

Telehealth 2.0: Beyond the VCPR, how to integrate virtual care into your practice

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Virtual care is an extension of veterinary practice that includes any interaction among clients, patients, and their circle of care that occurs remotely, using any form of technology, with the goal of delivering quality and effective patient care. Think of it as an umbrella term that encompasses all the different terms that follow.

Telehealth is the overarching term that encompasses all uses of technology to deliver health information, education, or care remotely. Telehealth can be divided into categories based on who is involved in the communication.

Telemedicine is a subcategory of telehealth that involves the use of a tool to exchange medical information electronically from one site to another to improve a patient's clinical health status. Telemedicine is a tool of practice, not a separate discipline within the profession. The appropriate application of telemedicine can enhance animal care by facilitating communication, diagnosis, treatment, client education, scheduling, and other tasks.



The VCPR

The major source of confusion and angst with regards to virtual care



AVMA VCPR

A VCPR is present when all of the following requirements are met:

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 initiate at least a general or preliminary diagnosis of the medical condition of the patient. This means that the veterinarian is personally acquainted with the keeping and care of the patient by virtue of a timely examination of the patient by the veterinarian, or medically appropriate and timely visits by the veterinarian 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.



AAVSB VCPR

Original definition of the VCPR in the AAVSB Practice Act Model:

- Veterinarian-Client-Patient Relationship (VCPR) exists when the Veterinarian has assumed responsibility for making medical judgments regarding the health of the Animal(s) and the need for medical treatment.

2018 approved definition:

Veterinarian-Client-Patient Relationship (VCPR) exists when:

- 1) Both the Veterinarian and Client agree for the Veterinarian to assume responsibility for making medical judgments regarding the health of the Animal(s); and
- 2) The Veterinarian has sufficient knowledge of the Animal(s) to initiate at least a general or preliminary diagnosis of the medical condition of the Animal(s); and
- 3) The practicing Veterinarian is readily available for follow-up in case of adverse reactions or failure of the regimen of therapy.

VCPR and COVID-19



Federal and state emergency orders led to temporary changes in the VCPR. It is important to know what is happening in your jurisdiction.

AVMA resource:

<https://www.avma.org/resources-tools/animal-health-and-welfare/covid-19/using-telemedicine-help-care-veterinary-patients-covid-19>

AAVSB resource:

<https://www.aavsb.org/news/article/83>

FDA:

*To further facilitate veterinarians' ability to utilize telemedicine to address animal health needs during the COVID-19 outbreak, **FDA intends to temporarily suspend enforcement of a portion of the Federal VCPR requirements.** Specifically, FDA generally intends not to enforce the animal examination and premises visit VCPR requirements relevant to FDA regulations governing Extralabel Drug Use in Animals (21 CFR part 530) and Veterinary Feed Directive Drugs (21 CFR 558.6).*

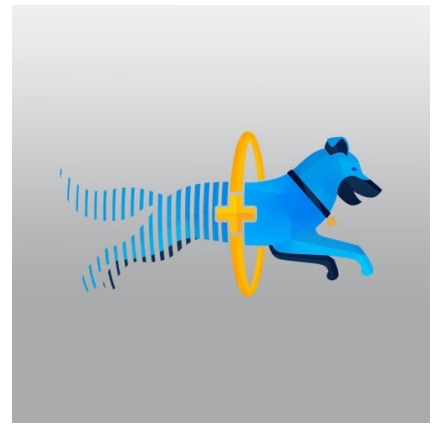
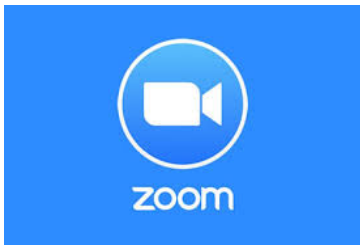
Questions to ask when adding virtual care to a practice:

- How will virtual care benefit my practice?
- How will it benefit clients and patients?
- What are the advantages and disadvantages of providing virtual care?
- Can specialists use telemedicine?
- What does a virtual care visit look like?
- Is **asynchronous** or **synchronous** delivery more appropriate for my practice? Or both?
- What equipment, if any, is needed?
- What laws and regulations dictate what can or cannot be done via virtual care?
- How can I **get paid** for a telemedicine encounter?
- What are **good cases or uses** for virtual care visits?
- What kind of results should I expect?
- How do I **promote virtual care** to my clients and manage expectations?
- How does **websiteside manner** differ from in-person, bedside manner?
- How do I ensure the **security of the data** obtained from a virtual visit—medical and financial?





