

Ethical considerations for telemedical delivery of fertility care: an Ethics Committee opinion

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Telemedicine has the potential to increase access to and decrease the cost of care. However, it also alters the nature of the physician-patient relationship and the interaction of patients with the healthcare system, which may limit access to care in some circumstances. Regardless of the modality of care delivery, the basic tenets of medical ethics and the obligations of physicians to their patients still hold. (Fertil Steril® 2024;121:434–8. ©2024 by American Society for Reproductive Medicine.)

El resumen está disponible en Español al final del artículo.

Key Words: Ethics, assisted reproduction, telehealth, telemedicine, digital healthcare

KEY POINTS

- Telemedicine delivery via telephone has benefits related to the ease of use, but raises concerns regarding the quality of care, patient identification, and the lack of physical examination capabilities.
- Telemedicine video visits, in contrast to telephone visits, require broadband as well as access to technologies, such as smartphones, laptops, personal computers, tablets, and broadband, which may present barriers for some patients and increase disparities in access to care.
- When caring for a patient via telemedicine, the overarching ethical obligations inherent to the physician-patient relationship remain unchanged.
- To the extent possible, physicians should aim to create a telehealth environment that resembles an in-person clinic visit.
- Physicians who use electronic communication to answer patient health questions should ensure that mechanisms exist to protect patients' identity and personal information, and to prevent unauthorized viewing of and access to private health information.

The evolution of digital infrastructures has allowed substantial growth in the ability of physicians to deliver medical care remotely. Telemedicine may decrease care costs and improve patient access to primary and specialty services. It also has a role when it is unsafe to travel for care, such as during a pandemic or natural disaster, and when patients have difficulty physically traveling to a medical facility due to health or transportation limitations. However, telemedicine also alters the nature of the physician-patient relationship and patients' interaction with the healthcare system. In this

Opinion, major ethical considerations associated with the telemedical delivery of reproductive medicine are reviewed. The overarching ethical obligations inherent to the physician-patient relationship remain unchanged whether care is provided remotely or in person.

OVERVIEW OF TELEMEDICAL MODALITIES/ TERMINOLOGY

Synchronous vs. Asynchronous

Telemedicine is defined as the practice of medicine at geographically distinct locations via a remote electronic interface. Telemedicine can be divided into

synchronous and asynchronous interactions. Synchronous interactions allow for a direct patient-to-provider interaction with the delivery of medical expertise. This is a real-time experience, with a live component occurring at a set time. This is the modality used for scheduled telemedicine clinic visits. A physician participates directly in the patient's clinical care in real time via telecommunication and is held accountable for the care being provided. Asynchronous interactions refer to the "store-and-forward" technique, where a patient sends their medical history, images, and test results to their physician for diagnostic and treatment

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expertise. This modality may be used to send messages through “portals” that link to the electronic medical record. In these, the patient may send their physician a message, similar to an email, which the physician receives at a later time (or conversely, physicians may reach out to and communicate with patients).

Audio Only vs. Audiovisual

Although using the telephone for telemedical visits provides ease of use, it also raises concerns related to quality of care, patient identification, and the lack of physical examination capabilities. Compared with audio-only visits, video visits allow at least some aspect of a physical evaluation. They also may facilitate a more personal connection between clinicians and patients. However, video visits require a more complex setup and broadband internet access, which may present barriers for some people. Finding the balance between using telemedicine, either audio or video, maximizing access to medical care, and maintaining the quality of care likely will continue to evolve.

PATIENT-PROVIDER VS. PROVIDER-PROVIDER

Telemedicine may be used for communication between clinicians about patients, in addition to more traditional telemedicine between clinicians and patients. Clinician-to-clinician telemedicine may be either synchronous or asynchronous and may be used for “curbside” consultation regarding challenging cases, during multidisciplinary case review (e.g., a “tumor board” for cancer care), or for remote instruction during procedures (i.e., “telementoring”). Generally, a patient-clinician relationship is not established by a consulting clinician who has not directly evaluated a patient (virtually or in person); therefore, the ethical obligations stemming from a therapeutic relationship generally do not apply to these interactions. However, it is good clinical practice to ensure that primary responsibility for patient care and follow-up is established clearly after such interactions between clinicians. Again, ethical standards of care for patients cared for in person should be used as a guide.

