

Practice Guidelines For Real-time, Direct-to-Patient Primary Urgent Care Telemedicine

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American Telemedicine Association

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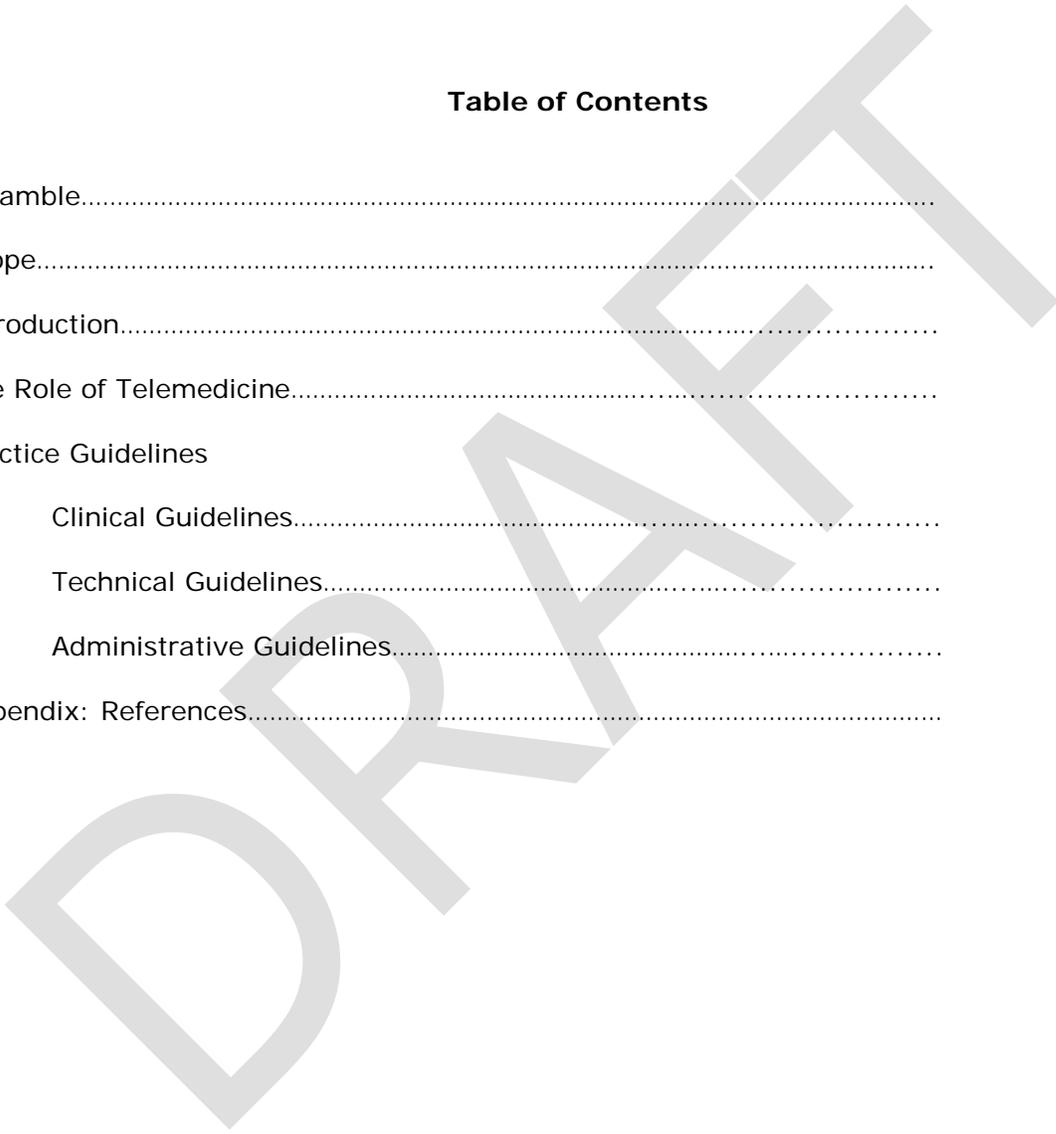
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PREAMBLE

The American Telemedicine Association (ATA) brings together diverse groups from traditional medicine, academia, technology and telecommunications companies, e-health, allied professional and nursing associations, medical societies, government and others to overcome barriers to the advancement of telemedicine through the professional, ethical and equitable improvement in health care delivery.

ATA has embarked on an effort to establish practice guidelines for telemedicine to help advance the science and to assure the uniform quality of service to patients. They are developed by panels that include experts from the field and other strategic stakeholders, and are designed to serve as both an operational reference and an educational tool to aid in providing appropriate care for patients. The guidelines generated by ATA undergo a thorough consensus and rigorous review, with final approval by the ATA Board of Directors. Existing products are reviewed and updated periodically.

The purpose of these guidelines is to assist practitioners in pursuing a sound course of action to provide effective and safe medical care that is founded on current information, available resources, and patient needs. The guidelines recognize that safe and effective practices require specific training, skills, and techniques, as described in each document. The resulting products are properties of the ATA and any reproduction or modification of the published guideline must receive prior approval by the ATA.

The practice of medicine is an integration of both the science and art of preventing, diagnosing, and treating diseases. Accordingly, it should be recognized that compliance with these guidelines alone will not guarantee accurate diagnoses or successful outcomes. If circumstances warrant, a practitioner may responsibly pursue an alternate course of action different from the established guidelines. A divergence from the guidelines may be indicted when, in the reasonable judgment of the practitioner, the condition of the patient, restrictions or limits on available resources, or advances in information or technology occur subsequent to publication of the guidelines. Nonetheless, a practitioner who uses an approach that is significantly different from these guidelines is strongly advised to provide documentation, in the patient record, that is adequate to explain the approach pursued. (1)

Likewise, the technical and administrative guidelines in this document do not purport to establish binding legal standards for carrying out telemedicine interactions. Rather, they are the result of the accumulated knowledge and expertise of the ATA work groups and other leading experts in the field, and they are intended to improve the technical quality and reliability of telemedicine encounters. The technical aspects of and administrative procedures for specific telemedicine arrangements may vary depending on the individual circumstances, including location of the parties, resources, and nature of the interaction.

This practice guideline focuses on primary care and urgent care services delivered using real-time videoconferencing, and telephonic technologies, including personal computers and mobile devices.

SCOPE

These guidelines cover the provision of direct-to-patient, primary and urgent care services delivered by licensed health care providers using real-time, two-way videoconferencing and telephonic technologies including mobile devices such as smart phones, laptops, or tablets where regulatory conditions permit. These guidelines do not specifically address the following: use of biometrics or additional diagnostic equipment deployed at a distance, communications between healthcare professionals and patients via texting, email, chatting, social network sites, or online "coaching," or the use of telemedicine for primary care when facilitated by a provider connecting to another provider.

