical and Surgical Procedures. The ophthalmologist should not misrepresent the procedure that is to be performed or the charges that will be made for the procedure, if any. The ophthalmologist should ensure that the procedure is performed in an appropriate location and have emergency equipment available in case of need.

Rule 11. Commercial Relationships. The decision to perform live surgery should be based on the ophthalmologist's clinical judgment and desire to contribute to generalizable knowledge and should not be influenced by economic interest in, commitment to, or benefit from professionally related commercial enterprises. Ophthalmologists should not perform live surgery if the purpose is self- or facility aggrandizement.

Rule 13. Communications to the Public. As in all professional advertising, promotions for a live surgery performance should not be false, deceptive, or misleading, and ophthalmologists should not participate in any live surgery course that is promoted in a false, deceptive, or misleading manner, or that includes mis- information about the participating ophthalmologist's skills, training, experience, or results.

Rule 15. Conflict of Interest. If a physician is compensated differently for the live surgery performance than for routine surgical patient care, that fact should be disclosed to the patient in advance. A conflict of interest exists when professional judgment concerning the well-being of the patient has a reasonable chance of being influenced by other interests of the provider. Disclosure of a conflict of interest is required in communications to patients, the public, and colleagues.

Rule 17. Confidentiality. Special consideration should be given in the performance of live surgery to respect the confidential physician-patient relationship and the safeguarding of confidential health information consistent with the law. The audience should be reminded of the special nature of the live surgery demonstration, including the need to maintain confidentiality and to protect patient privacy. Liability carriers may require an informed consent and/or confidentiality addendum to the forms routinely used for these purposes.

## Applicable Rules

"Rule 1. Competence. An ophthalmologist is a physician who is educated and trained to provide medical and surgical care of the eyes and related structures. An ophthalmologist should perform only those procedures in which the ophthalmologist is competent by virtue of specific training or experience or is assisted by one who is. An ophthalmologist must not misrepresent credentials, training, experience, ability, or results."

"Rule 2. Informed Consent. The performance of medical or surgical procedures shall be preceded by appropriate informed consent. When obtaining informed consent, pertinent medical facts and recommendations consistent with good medical practice must be presented in understandable terms to the patient or to the person responsible for the patient. Such information should include alternative modes of treatment, the objectives, risks, and possible complications of such a treatment, and the consequences of no treatment. The operating ophthalmologist must personally confirm with the patient or patient surrogate their (his or her) comprehension of this information."

"Rule 6. Pretreatment Assessment. Treatment (including but not limited to surgery) shall be recommended only after a careful consideration of the patient's physical, social, emotional, and occupational needs. The ophthalmologist must evaluate and determine the need for treatment for each patient. If the pretreatment evaluation is performed by another health care provider, the ophthalmologist must assure that the evaluation accurately documents the ophthalmic findings and the indications for treatment. Recommendation of unnecessary treatment or withholding of necessary treatment is unethical."

"Rule 7. Delegation of Services. Delegation is the use of auxiliary health care personnel to provide eye care services for which the ophthalmologist is responsible. An ophthalmologist must not delegate to an auxiliary those aspects of eye care within the unique competence of the ophthalmologist (which do not include those permitted by law to be performed by auxiliaries). When other aspects of eye care for which the ophthalmologist is responsible are delegated to an auxiliary, the auxiliary must be qualified and adequately supervised. An ophthalmologist may make different arrangements for the delegation of eye care in special circumstances, so long as the patient's welfare and rights are the primary considerations."

"Rule 8. Postoperative Care. The providing of postoperative eye care until the patient has recovered is integral to patient management. The operating ophthalmologist should provide those aspects of postoperative eye care within the unique competence of the ophthalmologist (which do not include those permitted by law to be performed by auxiliaries). Otherwise, the operating ophthalmologist must make arrangements before surgery for referral of the patient to another ophthalmologist, with the patient's approval and that of the other ophthalmologist. The operating ophthalmologist may make different arrangements for the provision of those aspects of postoperative eye care within the unique competence of the ophthalmologist in special circumstances, such as emergencies or when no ophthalmologist is available, so long as the patient's welfare and rights are the primary considerations. Fees should reflect postoperative eye care arrangements with advance disclosure to the patient."

"Rule 9. Medical and Surgical Procedures. An ophthalmologist must not misrepresent the service that is performed or the charges made for that service. An ophthalmologist must not inappropriately alter the medical record."

"Rule 11. Commercial Relationships. An ophthalmologist's clinical judgment and practice must not be affected by economic interest in, commitment to, or benefit from professionally related commercial enterprises."