THE USE OF TELEMEDICINE IN REPRODUCTIVE CARE

Care conducted via telemedicine may be episodic (e.g., a single consultation) or recurrent (e.g., serial follow-up). Each of these modalities may create different ethical obligations for clinicians, as they imply different physician-patient relationships.

Clinicians conducting single remote consultations may have very limited obligations to establish subsequent contact with patients. No subsequent visits or laboratory testing will be needed for some patient encounters or single consultations. Conversely, clinicians who establish an ongoing relationship with patients seen virtually should set up effective mechanisms to respond to patients’ questions, communicate laboratory results, and maintain care. The modalities used to communicate effectively with patients may differ, but the ethical underpinnings of respect for autonomy, nonmaleficence, and maintaining confidentiality do not

differ. Expectations for future contact between clinicians and patients should be made clear during the initial encounter to ensure that patients understand the nature of the remote relationship and to whom they should bring ongoing concerns. Likewise, physicians have the same obligations to contact patients with laboratory and imaging results, regardless of whether additional patient contact was planned otherwise.

The limited data on the use of telemedicine specific to fertility care suggest that although outcomes are similar compared with face-to-face visits, patients seen remotely had longer durations of infertility, lived farther from the clinic and had shorter visits (1). For new patients, no difference was seen for cancellation rates, diagnoses, and the number of clinic contacts made before starting treatment. For follow-up visits, no differences were identified for treatment recommended, percent that received treatment, and time to treatment initiation. Pregnancy and time-to-pregnancy rates were similar between telemedicine and face-to-face groups.

GROUP PATIENT EDUCATION/SUPPORT

Different uses of telehealth give rise to differing levels of accountability for physicians. On a group basis, some clinics or physicians may have webinars for patients starting in vitro fertilization, information that was conveyed previously in person. The information provided is generalized and intended for more general consumption. In these situations, patients should have contact information for the clinic directly so that any individual questions that come up during the online educational session can be answered. It should be stated clearly during webinars that the information provided does not constitute a physician-patient relationship and that a formal consultation should be arranged to establish this. The disadvantage of webinar-based education is the frequent lack of an interactive component, and physicians using this technology must ensure that means of communication are available for patients to meet their needs.

PHYSICIAN/PATIENT RELATIONSHIP

Although telehealth has the potential to increase access to fertility care, there also is the potential for it to alter the physician/patient relationship. Although in the past physician visits were performed in a clinic or private space, converting these to telehealth may create a more casual environment. From the patient’s perspective, these may feel more like a FaceTime call and less like a doctor’s visit. Patients may have more distractions in their home environment than there would be in a traditional office setting. Physicians should attempt to create a telehealth environment that feels as close as possible to an in-person clinic visit. As telehealth becomes a more accepted and consistent option for patient care, it is possible that a structured “code of telehealth conduct” or “telehealth etiquette” may become a part of preparing for these visits.

PHYSICAL EXAMINATION, QUALITY OF ANCILLARY TESTING

Telemedicine represents a substantial change from the traditional face-to-face mode of seeing patients, resulting in a

limited ability to perform a physical examination (2). Although not every patient encounter requires a physical examination, established clinical standards of care must continue to be met. One limitation of remote visits discussed in the aforementioned study on telemedicine in the reproductive endocrinology and infertility practice identified the lack of information regarding vital signs, including height and weight. These were recorded in 93.4% of in-person visits vs. none with telemedicine. It is important that physicians are aware of a patient's risk profile, including body mass index and blood pressure status, when planning for treatment. Having a full picture of these factors ensures patient safety and optimizes success when providing fertility care. Concerns have been raised about the lack of physical face-to-face interaction in telemedicine and the possibility that this could handicap the clinician in making an accurate diagnosis (3). Likewise, the physical examination is important in cases of male infertility to evaluate for testicular size, masses, vas presence, and the presence of varicoceles. The role of ultrasound as a substitute for in-person physical male examinations is under evaluation.

