

Telemedicine is the practice of medicine including diagnosis, consultation, treatment and prevention using patient information shared via telecommunications technology.

Telehealth describes all remote exchange of patient health information via telecommunications technology, but does not always include clinical services

Synchronous refers to interactive connections that transmit information between providers or providers and patients during the same time period.

Asynchronous refers to non-simultaneous sharing and analysis of information via **remote patient monitoring** of patient health data (e.g. blood glucose levels, heart rate) outside a clinical setting, and **store and forward** technology which allows digital medical images to be reviewed at another time (e.g. photos of skin or eye conditions, x-rays).

Originating site is the location of the patient at the time the service being provided via a telecommunications system occurs.

Distant site is the site at which the physician or other licensed practitioner delivering the service is located at the time the service is provided via telecommunications system.

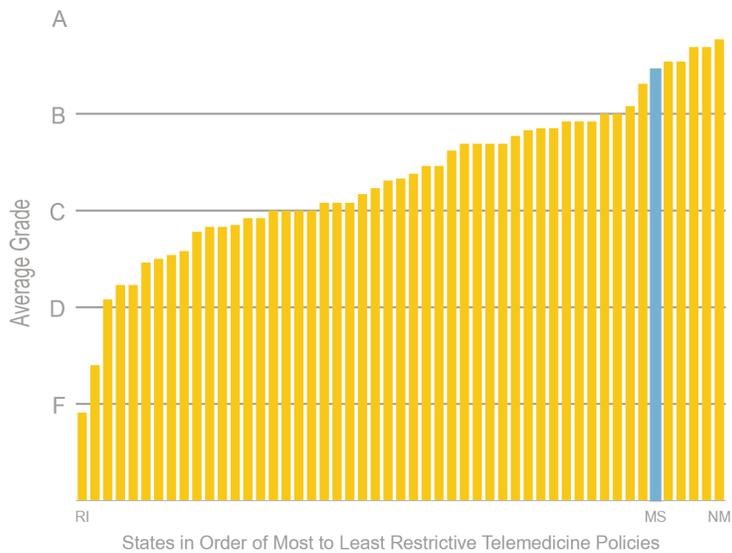
Direct to Consumer telemedicine services are accessed by patients outside of traditional clinical settings such as at home or at work at the patient's convenience.

Source: American Telemedicine Association. Telemedicine Glossary. (2016).

Mississippi has been an early adopter of telemedicine beginning in 2003 with the introduction of real-time, tele-emergency service connecting trauma clinicians at the University of Mississippi Medical Center with rural emergency departments throughout the state. Mississippi continues to be a national leader in the adoption and innovative application of telemedicine. This issue brief describes the current state of telemedicine in Mississippi and potential policy considerations.

Mississippi has fewer physicians per capita than any other state. Shortages in some specialties are particularly acute. Limited numbers and availability of healthcare providers (i.e. long waits for appointments) are barriers to appropriate and timely access to healthcare. Mississippi, however, has been a leader in the use of telemedicine to address access problems. While telemedicine may improve access, the quickly evolving technology is disruptive to traditional routes to care and has raised questions about what boundaries should be set to ensure quality and safety for patients.

FIGURE 1. AVERAGE STATE GRADES IN ADOPTION OF TELEMEDICINE POLICY, 2016



Source: Calculated from data provided by the American Telemedicine Association. (2016)

Insurance Coverage

Mississippi is one of twenty states requiring that private insurers and Medicaid pay for medically necessary telemedicine services at the same rate as services provided in an in-person office visit. This reimbursement parity encourages broader adoption of telemedicine.

MS CODE 83-9-351 (2) HEALTH INSURANCE PLANS IN MISSISSIPPI TO PROVIDE COVERAGE FOR TELEMEDICINE SERVICES

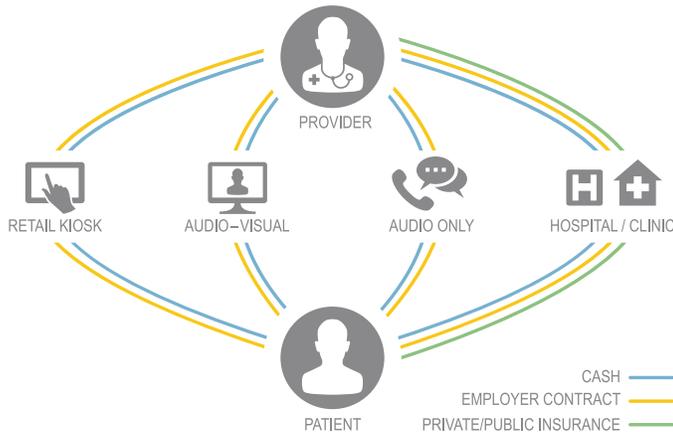
All health insurance and employee benefit plans in this state must provide coverage for telemedicine services to the same extent that the services would be covered if they were provided through in-person consultation.