How will you conduct your virtual visits?



VETERINARY CONNECTED CARE COMPANIES

avma.org/ConnectedCare

COMPANY	SERVICE TYPE			PRIMARY CUSTOMERS	VIDEO CHAT	CALL	TEXT	EMAIL	PMS INTEGRATION	IOS	ANDROID	BUSINESS MODEL	WEBSITE	CONTACT INFO
	Teleadvice ¹ / Telerriage ²	Teleconsulting ³	Telemedicine ⁴											
AirVet®	✓	✓	✓	Veterinarians; Pet owners	Yes	Yes	Yes	Yes	No	Yes	Yes	Fee for service	airvet.com	hello@airvet.com
Anippanion®	✓		✓	Veterinarians	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Fee for service	anippanion.com	info@anippanion.com
GoFetch Health™	✓		✓	Pet owners	Yes	Yes	Yes	Yes	No	Yes	Yes	Monthly plan	health.gofetch.ca	support@gofetch.ca
GuardianVets®	✓			Veterinarians	No	Yes	No	No	No	NA	NA	Fee for service customized per account	guardianvets.com	contactus@guardianvets.com
Medici®	✓	✓	✓	Veterinarians; Physicians	Yes	Yes	Yes	No	Limited	Yes	Yes	Fee for service	medici.md/Vets	medici.md/contact-us
MyPetDoc™	✓		✓	Pet owners; Veterinarians/ Veterinary partners	No	Yes	Yes	Yes	Yes	Yes	Yes	Pet owner: Fee for service or subscription. Practice: Monthly platform fee	ask.vet	shawna.garner@ask.vet
My Virtual Vet	✓	✓	✓	Veterinarians, Pet owners	Yes	Yes	Yes	Yes	No	Yes	No	Fee for service	myvirtualvetapp.com	support@myvirtualvetapp.com
PetHospice®	✓	✓		Pet owners; Veterinary team	Yes	Yes	Yes	Yes	No	Yes	Yes	Fee for service. Free online quality of life/end of life resources and education.	pethospice.com	shea@pethospice.com
Petriage®	✓		✓	Veterinarians	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Three tiers of service: • basic (telerriage) • essential (telerriage, telemonitoring) • premium (telerriage, telemonitoring, and telemedicine)	petriage.com	petriage.com/vets#- contact
Petzam™	✓	✓	✓	Veterinarians	Yes	Yes	No	No	No	Yes	Yes	Fee for service	petzam.com	info@petzam.com
TeleTails®	✓	✓	✓	Veterinarians	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Fee for service	teletails.com	clay@teletails.com
TeleVet®	✓		✓	Veterinarians	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Membership plans	gettelevet.com	info@gettelevet.com
VetNow®	✓	✓	✓	Veterinarians (specialists and general practitioners)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Fee for service or software subscription	vetnow.com	sales@vetnow.com
WhiskerDOCS®	✓			Pet owners; Pet insurance companies; Aggregated veterinary practices (large groups); Pet services providers; Pet suppliers (microchip, etc.)	Yes	Yes	Yes	Yes	Available, fees apply	Yes	Yes	Fee for service to vets, bundled as value added service to pet owner clients	whiskerdocs.com	info@whiskerdocs.com