The guidelines document contains requirements, recommendations, or actions that are identified by text containing the keywords "**shall**," "**should**," or "**may**." "**Shall**" indicates a required action whenever feasible and practical under local conditions. These indications are found in bold throughout the document. "**Should**" indicates an optimal recommended action that is particularly suitable, without mentioning or excluding others. "**May**" indicates additional points that may be considered to further optimize the telemedicine clinical care process. "**Shall not**" indicates that this action is strongly advised against.

INTRODUCTION

Primary care and urgent care telemedicine can play an important role in healthcare delivery. The ability to extend provider efficiencies, better manage patient panels, improve service to distant populations, provide patients with anytime/anywhere access, and shorten time to point of care, results in more cost-effective and expansive delivery of clinical services.

While the ATA has developed Core Guidelines for Telemedicine Operations that provide overarching, broad guidance, (7) this guideline provides specific recommendations on the use of real-time, two-way videoconferencing (VTC), and telephonic communications between providers and patients (i.e. direct-to-patient) in the delivery of primary and urgent care. The guidelines address clinical, technical, and administrative specifications, establish baseline practice expectations for remote consultations, promote quality outcomes, and support a more informed patient population.

An extensive review of the literature revealed relatively limited information regarding evidence-based practice guidelines for primary and urgent care (especially direct-to-patient applications) related to telemedicine. However, studies are emerging within and outside the United States that demonstrate safety, efficacy, and quality when medical care is offered for uncomplicated conditions. (2, 11, 13, 14, 26,) The cost of care may be significantly reduced, outcomes are often on par with in-person encounters, and patient satisfaction is extremely high. (1, 3, 9, 11, 12, 13, 14, 16, 17) However, there is insufficient evidence to ascertain the overall impact on total healthcare costs in the event that virtual visits result in increased utilization of healthcare services, in part attributable to the convenience of the delivery mechanism.

THE ROLE OF CLINICAL TELEMEDICINE

This is a rapidly growing and evolving field and the risks and benefits of primary and urgent care telemedicine health services delivered using videoconferencing, mobile and telephonic technologies are not widely discussed or addressed in formal training of medical

practitioners. Therefore, thoughtful elucidation of the key issues and the potential solutions are needed to better inform those who wish to practice responsibly.

Applications for Telemedicine in the Practice of Primary and Urgent Care

The virtual visit, for the purpose of this guideline, is communication between a provider or health care system professional and a patient (or their legally designated advocate) by any of several modalities including telephones, cell phones, and/or stand-alone videoconferencing technologies.

Telemedicine is not meant to totally replace all in-person, face-to-face visits, rather it may serve as a convenient and reasonable and safe alternative when in-person care is a challenge due to such barriers as geographic distance, limited access to transportation, and lack of available healthcare professionals. In some models telemedicine may serve a triage function. Additionally, in some cases, patients may prefer a virtual encounter.

Accommodating patient preference when clinically appropriate may reduce barriers to seeking care, enhance patient retention and potentially enhance the professional relationship. Primary and Urgent Care Telemedicine not only has obvious benefits associated with the remote delivery of care as in rural conditions where access is limited, but also to facilitate the immediacy of a visit when a patient may be nearby. Such an encounter can provide medical consultation, diagnosis, and treatment for both acute and chronic conditions across the spectrum of disease. Primary and urgent care services are best delivered outside costly and strained emergency departments. Urgent care is the delivery of medical care outside a hospital emergency department when a patient or their family has determined the need for immediate medical care. This non-life or limb-threatening care is typically unscheduled and episodic, and not always provided by the patient's primary care provider. Primary care typically implies a longer-term relationship between a patient and their healthcare provider, wherein the provider optimally has a comprehensive and long-term knowledge of the patient's health status. This treatment includes chronic disease management of the patient along with acute, stable exacerbations.

Telemedicine is a service delivery model that can be applied to both acute and chronic conditions in patients of most ages. Acute conditions are operationally defined as medical conditions of relatively brief duration that may be attributed to trauma, injury, or exacerbation of illness; while chronic conditions require longer-term care for ongoing illness and potentially address exacerbations of the chronic disease. Both acute and chronic conditions may present with symptoms that range from mild to severe disease. Examples of acute medical conditions that may be managed by telemedicine include but are not limited to uncomplicated cases of the following conditions: allergy/asthma, conjunctivitis, genito-urinary conditions, influenza, low back pain, otitis media, rashes, sinusitis, and upper respiratory infections. (9, 11, 12, 14, 26, 32) Chronic medical conditions addressed by telemedicine within primary care practices may include, but are not limited to: behavioral health, chronic obstructive pulmonary disease, congestive heart failure, diabetes, dyslipidemia, hypertension, smoking cessation and weight loss/obesity. (3, 10, 16, 17, 18, 19, 20, 22, 25, 27) The virtual medium is also an appropriate environment for consultations regarding prevention and wellness services such as immunizations, both routine and travel related; age and gender related health screening; and routine maintenance for chronic conditions, among others.

Primary and urgent care may overlap with respect to acute and chronic care issues, so medical practice and scope of expertise may as well, making telemedicine and virtual consultations a useful means for patient evaluation and management. There are several differences between primary care and urgent care, including expectation of follow up, ease

of being seen in a timely manner, continuity of care, and developing trusting relationships. Telemedicine services expand primary care practice to include many of the services and benefits of urgent care medicine that address immediacy and convenience for many acute concerns while addressing the ideals outlined in the primary care medical home model. (19, 21, 23)

Clinical Guidelines

I. Preliminary Considerations

The following criteria **shall** be taken into consideration when determining the appropriateness of using telemedicine for primary and urgent care using telemedicine. Providers **shall** follow federal, state and local regulatory and licensure requirements related to their scope of practice, and **shall** abide by state board and specialty training requirements.

A. Circumstances Appropriate for Videoconferencing-based Visits

1. The distant provider should obtain an accurate account of the patient's current condition and medical, medication and/or treatment history from either the patient or appropriate representative.
2. Provider and patient or patient-representative can hear clearly, or otherwise communicate especially with the telecommunications modality used during the encounter.
3. Patient or patient-representative and provider can converse in a language comfortable and familiar to both parties allowing the provider to obtain a clear history and the patient/representative to understand the recommendations provided. If necessary a translator (or signer for deaf/hearing impaired patients) should be used.
4. The patient (or their representative) should be able to participate in the examination; this may include demonstration of affected areas and provider-directed self-examination.

