

Position Statement on TELEMEDICINE/TELEHEALTH

Background

In 1996, the Institute of Medicine (IOM) published the report “Telemedicine: A Guide to Assessing Telecommunications for Health Care,” where telemedicine was defined as “*the use of electronic information and communications technologies to provide and support health care when distance separates participants.*” There are currently three broad categories of telemedicine technologies: store-and-forward, remote monitoring and (real-time) interactive services — demonstrating that since the release of the IOM report, the definitions of telemedicine and telehealth have continued to evolve, and further change is certain.

Neurological surgery is a high-acuity specialty with a limited number of practitioners. As a result, urgent or emergent transfer of patients to tertiary hospitals with continuous neurosurgical coverage is frequently required. Transfers may be affected for consultation due to the natural risk aversion of non-specialist physicians who may be faced with a neurosurgical condition and feel ill-equipped to assess the patient or offer treatment. Neurosurgical providers are not evenly geographically distributed, which can place a significant travel burden on patients, especially those with non-urgent issues. The disparity between the availability of neurosurgical services and the time-sensitive nature of neurosurgical conditions has led to an interest in using electronic technologies to overcome these challenges.

The COVID-19 pandemic significantly altered the delivery and utilization of health care and resulted in a significant increase in the use of telemedicine. A 2021 survey conducted by the Council of State Neurosurgical Societies in collaboration with the AANS/CNS Washington Committee found that most neurosurgeons in the U.S. began using telehealth during the pandemic, and over 95% believed telehealth improved patient access to care. Nearly half of the respondents also reported using telehealth to evaluate both new and established patients who were located in different states, and 90% believed that the ability to evaluate patients across state lines was beneficial. While telemedicine services have a clear benefit, many respondents cited concerns about the neurological exam, reimbursement and security.

AANS/CNS Position Statement

The timely, effectual and high-quality delivery of neurosurgical care remains the paramount mission of neurosurgeons and their neuroscience colleagues. Through the adoption of advances in telemedicine and telehealth technology, access to high-quality neurosurgical services can be expanded to patients across our nation’s fifty states, territories and the District of Columbia, regardless of location. In addition, a critical part of this expansion is fair and equitable reimbursement for telemedicine and telehealth services across all public and private payers. Deploying neurosurgery services via telemedicine and telehealth allows more patients to receive timely intervention and facilitates better care coordination. The AANS and the CNS support the appropriate use of telemedicine and telehealth technologies to maintain our high-quality standards of care in neurosurgery, as well as the use of streamlined state medical license processes, development of comprehensive malpractice insurance programs, and other necessary tools that would support the efficient adoption of telemedicine and telehealth technologies in neurosurgery.

Rationale

Definitions

Definition (Adopted from the Federation of State Medical Boards): “Telemedicine” means the practice of medicine using electronic communications, information technology or other means between a licensee in one location and a patient in another location with or without an intervening health care provider. Generally, telemedicine is not an e-mail/instant messaging conversation or fax. It typically involves the application of secure video conferencing or store and forward technology to provide or support health care delivery by replicating the interaction of a traditional in-person encounter between a provider and a patient. Telemedicine may include audio-only communication, such as a telephone call, but is reserved as a substitute for interactive modality with patient permission or request.

“Telemedicine Technologies” means technologies and devices enabling secure electronic communication and information exchange between a licensee in one location and a patient in another location with or without an intervening health care provider. Telemedicine visits are usually facilitated via synchronous (real-time) or asynchronous (store & forward, passive monitoring, or active electronic communications and information exchange) between a licensee in one location and a patient in another location with or without an intervening health care provider.

Alternate Definition (Adopted from the American Telemedicine Association): “Telehealth” is a mode of delivering healthcare services through the use of telecommunications technologies, including, but not limited to, asynchronous and synchronous technology and remote patient monitoring technology, delivered by a health care practitioner to a patient or another practitioner at a different physical location than the healthcare practitioner.