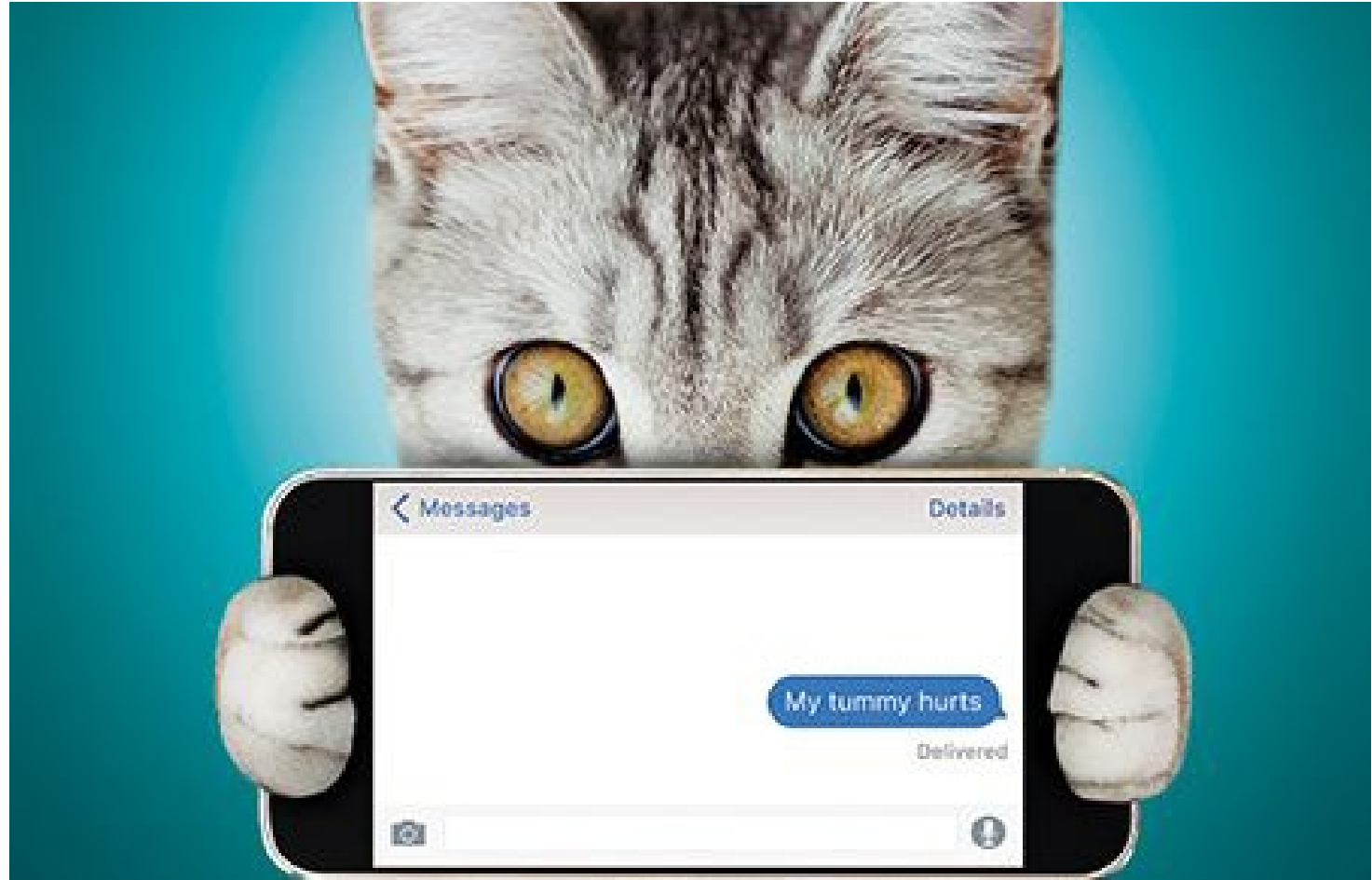
¹Teleadvice is the provision of any health information, opinion, guidance or recommendation concerning prudent future actions that are not specific to a particular patient's health, illness or injury, and that is not intended to diagnose, prognose, treat, correct, change, alleviate, or prevent animal disease, illness, pain, deformity, defect, injury, or other physical, dental, or mental conditions.

²Telerriage is the safe, appropriate, and timely assessment and management (immediate referral to a veterinarian or not) of animal patients via electronic consultation with their owners. The assessor determines urgency and the need for immediate referral to a veterinarian, based on the owner's (or responsible party's) report of history and clinical signs, sometimes supplemented by visual (e.g., photographs, video) information. A diagnosis is not rendered.