B. Informing and Educating the Patient

Prior to the start of the telemedicine encounter, the entity shall inform and educate the patient via the platform or in real-time, of all pertinent information such as: discussion of the structure and timing of services, record keeping, scheduling, privacy and security, potential risks, confidentiality, mandatory reporting, billing, and any information specific to the nature of videoconferencing. Additionally, the provider or designee should set appropriate expectations in regard to the telemedicine encounter. This may include for example prescribing policies, scope of services, communication and follow-up. The information **shall** be provided in language that can be easily understood by the patient. This is particularly important when discussing technical issues like encryption or the potential for technical failure.

Key topics that **shall** be reviewed include: confidentiality and the limits to confidentiality in electronic communication; an agreed upon emergency plan, particularly for patients in settings without clinical staff immediately available;

process by which patient information will be documented and stored; the potential for technical failure, procedures for coordination of care with other professionals; a protocol for contact between visits; and conditions under which telemedicine services may be terminated and a referral made to in-person care.

C. Physical Environment

Both the professional and the patient's room/environment should ensure privacy so clinical discussion cannot be overheard by others outside of the room where the service is provided. Seating and lighting should be tailored to allow maximum comfort to the participants. Both professional and patient should maximize clarity and visibility of the person at the other end of the video service. For example, patients receiving care in non-traditional settings should be informed of the importance of reducing light from windows or light emanating from behind them. Both provider and patient cameras should be on a secure, stable platform to avoid wobbling and shaking during the videoconferencing session. To the extent possible, the patient and provider cameras should be placed at the same elevation as the eyes with the face clearly visible to the other person. The provider **shall** decide if the minimum acceptable levels of privacy, distraction, noise, and other environmental aspects are present in the patient's location or circumstance during the virtual visit.

D. Referrals and Emergency Resources

The provider should optimally be familiar with, or have access to the physical locations of medical resources located near the area where the patient is receiving care at the time of the visit, should the provider exercise clinical judgment to make a referral for additional services or to escalate the level of care. At a minimum the provider shall have an emergency plan.

E. Community and Cultural Competence

Providers of telemedicine and their staff **shall** deliver services in a culturally competent manner that takes into account the patient's age, disability status, ethnicity, language, gender, gender identity and sexual orientation, geographical location, language, race, religion, and socio-economic status.

II. Treatment

Telemedicine is appropriate when care can be given as would otherwise be conducted in an in-person, face-to-face visit. Telemedicine extends access to care during times when a provider is not available, as a component of a primary care practice including after-hours coverage, and/or to increase access to care. Providers **shall** follow federal, state and local regulatory and licensure requirements related to their scope of practice, and **shall** abide by state board and specialty training requirements. Provider practices should implement standard operating procedures and workflows for telemedicine visits as for their usual patient encounters.

Providers of telemedicine should practice evidence-based care whenever possible and to the extent supported by the medical literature. The guidelines for the management of patients through videoconferencing technology or telephonic communications as discussed in this document should be considered a recommendation for guiding the interactions between providers and patients. Not all conditions for which care may be provided in a traditional primary care or urgent care environment are appropriate for a virtual visit.

Many conditions, however, lend themselves to a visit that can be conducted over the phone or through video-based technology. There is good evidence related to the effectiveness of telephone and video-based interventions improving patient outcomes for a variety of acute and chronic conditions seen in primary care such as diabetes, asthma, heart failure and hypertension. (28, 30)

In general, conditions that are appropriate for a telemedicine visit include conditions for which the provider has access to known diagnoses and treatments, those for which there is a reasonable level of certainty that a thorough history is sufficient to establish the diagnosis and generate a treatment plan, and/ or that the diagnosis may be established upon direct visualization of the patient. Whenever possible, access to clinical records, biometric data and/or diagnostic studies should be accessed at the point of care. Conditions managed by telemedicine in the primary care setting should be for acute uncomplicated conditions or simple/routine follow up for patients with underlying chronic conditions. (14, 25, 28)

In general, conditions inappropriate for telemedicine are those for which an in-person visit is required to evaluate the patient due to the severity of the presenting symptoms, the requirement of a "hands-on" examination, the need to obtain diagnostic testing, repeat visits do not yield an improvement in the patient's condition, and when the diagnosis is uncertain.

A. Telephonic and Video-based Evaluation

Telephonic evaluation may be appropriate for consultation, and for the evaluation and treatment of conditions for which the diagnosis can be made based on history, and conditions reported by the patient. The evaluation may be further supported with biometric data (obtained via self-report or access to store and forward databases) when available. Examination on the basis of VTC should be commensurate with the level of assessment required to manage a patient, taking into consideration the technical quality and extent of information that may be elicited remotely. The provider **shall** determine if a video-based visit is required or appropriate and what portion of the exam needs to be documented in order to evaluate the patient.

It may be possible to establish a provider-patient relationship through video or telephonic means for conditions amenable to the respective mode of care, if applicable standards of care are applied, the provider agrees to diagnose and treat the patient, the patient agrees to be treated, and additional steps are taken for appropriate development of the provider-patient relationship. This includes for example, verification of the patient's location, disclosure of the provider's identity and credentials. and obtaining required consents and acknowledgements.

The clinical history should include a record of the patient's symptomatology organized in a format that assists in developing a diagnosis and treatment plan. Necessary components include:

1. Identifying information
2. Source of the history
3. Chief complaint(s)
4. History of present illness (including location, description, size, quality, severity, duration, timing, and context modifying factors)
5. Associated signs and symptoms

6. Past medical history
7. Family history
8. Personal and social history
9. Medication review
10. Allergies including medication, nature and severity of reaction
11. Detailed review of symptoms
12. Provider-directed patient self-examination (as appropriate)

Documentation **shall** be performed following each patient encounter and **shall** be maintained in a secure, HIPAA (Health Insurance Portability and Accountability Act) compliant form and location (e.g., paper/fax, server, cloud).

Treatment by telephone and/or video is appropriate for conditions that meet clinical standards comparable to in-person, face-to-face care such as uncomplicated sinusitis or UTI (urinary tract infection). Laboratory tests, including diagnostics ordered in the usual course of evaluation via phone or video-based management, **shall** be followed up in a timely manner with the patient and any additional care providers as needed.

Following every visit, the provider **shall** communicate results of the encounter to the patient's primary care provider or other specialty providers using secure methods (e.g., email/fax, secure email, transmit to EMR), as well as to the patient, unless, the patient has requested a limitation on such communication. An appropriate disposition **shall** also be discussed with the patient including any required follow up and discussion of clinical signs that would signify a required escalation.

