Telehealth is among the fastest-growing sectors in health care.

With this rapid growth in mind, Kaiser Permanente’s Institute for Health Policy, in partnership with AcademyHealth, the American Telemedicine Association, and Physician Insurers Association of America, convened a group of experts to develop an overarching research and policy framework for telehealth in early 2016.

The resulting framework, adapted from the classic Donabedian (1988) framework for assessing health services and quality of health care, highlights the interplay across structure, process, and outcomes that is needed to advance the appropriate use of and payment for telehealth services. It is intended to educate policymakers and payers, and to frame discussions about implementation barriers.

Framework adapted from: Edmunds, Margo; Tuckson, Reed; Lewis, Joy; Atchinson, Brian; Rhueban, Karen; Fanberg, Hank; Olinger, Lois; Rosati, Robert; Austein-Casnoff, Cheryl; Capistrant, Gary; and Thomas, Latoya (2017) “An Emergent Research Framework for Telehealth,” eGEMs (Generating Evidence & Methods to improve patient outcomes): Vol. 5: Iss.2, Article 1.
Kaiser Permanente is committed to leveraging technology to create environments where everyone can access high-quality, affordable, clinically-appropriate care. Across every dimension of the Telehealth Research and Policy Framework – structure, process, and outcomes – Kaiser Permanente is leading the way.

Kaiser Permanente offers a variety of telehealth services, including telephone and video appointments. What sets Kaiser Permanente apart is that its telehealth services:

- are integrated with patients’ electronic medical records and our scheduling systems for coordinated care and easy transitions;
- are part of our holistic approach to care delivery, not an add-on service; and
- have been available to members for many years, with enhancements to our technologies and clinical workflows along the way.

Telehealth is part of Kaiser Permanente’s program-wide commitment to driving innovations that advance care, transform the member experience, and improve quality.

CASE STUDY: Telestroke

Time is of the essence during a stroke. Approximately two million brain cells die every minute until a patient receives treatment.

Kaiser Permanente’s telestroke program (currently available in Kaiser Permanente’s Colorado, Northern and Southern California, Northwest, and Washington regions) uses the only FDA-approved treatment for acute ischemic stroke.\(^1\) The program allows emergency physicians to activate a neurologist at a hospital without an in-house neurological intensive care unit, often before the patient arrives at the emergency room.\(^2\)

**PROCESS: Delivery System**

When stroke patients arrive in the emergency department, they need to see both a neurologist and a radiologist before the blood clot-dissolving treatment can be administered. Special beds equipped with mobile video devices enable neurologists to visually evaluate a patient, while virtually accompanying him or her to radiology. The doctors can then, together, review the imaging results and quickly decide whether to administer the drug.

**OUTCOMES**

Enabling neurologists to conduct video evaluations of the patient allows treatment to start sooner, saving precious minutes in the emergency room — preserving brain function and saving lives. In fact, Kaiser Permanente’s telestroke program is allowing providers to start treatment in emergency rooms twice as quickly as typical stroke treatment.\(^3\)

**STRUCTURE: Policy Context**

Using telehealth to provide high-quality stroke care and to optimize the availability of neurologists requires adherence to a variety of state and federal regulatory requirements, including licensure, credentialing, quality standards, privacy protections, coverage rules and more. Kaiser Permanente advocates for policy and payment changes at the federal and state levels to enable telehealth applications like telestroke to be leveraged more broadly.

---