

Chapter 2:

# Telehealth in Medicaid

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## Key Points

- Telehealth is the use of technology, including interactive telecommunication, to deliver medical and other health services to patients. Telehealth permits patients at one site to receive care or health education from providers at another site and lets patients, caregivers, and providers in one location consult with providers at a different site.
- Use of telehealth in Medicaid may help states address barriers to care, such as insufficient supply of providers, inadequate transportation options, and long distances between patient and provider and associated travel times. It may be particularly helpful to patients in rural and frontier areas and for patients who need behavioral health services but have concerns about confidentiality or stigma.
- In 2017, nearly all states and the District of Columbia provided some coverage of telehealth in fee-for-service Medicaid.
- Because there are few federal requirements for Medicaid coverage of telehealth, states have flexibility in defining telehealth and establishing limitations on coverage. As a result, Medicaid policies for coverage of telehealth vary from state to state including in the following areas: modalities, specialties and services, providers authorized to deliver services, and sites of service. State telehealth coverage policies may differ for fee-for-service and managed care delivery systems.
- Medicaid programs are using telehealth in a variety of clinical practice areas, including behavioral health, oral health, and maternity care, and for providing services to certain populations, such as individuals with chronic illness and beneficiaries who are dually eligible for Medicaid and Medicare.
- When adopting telehealth coverage in Medicaid, states weigh the costs and resource requirements against the potential for improvements in access to care, and they also consider factors beyond the scope of Medicaid, such as connectivity, technology, and provider licensure.
- The evidence on the effectiveness and outcomes of telehealth is mixed. Few published studies address the effects of telehealth in Medicaid specifically; states seeking to implement or expand coverage of telehealth would likely benefit from additional research as well as from the experiences of other states. Such information would help other states, providers, health plans, and the research community gain a more robust understanding of the effects of telehealth on access to care, quality of care, and cost of care for the Medicaid population.

## CHAPTER 2: Telehealth in Medicaid

Telehealth has the potential to improve access to services in underserved areas, as well as facilitate access to services for which there may be relatively few providers (ASPE 2016, Bashshur et al. 2014, NCSL 2015, ONC 2015). It can also encourage appropriate use of underutilized services, such as oral health and behavioral health services, by making it easier or more convenient to access them (Bashshur et al. 2014, Mehrotra 2014, Rudin et al. 2014). Telehealth can make regular checkups and follow-up visits easier for people who have difficulties traveling (e.g., individuals with disabilities or special health care needs) by enabling access to providers and services at home or at locations closer to home.

Telehealth is the use of technology and interactive telecommunication to deliver medical and health services and to conduct programs in related fields, such as patient education. It can also facilitate educational and consultative opportunities for health professionals. This mode of service delivery permits patients at one site to receive care from providers at another site, or patients, caregivers, and providers to consult with providers at a different site (CCHP 2017a, CMS 2017a, ONC 2017, CRS 2016). The terms telehealth and telemedicine are sometimes used interchangeably, but historically, the term telemedicine has focused more narrowly on the provision of clinical services while the term telehealth encompasses a broader range of services that address health care needs (ASPE 2016). This chapter uses the term telehealth because of its more inclusive definition; however, some state Medicaid programs use the term telemedicine and some use both terms.<sup>1</sup>

In 1996, the Institute of Medicine described the potential benefits of telehealth in rural and urban settings, highlighted the factors affecting adoption of telehealth, and noted the need for

evaluating its effectiveness (IOM 1996). Since then, technology has improved, the use of telehealth by public and private payers has grown, delivery systems have begun evolving toward value-based purchasing, and more research on the use and outcomes of telehealth has been conducted (AHRQ 2016). In 2015, the Office of the National Coordinator for Health Information Technology (ONC) recommended increasing the use of telehealth in federal health care delivery systems and in programs to advance person-centered and self-managed health care (ONC 2015). Currently, 10 federal agencies, including the Departments of Health and Human Services (HHS), Defense, Veterans Affairs, and Justice, run programs aimed at increasing the use of telehealth by addressing issues such as technology innovation, broadband access, and policy development and implementation (ONC 2016). The Federal Telemedicine Working Group (FedTel), established in 2011 with participants from 26 federal agencies and departments, conducts telehealth education and facilitates information-sharing among its members (ASPE 2016).

The use of telehealth in Medicaid has grown (ATA 2017). Telehealth may help states address barriers to care such as insufficient numbers of providers, inadequate transportation options, long distances and associated travel time required to get to health care providers—particularly for patients in rural and frontier areas—and concerns about confidentiality and stigma for patients needing behavioral health services (CRS 2016). Federal policy does not place many restrictions on state Medicaid programs in terms of adopting or designing telehealth coverage but it also offers little guidance or information about implementation (CMS 2017a). Thus, state Medicaid coverage of telehealth varies across multiple dimensions, such as the telehealth modality, specialties and services, providers authorized to deliver services through telehealth, and sites of service (ATA 2017, CCHP 2017a).

State decisions to cover telehealth are driven by factors such as the following:

- interest in balancing increased access to care with state budgetary limitations;
- their policy goals and expectations for providing coverage;
- provider and patient acceptance;
- payment policies for fee-for-service (FFS) and managed care delivery systems;
- consistency with other delivery system or payment reforms;
- the evidence base for the effectiveness and quality of telehealth services; and
- concerns about the potential for fraud and abuse.

States considering expanding coverage of telehealth may find lessons learned in other states instructive to their planning and policy development. The Centers for Medicare & Medicaid Services (CMS) could do more to facilitate state-to-state learning, data collection, and analyses of the effects of telehealth on access, cost, and quality; and how Medicaid programs could work with and educate plans, providers, and enrollees. CMS could extend existing mechanisms for supporting program planning and implementation, such as planning grants and learning collaboratives, to telehealth. The Center for Medicare and Medicaid Innovation (CMMI) supports the testing of innovative approaches for service delivery and payment; models now being tested by CMMI that include telehealth components in the Medicare population could be considered for testing in Medicaid programs.

This chapter provides an overview of telehealth in Medicaid. It starts with a description of telehealth modalities, federal Medicaid guidelines for telehealth, and the policy choices states make in establishing coverage. Next, the chapter describes specific applications of telehealth in behavioral

health, oral health, and maternity care, as well as how some states use telehealth to provide health care services to certain high-need populations. It then provides an overview of the evidence for telehealth. The chapter ends with a discussion of the issues states face in implementation and use of telehealth.

## Medicaid Coverage of Telehealth Modalities

A variety of telehealth modalities are used in different health care settings; they generally allow patients to engage with providers—often specialists not available in their communities—in real time, or to share health data with their providers (CCHP 2017a, CRS 2016, IOM 2012). Providers also use various telehealth modalities to consult with other clinicians who are located elsewhere. The site where patients are located is referred to as the originating site and the location of the provider they interact with is referred to as the distant site (ATA 2017, CMS 2016b). Technologies used in telehealth range from smart phones, medical devices, tablets, and computers in patients' homes, to audio, video, and imaging equipment in clinical settings such as hospitals, physician offices, and clinics (NCSL 2015).<sup>2</sup> Much of the technology requires broadband Internet access to enable patient-to-provider interaction or the transmission of images and medical data for evaluation (ASPE 2016, NCSL 2015).

Key modalities covered by Medicaid include the following:

**Live video (synchronous telehealth)** refers to real-time interaction, both audio and visual, between participants located at two different sites, to connect a patient, caregiver, or provider at the originating site with a provider at a distant site. Technologies used for live video include videoconferencing units, peripheral or web cameras, computer monitors, televisions, and projectors (ASPE 2016, NCSL 2015, CMS 2017a, CCHP 2017a).