Protocols should be developed for the delivery of care for conditions the providing entity can establish using evidence-based standards of treatment by telemedicine. Detailed protocols are beyond the scope of this document, but in general guidelines should include at minimum the following components:

1. Named condition and corresponding ICD code.
2. Scope of condition amenable to treatment by telemedicine based on medical evidence, or at a minimum, precedent for successful management based on peer-reviewed guidelines or expert opinion.
3. The mode of intervention required to treat the condition (i.e., is telephonic care adequate or is VTC required?)
4. Documentation required to appropriately assess the patient's condition including history, video-based examination including required components needed to visualize, demonstrate or test.
5. Parameters under which the condition can be treated.
6. Parameters under which the condition may not be treated and require referral to alternate modes of management.

Biometric data obtained via self-report or access to store and forward databases, when available, may contribute to a more comprehensive evaluation and diagnosis of the patient.

B. Physical Exam

The provider **shall** perform a virtual physical exam (for video or telephone-based visits) as indicated by the patient complaint, the history and conditions reported by

the patient utilizing available technology, and which comports with the standard of medical care and provider training.

C. Define Circumstances When Management by Telemedicine is Appropriate or Inappropriate

Telemedicine can be used as a tool to facilitate cost-effective and convenient care delivery. If not previously established, the patient/provider relationship may be established at the time of the initial encounter in accordance with state regulatory guidelines. In the event the patient does not have a primary healthcare provider, the provider should recommend continuity of care options for the patient.

1. Appropriate circumstances for a virtual visit include patients with conditions amenable to evaluation and treatment based on a thorough history. Providers should insure that patients and/or their caregivers understand and comply with the provider's request to participate in the evaluation. This may include the demonstration of physical findings or a physician-guided self-examination essential to a diagnostic assessment.
2. Inappropriate circumstances for treatment may include some patients with cognitive disorders, intoxication, language barriers, emergency situations that warrant escalation to an ER visit or 911, patients who do not have the technology to successfully complete a virtual visit, or when the acuity or severity exceed the therapeutic capabilities of a particular remote encounter.

D. Referral and Follow-Up Guidelines for Primary Care and Urgent Care

The professional shall be familiar with local in-person medical resources should the professional exercise clinical judgment to make a referral for additional medical or other appropriate services.

The professional shall also exercise their best clinical judgment in determining the need for follow-up services, and in making such recommendations.

E. Primary Care Conditions and Telemedicine Management of the Patient

Telemedicine management of the patient may involve direct medical care, diagnosis and treatment plan or it may result in triage and referral of the patient to obtain additional information for a final diagnosis and/or treatment. The information in this table provides a general guide to conditions that may or may not be appropriate to evaluate and treat through phone or video-based visits. It is not intended to be an all-inclusive list of conditions appropriate to a telemedicine environment.

The provider **shall** exercise their best clinical judgment in determining the appropriateness of a virtual visit on a case-by-case basis. Wherever possible, recommendations to support the diagnostic intervention should be supported by high quality evidence. The information is based on data from published randomized controlled trials and controlled and observational trials as available. Some conditions have more robust evidence than others. Where evidence is lacking, recommendations for the mode of intervention is based on the expert opinion of the work group. It is clearly recognized that with future research and the evolution of technology the appropriateness of telemedicine for each condition may change. This

document does not address a full range of potential models such as asynchronous email, web forms, video with peripherals, and presenter with patient. These guidelines are specific to audio-video and telephonic forms of provider-patient interaction as based on current knowledge.

To reduce the risk of overprescribing, it is incumbent upon the provider to follow evidence-based guidelines.

Condition	Telemedicine Appropriate	
	Telephone Only*	Video
Routine Conditions That Are Appropriate For Telemedicine Management		
Acid Reflux	Yes	Yes
Acute Conjunctivitis (e.g., uncomplicated viral or allergic)	No	Yes
Allergic rhinitis	Yes	Yes
Anxiety and Depression	Yes	Yes
Assessment of minor wounds	No	Yes
Burns (e.g., minor, sunburn)	No	Yes
Common rashes (e.g., contact dermatitis, shingles)	No	Yes
Constipation	Yes	Yes
Diabetes management (routine and follow-up)	Yes	Yes
Influenza (uncomplicated)	Yes	Yes
Sinusitis (uncomplicated)	Yes	Yes
Skin Infections	No	Yes
Smoking Cessation	Yes	Yes
Upper Respiratory Infections (uncomplicated)	Yes	Yes
Urinary tract infections (uncomplicated in non-pregnant women and in the absence of vaginitis)	Yes	Yes
Weight management	Yes	Yes
Conditions That May Be Appropriate for Telemedicine Management		
Asthma	No	Yes
Bronchitis (mild symptoms, pneumonia not suspected)	Yes	Yes
Essential Hypertension	Yes	Yes

Migraine headache (diagnosis established, uncomplicated)	Yes	Yes
Musculoskeletal issues muscle strains and joint sprains	No	Yes
Pain control (mild to moderate for known conditions) **	Yes	Yes
Rash (generalized without fever or systemic symptoms)	No	Yes
Viral gastroenteritis (uncomplicated)	Yes	Yes
Conditions That Are NOT Appropriate For Telemedicine Management***		
Acute abdominal pain	No	No
Acute neurologic symptoms	No	No
Altered mental status and inability to communicate history or symptoms	No	No
Anaphylaxis or severe allergic reaction	No	No
Chest pain	No	No
Diarrhea and vomiting (severe and with at least moderate dehydration)	No	No
Immune-compromised patient in which condition poses significant added risk	No	No
Procedure required for treatment	No	No
Rash (disseminated with fever and systemic symptoms)	No	No
Acute, or chronic shortness of breath	No	No
Trauma (moderate to severe of one or multiple sites)	No	No
UTI or kidney stone (complicated)	No	No
Vision disturbance due to eye trauma, peri-orbital infection	No	No

* The use of phone may be appropriate for some of the conditions indicated as “no” depending on factors such as the ability of the patient/caregiver to describe the condition, the use of still photos or mobile device applications with video capability, and the confidence/expertise of the provider in establishing a diagnosis and care plan by telephone.

** An established provider-patient relationship may be warranted for certain conditions and medication requirements.

***Patients with these conditions should never be managed virtually. Urgent or emergent evaluation is indicated.

III. Quality

Coordinated Quality Improvement Program (CQIP)

A. Quality Review

Quality review of a virtual visit should be conducted based on the same components that exist in the provider's current area of practice.

As with any visit, a risk management process should be in place to identify heightened risks through quality failures. Additional components that are specific to a telemedicine quality review should include but are not limited to:

- equipment or connection failure
- number of attempted and completed visits
- patient and provider satisfaction with the virtual visit
- patient or provider complaints related to the virtual visits
- measures of clinical quality such as whether the visit was appropriate for a virtual encounter
- recommendations consistent with appropriate standard of care

Unless there is an external requirement for recording a virtual visit, the provider may opt not to record the visit. If he/she chooses to record for quality or training purposes, it should be in accordance with appropriate consent and privacy/security measures (see Technical considerations below).

