

Virtual Medicine: Telemedicine for the Anesthesiologist

The accelerated pace of rapidly advancing technology has allowed for the reliable, consistent use of telemedicine across the globe. Articles in this issue detail its use in anesthesiology as well as its limitations.^{1,2} A summary of potential benefits is illustrated below.



↓ need for patient travel

- Benefits those who live far from clinic or with physical disability

Prehabilitation of patients

- Medication management
- Functional capacity
- Smoking cessation
- Diet and fluid status

↑ Cost savings



Remote guidance of intraop management

- Benefits in austere environments
- Real time surveillance of multiple anesthetizing sites

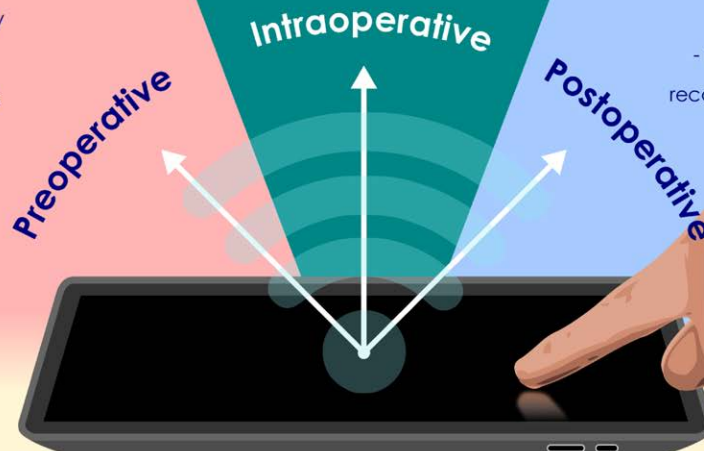


Recovery management

- Virtual ICU and PACU surveillance

Rehabilitation after discharge

- Oversight of pain management
- Record of postoperative milestones
- Post-discharge enhanced recovery pathway monitoring



Although the use of telemedicine in anesthesiology has enormous potential to benefit patients challenges in implementation exist...

Upfront equipment costs and setup

Reliability of uninterrupted remote connectivity

HIPAA compliance and protection of PHI

The infographic above details the real and potential benefits of remote clinical management of patients within the context of anesthesia practice. Bridges et al¹ offer a narrative review of real-world examples of digital interface platforms that extend the reach of anesthesiologists well beyond the perimeter of an operating room. Such technologies allow for patients to engage in preoperative optimization when physical disability, time, travel, and cost prohibit a conventional experience. In addition, remote guidance of anesthetic management in austere environments as well as postoperative surveillance of recovering patients has also been demonstrated. Tele-anesthesia also allows physicians to optimize the postdischarge phase of care in the era of enhanced recovery. For a more thorough understanding of telemedicine, the reader is encouraged to read the cited article¹ and accompanying editorial² in detail.

HIPAA indicates Health Insurance Portability and Accountability Act; ICU, intensive care unit; PACU, postoperative care unit; PHI, patient health information.

The Infographic is composed by Naveen Nathan, MD, Northwestern University Feinberg School of Medicine (n-nathan@northwestern.edu). Illustration by Naveen Nathan, MD.

The author declares no conflicts of interest.

REFERENCES

1. Bridges KH, McSwain JR, Wilson PR. To infinity and beyond: the past, present, and future of tele-anesthesia. *Anesth Analg*. 2020;130:276–284.
2. Kamdar NV, Jalilian L. Telemedicine: a digital interface for perioperative anesthetic care. *Anesth Analg*. 2020;130:272–275.