### **Store-and-forward (asynchronous telehealth)**

involves the secure transmission of data, images (e.g., X-rays, photos), sound, or video that are captured at the originating site and sent to specialists at a distant site for evaluation (ASPE 2016, NCSL 2015, CMS 2017a, CCHP 2017a). Store-and-forward is commonly used for dermatology, radiology, pathology, and ophthalmology, but also has applications in obstetrics and gynecology, cardiology, and orthopedics (CCHP 2017b).

**Remote patient monitoring (RPM)** refers to the secure transmission of patient health and medical data collected at the originating site to a provider who will assess them at a distant site. RPM is often used for chronic disease management; examples of patient data collected and transmitted for RPM include vital signs, blood glucose levels, weight, and blood pressure (ASPE 2016, NCSL 2015, CMS 2017a, CCHP 2017c).

Modalities that are less likely to be covered by state Medicaid programs include mobile health and electronic consults (NCSL 2015).

**Mobile Health (mHealth)** refers to the use of devices and smartphone apps to capture vital signs, provide health education, send text messages to encourage healthy behavior, or generate reminders to take medications (NCSL 2015).

**Electronic consults (e-consults)** refers to provider-to-provider consultation. One example of this modality is the Project Extension for Community Healthcare Outcomes (Project ECHO) model. Project ECHO does not connect patients with providers; rather, it uses videoconferencing to link primary care providers in the community (such as those in rural areas) to teams of specialists in academic hubs who can offer the community providers education and training about the management of specific diseases, including chronic diseases; discuss individual patient cases with them; and make patient treatment recommendations (AHRQ 2017, UNM 2017a).

## **Federal Guidelines**

According to the CMS telemedicine web page, there are few federal requirements or restrictions for Medicaid coverage of telehealth; states have flexibility in defining telehealth as well as in establishing limitations or restrictions on coverage. The federal Medicaid statute does not identify telehealth as a specific service and CMS has not issued regulations or other formal guidance on its coverage. Broad CMS guidelines require providers to practice within the scope of their state practice law and to comply with pertinent state licensing rules. Additionally, payment for telehealth must satisfy federal Medicaid requirements for efficiency, economy, and quality of care. CMS encourages states “to use the flexibility inherent in federal law to create innovative payment methodologies for services that incorporate telemedicine technologies” (CMS 2017a).

Medicaid requirements for comparability, statewideness, and freedom of choice do not apply to telehealth-provided services; however, states limiting telehealth to certain providers or regions must assure access to and cover face-to-face visits in regions where telehealth is not available. States are not required to submit a Medicaid state plan amendment to cover and pay for services provided via telehealth if telehealth services are covered and paid for in the same way or amount as those provided face-to-face (CMS 2017a).

Recent CMS rules acknowledge the role of telehealth in enabling access to care; for instance, the 2016 final Medicaid managed care regulation required states to consider use of telehealth in setting network adequacy standards (42 CFR 438.68(c)(1)(ix)). In another 2016 final rule, which implemented requirements for documenting face-to-face encounters within certain timeframes before ordering home health services, CMS permitted face-to-face encounters to be performed via telehealth (42 CFR 440.70(f)(6)).<sup>3</sup> In its analysis of and responses to public comments to the home health rule, CMS acknowledged the need for updated Medicaid telehealth guidance and indicated that it

would be forthcoming; in the meantime the agency would be available to provide technical assistance to states (CMS 2016a). Thus far, no further guidance has been issued.

## State Policy Design Choices

State Medicaid programs must make a number of design choices when establishing the scope of telehealth coverage (ATA 2017, CCHP 2017a). Most states have defined telemedicine or telehealth in state laws, regulations, or other guidance (CCHP 2017a). Although not required, some

### BOX 2-1. Medicare Coverage of Telehealth

Whereas states have flexibility to determine the parameters for Medicaid coverage of telehealth, Medicare's telehealth coverage parameters are clearly defined and more restrictive. Medicare policy has included the following limitations:

**Geography.** The originating site must be in a rural location that meets the definition of a non-metropolitan statistical area or a rural health professional shortage area (CMS 2016b).

**Modality.** An encounter must be a live, interactive, two-way audio and video telecommunication. Coverage for store-and-forward is allowed only in federal telehealth demonstrations in Alaska and Hawaii (CMS 2016b). In the 2018 Medicare Physician Fee Schedule final rule, CMS approved coverage for remote patient monitoring for chronic disease management and for provider-to-provider consultations via telehealth in the collaborative care model for behavioral health (CMS 2017c, 2016b).

**Originating sites.** Permitted originating sites are hospitals, critical access hospitals, physician offices, federally qualified health centers (FQHCs), rural health centers, tribal facilities and urban Indian clinics, skilled nursing facilities, community mental health centers, and hospital-based dialysis centers (CMS 2016b, CMS 2009).

**Distant site providers.** Permitted distant site providers are physicians, nurse practitioners, physician assistants, nurse-midwives, clinical nurse specialists, certified registered nurse anesthetists, clinical psychologists, clinical social workers, and registered dietitians and nutrition professionals (CMS 2016b).

**Covered services.** Medicare covers specific procedure codes via telehealth. Although the allowable procedure codes might change from year to year, covered services generally include annual wellness visits, general consultations, services to treat kidney disease, treatment for mental health and substance use disorders, nutrition therapy, pharmacological management, cardiovascular disease behavioral therapy, and obesity counseling (CMS 2016b).

The recently enacted Bipartisan Budget Act of 2018 (P.L. 115-123) expands Medicare coverage of telehealth in several ways. It permits Medicare Advantage plans to provide services via telehealth that otherwise would not be covered by Medicare. It expands the ability of certain accountable care organizations to use telehealth and relaxes originating-site limitations. In addition, Medicare now will cover telehealth services for individuals with stroke in urban and rural areas.

state Medicaid programs model their telehealth coverage policies, or parts of them, on Medicare’s policies and limitations (ATA 2014). For example, West Virginia’s Medicaid telehealth policy is based on Medicare policy, including the prohibition on federally qualified health centers (FQHCs) from serving as distant sites (WV DHHR 2017). Some states initially adopted Medicare standards (for instance, enforcing minimum distance requirements or restricting coverage of telehealth to use in rural areas or health professional shortage areas), then changed their policies over time as they gained more experience and understanding of the implications for access, cost, and quality (ATA 2017, CCHP 2017a).<sup>4</sup> States may also impose other restrictions or limitations to control utilization or costs.

Key telehealth policy design features include:

- covered modalities;
- eligible specialties and services;
- eligible providers; and
- payment for covered services, which must be within federal upper limits (ATA 2017, CCHP 2017a, CMS 2017a).

Policy design may also address differences, if any, in telehealth coverage in FFS delivery systems and coverage in managed care.

### Modalities

In 2017, nearly all states and the District of Columbia provided some coverage of telehealth in Medicaid FFS; however, the definition of and scope of coverage of telehealth differs from state to state. Some states define telehealth narrowly and limit coverage to live, two-way interactions or interactions using both audio and visual telecommunications, while other states use broader definitions or have established more inclusive policies (ATA 2017, CCHP 2017a). The most commonly covered form of telehealth is live video (synchronous telehealth), followed by RPM and store-and-forward (Table 2-1).

### Eligible specialties and services

Below, we discuss the specialties and services that states have determined to be eligible for Medicaid coverage.

**Specialties.** State Medicaid programs vary widely in terms of the specialties that can be provided

**TABLE 2-1.** State Coverage of Telehealth Modalities in Medicaid, October 2017

Modality	Number of states	States
Live video	50	All states and the District of Columbia, except Massachusetts, cover live video.
Remote patient monitoring	21	Alabama, Alaska, Arizona, Colorado, Illinois, Indiana, Kansas, Louisiana, Maine, Minnesota, Mississippi, Missouri, Nebraska, New York, Oklahoma, South Carolina, Texas, Utah, Vermont, Virginia, and Washington
Store-and-forward	15	Alaska, Arizona, Connecticut, California, Hawaii, Illinois, Maryland, Minnesota, Mississippi, Missouri, New Mexico, Nevada, Oklahoma, Virginia, and Washington

**Note:** Reflects state coverage of telehealth modalities in fee-for-service Medicaid as of October 2017. Massachusetts covers some telehealth services under managed care, but telehealth services are not covered in fee for service (ATA 2017).