³Teleconsulting is when a general practice veterinarian uses telehealth tools to communicate with a veterinary specialist to gain insights and advice on the care of a patient.

⁴Telemedicine involves use of a tool to exchange medical information electronically from one site to another to improve a patient's clinical health status and may only be conducted within an existing veterinarian-client-patient relationship, with the exception for advice given in an emergency care situation until a patient can be seen by or transported to a veterinarian.

This resource includes a non-exhaustive list of veterinary telehealth companies and is provided for informational purposes only. The AVMA does not endorse any company on this list or their respective products or services. This information has not been independently verified and is subject to change.



How are you already using telemedicine?
(Because we're all doing it!)

Suitable Appointment Types for Virtual Care

- Behavioral problems (aggression/anxiety)
- Skin problems (rash/wound)
- Worms in stool or vomit
- Medication side effects
- Ear concerns
- Lump or growth
- Itchy pet
- Vomiting/Diarrhea
- Coughing/Sneezing
- Post-op care
- At-home hospice care
- Pain management
- Nutrition
- Fractious cat
- Blood in urine (dog)
- Limping
- Fleas/Ticks
- Dental concerns
- Weight concerns
- Reverse sneezing
- Allergic reaction
- Assess pet health/Quality of Life
- Prescription refills
- New pet questions
- Potential toxin exposure
- *Does my pet need to come in?*

Other areas suitable for virtual care:

- Follow up information after an in-person visit
- Specialty consults
 - Vet-to-Vet
 - Vet-to-Vet with client
 - Other expertise
- Deliver information to multiple people in different locations at the same time
- Chronic care monitoring
- Remote monitoring
- Information needed from animal's environment
 - Behavioral issues
 - Housing issues

Workflow considerations

- Asynchronous, chat-based visits
- Synchronous, real-time, live video visits

Workflow Considerations

Synchronous

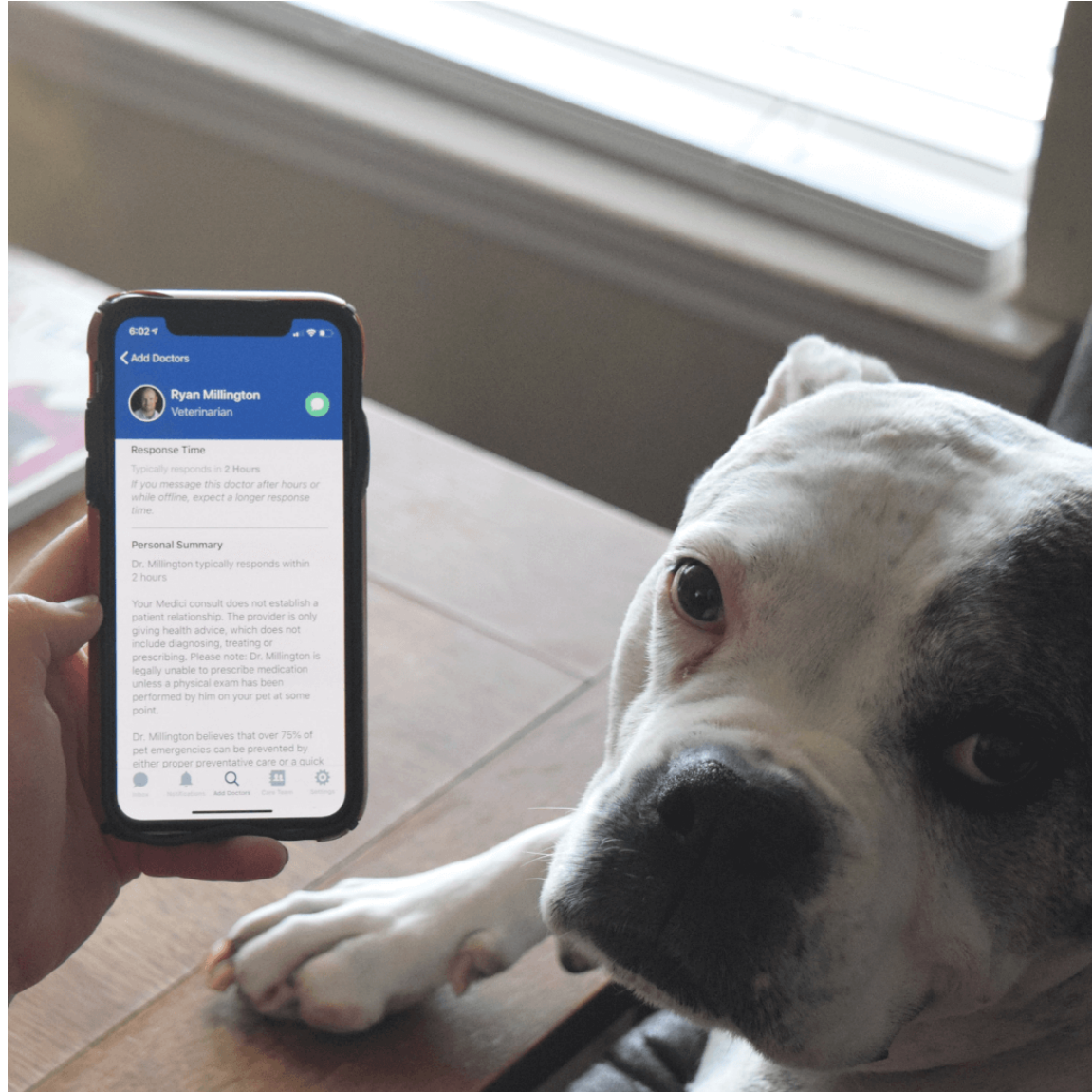
- Video visit in real-time with 2 way communication (audio/video)
- Most similar to in-clinic appointment
- Usually schedule an appointment unless triage/urgent care
- Needs to be documented and added to medical record
- Can share photos, videos, lab work
- Allows for sharing screens and reviewing imaging, etc
- Can connect other devices (ultrasound, microscope, endoscope...)