PHYSICIAN RESPONSIBILITY REGARDING DIGITAL TECHNOLOGIES

Physicians who offer telemedicine have a responsibility to familiarize themselves with this modality and its limitations. They should have mechanisms in place to care for patients when the digital connection is lost. They should be aware of any privacy concerns related to the technologies they use. They should become proficient in the use of digital technologies before incorporating these in their care model. They should ensure that they have appropriate access to the internet and backup systems to ensure that their digital connection is stable and consistent.

EQUITY IN ACCESS TO CARE

Data show that 21 million people lack broadband internet access in the United States, many from underserved communities that also face worse health outcomes (4). Likewise, a recent study suggests that 13 million older adults are not ready for telemedicine visits due to difficulties using technology (5). Data looking at which groups may not have access to telehealth exist. Older patients, Asian patients, and non-English-speaking patients had lower rates of telemedicine use, whereas older patients, female patients, Black, Latinx, and poorer patients had less video use (6). Several studies have identified racial and income status as factors that correlate with telemedicine use rates (7, 8). From an ethical perspective, low-income patients may face unique barriers to accessing video visits when they lack the technical devices, internet access, and other infrastructure to conduct these visits. Some patients also may lack technological literacy, which may limit their desire to attempt to use these technologies.

PRIVACY

Telemedicine encounters involve a wider range of third parties than traditional medical encounters, including

telecommunications service providers and health care personnel involved in checking patients in remotely. Some encounters are protected under privacy laws and regulations, but others may not be protected and may carry additional risks. Physicians who use electronic communication to answer patient health questions must be diligent in ensuring that mechanisms exist to protect the patient's identity. Physicians engaging in telemedicine should have protocols in place to prevent unauthorized viewing and access and protect patient information's security.

When engaging in telemedicine clinic visits, the virtual nature of telemedicine can make it difficult to ascertain who is present and able to view and hear the interaction between physician and patient. Physicians are responsible for being aware of who is present and obtaining consent from the patient to share information that others will hear or see in the space. The same rules for maintaining confidentiality in the face-to-face fertility clinic setting should be followed in the remote care setting. Given the sensitive nature of a couple's fertility information, physicians should use platforms that optimize the protection of patient health data. This may include minimizing the use of unsecure messaging systems.

REGULATORY CLIMATE

Physician and provider reimbursement issues for telehealth are a moving target. Before the pandemic, telephone visits seldom were reimbursed (9, 10). Furthermore, the Centers for Medicare & Medicaid Services has indicated that reimbursement for telephone visits may discontinue as recovery from the COVID-19 pandemic continues (11). Additional considerations include telehealth across state borders and physician licensure regulations related to this. Physicians engaging in telehealth should undergo the same credentialing/training/expertise required for telemedical care as for in-person care. For some patients, these potential barriers may mean losing access to medical care due to a lack of video telemedicine or transportation for face-to-face care. Physicians practicing telehealth should consult with local legal and regulatory experts when considering developing their capability for telemedical care.

CONCLUSION

Telemedicine has tremendous potential to increase access to and decrease the cost of care. However, telemedicine may alter the nature of the physician-patient relationship and patients' interaction with the healthcare system. From an ethical perspective, low-income patients may face unique barriers in accessing video visits when they lack the technical devices, internet access and other infrastructure to conduct these visits. Some patients may also lack technological literacy, which may limit their desire to even attempt to use these technologies. For some patients, these potential barriers may mean losing access to telehealth medical care. Physicians practicing telehealth should consult with local legal and regulatory experts when considering developing their capability for telemedical care. Establishing a clinician-patient relationship leads to the same overarching ethical requirements for clinicians, regardless of whether care is provided virtually or in person.

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Consideraciones éticas para la prestación de la atención de fertilidad mediante telemedicina: una opinión del Comité de Ética

La telemedicina tiene el potencial de aumentar el acceso y disminuir el costo de la atención. Sin embargo, también altera la naturaleza de la relación médico-paciente y la interacción de los pacientes con el sistema de salud, lo que puede limitar el acceso a la atención en algunas circunstancias. Independientemente de la modalidad de prestación de atención, los principios básicos de la ética médica y las obligaciones de los médicos para con sus pacientes siguen siendo válidos.