**Source:** ATA 2017, CCHP 2017a.

through telehealth. For example, Idaho's Medicaid program covers live video telehealth for mental health, developmental disabilities services, primary care, physical therapy, occupational therapy, and speech therapy (ID DHW 2016). Arizona's Medicaid coverage of live video is more expansive, covering cardiology, dermatology, endocrinology, pediatric subspecialties, hematology-oncology, home health, infectious diseases, neurology, obstetrics and gynecology, oncology and radiation, ophthalmology, orthopedics, pain clinic, pathology, pediatrics, radiology, rheumatology, and surgery follow-up and consultation (CCHP 2017a). Many states have adopted more inclusive live video telehealth policies and some also cover dentistry: Arizona, California, Hawaii, Minnesota, Missouri, Montana, and New York began covering telehealth for dentistry in 2016 and 2017 (CCHP 2017a).

Some states providing Medicaid coverage for store-and-forward limit coverage to certain specialties. California covers store-and-forward for dermatology, ophthalmology, and dentistry (CCHP 2017a). Minnesota Medicaid covers store-and-forward for dentistry and for reading or interpretation of diagnostic tests, such as X-rays or laboratory tests (CCHP 2017a).

**Services.** State Medicaid policies also vary with respect to specific services covered when delivered by telehealth and the scope of coverage. For example, Kentucky covers several classes of services provided via live video: consultation; mental health evaluation and management services; individual and group psychotherapy; pharmacological management; psychiatric, psychological, and mental health diagnostic interview examinations; individual medical nutrition; individual diabetes self-management training; occupational, physical, or speech therapy evaluation or treatment; neurobehavioral status examination; and end stage renal disease monitoring, assessment, or counseling (07 Ky. Admin. Regs. 3:170. (2018)). Georgia covers office visits, pharmacological management, limited office psychiatric services, limited radiological services, and a limited number of other physician

services (CCHP 2017a). Behavioral health services commonly covered include mental health assessments, individual therapy, psychiatric diagnostic interview examination, and medication management (ATA 2017).

States direct providers to use the applicable procedure or service codes when submitting claims for services provided via telehealth; some states and plans may also require the use of a modifier code that specifically indicates a telehealth encounter.<sup>5</sup> These modifier codes can also help track which services were provided using synchronous or asynchronous telehealth modalities. However, it is unclear how consistently or accurately providers use them, even when required to by the state Medicaid agency or plan (Roddy 2017, IOM 2012). Providers may lack incentives to use modifier codes if payment is not dependent on reporting or if the policy is unclear (Roddy 2017).

A Center for Connected Health Policy paper reports that some states restrict or limit covered services, for instance, limiting the number of telehealth visits or requiring prior authorization. For example, Arkansas limits coverage for live video telehealth to two visits per patient per year, although additional visits can be requested. Several states, including Indiana, Kansas, and Minnesota, require prior authorization for services, particularly RPM. States requiring prior authorization for live video include Maryland (for some behavioral health services), Michigan, and Nevada (CCHP 2017a).

## Eligible providers

State Medicaid policies vary with regard to the types of providers that are eligible for payment for services delivered through telehealth; at a minimum, states must ensure that providers are practicing within their scope of practice (ATA 2017, CMS 2017a). State policies also differ in which providers can be originating or distant sites or both.

**Provider types.** Nineteen states do not specify which providers are eligible to provide services through telehealth, and are therefore presumed



to have the most inclusive provider policies.<sup>6</sup> In general, state telehealth policies are expanding to include more providers, but 14 states allow fewer than nine provider types to deliver telehealth services (ATA 2017).

Although telehealth has the potential to overcome barriers to care, including barriers created by state lines, many state Medicaid programs continue to require providers of telehealth services to be licensed in and enrolled as Medicaid providers in their states. Some state policies describe circumstances in which out-of-state providers can provide telehealth services, for example, Arizona requires both originating and distant site providers to be registered with the state's Medicaid program and providers to be licensed in the state from which they are providing the service, unless they are Indian Health Service providers (AHCCCS 2016).<sup>7</sup> The state's policy also allows out-of-state providers to be either originating or distant sites (AHCCCS 2016). Arkansas requires providers delivering services via telehealth to be licensed or certified in Arkansas unless they provide only episodic consultation services (CCHP 2017a).

Some states require the presence of a telepresenter—a provider present at the originating site during the telehealth visit—to facilitate the patient's interaction with the provider at the distant site (CCHP 2017a, Ahn et al. 2016). Some require providers to be on the premises during a telehealth visit, even if not physically with the patient. Such requirements preclude the use of telehealth modalities like RPM. Currently 34 states do not require the presence of a telepresenter (ATA 2017).

**Originating site.** An originating site is where the patient is located during the telehealth encounter. Traditionally, approved originating sites have been restricted to settings such as physician offices and hospitals. However, with technological advancements, states are increasingly allowing other locations, such as homes, workplaces, and schools to serve as originating sites (ATA 2017). More expansive policies on originating sites could support greater availability of telehealth, improved

convenience for patients and use of modalities such as remote patient monitoring.

Twenty-three state Medicaid programs specify eligible originating sites; others do not explicitly require patients to be at specific sites (ATA 2017, CCHP 2017a). For example, in West Virginia, authorized originating sites include physician or other practitioner offices, private psychological offices, hospitals, rural health centers, FQHCs, hospital-based renal dialysis centers (including those in critical access hospitals), skilled nursing facilities, and community mental health centers (CCHP 2017a). Colorado identifies specific providers that are eligible to receive originating site fees; although other facilities are not prohibited from serving as originating sites, they will not be paid a facility fee for the service (CCHP 2017a). In Washington, beneficiaries may choose the location where they would like to receive services (WA HCA 2018).

**Distant site.** A review of state Medicaid telehealth policies identified 32 provider types allowed by states to serve as distant site providers (ATA 2017). These include physicians, nurses with varying types of certification, behavioral health care providers (e.g., psychologists, social workers, behavioral analysts, and substance use disorder clinicians), clinical sites (e.g., FQHCs, community mental health centers, skilled nursing facilities), and therapists (e.g., physical therapists and speech therapists) (ATA 2017).

## Payment

States set Medicaid payment levels for telehealth services. Payment rates for telehealth may be lower than rates for services provided in person, particularly in FFS payment arrangements, (NCSL 2015, Rudin et al. 2104) and lower telehealth rates may limit provider willingness to participate in such programs. State policies also vary as to coverage of facility fees and transmission fees, which help providers cover telecommunications costs. Thirty-two states pay one or both of these fees (CCHP 2017a). In states where facility or transmission

fees are not covered, providers may be less willing to participate (Rudin et al. 2014). Conversely, if facility and transmission fees are paid to encourage providers to participate and these providers replace services previously provided in person with services provided using telehealth, then the fees in combination with the cost of the services themselves could lead to increases in the overall cost of the service.

### Managed care versus fee for service

Medicaid coverage policies for telehealth may differ between managed care and FFS. In some states, Medicaid managed care plans are not required, but do provide, services through telehealth. For example, in Florida, live video telehealth is covered under FFS and is optional for managed care plans (TAC 2017, ATA 2017). The state's model contract for managed care plans explicitly notes this and, for plans choosing to use telehealth, the contract describes the conditions for payment (AHCA 2017). Differences between FFS and managed care may also have operational implications for states and managed care plans seeking to cover telehealth (Mehrotra 2014, Rudin et al. 2014). For example, some managed care plans use telehealth or may want to expand its use beyond what is covered in FFS but may face challenges submitting claims or receiving payment. On the other hand, Massachusetts does not cover telemedicine-provided services under its FFS plan but does have some coverage under at least one of their managed care plans (ATA 2017). Finally, the different incentives associated with FFS and managed care payment policies could affect states' decisions to cover telehealth as well as use and spending.

