As the nation’s healthcare costs continue to grow, telehealth has been gaining attention as a viable and cost-effective alternative to improve health outcomes and increase access to health care.¹,²

California has been at the forefront in the effort to expand and integrate telehealth since the passage of the Telemedicine Development Act of 1996, which set the standards for care provided via telemedicine and related reimbursement.³ In 2012, the Telehealth Advancement Act updated telehealth policies. Some of the measures included replacing the legal term “telemedicine” with “telehealth,” removing location requirements for patients and providers, and changing written patient consent to verbal consent.⁴

Still, policies will need to keep up as telehealth continues to evolve with the advent of new technological advancements and increased coverage through the Affordable Care Act. This brief focuses on the issues related to telehealth in California.

### Terminology

**Telehealth** is “a mode of delivering health care services and public health via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient’s health care while the patient is at the originating site and the health care provider is at a distant site.” *

**Telemedicine** is “the ability of physicians and patients to connect via technology other than through virtual interactive physician/patient capabilities, especially enabling rural and out-of-area patients to be seen by specialists remotely.” **

*California Business and Professions Code (BPC) Section 2290.5 (e)  
**California Code of Regulation Title 10 Section 6410*

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Delivery of telehealth

Four modes of delivering telehealth services exist, and each mode is associated with varying requirements for reimbursement by different payers.

**Mode 1: Live Video or Synchronous**

This is a bidirectional mode of live audiovisual interaction between the healthcare provider and the care recipient. It can be used as a substitute for in-person care when diagnosing a patient, providing treatment services, or consulting between providers. Patient’s verbal consent is required.

**Mode 2: Store-and-Forward or Asynchronous**

This is a mode through which patient health data is transmitted between providers to confer a diagnosis and treatment outside of the live interaction time frame. Patient health data may include videos or digital images (x-rays, magnetic resonance imaging, photographs, etc.) and must be transmitted via secure systems that abide by the Health Insurance Portability and Accountability Act of 1996 (HIPAA) regulations. This service is especially useful for providing specialty services (through a primary care provider) to patients.

**Mode 3: Remote Patient Monitoring (RPM)**

Remote patient monitoring is the collection, storage, and evaluation of health information (patient’s vital signs, blood sugar levels, etc.) through live monitoring via devices that transmit information from the home or care facility to a provider.

**Mode 4: Mobile Health (mhealth)**

Mhealth encompasses health care provision (diagnosis, education, advice, etc.) through mobile devices, personal digital assistants, or computer tablets. These can include text messages, instant messages, telephone consultations, faxes, or electronic mailing. While these methods are included under telehealth, they are not considered as part of telemedicine.

<table>
<thead>
<tr>
<th></th>
<th>Live Video</th>
<th>Store and Forward</th>
<th>RPM</th>
<th>Mobile Health</th>
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<tbody>
<tr>
<td><strong>Private</strong></td>
<td>Under state law (BPC section 1374.13), private payers can reimburse live video appointments, and no prior in-person meeting is required unless it involves prescribing “dangerous drugs” as defined by the BPC section 2242.1 (a).7,8</td>
<td>Under state law (BPC section 2290.5), private payers can reimburse store-and-forward. 7,8</td>
<td>State law neither mandates nor prohibits reimbursement for RPM for private payers. 7,8</td>
<td>State law neither mandates nor prohibits reimbursement for phone conversations, e-mails, or faxes between patients and providers. 7,8</td>
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<tr>
<td><strong>Medi-Cal</strong></td>
<td>California’s Department of Health and Human Services (DHHS) approves Medi-Cal reimbursement for live video appointments without a prior in-person appointment. 8,9</td>
<td>California’s DHHS approves Medi-Cal reimbursement for teledermatology, teleophthalmology, and teledentistry services only. 8,9</td>
<td>California’s DHHS does not approve Medi-Cal reimbursement for RPM. 8,9</td>
<td>California’s DHHS does not approve Medi-Cal reimbursement for e-mails, faxes, or phone conversations between patients and providers. 8,9</td>
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<tr>
<td><strong>Medicare</strong></td>
<td>CMS authorizes reimbursement for certain Medicare services as long as the patient is seen at an authorized originating site that is located in a certain geographic area such as a rural health professional shortage area. 10</td>
<td>CMS does not authorize store-and-forward service for reimbursement unless it is through the Medicare Chronic Care Management Program. 10,11</td>
<td>CMS authorizes reimbursement for RPM services using the billing code 99091.</td>
<td>CMS does not authorize reimbursement for mobile communication devices for healthcare delivery. However, CMS has proposed reimbursement for text messages as part of the 2019 physician fee schedule. 10,13 Under this code, it is not technically considered a telehealth service. 10,12</td>
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Benefits of telehealth

