Open Anesthesia Records: Guidance for Anesthesia Providers on Implementing the Cures Act

Priya Ramaswamy, MD, MEng David T. Chin, MD David Robinowitz, MD, MHS, MS

The notion that patients have a right to access their medical records was introduced by Shenkin and Warner in 1973 in *NEJM*. At that time, in most of the United States, patients could only obtain their medical records through litigation (*N Engl J Med* 1973;283:688-92). Since then, we have made significant strides thanks in part to legislation such as the Health Insurance Portability and Accountability Act of 1996 (HIPAA), Health Information Technology for Economic and Clinical Health Act (HITECH), and the creation of the Office of the National Coordinator (ONC). The advent and near universal adoption of electronic health records (EHRs), patient portals, and consumer technology have increased patient access to multiple parts of the patient record by streamlining the process of data delivery. What used to require hours of photocopying can now be accomplished in a few "clicks." Many patients now have near-immediate access to health data such as laboratory and imaging results. However, offering patients access to their physician's clinical notes has not been a widespread practice, nor has it been a legal requirement.

The OpenNotes movement started in 2010 and was initially pioneered at three medical centers across the country: Boston's Beth Israel Deaconess Medical Center, Pennsylvania's Geisinger Health System, and Seattle's Harborview Medical Center. Outpatient clinical notes were shared by providers with over 20,000 patients, and the initial study found overwhelming patient satisfaction and perceived benefit of the practice with minimal to no change in physician workload (*Ann Intern Med* 2012;157:461-70). Several studies have confirmed that sharing provider notes with patients results in increased patient satisfaction, patient-physician trust, and patient engagement, among other positive findings (*JAMA Netw Open* 2020;3:e201753; *J Am Med Inform Assoc* 2019;26:1115-19; *BMJ Qual Saf* 2017;26:262-70). The OpenNotes movement has since expanded to the Veteran's Affairs system and other health care systems across the country, and now over 40 million patients have access to their providers' notes (asamonitor.pub/2UmhKIk).

Table: Recommendations for Transparent Anesthetic Records

Patient Education	Provide basic anesthesia literacy for patients, including training materials, on to help patients interpret their anesthetic record
	Develop electronic resources to assist with understanding the released documents, such as Frequently Asked Questions about the anesthesia record
	Consider anticipatory guidance on the release of intraoperative laboratory results, especially when a proxy has access to these labs
Patient Communication	Prepare for patient follow up questions and/or concerns regarding released documents and develop systems with which these concerns can be rapidly addressed (e.g. patient portal, email, answering service)
	Document all communication with the patient in the medical records
IT Implementation	Work with your clinical informatics leaders to develop rules for when and how to best release anesthetic records, intraoperative lab results, and captured images
	For special circumstances, implement feature to "hold" or "delay" record release (e.g., new diagnosis of significant illness)
	Develop institution policy on release of retrospective records and release of paper records
	Align release of records with those of procedural and surgical colleagues
	Design records that are interpretable by patients without medical training
Provider Considerations	Educate trainees and anesthesia providers on the importance of proper anesthetic documentation and the considerations and consequences of releasing anesthetic records
	The medical record is a medical and legal document and must be truthful and complete. However, the immediate release of these documents may require additional sensitivity to the psychological needs of the patient in the manner of documentation

Priya Ramaswamy, MD, MEng
Clinical Informatics Fellow, University of California, San Francisco.
@PriyaRamaswamy

David T. Chin, MD
Resident Physician/CA-2, University of California, San Francisco.
@dvdtchn

David Robinowitz, MD, MHS, MS
Professor of Clinical Anesthesia, Pediatric Anesthesiologist, and Medical Director, Anesthesia Informatics, University of California, San Francisco.

Cures Act summary

In 2016, the 21st Century Cures Act (Cures Act) was signed into law. Among the many provisions of the Cures Act is a focus on "empowering patients and improving patient access to their electronic health information." The Cures Act directed the ONC and Health and Human Services Secretary to determine what electronic health information (EHI) would be mandated to be shared with patients via application programming interfaces (APIs, like Epic's MyChart) (asamonitor.pub/3kjYWEh). In 2019, the ONC released the first version of the U.S. Core Data for Interoperability (USCDI), which expanded prior EHI definitions to encompass clinical notes. With this addition, it is now required that physician notes from both inpatient and outpatient settings become readily available to patients "without special effort," "at no cost," and "updated automatically" (asamonitor.pub/3kjYWEh). Anesthesia provider notes and anesthesia records are not excluded from these requirements.

On May 1, 2020, the ONC published the Cures Act Final Rule, which mandated that clinical notes must be shared with patients by November 2, 2020 (six months following the release of the Final Rule). However, given the burdens imposed by

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the COVID-19 pandemic response, the ONC extended the deadline to April 5, 2021. The Cures Act also requires that by October 6, 2022, health systems must share clinical notes with third party applications specified by patients, meaning notes must be accessible and able to be downloaded to a smartphone or tablet.