## Applications of Telehealth in Medicaid

Medicaid programs are using telehealth for a variety of clinical conditions and populations. This section describes the application of telehealth in behavioral health, oral health, maternity care, and services for certain high-need populations. We focus on these areas because Medicaid plays a significant role as a payer for these services; there are known barriers to accessing the services; or because the use of telehealth for these services is becoming more common.<sup>8</sup> For each application, we discuss how telehealth can be used, relevant state policies and practices, and, if available, evidence on the effectiveness of these interventions.

### Behavioral health

Non-institutionalized adult Medicaid enrollees have a higher rate of behavioral health disorders than privately insured individuals. Children and adolescents covered by Medicaid are also more likely to have a mental health condition than peers with private insurance (MACPAC 2017, 2015). Barriers to care include fragmented delivery systems, an insufficient supply and geographic maldistribution of behavioral health providers, and on the patient side, concerns about confidentiality and fear of stigma attached to acknowledging the need for and seeking treatment (MACPAC 2017, SAMHSA 2016, Tummala and Weiss Roberts 2009).

Telehealth has the potential to increase access to evidence-based care for mental health and substance use disorders (SUDs) for individuals in underserved areas (Bashshur et al. 2016, SAMHSA 2016, NCSL 2015, Hilty et al. 2013). Applications for behavioral health span the continuum of care, from patient screening, assessment, and diagnosis; to treatment and medication management; and promotion of compliance, engagement, and retention. Videoconferencing may be used in medication-assisted treatment for opioid

use disorder for delivering psychotherapy and counseling as well as assessment and medication management. Telehealth can facilitate provider consultation and collaboration as well as enable more confidential delivery of services. For example, a patient could use a primary care office as an originating site and receive psychotherapy from a distant site, thereby avoiding the perceived stigma of visiting a mental health provider's office (Eibl et al. 2017; SAMHSA 2016, 2015; King et al. 2009).

**Medicaid policies.** All states that cover telehealth-provided services provide some coverage for behavioral health services via videoconferencing, but the scope of coverage varies (CCHP 2017a). The most commonly covered services are mental health assessments, individual therapy, psychiatric diagnostic interview exams, and medication management (ATA 2017). In 2015, 38 states and the District of Columbia covered mental health services via telehealth, and 30 states and the District of Columbia either explicitly covered certain SUD-related treatments delivered via telehealth or did not differentiate between mental health and SUD coverage in their policies (MACPAC 2016c).

Behavioral health services delivered via telehealth are more likely to be covered if provided by psychiatrists, advanced practice nurses with clinical specialization, and psychologists than if they are delivered by social workers or counselors. Medicaid programs in 23 states and the District of Columbia cover behavioral health services delivered via telehealth by licensed social workers, and programs in 18 states and the District of Columbia cover these services when provided by a licensed professional counselor. Only four states specifically allow behavioral health analysts to bill Medicaid for telehealth-provided services (ATA 2017). State Medicaid programs may exclude the home as an eligible originating site although some studies suggest the home can be an effective originating site for certain behavioral health care services (CCHP 2017a, SAMHSA 2015).

There are other consultative modalities for behavioral telehealth that are rarely covered by

Medicaid; however, some research suggests their utility and there are indications of some interest by states and stakeholders in their use. These modalities include telephonic consultation, provider-to-provider e-consults, and the collaborative care model.

- **Telephonic consultation.** Few states consider telephone-only care to be telehealth and few states cover it. Oregon, however, permits patient consultations via telephone when they comply with specific practice guidelines (OR HA 2017).<sup>9</sup> Maine also covers services delivered by telephone if videoconferencing is unavailable and if the services are delivered in a clinically appropriate manner (CCHP 2017, OMS 2016).
- **Provider-to-provider e-consults.** Providers in different locations can use provider-to-provider e-consults to seek and receive advice and education (Waugh et al. 2015). For example, a state-funded child telepsychiatry system in Wyoming facilitates consultation between community providers in state and child psychiatrists at Seattle Children's Hospital; this initiative not only helped to reduce the use of psychotropic medications in some children but it also led to program savings—Wyoming Medicaid experienced an estimated 1.82:1 return on investment (Hilt 2015).<sup>10</sup> Project ECHO, another model for provider-to-provider e-consults and education, addresses a wide range of behavioral health care topics, including SUDs, developmental disabilities, and psychiatric medication management (UNM 2017b). Medicaid programs in four states—California, Colorado, New Mexico, and Oregon—support Project ECHO activities (CHCS 2017).
- **Collaborative care model.** In this model, primary care providers (PCPs), behavioral health care coordinators embedded in the PCP practice, and psychiatric specialists work as a team to care for patients with behavioral health conditions. The psychiatric specialist

helps the PCP practice develop and implement treatment plans and track patient progress. In cases where the specialists are not located at the same site as the rest of the care team, they can connect via videoconference. Few states currently pay for this model under Medicaid; however, in light of robust evidence about its effectiveness, there is increasing interest in supporting its adoption and payment in both FFS and managed care arrangements (AIMS 2017, MD DHMH 2017, Townley and Yalowich 2015).<sup>11</sup> For example, the Washington State Mental Health Integration Program's use of this model reduced the median time to improvement for Medicaid enrollee depression to half of what it was before implementation (Unützer et al. 2013).<sup>12</sup>

### **Evidence on effectiveness of telehealth in behavioral health.**

A growing body of research supports the use of telehealth in behavioral health care. Psychotherapy delivered via telehealth has been shown to be effective, and research generally supports the use of interactive videoconferencing for assessment and treatment of conditions such as depression, post-traumatic stress disorder, SUD, and developmental disabilities (AHRQ 2016, Hilty et al. 2013). Psychiatric assessments via videoconferencing are generally as reliable as face-to-face assessments, although reliability can be a concern if limited bandwidth diminishes video and audio quality. Medication management for psychotropic drugs via telehealth can also be on par with face-to-face treatment. Studies to date generally show high patient and provider satisfaction with care delivered via videoconferencing, although some providers express concern that telehealth may affect the therapeutic alliance between patient and provider. There is also some resistance to adopting a new mode of care delivery (APA 2017, Hubley et al. 2016, Hilty et al. 2013).

There are few studies focused solely on Medicaid enrollees and the generalizability, availability, and quality of research on feasibility and effectiveness of telehealth for behavioral health varies depending

on the type of telehealth application, specific intervention, patient condition, outcome metric, or population being studied (SAMHSA 2015). For example, studies focused on specific populations, such as individuals over age 65 or children, or specific settings, such as emergency departments, are more limited. Available research thus far, however, suggests high rates of patient satisfaction, reliability, and potential for positive outcomes (APA 2017, Saeed 2017, Myers and Comer 2016, Hilty 2013). While more research is needed, studies on telehealth use in opioid use disorder treatment also report favorable outcomes, patient satisfaction, and retention that are similar to face-to-face care (Zheng et al. 2017, SAMHSA 2016, Hilty et al. 2013, Young 2012).

### **Oral health**

Use of oral health services among individuals with Medicaid coverage is relatively low despite some increases in recent years (MACPAC 2016a, 2016b).<sup>13</sup> Appropriate use of such services is important for prevention and treatment of dental disease, which if left untreated, can lead to pain, other health problems, and missed school or work days (KCMU 2016, MACPAC 2016a). Barriers to oral health care for Medicaid beneficiaries include cost, trouble finding a dentist that accepts Medicaid, fear of the dentist, and inconvenience of location or time (ADA 2017).