Additionally, e-surveys may be used for the purpose of tracking provider performance and patient satisfaction. Telemedicine may potentially be integrated into broader measures used to meet quality metrics such as HEDIS and Star.

B. Provider Training and Mentoring

Provider orientation and training should entail a thorough review of history taking skills and physical examination skills as they pertain to the evaluation of a patient through telephonic and videoconferencing visits. Providers **shall** be cognizant of, and understand local and state telemedicine laws and stay abreast of changes to those laws. The provider **shall** obtain the necessary training and education for themselves and/or staff to insure they maintain technical and clinical competence in accordance with their discipline. Providers should conduct several "dry run" visits with test "patients" to become familiar and comfortable with the technology used to conduct virtual visits, and be generally familiar with what technology the patient is using to direct and assist with minor technical questions. The provider should also be familiar and proficient with a satisfactory default mode of patient engagement should technology fail during a patient encounter. It is encouraged for new providers to be observed by another provider experienced in telemedicine. Proctored visits should include a variety of patient conditions, and modes of encounter (e.g., phone, web, mobile). Protocols regarding indications when care should be escalated, and provision for escalating patients when necessary to alternate modes of care should be established, documented and communicated as part of the provider orientation process. The effectiveness of these guidelines should be assessed routinely by the provider entity as part of their standard quality review process.

Healthcare entities should standardize operations, provider workflows, and orientation and training materials to ensure consistent patient care, safety and quality of the patient experience.

IV. Ethical Considerations

Practicing at a distance requires the same attention and adherence to professional ethical principles-as would an in-person encounter. An organization should incorporate ethics statements and policies into their policies and procedures for telepractice.

The following are guidelines for health professionals' ethical conduct when engaging in telemedicine:

1. A practitioner **shall** uphold the code of ethics for their profession, and be aware of the codes for other professional disciplines.
2. A practitioner should abide by all federal, state, and jurisdictional laws and regulations, and institutional policies.
3. Telemedicine **shall not** be employed as a means to preferentially avoid in-person encounters based upon a patient's geographic location, socio-economic status, disease or disability, gender, gender preferences or sexual orientation, behavioral factors, ethnicity, religion, etc. An exception to this consideration may be the avoidance of in-person visits during epidemic or pandemic scenarios to avoid the spread of infectious disease.
4. Payment should not be conditional on certain diagnoses or receipt of particular treatment, such as receipt of a prescription antibiotic.
5. Providers should abide by a robust conflict of interest policy that deters the use of telepractice for the sole purpose of enhancing income.
6. Providers **shall**:
 - a. Apprise patients of their rights when receiving telemedicine, including the right to suspend or refuse treatment.
 - b. Apprise patients of their responsibilities when participating in telemedicine.
 - c. Inform patients of a formal complaint or grievance process to resolve ethical concerns that might arise as a result of participating in telemedicine.
 - d. Discuss the potential benefits, constraints and risks (e.g., privacy and security) of telepractice.
 - e. Inform patients and obtain their approval, if student or observers might observe their visit.
7. Providers should have a policy in place concerning the disclosure to patients of technology or equipment failures during their sessions and document these events in the patient's health record.

V. Special Circumstances

Emergencies

A. Definition of Emergent Conditions: An emergent condition is an illness or injury that poses an immediate threat to a person's life or long-term health. Such conditions are outside the scope of a primary and/or urgent care telemedicine practice.

B. Emergent Patient Evaluation and Referrals: The provider **shall** assess a patient's condition to determine immediacy and acuity of the patient's condition and triage to the appropriate level of care within the patient's locale by

referring/transferring patients with conditions outside the scope and capabilities of a telemedicine practice. It is the responsibility of the provider during the virtual encounter to triage to the appropriate level of care (e.g., PCP, specialist, urgent care, ED). Providers may consider incorporating standard triage guidelines in their telemedicine practices. The provider should confirm patient adherence to urgent referral recommendations when clinically appropriate and/or feasible.

C. Documentation of Emergent Encounters:

The provider **shall** have a documented process for responding to emergent situations (which may include phoning the receiving facility in advance of the patient's arrival).

Providers **shall** document all referrals to EMS (Dialing 911) including the medical indication/basis for the recommendation and nature of the problem.

Providers should document where the patient is located

Providers should document any extenuating events whether technical or clinical in regard to the encounter.

Documentation should adhere to all medical-legal standards of care, and if appropriate, insurance requirements expected to pass future review and audit.

VI. Consultant Referrals

A. Knowledge of the Patient's Healthcare Network

The provider should have knowledge of the patient's healthcare network whenever possible, to be able to facilitate timely access to recommended specialty consultations or referrals.

B. Provision of Clinical Reports to Referral Sources

The provider, to the extent possible while being remote, **shall** make available relevant clinical reports to the referral institution or specialist absent a request by the patient to the contrary.

C. Transmission of Home Monitoring and Electronic Data

If feasible, the provider should facilitate transference of any home monitoring or electronic data.

D. Patient Requests for Records

The provider **shall** establish a process for the patient to request copies of telemedicine records to facilitate specialty care.

VII. Special Populations

Virtual visits can be conducted with patients with unique needs. Some examples include patients with communication disorders, mental or physical disabilities, sensory disorders, or special needs related to age, gender, culture, chronic disease, location of care, and need for a facilitator or other non-medical personnel present at the visit. These populations often require considerations in addition to those described earlier. As with all telemedicine programs, technology should be chosen to most closely match the needs of the population.

In dealing with special populations it is especially important to engage both patients and providers in discussions and planning to be sure to include their unique needs and perspectives. As with in-person visits, the practitioner in a virtual visit **shall** be in compliance with the American Disabilities Act of 1990 (ADA) and other legal and ethical requirements, including non-discrimination regulations and ethical principles. In deciding whether to use a virtual visit mode, a health practitioner may determine based on medical judgment and established guidelines for telemedicine practice that a virtual visit is inappropriate or unable to be adequately completed through a virtual medium. Unique characteristics of certain patient populations may require addition to or modification of existing telehealth guidelines and procedures. A useful reference to identifying and responding to these populations can be found in the ATA Practice Guidelines for Videoconferencing-Based Telemental Health. (8)

A. Pediatric

Many examples of successful pediatric telehealth programs exist in the literature with evidence to date that suggests there are no physical contraindications to the use of telemedicine in the evaluation of a child. (41, 42, 43, 44, 45) In order to manage equipment and appropriately engage a child in a telemedicine visit, a facilitator should be present during the virtual visit. The choice of facilitator should be based on the type of visit and training needed. Facilitators may include but are not limited to lay persons, parents/guardians, nurses, and childcare workers. There may be special circumstances, including but not limited to, adolescent patients or mental health issues, where a facilitator would not remain in the room for the entire visit. In a telemedicine visit for a patient under the legal age of consent in the state where they are located, the practitioner **shall** obtain consent from the parent or legal representative of the child as required by law. If the parent/guardian is not present at the time of the visit, a process **shall** be established for prompt communication of the results of the visit with the parent/guardian. There may be special circumstances, including but not limited to, adolescent patients or mental health issues, where consent is obtained only from the patient, in accordance with state law. In this case adolescent patients may be asked to consent to the virtual visit. Guidelines for appropriate maximum or minimum ages appropriate for pediatric consultation are not included in this discussion. Safety of pediatric management in a virtual environment varies with condition, technology and comfort of the provider. With improvement in technology and clinical experience with different models of care, future guidelines will better address the issue of age appropriate management.