Live-and-interactive Telemedicine: Live interactive telemedicine care delivery uses video conferencing as its core technology. Participants are separated by distance but interact in real time. By convention, the site where the patient is located is referred to as the originating site, and the site where the consultant is located is known as the distant site.

Store-and-forward Telemedicine: Refers to providing asynchronous consultations to referring providers or patients. A history and a set of images are collected at the point of care and transmitted for review by the consultant. In turn, the consultant provides a consultative report back to the referring provider or patient at the point of care. Store-and-forward telemedicine is used in several settings: teleradiology, teleconsultation and patient-initiated consultation requests.

Remote Patient Monitoring: Involves the use of either synchronous or asynchronous electronic information and communication technology to collect personal health information and medical data, such as patient’s vital signs or biometric data, from a patient in one location and the licensee in another site for the treatment and management of medical conditions that require frequent monitoring.

Different models for telehealth delivery include the direct-patient-care-model (provider to patient) and teleradiology or teleconsultation models (provider to provider).

Principles

Where an existing physician-patient relationship is not present, a physician should take the appropriate steps to establish a physician-patient relationship consistent with the following principles:

- Physicians and other health practitioners delivering telemedicine services must abide by state licensure and state medical practice laws and requirements, including the Federation of State

Medical Boards' (FSMB) Interstate Medical Licensure Compact ("interstate licensure compact"), where applicable.

- There should be reasonable provisions for choosing a provider should circumstances allow. Patients should be informed about the licensure and board certification qualifications of the health care practitioners providing the care before their encounter when possible.
- A documented medical evaluation and collection of relevant clinical history commensurate with the presentation of the patient to establish diagnoses and identify underlying conditions and/or contraindications to the treatment recommended/provided must be obtained before providing treatment — including issuing prescriptions — electronically or otherwise.
- Treatment and consultation recommendations made online — including issuing a prescription via electronic means — will be held to the same standards of appropriate practice as those in traditional (encounter in person) settings.
- The standards and scope of telemedicine services should follow evidence-based practice patterns to ensure patient safety, quality of care, and positive health outcomes and should follow current ethical guidelines.
- Appropriate patient informed consent should include the use of telemedicine technologies to notify the patient of the proposed manner of diagnosis and treatment and disclose any anticipated limitations in drug prescribing via telemedicine. Additionally, patient informed consent should include the identification of the patient and physician in advance of the delivery of the service, as well as patient cost-sharing responsibilities.
- Documentation of telemedicine services should ensure continuity of care. Systems that deliver telemedicine services must establish protocols for appropriate referrals for emergency services or non-urgent follow-up and provisions for interruptions of the ongoing delivery of telemedicine technologies.
- Certain barriers to access, including language and literacy gaps, access to broadband internet, and coverage and payment of telemedicine services, should be eliminated or reduced.

Reimbursement

The increased use of telemedicine during the COVID-19 pandemic was accompanied by temporary payment accommodations by Medicare and Medicaid, allowing reimbursement for remote services. During the COVID-19 public health emergency (PHE) declaration, any health care provider eligible to bill Medicare can bill for telehealth services regardless of where the patient or provider is located. As of March 2020, more than 100 telehealth services are covered under Medicare. When billing telehealth claims for services delivered on or after January 1, 2022, place of service codes and modifiers to indicate delivery of service via telehealth must be used. However, some CPT® and HCPCS codes are only covered until December 2024, as authorized by the *Consolidated Appropriations Act, 2023*. The AANS and the CNS support a permanent expansion of reimbursement for telehealth services and further support parity in payment, including private insurers, to cover telemedicine-provided services comparable to in-person services.

Before the COVID-19 pandemic, coverage of and payment for telemedicine services varied widely. The passage of the Balanced Budget Act of 1997 and the Telemedicine Communications Act of 1996 enabled payment for professional telemedicine consultation in 1999. Medicare would reimburse for live-interactive consultations, office visits, individual psychotherapy and pharmacologic management

delivered via a telecommunications system for patients in non-metropolitan statistical areas. This includes nearly all rural counties. A definition and listing of qualified areas are available via U.S. Census data at <https://www.census.gov/programs-surveys/metro-micro/data/tools.html>. However, there is no limitation on the location of the health professional delivering the medical service.