The use of telehealth in dentistry has been recognized for its potential to improve access to primary and specialty oral health care services in communities and settings where provider capacity is limited, for instance remote rural areas and nursing facilities (OHWRRC 2016, ADA 2015). In a live video interaction, a patient in an originating site is typically joined by an oral health professional for a real-time video consultation with a general dentist or specialty dentist for diagnosis and development of a treatment plan (Glassman 2016, OHWRRC 2016). Use of the store-and-forward modality allows a provider at the originating site (often a dental hygienist or dental therapist) to send images or

records such as X-rays, photographs, or lab results generated at that site to a general or specialty dentist for review at a later time (Glassman 2016, OHWRC 2016, Friction and Chen 2009). RPM includes the use of devices to collect and transmit data pertinent to patient oral health (e.g., measuring the pH of saliva over a period of time) to a dentist for review and treatment planning (Glassman 2016, OHWRC 2016).

Two recent scans of state policies identified 11 states providing some Medicaid coverage for teledentistry: Arizona, California, Colorado, Florida, Hawaii, Minnesota, Missouri, Montana, New Mexico, New York, and Washington (ATA 2017, CCHP 2017a). Policies vary in terms of modalities covered and conditions for payment. Arizona and California provide two examples:

- Arizona's Medicaid program, the Arizona Health Care Cost Containment System (AHCCCS), covers interactive audio, video, and data communications for triage, dental treatment planning, and referral. AHCCCS covers real-time teledentistry for enrollees under age 21 when provided by registered dental providers.<sup>14</sup> Consultation by a provider not licensed in Arizona may be permitted if such consultation is for an AHCCCS patient, the provider is registered with AHCCCS, and the provider is licensed in the state the service is provided from or employed by a tribe or by the Indian Health Service (AHCCCS 2016).
- California's Medi-Cal program covers live, synchronous telehealth only if the beneficiary requests it, and transmissions may not exceed 90 minutes per beneficiary per provider per day. Medi-Cal also covers teledentistry services by store-and-forward of periodontal charts or X-rays (CA DHCS 2016). The distant provider must review the information within 48 hours without the beneficiary being present. Beneficiaries may also request real-time communication with the distant dentist at the time of the consultation or within 30 days.

Allied dental professionals are not permitted to bill for teledentistry (CA DHCS 2017).

Although available literature on teledentistry generally shows it to be effective, few studies focus specifically on the Medicaid population, and many cite the need for additional research on outcomes, use, and costs (Martin et al. 2016, ORWRC 2016, Daniel et al. 2013, Friction and Chen 2009, Kopycka-Kedzierawski et al. 2007). Teledentistry appears to be as effective as in-person visits for screening of childhood dental caries and orthodontic referrals (Daniel et al. 2013). One study found that teledentistry exams identified more dental caries in children than in-person visits did, possibly because of the high sensitivity of cameras used in teledentistry visits (Kopycka-Kedzierawski et al. 2007). Both patients and providers report high satisfaction with teledentistry (Daniel et al. 2013, Friction and Chen 2009). Patients expressing satisfaction cited greater convenience and improved access to care due to reduced driving time to appointments (Friction and Chen 2009).

A survey of dentists found that many dentists had limited knowledge about telehealth but were interested in its use to improve access to dental services (Martin et al. 2016). Respondents with Medicaid-enrolled individuals making up more than 10 percent of their patient pool were likely to cite a need for orthodontic consults; those with a smaller percentage of Medicaid-enrolled patients cited a need for periodontics consultations. A majority of respondents reported that they would seek a teledental consult for populations with special needs, for example, individuals with medically complex conditions, including children with special health care needs (Martin et al. 2016). Friction and Chen (2009) note that teledentistry can be particularly helpful in improving access to specialists for treating conditions that general dentists feel they lack training in, such as orofacial disorders.<sup>15</sup>

## Maternity care

In 2010, Medicaid covered nearly half of all births in the United States (MACPAC 2013). Yet, in the same year, nearly 50 percent of U.S. counties had no obstetrician-gynecologists providing direct patient care, including those specializing in maternal-fetal medicine (MFM) to manage high-risk pregnancies (MACPAC 2013). Telehealth could help alleviate the geographic shortage of these providers by allowing them to help other providers manage pregnancies during the prenatal, perinatal, and postpartum period.<sup>16</sup>

Telehealth can be used to manage pregnancies in a number of ways. Videoconferencing can connect an MFM specialist with a patient and her regular maternity care provider in real time or enable the two providers to confer, even during labor and delivery (Marcin et al. 2016). This modality can also be used for genetic counseling (Hilgart et al. 2012). Another emerging use is for neonatal resuscitation: live videoconferencing enables experienced providers to guide resuscitation efforts in sites where low volumes of such events make it difficult for regular providers to maintain their proficiency in the procedure (Marcin et al. 2016). Pilot studies and initiatives have also tried videoconferencing for prenatal care visits, group prenatal care, and breastfeeding support, which include women with both high-risk and low-risk pregnancies (Pflugeisen et al. 2016, Haas 2014, Odibo et al. 2013, Macnab et al. 2012). To the extent a state Medicaid program covers specialty physician consults via live videoconferencing generally, patient consultations with MFM specialists are also covered. As of 2014, seven states explicitly stated that similar services would also be covered when performed by a licensed midwife (ATA 2014).

Store-and-forward technology can be used by specialists to receive and read ultrasounds as well as to oversee in real time, from a distant site, the administration of ultrasounds by a sonographer at the originating site. Several studies have demonstrated store-and-forward technology's

feasibility for diagnosis of fetal anomalies and high-risk pregnancy management (Burke and Hall 2015, Odibo et al. 2013). Another emerging practice is the use of telehealth to diagnose congenital heart defects, either through live videoconferencing between a radiographer and fetal cardiologist, or by using store-and-forward to allow a specialist to review echocardiograms post hoc (Odibo et al. 2013, McCrossan et al. 2011). As of 2014, the only Medicaid programs covering telehealth interpretation of fetal echocardiograms were those in Arkansas and Virginia. Virginia was the sole state to pay for remote interpretation of ultrasound. Arkansas paid for the interpretation only if it was conducted during real-time videoconferencing while the ultrasound was being performed (ATA 2014).

Remote monitoring has also been used in the treatment of pregnant women. For example, women with diabetes can send blood glucose values to the provider via RPM, potentially reducing the frequency of in-person visits (Polsky and Garcetti 2017, Odibo et al. 2013). Home uterine activity monitoring, which uses a device to transmit data recordings to a provider to assess risk of preterm labor onset based in part on uterine contractions, however, has not been shown to affect maternal and perinatal outcomes. It is therefore not covered by many Medicaid programs (Urquhart et al. 2017, ATA 2014).

Arkansas Medicaid provides support to a telehealth initiative in high-risk obstetrics via the Antenatal and Neonatal Guidelines, Education and Learning System (ANGELS) program, directed by the University of Arkansas for Medical Sciences (UAMS). Most of the state's MFM specialists are located at UAMS only, so ANGELS uses videoconferencing to enable weekly real-time telehealth consultations between these specialists and participating patients and their local physicians, as well as real-time ultrasound readings.<sup>17</sup> Over a nine-month period in which this initiative was in place, Medicaid deliveries of very low birthweight infants in hospitals without neonatal intensive care

units (NICUs) decreased from 13.1 percent to 7.0 percent, and there was an associated small, but statistically significant, reduction in infant mortality. Separate studies found that there was also a 50 percent reduction in the need for women to travel to the tertiary care center at UAMS for specialist visits, and more women with high-risk pregnancies in Medicaid received a comprehensive ultrasound (Marcin et al. 2016, Long et al. 2014, Kim et al. 2013).