B. Geriatric

Examples of successful geriatric telehealth programs exist in the literature. (18, 36) Evidence to date suggests that there are no physical contraindications to the use of telemedicine in the evaluation of a geriatric patient. Telemedicine evaluations in the context of a geriatric population require appropriate communication with the patient through telephone, video conferencing, or real time technology. Reported positive benefits include more frequent monitoring for chronic disease, decreased need for office visits, reduced transportation costs, reduced stress to the patient, and increased access to care for homebound patients. (4, 31, 34, 37) Providers also report benefits from the ability to observe the patient in their home environment. (37)

Many of the following considerations apply to every primary and/or urgent care televisit, but are particularly important when dealing with geriatric patients. Telemedicine evaluations in the context of a geriatric population require appropriate communication with the patient through telephone, video conferencing, or real time technology. In designing a system for virtual visits with a geriatric patient, potential hearing or vision issues should be taken into consideration when choosing equipment and systems. Orientation to the equipment should take place either in the office setting or in the home setting with a technician. Orientation should include evaluation of patient understanding and possible need to reinforce training. In cases where a patient demonstrates excessive confusion or anxiety during a telemedicine visit, the practitioner should use medical judgment in determining whether continuing the virtual visit is appropriate. Factors to consider in determining whether a facilitator is necessary in a geriatric telemedicine visit should include the personal preference of the patient, as well as evaluation of the patient's physical and mental capabilities. Facilitators include but are not limited to lay persons, family members, caregivers, and nurses. Some patients may choose to have other persons present during a virtual visit. Providers should have the patient affirm consent to that person's participation in the visit. A practitioner should continue to exercise medical judgment in the assessment as to whether an additional person's presence impedes the necessary history or physical examination of the patient. In circumstances where the patient is in a care facility or senior living community, a trained technician may assist in collecting relevant clinical information and access to resources such as medical records, lab or diagnostic testing, and access to caregivers and staff. In cases of questionable mental competency, practitioners should ensure that appropriate consent is obtained from a health proxy or representative. In circumstances where the patient is in a care facility or senior living community, a trained technician may assist in collecting relevant clinical information and access to resources such as medical records, lab or diagnostic testing, and access to caregivers and staff.

In managing patients with dementia, providers should identify the patient's power of attorney for healthcare (POA), and obtain consent from the POA identifying appropriate caregivers and contacts available 24/7. [Issues related to the use of telemedicine with patients with reduced mental capacity, confusion, or excessive anxiety are addressed below in 5. Behavioral Health.]

C. Special Communication Needs

An assessment should be made as to any physical impediments the patient may have in the use of telehealth equipment. If possible, equipment can be adapted or a facilitator used to accommodate these limitations. In deciding whether to use a virtual visit mode, a health care provider may determine, based on medical judgment and established standards for telemedicine practice, that a virtual visit is inappropriate. Providers of telemedicine should follow federal, state and local laws concerning provision of language interpreters and/or special equipment.

D. Place-based Care

Examples exist in the literature of successful telemedicine programs centered in places other than health care facilities or patient homes, including but not limited to, childcare centers, schools, chronic care facilities, and prisons. (18, 24, 26, 29, 36) Telehealth visits in these settings have been shown to efficiently and effectively provide continuity with the patient's medical home. (19, 21) Issues to be considered

when conducting place-based visits should include but are not limited to patient privacy, potential impact of the presence of non-medical personnel during the visit, consent from the patient or proxy for a specific patient type, time limitations, and physical limitations of the setting. The practitioner should exercise reasonable judgment in determining whether a virtual visit is appropriate in each setting.

E. Behavioral Health

Issues regarding behavioral health are addressed in detail in the ATA Telemental Health guidelines documents. (8, 40)

In cases where a patient demonstrates excessive confusion or anxiety during a telehealth visit, the practitioner should use medical judgment in determining whether continuing the virtual visit is appropriate.

In cases of questionable mental competency, providers should ensure that appropriate consent is obtained from a health proxy or representative.

Regulatory Considerations

I. Licensing and Credentialing

Providers **shall** ensure that the patient is physically located in a jurisdiction in which the provider is duly licensed and credentialed. Providers **shall** practice within the scope of their licensure and all applicable state and federal regulatory requirements.

II. Provider-Patient Relationship

Providers **shall** inform patients that the telemedicine visit provides the same doctor-patient relationship as an in-person visit. Given there are regional and state variations of the definition of the doctor-patient relationship, telemedicine visits **shall** be governed in the same light with respect to these regional variations. Additionally, the frequent addendums and updates to such definitions governing the doctor-patient relationship prohibit a standard definition of the relationship, further necessitating adherence to local requirements.

III. Use of Audio-only Communication (telephone)

Providers and healthcare entities should be aware that audio-only communication (phones) may not fall under the definition of "telemedicine" under some current or pending state statutes or legislation. Providers and healthcare entities should observe all federal, state and local requirements governing the definition and practice of telemedicine.

IV. State Licensure Requirements

Providers shall follow current state and federal laws regarding physician, nurse and allied professional licensure. Generally, state medical boards require a physician that provides a patient consultation to be licensed in the state where THE PATIENT is located at the time of the consultation. However, federal law provides exceptions to such multi-state licensure requirements for services provided within certain federal programs (e.g., Department of Defense, Veteran's Administration, and Indian Health Service). Laws and regulations for other health professionals vary. For example, a number of states participate in a nursing compact, providing reciprocal licensing recognition. It is recognized that the regulatory

environment for telemedicine is frequently changing. Federal and state licensure and regulatory requirements should be monitored for compliance.

Technical Guidelines

I. Security and Privacy

Providers and healthcare entities should become familiar with their computer and mobile device security and strive to achieve acceptable privacy and cyber security. Providers and healthcare entities **shall** be aware of the technical limitations of the systems they use for telemedicine. As pertains to privacy and security, providers should implement security best practices at the provider/healthcare entity level, and encourage patients to consider adopting security measures for their individual communication devices.