The key benefit of telehealth is the expanded access to necessary care. Furthermore, many research studies to date have demonstrated efficacy and improved quality of care provided via telehealth. The Agency for Healthcare Research and Quality (AHRQ) conducted a systematic review of nearly 60 studies and concluded that telehealth is effective in improving health outcomes. There was some doubt over whether physicians could accurately diagnose conditions without a physical examination.

A study published in the *Journal of Telemedicine and Telecare* found that teleconferencing was a reliable and valid method of diagnosing the presence, stage, and volume of a pressure ulcer and related wounds in patients with spinal cord injury.

To address concerns over whether telehealth would make it more difficult to develop trust in the patient-provider relationship, one study conducted surveys and found that providers and patients were highly satisfied with telehealth service quality in an intensive care unit (ICU) in rural Northern California. Moreover, a study published in *Behavioral and Psychosocial Research* found that telehealth overcame some of the privacy concerns that HIV-positive African American youth had and improved the patient-provider relationship. To address the cost-effectiveness of telehealth, the VA conducted a study in 2012 and estimated that $6,500 could be saved per patient annually due to the improvements in health outcomes that were conferred via telehealth.

Barriers to telehealth

According to the two federally-designated resources on telehealth in California (California Telehealth Resource Center & Center for Connected Health Policy), five key limitations exist in current telehealth policies.

**Reimbursement:** Medicare only reimburses two of the four modalities, thereby excluding multiple services that could improve access to care (especially specialty care via mode 2). Moreover, state and Medi-Cal policies do not comprehensively cover all four modalities. Specifically, policies will have to address mhealth coverage as new “doctor-on-demand” phone applications emerge. Furthermore, the rates of covered services may not adequately cover the cost of implementing that service.

**Malpractice:** No law in California requires physician malpractice coverage of telehealth-related services. This may prevent many physicians from participating in such services out of fear of malpractice lawsuits.

**Licensing:** Assembly Bill 415 was passed in 2011 and required that all professionals providing telehealth services be licensed to provide these services. Since no interstate licensing is available in California, this law poses an additional burden on out-of-state providers to acquire a California license in order to provide telehealth services to patients in California.

**Security:** HIPAA does not have clearly defined policies for telehealth services. Moreover, independent companies that store personal health records are not subject to HIPAA regulations. In 2014, California passed Assembly Bill 658 to extend consumer protections for mobile health applications and businesses that provide personal health records services.

**Prescribing:** The requirement for a prior in-person visit (as noted earlier) for controlled substances can especially pose limitations for patients who are seeking treatment for mental/behavioral health services, such as drug-addiction therapy, that are not present near their residence.
The future of telehealth

There are currently multiple bills in both the California state senate and assembly that could expand telehealth services across various sectors, increase the types of providers and number of reimbursable services, provide grants for pilot programs, and increase consumer protections. Consumers and providers are excited about the future of telehealth and its ability to improve access to healthcare locally and globally. As telemedicine expands, related policies should thoughtfully address potential limitations and unintended consequences while leveraging the evidence-based benefits of telemedicine.

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