In a similar initiative at the University of Virginia Center for Telehealth, live videoconferencing connects women with high-risk pregnancies and their community providers to specialists at the university. This effort, too, has reported positive results among patients, some of whom were Medicaid enrollees. There was a 39 percent reduction in NICU hospital days, a 62 percent reduction in patient appointment no-shows, and a reduction in patient travel (Rheuban 2017).

## Other high-need populations

Below we discuss how states have incorporated telehealth into efforts to improve and coordinate care for certain high-need populations, such as those enrolled in Medicaid health homes, individuals using home and community-based services, and beneficiaries who are dually eligible for Medicaid and Medicare.

### **Individuals enrolled in Medicaid health homes.**

Health homes are an optional state plan benefit to coordinate care for Medicaid beneficiaries with certain chronic conditions: mental illness, SUDs, asthma, diabetes, heart disease, and obesity. Through health homes, states provide comprehensive care management, care coordination, health promotion, comprehensive transitional care and follow-up, patient and family support, and referrals to community and social support services (CMS 2017b).<sup>18</sup>

Some states cover the use of telehealth to deliver health home services, for example, Ohio's health home provides services to adults with serious and

persistent mental illness and children with serious emotional disturbances. Health home providers may deliver services face to face, by telephone, or by videoconferencing (CMS 2016d). Similarly, in West Virginia's statewide health home for individuals with bipolar disease who are also at risk for hepatitis B and C, providers can opt to deliver services face to face or through telehealth modalities (CMS 2017d). West Virginia's Medicaid program covers the live interactive modality (WV DHHR 2017).

### **Individuals using home and community-based services.**

Some states also use telehealth to provide home- and community-based services (HCBS); for example, under a Section 1915(c) waiver, Kansas provides telehealth-delivered services to individuals age 65 and older who need an institutional level of care but who are living in the community (CMS 2016e). These individuals must also need disease management consultation and education (e.g., for chronic obstructive pulmonary disease, congestive heart failure, hypertension, or diabetes), have had two or more hospitalizations within the previous year related to one or more diseases, or be participating in the Money Follows the Person demonstration (CMS 2016e). Providers engage in RPM or disease management, including educating enrollees on the use of equipment; they provide ongoing health education, counseling, and nursing supervision (CMS 2016e). Providers have access to enrollees' baseline health data and vital sign measurements. Nurses monitor enrollee health status, send monthly status reports to their physician supervisors, and contact enrollees at least once a month about pertinent healthful behaviors. Nurses are responsible for determining whether a follow-up with a provider is needed. A 2010 tracking study of the Kansas frail elderly HCBS waiver found that RPM helped reduce emergency department use, inpatient hospitalizations, nursing facility placements, and health care costs (CGA 2015).

Under its HCBS waiver for individuals age 60 and over, Pennsylvania provides TeleCare to individuals over age 60 in need of a nursing level of care, and who meet other conditions, such as having been hospitalized in the past year, diagnosed with

depression or other mental health issues, and having used the emergency department in the past year. TeleCare can use wireless technology or a phone line for communication between the participant and provider for education and consultation, and collection of health-related data to help the provider assess the participant's health status (PA DOA 2009).<sup>19</sup>

**Individuals who are dually eligible for Medicaid and Medicare.** A few states—Michigan, New York, and Virginia—that participate in capitated models under the Financial Alignment Initiative have incorporated telehealth (ATA 2017). In Michigan's demonstration, an entity referred to as the Integrated Care Organization (ICO) is responsible for providing integrated benefits for dually eligible enrollees. ICOs must ensure that enrollees have access to all Medicaid and Medicare services, and they may contract with prepaid inpatient health plans for behavioral health services. The plans must provide for care delivered through telehealth and must ensure coordination with the ICO (CMS 2014a).

In New York, fully integrated duals advantage (FIDA) plans cover telehealth or telemonitoring and web- or phone-based technology for enrollees with conditions that require frequent monitoring and frequent services, and where the provision of telehealth services can appropriately reduce the need for on-site or in-office visits or acute long-term care facility admissions. Examples of eligible conditions include congestive heart failure, diabetes, chronic pulmonary obstructive disease, wound care, polypharmacy, behavioral health issues that limit self-management, and technology-dependent care such as continuous oxygen, ventilator care, total parenteral nutrition, or enteral feeding (CMS 2014b).

## Considerations for the Adoption of Telehealth

The use of telehealth in Medicaid has grown over the years as states have sought to reduce barriers to accessing care from providers who are in short supply or to eliminate the need to travel long distances for services. States may view telehealth as a strategy for reducing costs by eliminating the need for in-person encounters or to reduce the need for and use of more expensive services (e.g., inpatient hospital stays). States' ability to implement telehealth may also be affected by circumstances exogenous to Medicaid such as connectivity, technology, and provider licensure.

### Expected effects of using telehealth

Commonly cited benefits of telehealth are its potential to expand access to services in areas that might otherwise be underserved and to better integrate care. However, states will need to weigh the costs and resource requirements of using or implementing telehealth against their goals of improving access (Ahn et al. 2016). Easier patient access to services through telehealth delivery might lead to greater and more appropriate use of services, but it could also lead to inappropriate use or overuse of services (Rudin et al. 2014). For example, if a telehealth service replaces what would have been an in-person encounter and the state pays a facility or transmission fee, then the overall cost of the service could be greater with telehealth than it was when delivered face to face. States expanding or implementing new telehealth modalities must also develop payment rates and program rules. States must also consider effects on quality of care, such as the potential for fragmented care from different providers, duplication of services, patient safety concerns if telehealth providers are unable to obtain sufficient medical information, and preservation of patient-provider relationships (Ahn et al. 2016).

Evidence on the effectiveness and outcomes of telehealth is somewhat mixed, depending on factors



such as the modality, condition, clinical setting, or population studied. Some studies have found that telehealth is as effective as in-person care, while others have found that it does not always lead to improved health outcomes (Bashshur et al. 2014, Mehrotra 2014).

Few published studies address the effects of telehealth in Medicaid specifically. Some included Medicaid beneficiaries in their overall study population but did not distinguish them from those with other coverage (Daugherty Douglas et al. 2017). We identified only one study that used Medicaid claims data to look at utilization and the characteristics of telehealth users (Daugherty Douglas et al. 2017). The study found that telehealth was predominantly being used to treat individuals with mental health conditions, specifically bipolar and attention deficit or attention deficit hyperactivity disorders. Individuals living in rural areas were 17 times more likely to use telehealth compared to individuals in large metropolitan areas. The same study found that aged, blind, or disabled enrollees were four to six times more likely to use telehealth than adults or children who were not aged, blind, or disabled (Daugherty Douglas et al. 2017).

Some state-specific analyses suggest that telehealth programs in Medicaid reduce use of expensive services and provide cost savings (CGA 2015, ICCC 2012). For example, in addition to the evaluation of Kansas's use of RPM in its frail elderly HCBS waiver program noted above, an evaluation of Iowa's congestive heart failure disease management program that used remote patient monitoring found that overall costs to the Medicaid program shrank (ICCC 2012). The cost reductions were attributed to reductions in the number and length of hospital stays and payments for prescription drugs (ICCC 2012).

Findings from other research on RPM also suggest that the modality can be effective in reducing hospitalizations or length of stay, as well as in reducing spending (Bashshur et al. 2014, Baker et al. 2011). However, one systematic review suggested that, on measures such as quality and

cost effectiveness, findings were mixed, with some studies showing positive effects and others showing no impact (Bashshur et al. 2014).

A June 2016 review by the federal Agency for Healthcare Research and Quality (AHRQ) provides the most up-to-date assessment of systematic reviews of telehealth. AHRQ researchers assessed 58 systematic reviews on a range of modalities, settings, populations, and conditions to identify and describe the body of research evidence on telehealth, areas where research is insufficient, and suggested areas for future research.<sup>20</sup> The review concluded that RPM for patients with chronic diseases, communication and counseling for patients with chronic conditions, and psychotherapy are effective (AHRQ 2016).