Asynchronous

- The chat IS the medical record
- Can share photos, videos, lab work
- Good for issues that don't require a more urgent response
- Generally don't schedule an appointment (though you can)
- Harder to display empathy
- Requires less broadband

Determine your current workflows

- What is the flow for in-clinic visits? How do those get scheduled? How are messages routed for questions to be answered?
- Do you want to provide telemedicine synchronously, asynchronously, or some combination of the two?
- Do you want to have a set schedule of when you will do telemedicine visits or do you want to manage them between other appointments and procedures?
- Will you schedule them yourself or will one of your staff people be in charge of scheduling?
- What role can my staff play?



Who will schedule the appointment?

The screenshot displays a web-based calendar interface for June 2020. On the left is a navigation sidebar with options: Dashboard, My Schedule, Appointments, My Clients, My Clinic, Profile Settings, and Help. The main area is titled 'CALENDAR' and includes a toggle for 'On Call' (currently off) and a prompt: 'Please click on a date to add your availability.' The calendar grid shows dates from 31st to 4th. A right-hand panel titled 'Edit Availability' allows setting time slots from 12:00 PM to 04:00 PM. It features three buttons: 'CLEAR ENTRY', 'APPLY TO JUN 30 ONLY', and 'APPLY TO ALL TUESDAYS'. A blue button at the bottom reads 'OR APPLY TO MULTIPLE'. The footer contains the text: '© 2020 VetNOW. All rights reserved. Last updated on - 731200640'.

- Provider
- Client
- CSR/Support Staff

What hours will you be available?
How long will an appointment last?



Before the Virtual Visit:

- Make sure the client knows how to access the platform or the Zoom link or whatever method you choose to utilize for virtual care
- Share tips with the client for a smooth visit
 - Lighting—no shadows or glare that will interfere with visibility
 - Audio—make sure speaker and microphone work
 - Limit background distractions (people, noise)
 - Upload relevant documents/images
 - Pet should be nearby if you will need to visualize something
 - Have a list of medications the pet takes
 - Know what the pet eats
 - Be prepared with a list of questions to be covered
- What is the backup plan if there is a technologic problem or the client needs customer support?
- What is your plan if the client is a no-show?