Providers and healthcare entities **shall** develop and implement policies for communication and sharing of medical records with Primary Care Providers and other appropriate entities that conform to HIPAA, HITECH (Health Information Technology for Economic and Clinical Health Act) and other applicable laws. They should comply with industry best practices.

This **shall** include appropriate disclosure to patients about sharing their personal healthcare information (PHI). Providers **shall** document medical records as thoroughly as if the patient participated in an in-person visit. Storage of medical records **shall** be accomplished using any method that is compliant with all laws pertaining to medical record storage and should comply with industry best practices. Requests for access to patient information **shall** follow standard HIPAA privacy practices.

If an intermediary or third party entity is used in the collection, storage or transmission of PHI, a Business Associate Agreement (BAA) **should** be executed in compliance with HIPAA and state-specific requirements.

The provider should decide whether and how the virtual visit will be recorded and determine whether it will be available to others after the visit. If recorded, the patient **shall** be informed and provide their consent. The provider **shall** have a policy for storage and retrieval of documents. If the patient chooses to record the visit they should inform the practitioner. Release of stored audiovisual data **shall** require written patient authorization.

The provider **shall** ensure that recordings meet the HIPAA requirements for patient access to review and request for copy (if the practitioner is a HIPAA covered entity), and if requested, meet this requirement by the legal due date. Personally identifying information of an administrative or financial nature **shall** be secured to protect patient confidentiality. Only relevant information can be released for purposes of treatment, payment or in the course of usual and required operations.

All efforts **shall** be taken to make audio and video transmission secure by using point-to-point encryption that meets recognized standards. Currently, FIPS 140-2, known as the Federal Information Processing Standard, is the US Government security standard used to accredit encryption standards of software and lists encryption such as AES (Advanced Encryption Standard) as providing acceptable levels of security. Providers should familiarize themselves with the technologies available regarding computer and mobile device security, and should help educate the patient.

When the patient and/or provider uses a mobile device, special attention should be placed on the relative privacy of information being communicated over such technology.

Providers should ensure access to any patient contact information stored on mobile devices is adequately restricted.

Mobile devices **shall** require a passphrase or equivalent security feature before the device can be accessed. If multi-factor authentication is available, it should be used. Mobile devices should be configured to utilize an inactivity timeout function that requires a passphrase or re-authentication to access the device after the timeout threshold has been exceeded. This timeout should not exceed 15 minutes. Mobile devices should be kept in the possession of the provider when traveling or in an uncontrolled environment. Unauthorized persons **shall not** be allowed access to sensitive information stored on the device, or use the device to access sensitive applications or network resources. Providers should have the capability to remotely disable or wipe their mobile device in the event it is lost or stolen. Videoconference software **shall not** allow multiple concurrent sessions to be opened by a single user.

Should a second session attempt to be opened, the system **shall** either log off the first session or block the second session from being opened. Session logs stored in 3rd party locations (i.e., not on patients' or providers' access device) **shall** be secure. Access to these session logs **shall** only be granted to authorized users.

Protected health information and other confidential data **shall** only be backed up to or stored on secure data storage locations. Cloud services unable to achieve compliance **shall not** be used for PHI or confidential data. Professionals may monitor whether any of the videoconference transmission data is intentionally or inadvertently stored on the patient or professional's computer hard drive. If so, the hard drive of the provider should use whole disk encryption to the FIPS standard to ensure security and privacy. Pre-boot authentication should also be used. Professionals should educate patients about the potential for inadvertently stored data and patient information and provide guidance on how best to protect privacy.

Professionals and patients **shall** discuss any intention to record services and how this information is to be stored and how privacy will be protected. Recordings should be encrypted for maximum security.

Access to the recordings **shall** only be granted to authorized users and should be streamed to protect from accidental or unauthorized file sharing and/or transfer. The professional may also want to discuss his or her policy with regards to the patient sharing portions of this information with the general public. Written agreements pertaining to this issue can protect both the patient and the professional.

II. Communication Between Organizations

Providers of telemedicine **shall** meet the same standards for communication between patient and provider, and between provider and other organizations, as expected for encounters that are non-virtual in nature. Providers of telemedicine **shall** verify that their communications with patients, and with other providers or organizations, are transmitted over secure networks that meet state and federal regulations for privacy. Providers of telemedicine shall verify that their communications with patients, providers and other organizations were successfully sent and received. Providers of telemedicine **shall** ensure that messages from current or prospective patients are responded to in a timely manner (at least on par with local standards of care).

III. Remote Monitoring Devices and Data

The provider **shall** refer to existing guidelines where applicable and current or the provider **shall** follow best practice standards.

The provider should access data from remote monitoring if available. Remote monitoring has been the subject of numerous studies in the United States and internationally. (5, 6, 15) Largely, in the field of chronic disease management, the use of remote monitoring appears to provide "just in time" information to allow for medication adjustment and physician or nurse interventions. Remote monitoring for the purpose of this document refers to the episodic use of remote monitoring data during a virtual visit.

The provider should be aware of data trends of remote monitoring when available while assessing and treating the patient. Remote monitoring and the data generated may be an adjunct to a virtual visit but does not constitute a virtual visit unless the data is acted upon or utilized in such a way as to validate the current plan of care or change or initiate a treatment. In this scenario, the remote monitoring data should be incorporated into the visit record. The provider should assess the quality of the data provided as to validity, accuracy, and patient's efficacy of use. Assessment methods include but are not limited to, referring to the Food and Drug Administration's guidance on remote monitoring and mobile apps for healthcare, reviewing the remote monitoring device manufacturer's specification and use documentation, and consulting with any third party remote monitoring services regarding their data management and analysis protocols. If the provider chooses to use remote monitoring in the management of a patient's chronic condition, they should consider equipment requirements, connectivity, training of patient or caregiver, training of provider, setting of appropriate alert parameters, response to alerts, backup processes for the system and protection of PHI.

IV. Videoconferencing

Videoconferencing is characterized by key features: the videoconferencing application, device characteristics including their mobility, network or connectivity features, and how privacy and security are maintained. The use of desktop and mobile devices requires consideration of each of these.

A. Videoconferencing Applications

All efforts **shall** be taken to use videoconferencing applications that have been evaluated and have appropriate HIPAA compliant verification, confidentiality, and security parameters necessary to be properly utilized for telemedicine.

B. Device Characteristics

When using a personal computer (including laptops, iPads and other mobile devices), both the professional and patient devices should, when feasible, use professional grade or high quality cameras and audio equipment. Devices **shall** have up-to-date antivirus software and a personal firewall installed. Providers should ensure their personal computer or mobile device has the latest security patches and updates applied to the operating system and any third party applications.

