

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 2017, including secure emails between patients and clinicians and appointments conducted by

phone or video. Additionally, Kaiser Permanente patients in 2017 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.

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 supported 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 known as Clinician Connect 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.

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

Expanding Telehealth	Phone		Access to scheduled telephone visits
	Online		Remote health monitoring Online interactive programs
	Video		Patient-to-clinician integrated video visits Real-time, specialist consultation during clinical care visits
	Apps		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 ongoing chronic conditions 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

"Convenience, Choice, Connectivity," permanente.org, March 19, 2018 <https://permanente.org/convenience-choice-connectivity>.

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>

Sausser-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>



About the Permanente Medical Groups

The Permanente Medical Groups are composed of more than 22,000 physicians dedicated to the mission of improving the health of our patients and the communities in which we provide care. We practice in eight self-governed, physician-led, prepaid, multispecialty medical groups. Together with the Kaiser Foundation Health Plans and Kaiser Foundation Hospitals, we are Kaiser Permanente – an award-winning health care system that delivers Permanente Medicine to more than 12.2 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

The Permanente Federation LLC (the Federation) is the national leadership and consulting organization for the eight Permanente Medical Groups (PMGs), which, together with the Kaiser Foundation Health Plans and Kaiser Foundation Hospitals, comprise Kaiser Permanente. The PMGs employ more than 22,000 physicians, approximately 90,000 nurses, other clinicians and staff, and provide care to over 12.2 million Kaiser Permanente members. The Federation works on behalf of the PMGs to optimize care delivery and spread Permanente Medicine – medicine that is patient centered, evidence based, technology enabled, culturally responsive, team delivered, and physician led. The Federation, based in Oakland, California, fosters an open learning environment and accelerates research, innovation, and performance improvements across the PMGs to expand the reach of Kaiser Permanente's integrated care delivery model and to lead the nation in transforming care delivery.

Please visit permanente.org.

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The Permanente Federation

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