Webside manner

- The manner in which a health care professional interacts with patients remotely in telehealth or telemedicine.
- The virtual equivalent of a clinician's bedside manner—or the way in which you interact with a patient. Whether communicating through text, patient portal, phone, or video, it's important to remember how bedside manner carries over (or doesn't) through technology.



Webisode manner



- The ability to communicate with a client is an essential skill necessary for a successful telemedicine encounter.
- Veterinarians need to show that they are listening to their client to build trust.
- Virtual care is more reminiscent of “traditional” veterinarian-client interactions that rely on communication and trust rather than primarily on test results.

Opening the Visit

- Welcome the client with a warm greeting and a wave.
- If this is the client's first virtual visit, acknowledge that it may feel awkward
- Verify that the client can hear and see you okay
- Ask if there is anything you can do to make the experience easier
- Recognize there may be unexpected disruptions from ambient noise
- *Every visit starts with a smile and ends with a summary of the plan and next steps.*



Eye Contact

- Maintaining eye contact is an important part of any visit.
- Clients think that the veterinarian is not paying attention if they are not maintaining eye contact.
- Be mindful of where your eyes are looking.
- At the beginning of the visit, let the client know that you are looking at them on the monitor, but you may look away at times to take notes.
- Check in frequently to ensure engagement.







Set Expectations at the Beginning

- This may be your client's first experience with telemedicine
- Make sure the client understands what you can and cannot accomplish with a virtual visit
 - Cannot do a complete physical exam
 - What if this is more serious than client thought?
- If the patient is cooperative, there are some parts of the physical exam the client can manage
- If you have an established VCPR, you can make a diagnosis and create a treatment plan
- If you do not have a VCPR, then you can provide general advice, educational information, emergency information, or triage a patient

Build Rapport

- **Social/small talk**
 - Touch is missing: virtual visits don't allow for the customary handshake with the client or gentle petting of the patient
- Helps to put the client at ease
- Non-verbal gestures are important
- Use intentional listening



Verbal Communication



- **Latency** is a time delay in transmission from one end of the call to the other
 - Short periods (≤ 200 ms) have minimal effect on interactions
 - Longer periods (≥ 500 ms) can interfere with conversational flow
- Due to latency, doctor and client start overlapping each other while talking
 - Client thinks doctor is interrupting him and doctor thinks the same of the client
- Eventually both stop talking until one apologizes and the other says, "Please continue."

Verbal Communication

- Utilize brief pauses, but avoid prolonged silence
 - Prolonged silences cause concern that the internet connection has been lost
 - Brief pauses allow veterinarian a chance to make sure client has finished speaking
 - Latency can potentially effect the turn-taking needed with a virtual conversation
- Avoid saying “mm-hmm” as client is talking
 - Disrupts conversational flow and comes across as an interruption
 - Instead, gently nod your head to convey that you are listening

Non-verbal Communication

- Lean in slightly towards the screen to convey intentional listening
- Place your hand over your chest as a sign of empathy
- Nod your head gently
- Synchrony of facial expression
- Sit up straight (posture is more apparent on camera)





Non-verbal Communication

- Maintain an open chest
 - Don't cross your arms in front of you
 - Perceived as defensive
- Don't lean back
 - Perceived as disinterest
- Keep hand gestures to a minimum and at chest level
 - No flailing of the arms and hands
 - Make bigger and move more slowly
- Try to avoid eating or drinking during the visit
- Dress professionally
 - Don't roll out of bed and put on your college hoodie
- Avoid tapping, fidgeting, or holding props
 - Distracting to watch on video
 - Microphone may amplify the noise on audio
- Stay seated or standing in one location
 - No pacing or rocking back and forth in your chair

Facial Synchrony

- Veterinarians can see their own expressions on screen in real-time
- Can quickly correct facial expressions or posture and mirror the client's
- Non-verbal synchrony builds rapport and trust
- Contributes to collaboration in problem-solving