C. Provider Organizations

Provider entities should utilize mobile device management software to provide consistent oversight of applications, device and data configuration and security of the mobile devices used within the organization.

In the event of a technology breakdown, causing a disruption of the session, the professional **shall** have a backup plan in place. The plan **shall** be communicated to the patient prior to commencement of treatment and may be included in the general emergency management protocol. The professional should review the technology backup plan on a routine basis.

The plan may include calling the patient via telephone and attempting to troubleshoot the issue together.

The plan may include providing the patient with access to other healthcare professionals. If the technical issue cannot be resolved, the professional may elect to complete the session via a voice-based telecommunication system (i.e., phone). Screen-in-screen options, also known as picture-in-a-picture or "PIP" may be used when feasible and are widely available in many videoconferencing software packages.

Professionals and patients may opt to use cameras that allow for pan, tilt, and zoom for maximal flexibility in viewing the remote room.

D. Connectivity

Healthcare services provided through personal computers or mobile devices that use internet-based videoconferencing software programs should provide services at a minimum bandwidth of 384 Kbps in both the downlink and uplink directions. Such services should provide a minimum of 640 X 360 resolution at 30 frames per second. Because different technologies provide different video quality results at the same bandwidth, each end point **shall** use bandwidth sufficient to achieve at least this minimum quality during normal operation.

Where practical, providers may recommend preferred video conferencing software and/or video and audio hardware to the patient, as well as providing any relevant software and/or hardware configuration considerations. The provider and/or patient may use link test tools (e.g., bandwidth test) to pre-test the connection before starting their session to ensure the link has sufficient quality to support the session. Where possible, each party should use the most reliable connection method to access the Internet. Where wired connections are available (e.g., Ethernet), they should be used.

The videoconference software should be able to adapt to changing bandwidth environments without losing the connection.

Administrative Guidelines

I. Verification of Service Eligibility

The provider or staff should identify whether the patient is eligible for the telemedicine service in advance of the visit and verify the method of reimbursement as needed. Portal-

based or other patient access to triaging algorithms may be useful adjuncts to assist patients and providers in identifying patient eligibility and subsequent triage to appropriate care options.

II. Provider and Patient Identity Verification

The provider **shall** introduce him/herself and any attendant personnel (e.g., residents, fellows) to the patient and document those present. The patient should make known all those in attendance with them (e.g., guardian, family) and the provider **shall** document.

The full name and credentials of the provider and the full name of the patient and caregiver (if applicable) **shall** be verified. Providers may ask patients to verify their identity using date of birth or other forms of identification. The provider should determine if a facilitator is required to assist the patient and their identity should be verified.

III. Provider and Patient Location Documentation

The provider **shall** document the location where the patient receives care, whether by phone or VTC. The locations of the provider and patient may require documentation for reimbursement of services. However, it is not necessary for the health provider to reveal their specific location to the patient, especially if the provider is located at home at the time of service. The verification of the physical location of provider and patient is important for several reasons:

1. The provider **shall** follow federal, state and local laws applicable to licensing and regulatory requirements in the jurisdiction where the provider is physically located at the time care is delivered and where the patient is physically located at the time care is received. Most states require that jurisdictional licensure requirements be tied to where the patient is physically located at the time care is received, not where the patient lives. Therefore providers should be aware of the state in which the patient is located at the time of service to assure they have a current medical license in that state.
2. Specific requirements should be investigated on a state-by-state basis. Emergency management protocols are entirely dependent on where the patient receives services. Where the patient resides is only relevant if that is also where he or she is receiving care.

IV. Contact Information Verification for Provider and Patient

Contact information **shall** be obtained from the patient including address of residence, address at time of consultation, telephone, mail, and email addresses. Similarly, provider contact information **shall** be exchanged with patient including telephone, practice address and email. It is not necessary for the health provider to reveal their specific location to the patient, especially if the provider is located at home at the time of service.

V. Credentialing and Licensing

All providers **shall** abide by the same local and regional credentialing policies as required for a traditional in-person visit as mandated by state and federal law.

Providers **shall** abide by all qualifications of licensure, board eligibility, or certification as required for traditional in-person visit as mandated by state and federal law. The scope of

care provided should be consistent with the provider's level of training (e.g., MD/DO, ARNP, PA, RN, etc.). Providers should be cognizant of oversight requirements and auditing standards that may be applied to telemedicine patient visits as if the patient visit occurred in person. Where telemedicine or telehealth laws require or permit different credentialing, compliance **shall** be maintained with those provisions.

VI. Organizational Policies and Procedures

Healthcare organizations should draft and implement organizational policies and procedures governing the use of telemedicine. Providers and healthcare entities **shall** adhere to all applicable laws and regional and local practice as to Patient Informed Consents and Disclaimers. As part of organizational policies and procedures, healthcare entities should promulgate standards for patient and provider verification and authentication.

VII. Coding and Documentation

Coding and medical record documentation should be used to accurately and ethically (i.e., not for the purpose of unduly enhancing reimbursement) document the patient visit.

Medical record and procedure coding should follow existing standards related to coding practices as already established by state and regional health care entities such as the AMA Coding Requirements when deemed necessary by the needs of each provider's medical practice.

A. Electronic Medical Record

Providers **shall** generate and maintain an electronic medical record (when feasible) for each patient for whom they provide remote care. All communications with the patient (verbal, audiovisual or written) should be documented in patient's unique medical record on par with documentation standards of in-person visits. Such records include but are not limited to, the patient's history (including past medical and surgical history, medications and allergies) physical examination (where applicable), differential diagnosis, assessment, and treatment plan. It should also include information regarding the scope of treatment, and information regarding fees and billing. Visits should be documented as a remote service and include date, duration and type of service provided. All records should be maintained in a standard medical record compliant with relevant regional and federal guidelines, such as HIPAA and HITECH, with respect to format (EMR requirements), storage, access and disposal.

B. Access to Analytics and Clinical Information at Point of Care

The provider should ensure that the patient's clinical record is available during or prior to a visit whenever possible, and that sufficient time is allotted to update the patient history; if possible with the patient's primary care provider or other relevant healthcare entity. The provider should ensure that other clinical information that is not immediately available is garnered in a timely manner to complete care whenever possible. This may include follow-up via telephone, text, or electronic mail communication with the patient.

C. Payment and Billing

Prior to providing **patient** services, the patient **shall** be made aware of the patient's cost of the service provided, if any. Arrangement for payment should be completed prior to the delivery of the service. Special consideration must be made for Medicare patients participating in virtual care. Providers **shall** follow Medicare rules (such as the Medicare Opt Out election) for billing patients outside of standard Medicare reimbursement.

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