

Broadband and Telemedicine

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Research Highlights

The use of telehealth has grown since the COVID-19 pandemic.

Certain uses of telemedicine (e.g., monitoring asthma, chronic heart failure, and opioid use disorder) are as effective as in-person options.

Since 2020, all states have required some form of coverage for telehealth options through Medicaid or private payers.

Telemedicine benefits patients in certain cases

Telehealth, sometimes called telemedicine, refers to health services provided over distance ([HHS 2023](#)). Common telemedicine interventions include ([WHO 2018](#)):

- Remote consultation between a patient and provider
- Remote health monitoring and diagnosis
- Transmission of medical data between patient and providers

- Consultation between providers

Telemedicine improves patient satisfaction and increases access to care in areas with healthcare provider shortages, reduces costs, and reduces unnecessary emergency room visits ([MO DHSS 2023](#), [Penn Medicine 2020](#)).

- During the first three months of the COVID-19 pandemic, telehealth visits increased 766% ([Shaver 2022](#)).

MO has provided telehealth for 25 years through all major state health systems.

Patient travel and cost savings: Telemedicine visits, compared to in-person visits, can reduce barriers to health care.

- A University of California telehealth system focused on rural populations saved patients on average 139 miles of travel, 123 minutes of travel and \$78 in travel costs per consultation ([Dullet 2017](#)).
- Patients may save money on the cost of care, particularly when expensive alternatives can be avoided, such as visiting an emergency room to seek medical advice ([Nord 2019](#), [Michaud 2018](#)).

Quality of Care: Telehealth can be as effective as in-person options for the treatment of some chronic conditions, including asthma, chronic heart failure, and opioid use disorder ([Shaver 2022](#)).

- Telemedicine can connect isolated providers to improve patient outcomes. The [Show-Me ECHO](#) (Extension for Community Healthcare Outcomes) Project, led by the Missouri Telehealth Network, connects isolated primary care providers to share evidence-based practices and improve patient outcomes ([Becevic 2020](#)).
- Direct-to-consumer telemedicine (on-demand healthcare that may be with a physician the patient has no previous relationship with) can be associated with lower quality care, including over-prescription of antibiotics ([Ray 2019](#), [Uscher-Pines 2016](#)).
- Telehealth is not appropriate when a hands-on physical examination would yield crucial data ([American Medical Association](#)).

Communities without high-speed internet could benefit the most from telemedicine.

A third of Missourians live in rural areas, where access to both physicians and broadband are more limited than in urban areas ([MO DHSS 2023](#)).

- Rural MO counties are more likely to lack adequate internet access; 28 rural counties have more than 25% of households without adequate internet ([MO DHSS 2023](#)).
- In urban areas, the elderly, underinsured, and minority patients are less likely to live in areas with high internet connectivity ([Perzynski 2017](#)).

The [Missouri Office of Broadband Development](#) was tasked with equitably expanding broadband access to rural areas of the state.

States expanded access to telehealth during the COVID-19 pandemic.

All states allow for Medicaid reimbursement for live video telehealth services ([NCSL 2021](#), **Figure 1**). The types of telehealth services and providers covered by Medicaid differ by state. MO and at least 43 states have private payer policies that include coverage for telehealth visits ([RSMO 376.1900](#), [NCSL 2021](#)).

Some states passed payment parity laws during the COVID-19 pandemic that required telehealth be reimbursed at the same rate as in-person visits; several states have allowed parity rules to expire at the end of the declared public health emergency ([NASHP 2021](#)).

- In MO, telemedicine visits must be reimbursed at the same rate as in-person visits ([RSMO 376.1900](#)).
- To alleviate rising healthcare costs and protect consumers, MO and other states prohibit additional fees for telehealth visits ([RSMO 376.1900](#), [NCSL 2023a](#)).

Most states allow interstate licensure compacts to help alleviate healthcare workforce labor shortages ([NCSL 2023b](#)). In states that participate in interstate licensure compacts, practitioners can see patients across state lines in other compact states, by in-person visits or via telehealth appointments.

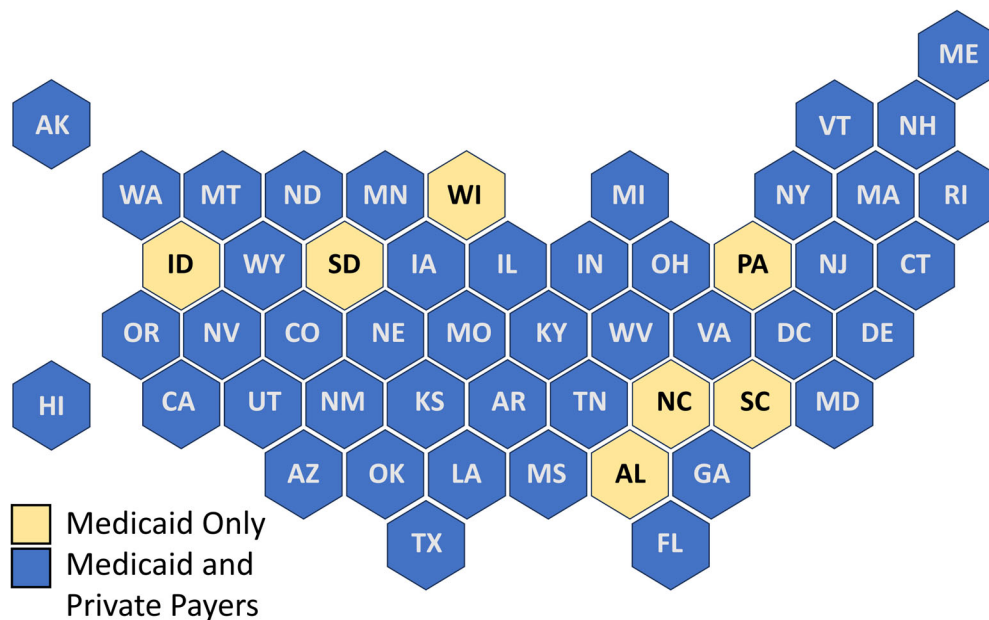


Figure 1. Map of state’s telehealth reimbursement policies. Figure adapted from NSCL 2021.

For more information on topics discussed in this note see our Science Notes [Health Outcomes of Telehealth](#), [Broadband Deployment](#), [Wireless Internet Speeds](#), [Broadband Availability Mapping](#), and [Interstate Medical Licensure Compacts](#).

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