AHRQ also reported on areas where there is promising evidence on telehealth's effectiveness, but for which they recommended systematic reviews: clinical consultation, use in intensive care units, and maternal and child health (AHRQ 2016). AHRQ noted that there is a need for more research in the following areas: triage for urgent and primary care, management of serious and chronic pediatric conditions, integration of behavioral and physical health, clinical outcomes for dermatology, and impact on cost and utilization (AHRQ 2016).

Research on telehealth can be challenging to interpret and findings of specific studies are not necessarily generalizable to other settings or populations (Mehrotra 2014). Studies have focused on a range of modalities, settings, populations, health conditions and severity levels, or outcome measures (AHRQ 2016, Bashshur et al. 2014, IOM 2012). Moreover, many of the available studies predate the implementation of delivery system reforms such as value-based purchasing and use of accountable care organizations. Given the movement toward these reforms, it would be worthwhile to understand the use of telehealth in these models as well as any effects on outcomes.

## Connectivity and technology

Because telehealth relies on the electronic transmission of data, video, and images, reliable and affordable broadband connectivity is crucial. However, some areas—such as rural areas and Indian reservations where access to care could be improved through use of telehealth—lack such connectivity (ASPE 2016). An estimated 53 percent of individuals living in rural areas lack access to broadband speeds needed to support telehealth (ASPE 2016). Moreover, when broadband is available in rural areas, its cost can be three times that in urban areas (ASPE 2016). Although the Federal Communications Commission and the U.S. Department of Agriculture have programs to facilitate expansion of broadband to rural areas, the required application, cost sharing, and process for obtaining the funds may prevent health care providers from accessing them (ASPE 2016). In addition, there are likely to be costs associated with the acquisition, installation, maintenance, repair, and replacement of front-end technology needed to establish telehealth as a way of delivering services. However, not all states provide payment for these costs, which may be prohibitive and thus affect providers' ability or willingness to adopt telehealth.

## Licensure

Provider licensure is the purview of states. Policies vary and may pose barriers to telehealth adoption and use (CCHP 2017a, ASPE 2016). For example, 48 states and the District of Columbia require that physicians providing telehealth be licensed in the state in which the patient lives (FSMB 2017). Although some providers are licensed in more than one state, those that are not may find the cost and administrative burden related to obtaining multiple state licenses prohibitive, and they may be deterred from using telehealth (ASPE 2016, CCHP 2016b). Some states allow telehealth providers to obtain a temporary license; others have licenses specific to telehealth or have reciprocity agreements with other states (CCHP 2017a, NCSL 2015).

Multistate compacts for physicians, psychologists, physical therapists, and nurses enable providers in participating states to practice across state lines more easily, by creating expedited state licensing pathways (IMLC 2017, NCSL 2015). These compacts are intended to facilitate use of telehealth as well as more broadly increase access to care.<sup>21</sup> The agreement applicable to physicians is called the Interstate Medical Licensure Compact. To date, 22 states have enacted a physician compact, and 4 more have introduced model compact legislation (IMLC 2017).

## Other considerations

There are numerous other considerations associated with the use of telehealth in Medicaid and its use generally. Some are described below.

**Privacy rules.** The Health Insurance Portability and Accountability Act of 1996 (HIPAA, P.L. 104-191) and the confidentiality regulations governing SUD treatment information (42 CFR Part 2) do not have telehealth-specific requirements; thus telehealth providers must adhere to the same privacy requirements and standards that would have applied if the services were provided in person (CCHP 2016b, NCSL 2015, Molfenter et al. 2015). However, there may be additional privacy considerations when care is delivered via telehealth that could impede use of telehealth (CCHP 2016b). For example, providers may require technological support services during a visit using telehealth, which could mean that such support staff may be exposed to patients' personal health information. The use of mobile technologies for sending health information can also pose confidentiality concerns.

**Prescribing.** State rules on prescribing via telehealth vary, ranging from more to less specific to silent (CCHP 2017a, NCSL 2015). One patient safety concern related to prescribing is whether the interaction via telehealth is enough to ensure that providers have sufficient medical history or information to safely prescribe medication (CCHP 2016b, NCSL 2015). There is some agreement that providers should be able to prescribe via telehealth

just as they would prescribe during a face-to-face visit, provided that the provider-patient relationship has been established (NCSL 2015).

States generally determine how medications are prescribed via telehealth. In the case of controlled substances, however, there is a federal floor for requirements and limitations established by the Ryan Haight Online Pharmacy Consumer Protection Act of 2008 (P.L. 110–425).<sup>22</sup> The law generally prohibits prescribing of controlled substances through the Internet without a valid prescription, which requires the prescriber to have conducted at least one in-person medical evaluation of the patient. It exempts telehealth providers from this requirement under a limited set of circumstances. This includes situations when the patient’s originating site is a Drug Enforcement Administration (DEA)-registered clinic or hospital (21 CFR Part 1300).<sup>23</sup> Some observers have raised concerns that this requirement can restrict the physician’s ability to deliver appropriate care if, for example, a psychiatrist has a teleconsulting relationship with a clinic that is not DEA-registered, or the patient being seen via telehealth is located at home (ATA 2015, Baney 2015).

In 2015, the DEA announced plans to issue regulations to establish a telehealth registration process that could potentially enable more providers to prescribe medications via telehealth encounters, without needing to meet the in-person evaluation prerequisite (DEA 2015). As of December 2017, no such regulation had been issued. On October 26, 2017, the HHS Acting Secretary, at the request of the President, declared a nationwide public health emergency to address the opioid crisis, and stated the intent to work with the DEA to expand access for certain patients to SUD treatment via telemedicine (HHS 2017). However, no additional details on these efforts were released. The original declaration was set to expire on January 23, 2018 but has since been extended through April (HHS 2018).

States and licensing boards may also limit the circumstances under which a provider can prescribe

a controlled substance via telehealth; they may restrict the types of controlled substances that can be prescribed or require an initial in-person assessment or treatment plan (Yood and Krauss, 2017).

**Informed consent.** Although there is no federal requirement for informed consent for telehealth, 28 states and the District of Columbia do have such requirements (CCHP 2017a). Requirements vary by state, including whether they are applicable to Medicaid or to telehealth in the state generally, if they apply to certain specialty services only, and whether consent must be provided in writing or if oral consent is acceptable (CCHP 2017a). With informed consent, providers explain to patients what telehealth is; how it is used; its benefits, risks, and limitations; and alternatives to telehealth. Examples of risks and alternatives include technological glitches or delays in care and the need for in-person visits in addition to telehealth, depending on the specific circumstances of the patient’s condition (NCSL 2015).

**Operational challenges for providers.** Providers, too, may face challenges in implementing telehealth. For example, providers may not understand what it is or how to use the technologies (Martin et al. 2016, Glassman 2012, Friction and Chen 2009). Such problems can be resolved with education and experience. Close coordination between providers at originating and distant sites (e.g., correctly scheduling appointments at both sites) and development of trust and rapport is important for smooth telehealth encounters (Friction and Chen 2009).

## Looking Ahead

This chapter highlights the growing use of telehealth by states in delivering Medicaid-covered services to beneficiaries. With few federal restrictions, states have flexibility in design and adoption of telehealth coverage. As a result, use of telehealth in Medicaid varies across states, but there are some common themes.

First, state coverage of telehealth in Medicaid is dynamic. Over time, states have expanded coverage for telehealth and further expansions of coverage to new modalities, services, or specialties are likely. In addition, ongoing advances in technology could lead to new opportunities for telehealth. As states consider how to improve access to care, they may consider a greater role for telehealth particularly in areas such as behavioral health or chronic disease management where the evidence of its effectiveness is relatively strong.