"Rule 13. Communications to the Public. Communications to the public must be accurate. They must not convey false, untrue, deceptive, or misleading information through statements, testimonials, photographs, graphics, or other means. They must not omit material information without which the communications would be deceptive. Communications must not appeal to an individual's anxiety in an excessive or unfair way, and they must not create unjustified expectations of results. If communications refer to benefits or other attributes of ophthalmic procedures that involve significant risks, realistic assessments of their safety and efficacy must also be included, as well as the availability of alternatives and, where necessary to avoid deception, descriptions and/or assessments of the benefits or other attributes of those alternatives. Communications must not misrepresent an ophthalmologist's credentials, training, experience, or ability and must not contain material claims of superiority that cannot be substantiated. If a communication results from payment by an ophthalmologist, this must be disclosed unless the nature, format, or medium makes it apparent."

"Rule 15. Conflict of Interest. A conflict of interest exists when professional judgment concerning the well-being of the patient has a reasonable chance of being influenced by other interests of the provider. Disclosure of a conflict of interest is required in communications to patients, the public, and colleagues."

"Rule 17. Confidentiality. An ophthalmologist shall respect the confidential physician-patient relationship and safeguard confidential information consistent with the law."

#### Other References

"Principle 1. Ethics in Ophthalmology. Ethics address conduct and relate to what behavior is appropriate or inappropriate, as reasonably determined by the entity setting the ethical standards. An issue of ethics in ophthalmology is resolved by the determination that the best interests of patients are served."

"Principle 7. An Ophthalmologist's Responsibility. It is the responsibility of the ophthalmologist to act in the best interest of the patient."

"Rule 3. Research and Innovation. Research is conducted to provide information on which to base diagnostic, prognostic, or therapeutic decisions and/or to improve understanding of pathogenesis in circumstances in which insufficient information exists. Research and innovation must be approved by appropriate review mechanisms (Institutional Review Board [IRB]) and must comply with all requirements of the approved study protocol to protect patients from being subjected to or potentially affected by inappropriate or fraudulent research. In emerging areas of ophthalmic treatment where recognized guidelines do not exist, the ophthalmologist should exercise careful judgment and take appropriate precautions to safeguard patient welfare. Appropriate informed consent for research and innovative procedures must recognize their special nature and ramifications. The ophthalmologist must demonstrate an understanding of the purpose and goals of the research and recognize and disclose financial and nonfinancial conflicts of interest. Commensurate with the level of his/her involvement, the investigator must accept personal accountability for patient safety and compliance with all legal and IRB-imposed requirements."

American Academy of Ophthalmology. Advisory Opinions of the Code of Ethics, Research and Innovation in Clinical Practice (2017), Informed Consent (2017), Appropriate Examination and Treatment Procedures (2016), Delegated Services (2018), Postoperative Care (2018), and Disclosure of Professionally Related Commercial Relationships and Interests (2018). San Francisco, CA. American Academy of Ophthalmology. Available at: <a href="http://www.aao.org/about/ethics">http://www.aao.org/about/ethics</a>.

American Academy of Ophthalmology. Information Statement, Unique Competence of the Ophthalmologist. San Francisco, CA. American Academy of Ophthalmology; 2018. Available at: <a href="http://www.aao.org/about/ethics">http://www.aao.org/about/ethics</a>.

American Academy of Ophthalmology. Policy Statements of the Code of Ethics, An Ophthalmologist's Duties Concerning Postoperative Care (2017) and Pretreatment Assessment: Responsibilities of the Ophthalmologist (2017). San Francisco, CA. American Academy of Ophthalmology. Available at: <a href="http://www.aao.org/about/ethics">http://www.aao.org/about/ethics</a>.

AMA Council on Ethical and Judicial Affairs. AMA Code of Medical Ethics - Current Opinions E-5.046 Filming Patients for the Education of Health Professionals. Issued December 2003 based on the report Filming Patients for Educational Purposes, adopted June 2003.

Dehmer, GJ, Douglas, JS, Alexander Abizaid, et al. Expert Consensus Document: Statement on the Use of Live Case Demonstrations at Cardiology Meetings. *J Am Coll Cardiol*. 2010;56(15):1267-1282. doi: 10.1016/j.jacc.2010.08.599.

Farb, A, Brown, SA, Wolf, DA, Zuckerman, B. Interventional Cardiology Live Case Presentations: Regulatory Considerations. *J Am Coll Cardiol.* 2010;56(15):1283-1285. doi: 10.1016/j.jacc.2010.08.601.

Kallmes, DF, Cloft, HJ, Molyneux, A, et al. Live case demonstrations: Patient safety, ethics, consent and conflicts. *The Lancet*. 2011;377(9776):1539–1541. doi.org/10.1016/S0140-6736(11)60357-7.

Smith, A. Urological Live Surgery - An Anathema, *BJU International.* 2012;110:299-300. doi.org/10.1111/j.1464-410X.2012.11314.x.

Williams, JB, Mathews, R, D'Amico, TA. "Reality Surgery" - A Research Ethics Perspective on the Live Broadcast of Surgical Procedures. <u>J Surg Educ. 2011 Jan-Feb;68(1):58-61. doi: 10.1016/j.jsurg.2010.08.009.</u>

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