Telemedicine presenters “present” the patient, manage the cameras and perform any hands-on activities to complete the tele-exam successfully at the originating site to support providers at the distant site. A presenter must have a clinical background (e.g. LPN, RN, etc.) and be trained in the use of telehealth equipment.

Source: American Telemedicine Association. Telemedicine Glossary. (2016).

Mississippians are currently able to access telemedicine services through employment-based arrangements with commercial telemedicine providers, direct-to-consumer platforms, traditional medical facilities, and from diverse settings including work, home, or kiosks in retail locations, but not all of these venues will qualify for payment under public or private health insurance (see Figure 2). Some are paid for by the employer or by the consumer directly.

FIGURE 2. ACCESS AND PAYMENT METHODS FOR TELEMEDICINE SERVICES IN MISSISSIPPI



Mississippi Medicaid covers visits conducted via live, interactive audio-visual telemedicine technology when facilitated by certain telemedicine presenters (i.e. physicians, nurse practitioners, etc.) in designated clinical settings. Remote monitoring and store and forward technology are also covered for disease management programs. Medicare covers services delivered via telemedicine in designated sites in specified Health Professional Shortage Areas.

Effectiveness

IMPROVED HEALTH AND REDUCED COST FOR REMOTELY-MONITORED PATIENTS WITH DIABETES IN THE MS DELTA

Clinicians at the University of Mississippi Medical Center (UMMC) remotely monitored 180 patients with uncontrolled diabetes living in the Mississippi Delta. Preliminary data after six months from the first 100 patients resulted in reductions in hospitalizations and ER visits (zero in six months), patient travel (over 9,400 miles) and healthcare costs (by \$339,000).

Based on these results, UMMC projects that as much as \$180 million may be saved with telehealth interventions targeting just 20% of Mississippians with diabetes.

Source: The Center for Telehealth at the University of Mississippi Medical Center. (2016).

Clinical studies have compared outcomes of patients who access care via telemedicine with those of patients who received in-person care; findings suggest no significant difference in outcomes for patients seen via telemedicine. Neurological care, treatment of chronic heart failure, and tele-dermatology facilitated by telemedicine have yielded equivalent outcomes, and, in the case of heart failure, reduced hospitalizations.

Beyond episodic care for acute conditions, evidence suggests that telemedicine may result in longer-term improvements in health and reduced costs to patients and payers through the reduction of preventable hospitalizations. Chronic conditions such as diabetes, chronic obstructive pulmonary disease, and heart failure are currently being managed for more than 150,000 veterans nationally via remote patient monitoring and internet-based care coordination by the Veteran’s Health Administration (VHA) at an estimated savings of \$6,500 annually per telemedicine patient.

A few studies point to the potential for negative effects such as over-testing or over-prescription of antibiotics. More study into these potential negative effects is necessary as study results to date have been inconclusive.

Key Issues

MS CODE §41-3-15 (4)(J) GENERAL POWERS AND DUTIES OF STATE BOARD OF HEALTH

The State Board of Health shall have authority:
...to promulgate rules and regulations, and to collect data and information, on (i) the delivery of services through the practice of telemedicine; and (ii) the use of electronic records for the delivery of telemedicine services.

MS CODE §73-25-34 TELEMEDICINE; LICENSING REQUIREMENTS FOR PRACTICING MEDICINE ACROSS STATE LINES

...no person shall engage in the practice of medicine across state lines (telemedicine) in this state...unless he has first obtained a license to do so from the State Board of Medical Licensure and has met all educational and licensure requirements as determined by the State Board of Medical Licensure.

MS CODE §41-127-1- LICENSED HEALTH CARE PRACTITIONERS AUTHORIZED TO PROVIDE HEALTH CARE SERVICES VIA ELECTRONIC MEANS

...a health care practitioner licensed in this state may prescribe, dispense, or administer drugs or medical supplies, or otherwise provide treatment recommendations to a patient after having performed an appropriate examination of the patient either in person or by the use of instrumentation and diagnostic equipment through which images and medical records may be transmitted electronically. Treatment recommendations made via electronic means, including issuing a prescription via electronic means, shall be held to the same standards of appropriate practice as those in traditional provider-patient settings.