Second, there is much still to be learned about beneficiary, provider, and state experience with telehealth in Medicaid. For example, there is little information about outcomes and effectiveness, cost, or program integrity issues related to Medicaid coverage of telehealth-provided services. Existing research and data on the use of some telehealth modalities for different health or clinical conditions or populations has not focused on Medicaid populations or programs. Moreover, findings have been inconclusive concerning telehealth's effectiveness.

Third, there are few federal Medicaid barriers to the use of telehealth; however, numerous other factors may play into policies adopted by states or their ability to leverage telehealth. These factors affect use of telehealth by other payers as well. For example, access to technology and the broadband services required for telehealth can pose a challenge to some of the communities for which telehealth might be most beneficial. Examples of other commonly cited barriers to telehealth include licensure and ensuring privacy and security of personal information.

Fourth, although telehealth might address some of the access issues in Medicaid, it will not address all of them. For example, telehealth can address geographic access barriers and make it easier or more convenient for beneficiaries to see a provider who already cares for Medicaid enrollees, but it will not guarantee a change in overall provider willingness to participate in Medicaid or issues such

as the lack of convenient office hours and available appointment times.

Finally, states seeking to implement or expand coverage of telehealth would likely benefit from additional research as well as from the experiences of other states. Shared state insights can also help other states, providers, health plans, and the research community gain a more robust understanding of the effects of telehealth on access to care, quality, and cost of care for the Medicaid population.

## Endnotes

<sup>1</sup> For the purpose of Medicaid, the Centers for Medicare & Medicaid Services (CMS) describes telemedicine as “a cost-effective method of providing medical care through use of two-way, real-time interactive telecommunication, including the use of at least audio and video equipment, between Medicaid enrollees and a provider at a distant site” (CMS 2017a).

<sup>2</sup> Additionally, technologies may be supported by digital diagnostic medical device peripherals including otoscopes, pulse oximeters, glucometers, stethoscopes, and blood pressure cuffs.

<sup>3</sup> The rule was issued in 2016 to implement requirements made by the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) and the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA, P.L. 114-10). Under the requirements, physicians and other practitioners must document the occurrence of a face-to-face encounter with the Medicaid beneficiary within a reasonable timeframe (CMS 2016a).

<sup>4</sup> Distance standards require a minimum distance between the originating and distant sites as a condition of coverage.

<sup>5</sup> Historically, the telehealth modifiers used by Medicare and some states were the GT modifier to indicate “via interactive audio and video telecommunications systems” and the GQ modifier to indicate “via an asynchronous telecommunications system,” such as for remote patient monitoring (CMS 2016b). Effective January 2017, CMS developed a new place of service (POS) code, 02, for

providers providing telehealth at the distant site. POS codes are used for claiming in Medicare and Medicaid (CMS 2016c). In addition, some state Medicaid programs are adopting the American Medical Association's new 95 modifier that other payers use with certain Current Procedural Terminology® codes to indicate real time, synchronous telehealth (CCHP 2017a).

<sup>6</sup> These states are Connecticut, Florida, Hawaii, Iowa, Kansas, Louisiana, Maine, Massachusetts, Mississippi, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Tennessee, Utah, and Vermont (ATA 2017).

<sup>7</sup> The state's policy refers to hub and spoke sites, with the hub being the distant site, and the spoke being the originating site.

<sup>8</sup> In addition to the applications described in this section, there are numerous other applications for telehealth in Medicaid, such as telestroke and teleintensive care units.

<sup>9</sup> Patient telephone consultations must comply with Oregon's Health Evidence Review Commission practice guidelines (OR HA 2017).

<sup>10</sup> Over a 26-month period, the Wyoming initiative substantially reduced the number of preschool-age children using psychotropic medications (Hilt 2015).

<sup>11</sup> In 2017, Medicare began paying for this care model using a code to cover the initial patient assessment and a second bundled code for ongoing monthly collaborative care management, with the possibility of a third add-on for more time-intensive management. It is billed by the primary care provider, and covers both the care manager and psychiatric specialist engagement (CMS 2017c).

<sup>12</sup> Washington implemented the model in a network of FQHCs and community behavioral health centers. Washington has submitted a state plan amendment seeking approval to pay broadly for this model's services under the new collaborative care model codes beginning in 2018 (WA HCA 2017).

<sup>13</sup> In Medicaid, states must provide comprehensive dental services to children; such services are optional for adults.

<sup>14</sup> Arizona's policy manual on telehealth says that the

state covers teledentistry for individuals covered by early and periodic screening, diagnostic, and treatment (EPSDT) services (AHCCCS 2016).

<sup>15</sup> Examples of conditions that general dentists may not feel adequately trained to treat include orofacial disorders such as oral cancer, temporomandibular disorders, and oromucosal disease (Friction and Chen 2009).

<sup>16</sup> High-risk pregnancies can occur for a number of reasons; for example, when a woman has diabetes, hypertensive disorders, or cervical insufficiency; a previous history of preterm birth; is pregnant with multiples; or her fetus has suspected anomalies. Women with such conditions usually need to be seen by an obstetrician-gynecologist more frequently than those with low-risk pregnancies and may require the expertise of an MFM specialist (Marcin et al. 2016, Stover 2015). Complications during and immediately after birth can also occur unexpectedly, potentially necessitating the involvement of a specialist.

<sup>17</sup> ANGELS also includes a 24-hour call center service for provider access to obstetrical and neonatal telehealth consultations, specialist participation via videoconference in neonatal and obstetrical rounds in other hospitals, and interactive video education conferences for obstetrics and pediatrics (UAMS 2017).

<sup>18</sup> The extent to which telehealth services are being used in health homes is unclear. The federal annual evaluation reports, which focus on required core quality measures and other outcome measures, do not specifically address the use of telehealth.

<sup>19</sup> TeleCare services are specified by the service plan and may include the following: (1) health status measuring and monitoring for collecting vital signs information, such as blood oxygen levels and blood pressure; (2) activity and sensor monitoring for passively tracking participants' daily routines, such as wake up times, overnight bathroom usage, bathroom falls, medication usage, meal preparation, and room temperature; and (3) medication dispensing and monitoring, which utilizes a remote monitoring system personally pre-programmed for each participant to dispense, monitor compliance, and provide notification to the provider or family caregiver of missed doses or non-compliance with medication therapy (PA DOA 2017).

<sup>20</sup> Half of studies looked at more than one telehealth technology, 29 percent at asynchronous technology (including RPM), 17 percent at videoconferencing, and 4 percent at mobile technologies. Studies looked at clinical outcomes, and to a lesser extent, use of services or cost (AHRQ 2016).

<sup>21</sup> The Federation of State Medical Boards has developed a model interstate licensure compact that would allow states to offer a streamlined licensure process for physicians seeking to practice in multiple states. Although it is not specific to telehealth, increasing access to telehealth was a goal in its development (NCSL 2015). Under the Nurse Licensure Compact, the nurse license from one state is recognized in compact member states (CCHP 2016b, NCSL 2015). The Association of State and Provincial Psychology Boards, in 2015, approved a similar approach for psychologists called PSYPACT. The compact will become operational once seven states enact legislation to enter into it. As of September 2017, three states have passed such legislation (ASPPB 2017). The Federation of State Boards of Physical Therapy developed an interstate licensure compact for physical therapy and as of January 9, 2018, 14 states have enacted compact legislation (FSBPT 2018).

<sup>22</sup> The Ryan Haight Online Pharmacy Consumer Protection Act of 2008 (P.L. 110–425) was passed to eliminate illegitimate online pharmacies selling controlled substances without any patient contact or physician oversight.

<sup>23</sup> DEA registration requirements are described in 21 CFR Part 1301.

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