Private insurers vary in their policies, but most will reimburse services provided to patients in rural areas. It is recommended that the provider writes a letter of intent to the insurer informing them that the provider will be billing for telemedicine services. For the latest reimbursement information, see the American Telemedicine Association (ATA) or Center for Medicare & Medicaid Services (CMS) websites.

Regarding Medicaid coverage, each state has its own store and forward billing policies, which can be found at <https://www.cchpca.org/topic/store-and-forward/>. As of 2014, CMS reimburses store-and-forward telemedicine only as a demonstration project in Hawaii and Alaska. However, several states are currently reimbursing store-and-forward telemedicine for Medicaid patients. Private insurers are also paying for these modalities, including those that are part of a Medicare Advantage plan. Providers who wish to provide store-and-forward services should inquire with their payers regarding reimbursement. Moreover, the FSMB has an updated list of reimbursement policies by state: https://www.fsmb.org/siteassets/advocacy/key-issues/telemedicine_policies_by_state.pdf.

Telemedicine is cost-effective, efficient and equal in therapeutic value to face-to-face encounters, but widespread adoption has been limited due to inconsistent and fragmented payment policies. Furthermore, existing state-by-state medical licensure requirements impose additional barriers to more rapid expansion.

The AANS and the CNS support the use of telemedicine services provided by board-eligible/board-certified neurosurgeons, as well as coverage and payment for those services when several essential criteria are met:

- Generally speaking, physicians delivering telemedicine services must be licensed in the state where the patient receives services or via an interstate licensure compact if applicable. They must abide by that state's licensure and medical practice laws and regulations. Emergency treatment and situations that arise when a neurosurgeon's existing patient is traveling to another state should be exceptions to this requirement, though existing laws and regulations may still apply. The AANS and the CNS support efforts by state medical boards to facilitate and lower burdens for physicians to obtain licenses in multiple states.
- Patients or referring physicians seeking telemedicine services must have a choice of neurosurgeon if possible, and the patient-provider relationship should be established following the principles outlined above. The delivery of telemedicine services must be consistent with state scope of practice laws. The AANS and the CNS firmly believe that any use of non-physician clinicians in the provision of telemedicine should abide by the supervision requirements that would apply to rendering in-person services.
- The patient's relevant medical history must be collected as part of the provision of telemedicine services. For teletriage and teleconsultation, appropriate medical records should be available to the consulting neurosurgeon before or during the telemedicine encounter.
- Telemedicine services must be properly documented, and these medical records should be available at the consultant site. For teletriage and teleconsultation services, the medical records should also be available at the referral site.

- Telemedicine services should include care coordination with the patient’s primary care physician, medical home and existing neurosurgeons, if applicable. This should include, at a minimum, identifying the patient’s existing primary care physician and neurosurgeon in the telemedicine record and providing a copy of the medical record to those existing members of the treatment team who do not have electronic access to it. This is especially important so that information about diagnoses, test results and medication changes are available to the existing care team.
- Organizations and clinicians participating in telemedicine should have an active training and quality assurance program for both the distant and receiving sites. In addition, those programs using telemedicine should have documentation of their training programs for any technician who is capturing clinical images and for any manager who is handling consults. Each organization should also maintain documentation on how the program protects patient privacy, promotes high-quality clinical and image data, continuity of care, and care coordination for patients who may require subsequent in-person evaluations or procedures.
- Organizations and clinicians participating in telemedicine must have protocols for local referrals (in the patient’s geographic area) for urgent and emergency services if required.

