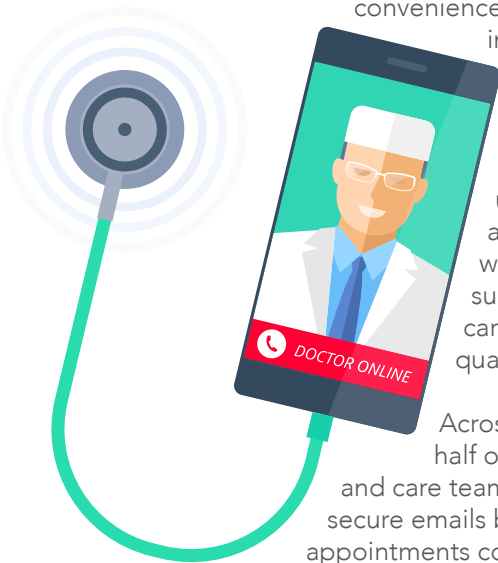


The Future of Care Delivered Today



GENERAL OVERVIEW

As in many other sectors, the role of technology in health care is rapidly evolving. Various health care payers are grappling with new health care delivery methods, and patients are adapting to novel ways to interact with their physicians. Kaiser Permanente utilizes [telehealth](#) technology – telecommunications-based services that can increase quality, offer convenience and choice, meet patient needs in clinically appropriate ways, and enable collaboration among physicians – throughout a diverse set of care settings. In and out of the exam room, Permanente physicians use extensive voice, video, online, and mobile technologies to connect with their patients and each other to support integrated, patient-centered care that leads the nation in health care quality and innovation.



Across Kaiser Permanente, approximately half of all “touches” between patients and care teams were virtual in 2016, including secure emails between patients and clinicians and appointments conducted by phone or video. Additionally, Kaiser Permanente patients in 2016 performed more than 70 million care-related transactions online or through the company’s web and mobile application, including viewing lab results, ordering prescriptions, and scheduling appointments.

2016 TELEHEALTH SERVICES

- 
6.2 million telephone appointments
- 
30 million secure messages between patient and care team
- 
Almost 100,000 video visits
- 
50 percent faster diagnosis and treatment with Teletroke program

System connectivity with Kaiser Permanente’s electronic medical record allows care teams to prompt preventive care services and quickly fill care gaps.

How Kaiser Permanente Addresses This Issue

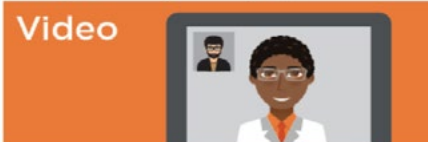
Permanente physicians are pioneers at using integrated and extensive voice, video, online, and mobile technologies to deliver culturally-responsive, patient-empowered care. Scheduled telephone visits enable patients to discuss their health concerns with their clinician when an in-person visit is not clinically necessary. Integrated video visit capabilities allow patients to access urgent, primary, and specialty care – when clinically appropriate – based on their health needs and preferences. Individuals who select telephone and video visits have reported high levels of satisfaction with both care modalities. Importantly, these services are support-

ed by the patient’s comprehensive electronic health record that the physician can access at the point of care.

System connectivity with Kaiser Permanente’s electronic health record allows care teams to prompt preventive care services and quickly fill care gaps. Several Permanente Medical Groups (PMGs) use a mobile app that allows a physician to identify the specialist on duty and facilitate real-time phone or video consultations. This allows the treating physician to consult a specialist during the initial care visit, often eliminating an extra visit for the patient.

continued

These are the many ways Kaiser Permanente is bringing technology to health care.

Expanding Telehealth	 <p>Phone</p>	Access to scheduled telephone visits
	 <p>Online</p>	Remote health monitoring Online interactive programs
	 <p>Video</p>	Patient-to-clinician integrated video visits Real-time, specialist consultation during clinical care visits
	 <p>Apps</p>	Secure text/email Clinician-to-clinician on call availability Clinical decision tools

On the Horizon

Remote monitoring for patients with chronic conditions offers significant promise to improve quality outcomes. Care teams at the Mid-Atlantic Permanente Medical Group monitor blood pressure for patients with hypertension, and the Southern California Permanente Medical Group has begun testing remote glucose monitoring technology to manage blood sugar levels in patients. Remote monitoring offers the opportunity to improve quality and clinical outcomes, recognizing that patients with chronic diseases spend limited time in doctors' offices.

Care delivery leaders are working to spread Kaiser Permanente's core set of existing capabilities more broadly across all regions, including system-wide smartphone usage that enables physicians and care team members to access telehealth apps. For example, some apps allow physicians to text each other about clinical cases and receive prompt advice for a patient's ongoing care without compromising patient privacy and security. Other apps provide access to vital information that supports clinical decision-making at the point of care.

Selected Publications

Karter, Andrew J., E. Margaret Warton, Kasia J. Lipska, James D. Ralston, Howard H. Moffet, Geoffrey G. Jackson, Elbert S. Huang, and Donald R. Miller. "Development and Validation of a Tool to Identify Patients With Type 2 Diabetes at High Risk of Hypoglycemia-Related Emergency Department or Hospital Use." *JAMA Internal Medicine* (2017). <http://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2649265>

Sauser-Zachrisson, Kori, Ernest Shen, Navdeep Sangha, Zahra Ajani, William P. Neil, Michael K. Gould, Dustin Ballard, and Adam L. Sharp. "Safe and Effective Implementation of Telestroke in a US Community Hospital Setting." *The Permanente Journal* (2016), 20(4):15-217. <http://www.thepermanentejournal.org/issues/search/results/43-the-permanente-journal/original-research-and-contributions/6200-acute-ischemic-stroke.html>

Permanente Physician Experts

Our physician experts are available to discuss our many telehealth services.



Mary Wilson, MD, MPH, executive medical director, The Southeast Permanente Medical Group



Richard Isaacs, MD, co-CEO, The Permanente Federation; executive director and CEO, The Permanente Medical Group; president and CEO, Mid-Atlantic Permanente Medical Group

About the Permanente Medical Groups

The Permanente Medical Groups are composed of more than 21,000 physicians. Our mission is to improve the health of our patients and the communities in which we provide care. We practice in eight self-governed, physician-led, prepaid, multi-specialty medical groups that work with the Kaiser Foundation Health Plans and Kaiser Foundation Hospitals to provide care for more than 11.8 million Kaiser Permanente members. We work collaboratively, enabled by state-of-the-art facilities and technology, to provide preventive and world-class complex care in eight states – from Hawaii to Maryland – and the District of Columbia.

About The Permanente Federation

In 1997, the Permanente Medical Groups formed The Permanente Federation LLC to represent their shared interests. The Federation serves as the key partner on behalf of the medical groups with Kaiser Foundation Health Plan and Kaiser Foundation Hospitals on national initiatives.

Please visit permanente.org.

