Introduction

Telehealth, by definition, encompasses all uses of technology designed to remotely deliver health information or education. Telemedicine is an exchange from one site to another via electronic communication to improve a patient’s healthcare. In practice, telehealth is a collaborative tool for equine veterinarians to enhance diagnostic testing, consultation with experts, patient treatment and monitoring, as well as owner communication.

Most commonly, a veterinarian with the valid veterinary-client-patient relationship (VCPR) assumes responsibility not only for flow of information, but also for medical judgments regarding the health of the patient, and the client has agreed to follow their veterinarian’s instruction. On the rare occasions that equine telehealth is employed outside of a valid VCPR, medical and regulatory limitations must be closely considered.

In short, telehealth and telemedicine expand the availability and performance of high quality equine veterinary care by encompassing a wide variety of technologies and methodologies to deliver virtual medical, health and education services.1 The AVMA has produced guidelines for the use of telehealth to maintain professionalism and adhere to the standards of care.2

Telehealth in Practice

Telehealth, with respect to the equine veterinarian, may be divided into five categories:

1) Teleconsulting: vet-to-vet or vet-to-specialist

2) Telemedicine: vet-to-client with Veterinary-Client-Patient Relationship

3) Teletriage/teleadvice: providing health information, opinion, guidance or recommendation concerning, but not specific to, a patient's health, illness or injury

4) Telemonitoring: veterinary monitoring of the patient’s condition from a different location than the patient

5) Teleprescribing: digital format that replaces paper and facsimile and must follow all state and federal laws and regulations

Veterinarian-Client-Patient-Relationship (VCPR)

The VCPR is of utmost importance in navigating the nuances of telehealth. The AVMA recognizes five criteria that must be met for a VCPR to exist:

1) The veterinarian has assumed the responsibility for making clinical judgments regarding the health of the patient, and the client has agreed to follow the veterinarians' instructions.
2) The veterinarian has sufficient knowledge of the patient to make a preliminary diagnosis of the patient’s medical condition. This means the veterinarian has performed a timely examination of the patient or has made medically appropriate and timely visits to the operation where the patient is managed.

3) The veterinarian is readily available for follow-up evaluation or has arranged for the following: veterinary emergency coverage, and continuing care and treatment.

4) The veterinarian provides oversight of treatment, compliance and outcome.

5) Patient records are maintained.

**Applications of Telehealth**

Many applications of telehealth are in use in equine practice, most widely for diagnosis of health issues. There are many examples of forms of telehealth that greatly enhance equine veterinarians’ abilities to provide outstanding care to their patients. Most are asynchronous forms that help the veterinarian with the valid VCPR communicate with or convey information for review to colleagues, veterinarian specialists, clients, trainers, farriers, and consultants in other professions. Data from biomechanical tools can be conveyed to a resource for analysis. For example, for many years digital images or recordings have been relayed through various data connections by the attending veterinarian seeking the opinion of a specialist. Pathologists can review cytology and histopathology specimens relayed electronically from distant cases as well. Access to global experts in specific fields thus provides valuable learning opportunities for the veterinarian who receives information back from the consulted entity, in addition to optimizing patient care.

As technology evolves, more synchronous telehealth tools will provide immediately available information to guide diagnosis and treatment of the patient. Dynamic videoendoscopy of the upper airway of exercising horses would meet this designation when images are seen in real time. Telemetry is also in use for detection and monitoring of cardiac arrhythmias. Intraoperative guidance from a remote surgical specialist is feasible as well. Many equine clinics utilize video cameras in hospital stalls to monitor patients, allowing earlier detection of problems such as colic, dystocia and casting. Clients can send their veterinarian updates such as the progress of a healing wound or lameness with photos and videos from a cell phone. Teleconsultation can also be used to guide treatment in real time. As long as a valid VCPR exists there seems to be few limitations.

However, telehealth that occurs outside of a valid relationship between the health professional and the patient is highly controversial. Virtual visits and availability of a veterinary consultant 24/7 are very appealing to animal owners, motivated by convenience and reduced cost. The limits for the safe use of telehealth are under discussion in human and veterinary medicine. Scope of practice, evidence of risks, prescribing privileges, regulatory oversight and expedited interstate licensing compacts are critical factors that are impacted. Hence, both federal and state governments are actively developing policies to ensure that the public is protected.
Limitations

“Advice only,” is a common, yet potentially dangerous, justification offered by proponents of veterinary telemedicine in the absence of a VCPR; they claim patient-specific advice will not be provided and therefore, the welfare of the patient is not compromised. AVMA defines advice as “providing of any health information, opinion, guidance or recommendation concerning prudent future actions that are not specific to a particular patient's health, illness or injury. This is general advice that is not intended to diagnose, prognose, treat, correct, change, alleviate, or prevent animal disease, illness, pain, deformity, defect, injury, or other physical, dental, or mental conditions.” It follows that claims of simply speaking in general terms about clinical signs or diseases seem to offer little more than an internet search or educational articles on a practice website. Nonetheless, it is important to note that in some states, such as Minnesota, provision of advice is the practice of veterinary medicine. Telehealth outside of a VCPR is clearly a regulatory challenge.

Furthermore, patient location in telemedicine is important for licensing requirements and professional liability. Does the veterinarian providing advice outside of a VCPR have a license in the same state as the horse? If not, that veterinarian may be practicing veterinary medicine without a license. How can a horse owner be sure that the “veterinarian” is licensed in their state or is indeed a specialist? In human telehealth, the majority of regulatory agencies are of the opinion that telehealth, and therefore liability, occurs in the state of the patient’s location. Consequently, the veterinarian needs to be licensed in that state (telemedicine), unless the veterinarian is advising the licensed health professional who is providing services for that patient and has the valid client patient relationship (teleconsultation). The AVMA panel concurred.

Prospective studies of the outcomes of equine telehealth are needed to optimize care for horses and to develop evidence-based regulatory policies. In human medicine, numerous studies have been performed to evaluate the outcomes of telemedicine. The federal Agency for Healthcare Research and Quality recently finished an extensive review of published studies and concluded that there is sufficient evidence to support the effectiveness of telehealth for specific uses, including remote patient monitoring for patients with chronic conditions, communication and counseling for patients with chronic conditions, and psychotherapy as part of behavioral health.

AAEP Recommendations

Equine veterinarians need to approach telehealth with awareness of its advantages and limitations. Clients want the best telehealth has to offer for their horses, and they want to communicate with the professional of their choice. Client education that encourages choices within a VCPR is needed. Ultimately, the equine practitioner is responsible for making decisions regarding the use of telehealth tools for clients, and for upholding the standard of care within applicable state regulations. Veterinarians are encouraged to provide input to develop policies as state and national governments craft regulatory language that incorporates telehealth, protects the public, and the health of the animals.
References:

1. https://www.aavsb.org/PAM
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