Credentialing and Privileging

The Joint Commission (TJC) has implemented standards for telemedicine. In 2021, TJC announced changes in its accreditation rules to include a “credentialing by proxy” process. With this updated process, the distant site telemedicine entity must be accredited with TJC or enrolled in the Medicare program. Previously, the rules required both the originating site hospital and the distant site entity to be accredited with TJC. TJC created that requirement of dual accreditation, which was not mandated by CMS regulations. Credentialing by proxy permits the hospital receiving the telemedicine services (the originating site) to rely on the privileging and credentialing decisions made by the hospital or a non-hospital entity providing the telemedicine services (the distant site).

Under the TJC telemedicine standards, practitioners who render care using live interactive systems are subject to credentialing and privileging at the distant site when they provide direct patient care. The originating site may use the credentialing and privileging information from the distant site if all the following requirements are met:

1. The distant site is TJC-accredited or enrolled in the Medicare program;
2. The practitioner is privileged at the distant site for those services that are provided at the originating site; and
3. The originating site has evidence of an internal review of the practitioner’s performance of these privileges and sends to the distant site information that is useful to assess the practitioner’s quality of care, treatment and services for use in privileging and performance management.

TJC views practitioners who render care using store-and-forward systems as “consultants” and may not be required to be credentialed at the originating site. However, standards can vary by state and organization.

Privacy and Confidentiality

Practitioners who practice telemedicine should ensure compliance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA), as amended, and its implementing regulations. Video or store-and-forward transmissions should be encrypted when transmitted via electronic means

to ensure security. Handling records, faxes, and communications are subject to the same HIPAA standards as in a standard office environment.

In the case of asynchronous or store-forward transmissions, HIPAA compliance is largely a matter of the originating site letting patients know that their information will be traveling by electronic means to another location for consultation. This should be noted in the consent form at the point of care and the HIPAA notice of privacy practices. Also, all electronic transmissions should be encrypted, and reasonable care should be taken to authenticate providers with electronic access to the records.

Licensure and Telemedicine Across State Lines

Licensure, liability and risk management are important considerations in telemedicine practice. Since care may be rendered across state lines, clear telemedicine practice guidelines and comprehensive malpractice insurance policies will be required to protect patients and physicians.

Interactive telemedicine requires the equivalent of direct patient contact. In the U.S., telemedicine using interactive technologies is restricted to jurisdictions where the provider is permitted, by law, to practice. In other words, the provider using interactive technologies must usually be licensed to practice medicine in the jurisdiction where the patient is located.

For store-forward asynchronous telemedicine interactions, most states require the physician to be licensed in the same state where the patient resides, even when they act only as a consultant. Providers who wish to provide store-and-forward consultations across state lines should limit such consultations to originating states in which they are permitted, by law, to provide care.

For prospective patient screening, physicians providing specialty assessments or consultations are not required to obtain a license in the state where the patient is located to screen a patient for acceptance of a referral. Subsequent care, however, must abide by licensure requirements as described above.

A simplified state medical license process for those physicians looking to provide telemedicine services across state borders and use telemedicine to treat patients living in rural areas should be defined. The interstate licensure compact would expand telemedicine and access to much-needed specialists licensed to practice across multiple states participating in the compact. The interstate licensure compact currently includes 37 states, the District of Columbia and the Territory of Guam. Most recently, Rhode Island passed legislation to issue licenses through this mechanism. A core [Policy Principle](#) of the ATA is to enable health care delivery across state lines. Adopting interstate licensure compacts, flexibility for online medical second opinions, cross-state follow-ups for continuity of care and other related licensure portability policies ensure clinicians can treat patients safely across state lines. Policy barriers that impose undue administrative burdens or restrictions that do not promote patient access, continuity of care and quality medical services should be reduced. State and federal policy should ensure efficient licensure. The AANS and the CNS support expanding the compact to all 50 states and U.S. territories.