Policy Considerations

MS CODE § 83-9-351 (1)(D)- HEALTH INSURANCE PLANS IN MISSISSIPPI TO PROVIDE COVERAGE FOR TELEMEDICINE SERVICES; DEFINITIONS

“Telemedicine” means the delivery of health care services such as diagnosis, consultation, or treatment through the use of interactive audio, video, or other electronic media. Telemedicine must be “real-time” consultation, and it does not include the use of audio-only telephone, e-mail, or facsimile.

Utilization

Wider adoption of telemedicine is expected to spur an increase in total utilization of services as persons with previously unmet medical needs are able to more easily access care. While this spike in utilization would increase costs for insurers in the short-term, there is potential for significant longer-term savings due to more timely treatment of conditions.

Privacy and Security

Telemedicine providers are covered entities under the Health Insurance Portability and Accountability Act (HIPAA) and the Health Information Technology for Economic and Clinical Health Act (HITECH), and are subject to laws and regulations providing for security of personally identifiable health information that is collected, stored, and transmitted in the course of medical treatment.

Licensure

Mississippi law (§41-127-1), holds any medical treatment delivered electronically to the same standards of practice as those in traditional, provider-patient settings, including licensure. In Mississippi law, the location of the patient is where telemedicine is deemed to be practiced. A physician in a remote location must be licensed in the state in order to practice on its residents. In 2016, Mississippi lawmakers joined the state to the Interstate Medical Licensure Compact (MS Code §73-25-101) which eases the process for physicians in Compact states to become licensed to practice telemedicine remotely on Mississippi patients; likewise, appropriately licensed Mississippi providers may more easily provide telemedicine to residents of the other Compact states. A total of 17 states have joined the Compact, which will go into effect in 2017.

Physician-Patient Relationship

Concerns have been raised about the impact of telemedicine on the physician-patient relationship. Physicians’ offices maintain patient medical records and health histories important for managing the ongoing health condition of patients. Consistent treatment from a regular provider also engenders trust in patients. Internet-based and retail providers of telemedicine used for convenience cannot ensure the same provider is available for multiple encounters, and these providers may not have the benefit of a patient’s complete medical history. Conversely, telemedicine provides access to healthcare for patients with no regular primary care provider.

Audio-Only

Teleconferencing without visual contact between patient and provider is referred to as audio-only. Mississippi laws regulating health insurance coverage for telemedicine services explicitly exclude audio-only telephone service from consideration as telemedicine. Mississippi Medicaid, Medicare, and many insurers limit reimbursement for telemedicine services to live, interactive, and audio-visual technologies. Alaska and Maine allow for reimbursement of audio-only services, but only in extraordinary circumstances, while other states’ laws either explicitly exclude audio-only or remain silent on the issue. Many in the medical community are concerned that appropriate

standards of care may not be met in audio-only encounters. However, policies that exclude coverage for audio-only service may unintentionally restrict patient access to on-demand, cash-only sources of telemedicine.

Schools as Sites of Service

Studies have documented the effectiveness and potential cost reductions of telemedicine delivered in school settings. Mississippi schools that have a designated school-based clinic with a school nurse and supported by an appropriately credentialed telemedicine presenter (i.e. nurse practitioner, physician, etc.) may qualify for Medicaid payment as an originating site for telemedicine services. A number of schools in Mississippi have designated school-based clinics with school nurses who conduct child health screenings, however, they are not equipped for telemedicine services. Therefore, few schools currently qualify as an originating site for Medicaid payment for telemedicine services. Nurse staffing and site-designation barriers must be overcome if Mississippi is to see widespread, sustainable adoption of telemedicine in schools. Efforts are underway to devise a solution to enable more students access to needed healthcare services via telemedicine in schools, and policy changes may be required to implement a workable solution.

SCHOOL NURSES IN MISSISSIPPI



Source: Mississippi Department of Education.
Office of Healthy Schools. (2015)

Summary

As the healthcare industry shifts rapidly due to evolving technologies and consumer expectations, providing quality health care that meets the needs of an on-demand population will be challenging. Policies need to achieve a balance between progressive measures designed to meet growing demands for new technologies with intentionally cautious measures that will assure high quality standards of care. Mindful adoption of telemedicine policies is critical to ensuring that the new technologies help the state reach this goal and meet Mississippians' complex health needs.

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