

Bringing advanced care to more places

The challenge

Telemedicine is becoming more common in the U.S.; 76% of U.S. hospitals connect with patients at a distance via video and other technology.¹ Many procedures, including life-saving heart catheterization, are done in person. Patients experiencing the most severe heart attacks need surgery as soon as possible to survive.² Pairing telemedicine with advanced surgical equipment could make such procedures available to more people worldwide.

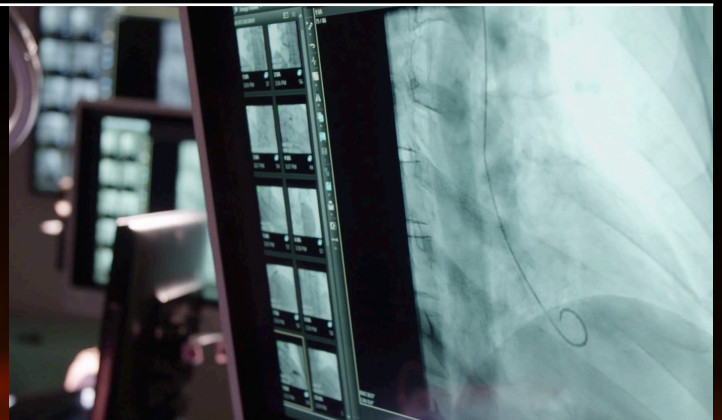
18.2M U.S. adults with coronary artery disease³



The tech

Corindus, a Siemens Healthineers company, makes robot-assisted surgical equipment. In 2018, Corindus equipment was used in the first remote human heart surgery trial at a distance of 20 miles.⁴ But latency in a network can limit the accuracy of remote surgery. In 2019, Corindus used 5G in a trial that completed 36 heart surgery simulations with an operator in Massachusetts and simulators in New York and San Francisco.⁵

3K miles Maximum distance in simulation trial⁵



The takeaway

The 2019 simulation trial showed that 5G networks have the potential to provide the high speed and ultralow latency needed for robotic medical tools and equipment.⁵ Corindus wants its inventions to work as well at a distance as they do on site. The vision is for a new era of remote surgery, where outcomes for heart patients near a top hospital are equivalent to those who live far away from one.

\$7B Market size of robotic surgeries by 2025⁶



For more information, reach out to your Verizon Wireless business specialist or visit [verizon.com/5g/business](https://www.verizon.com/5g/business)

¹ "Fact Sheet: Telehealth," American Hospital Association, February 2019 ² "Shorter time between first medical contact to PCI in heart patients linked to saving lives," European Society of Cardiology, Science News, February 13, 2018 ³ "Heart Disease Facts," Centers for Disease Control, June 22, 2020 ⁴ "Corindus' Technology Successfully Used in World's First-in-Human Telerobotic Coronary Intervention," www.corindus.com, December 6, 2018 ⁵ "Corindus Completes First-Ever, Transcontinental Simulated Telerobotic Percutaneous Coronary Intervention Procedures Over 5G, Fiber, and Public Internet Networks," www.corindus.com, November 18, 2019 ⁶ "Robotic Surgery Market Expected to More than Double to \$7 billion by 2025 – New Study by iData Research," Businesswire, March 21, 2019