Medical Liability

If a direct-patient-care-model (provider to patient) is used (no provider at the referring site), the consulting neurosurgeon bears full responsibility (and potential liability) for the patient's care. The diagnostic and therapeutic recommendations rendered are based solely on the information provided by the patient. Therefore, any liability should be based on the information available at the time the consult was answered. Liability may be shared in a consultative model (provider to provider). However, the allocation of responsibilities will vary on a case-by-case and state-by-state basis.

In the teletriage and teleconsultation models (provider to provider), the referring provider ultimately manages the patient with the aid of the consultant's recommendations. The referring provider may accept the recommendations in part, whole or none at all. The responsibility and potential liability in this scenario may be shared (between the referring provider and the consultant) based on the extent to which the referring provider followed the recommendations. If a direct-to-patient model (provider to patient) is used (no provider at the referring site), the responsibility and potential liability rest entirely on the tele-neurosurgeon. In this case, the tele-neurosurgeon would also be responsible for ensuring proper follow-up and to address any medication complications. In both instances, neurosurgeons should verify that their medical liability insurance policy covers telemedicine services, including telemedicine services provided across state lines, if applicable, before the delivery of any telemedicine service.

Workforce

Neurosurgical workforce optimization mandates the utilization of neurosurgeons for those conditions requiring neurosurgical expertise, as well as assisting with the determination of which patients will benefit from transfer to other care environments. This may be achieved by developing regional protocols and criteria for consultation and transfer.

Rapid evolution in radiographic technologies has outstripped the capabilities and processes needed to provide true telemedicine services. In many regions of the U.S., remote access to imaging from outside centers is available, but no other telemedicine technologies exist. Neurosurgical consultation via telemedicine includes more than the remote reviewing of imaging. Care must be taken not to substitute neurosurgical expertise for sufficient radiology support to interpret radiographic imaging so as not to overburden an already small neurosurgical workforce.

Equity

In delivering telehealth services, care must be taken to eliminate or reduce barriers, including, but not limited to, digital literacy, language gap, access to broadband internet access, and available technology for use in the telemedicine visit (e.g., computers, smartphones).

Additional Issues for Direct-to-Patient or Patient-Initiated Telemedicine

- Providers must exercise caution regarding direct prescribing for patients via electronic communications and should familiarize themselves with state regulations. States may have regulations that discourage or prohibit practitioners from prescribing for patients they have not seen face to face. In many cases, the wording of these regulations is such that a live interactive teleconsultation would meet the requirements for a "face-to-face exam." The FSMB established a National Clearinghouse on Internet Prescribing at http://www.fsmb.org/ncip_overview.html. The clearinghouse includes a state-by-state breakdown of jurisdiction, regulations, and actions related to the regulation of Internet prescribing <https://www.fsmb.org/policy-clearinghouse/clearinghouse-list/>. The appropriate use of telemedicine technologies (Model Guidelines) was recently updated in April 2022.
- Providers providing direct-to-patient telemedicine must make every effort to collect accurate, complete, and quality clinical information. The provider may contact the primary care providers or other specialists to obtain additional corroborating information when appropriate.
- Photographs or images obtained from patients, their family members, or their friends outside of a clinical setting may not be of adequate quality or include the appropriate lesions or areas to make an accurate diagnosis.

- Mechanisms must be in place to facilitate continuity of care, follow-up care, and referrals for urgent and emergency services in the patient’s geographic area. Any new medications prescribed or changes in existing medications must be communicated directly to the patient’s existing care team (unless they have easy electronic access to the telemedicine record).
- The AANS and the CNS believe that when creating directories of participating physicians or establishing network adequacy, an insurer should not consider telehealth access as a substitute for locally available neurosurgeons who can offer the full spectrum of care for neurosurgical diseases.
- The AANS and the CNS support telemedicine services designed and dedicated to consistently providing demonstrably high-quality patient care.
- The AANS and the CNS do not support telemedicine services that offer easy prescriptions without an adequate history, examination and valid/proper patient-provider relationship.
- The AANS and the CNS do not support telemedicine services that prioritize business interests over the quality and safety of patient care.

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