We believe it is imperative to bring the new federal requirements to the attention of anesthesia providers.

Considerations and guidance for anesthesia practices and providers

Implementing open anesthetic records, a novel concept in our field, will require a host of considerations for practices, providers, and their patients. We anticipate significant lessons will need to be learned along the way. Patient and physician satisfaction with open notes have not included specialty specific notes like those from anesthesia providers (*BMJ Qual Saf* 2017;26:262-70). We do not know the impact that open anesthetic records will have on anesthesia practice, but we envision that the provider-patient relationship will evolve. It is important to bring awareness of the coming changes with respect to transparent anesthetic records, and we acknowledge that there will be challenges in implementation. We provide a list of summary recommendations for implementing open anesthetic records in Table. While these recommendations are a start, they are by no means all-encompassing.

Primarily, anesthetic records are different from any other clinical note type. These records can be difficult to understand for non-anesthesia medical professionals let alone patients. Anesthesiologists should consider providing basic anesthesia literacy to their patients in anticipation of the layperson accessing their own anesthetic records. This education includes discussing the need for intraoperative labs, differing goals of intraoperative lab values (which may be significantly different from "normal" ranges, i.e., ACT values), and the eventual incorporation of those labs into open records. For example, a slightly elevated INR may be inconsequential to the anesthesiologist but may raise questions to a parent following their child's lab results in real-time. Groups may want to consider holding off on the release of intraoperative labs until after the surgical procedure has been completed so that providers are available to answer questions about released medical records

When implementing open anesthetic records, the nuances of anesthetic note types should also be examined. In some systems, preoperative evaluations are often a work in progress and are not finalized until the day of surgery. A pre-anesthesia clinic note may differ from the pre-anesthesia evaluation the day of surgery once new medical information is available. We recommend a disclosure statement be made that not all information (i.e., labs, imaging) reviewed by anesthesiologists are copied in the preoperative note. The timely release of preoperative notes will depend on the culture of the anesthesia system. With regard to trainee notes, the OpenNotes culture has historically released notes after final signature from the supervisory physician. However, many intraoperative anesthetic records have a supervisory physician "attest," which can be at any time during the case. Accordingly, the release of notes when the supervising physician "attests" or "signs" may not be appropriate for anesthetic record workflows. Institutions should exercise caution when implementing blanket rules for note release. Lastly, many anesthetic records have historically been documented in paper charts prior to the implementation of electronic charting. The decision for retrospective openness to anesthetic records and the technical feasibility of sharing older paper records through electronic format should be weighed by each anesthesia group.

Open anesthetic records documenting anesthesia-related procedures and detailing adverse events will also uncover challenges. Difficult line placements or numerous block/neuraxial attempts will become very public to the patient now. Teaching programs, in particular, have to be sensitive to the needs of the patient while balancing trainee procedural education. Adverse events and poor outcomes will all likely be published unless they are flagged by the provider because they fall into the Cures Act exception categories (asamonitor.pub/3kjYWEh). In these instances, consider building in a "hold release" option for providers who may want to delay or block the release of anesthetic records during certain circumstances.

While reviewing their records, patients may seek out clarifications or answers. Patients may also find inaccuracies in their notes, for example an incorrect preoperative medical condition listed, and they will seek to rectify it. Currently, most anesthesia providers do not have ways for patients to easily contact them with questions or concerns regarding their anesthetic care, like a formal answering service. At minimum, some systems may want to consider a "Frequently Asked Questions" link or attachment with the open anesthetic records. Others may want to have a more traditional electronic or telephone contact service to address patient inquiries and have workflows in place to address and correct errors. All follow-up communication with the patient should be documented in their medical records.

Open anesthetic records may empower patients. Armed with previous anesthetic records, patients may be better prepared to communicate prior adverse events or side effects. We may also see more patients who seek the same "cocktail" of anesthetics that were provided to them in the past or may ask for the same anesthesia providers who have cared for them. Overall, patients should be able to better communicate their satisfaction or dissatisfaction with prior anesthetic experiences. Anesthesia providers will also have access to a wealth of important information, like airway management details, from prior out-of-network anesthetic records.

Future iterations of transparent anesthetic records will have to rely on feedback from patients and anesthesia providers. With the roll-out of open anesthetic records, we can also learn about special considerations for anesthesia subspecialties like pediatrics, obstetrics, and regional. For example, the release of ultrasound images captured while performing a nerve block or transesophageal echocardiogram may alter workflows. Future studies that evaluate patient engagement with their anesthetic records and follow-up communication with their anesthesia providers could provide many valuable insights. Depending on a practice's EHR build, released anesthetic record contents will vary. Patients will experience inter-practice information inequality, and these differences may call for further standardization of released anesthesia records. Implementation of open anesthetic records may even inspire a complete redesign of how anesthetic records are presented to make it easier for the layperson to comprehend. Overall, we hope open anesthesia records will further empower our patients, improve their satisfaction, and improve the quality of services we provide. ■