More on Verbal Communication

- Be clear and precise
- Avoid medical jargon
 - Client may be more hesitant to ask you to clarify in virtual visit
- Use reflective statements to help express empathy
 - “I hear how sad all this news is. I wish I could be there to comfort you.”
 - “I’m really happy that the wound is healing well.”
- Humor used appropriately can minimize the lack of physical presence and help client feel more at ease
- Lack of multisensory feedback means verbal cues must be regularly initiated for continuity and confirmation

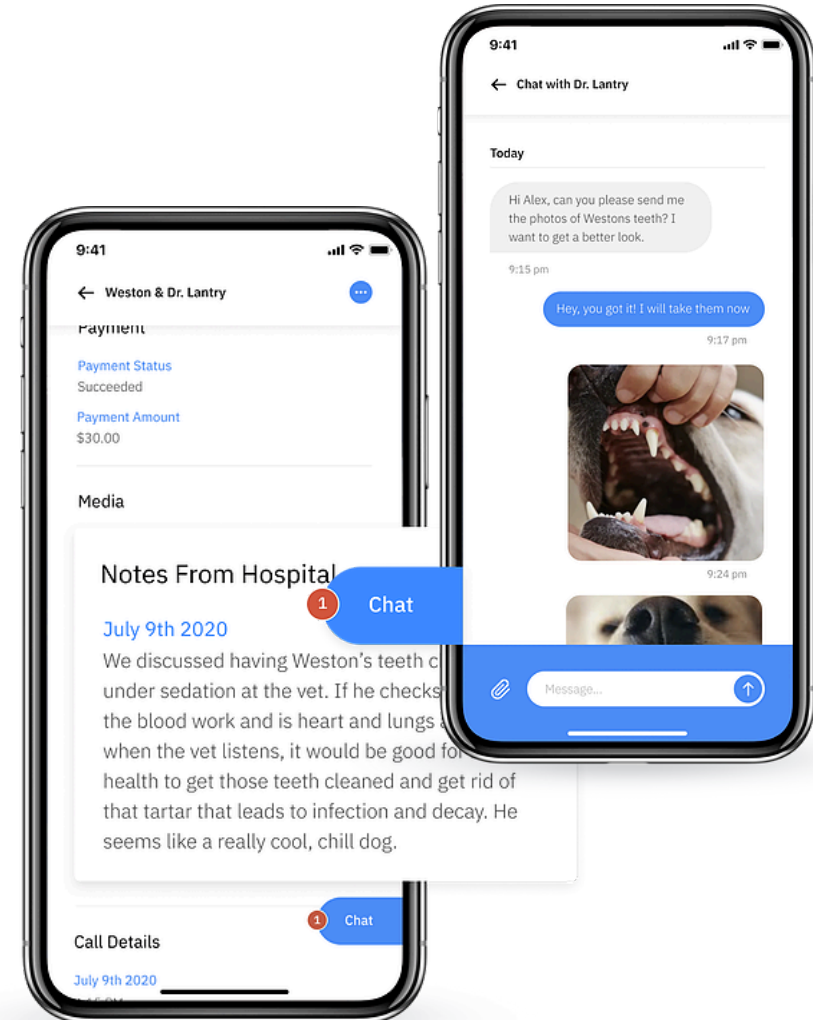
Closing the Visit



- Summarize the visit
- Verify the client understands what was discussed
- Provide opportunity for questions, thoughts, concerns
- Outline next steps
- Thank the client for participating in a virtual visit
- Document the visit and make sure it is included in patient's medical record

What About Chat-based Virtual Care?

- Harder to establish rapport
 - *But not impossible*
- Set expectations about what can be accomplished
- May need to switch to video visit or schedule in-clinic visit
- Use verbal statements and select emojis to convey empathy
 - *Be professional*
 - *Relay statements that express empathy*



Role of Veterinary Technicians: working collaboratively with their DVMs

- Follow-up after an exam
- Client education
- Basic training
- How to administer medications (pills, injections, SQ fluids)
- History-taking
- Nutrition
- Triage
- Potential for house/farm call assistance
- Long-term monitoring (diabetes, CKD, etc)
- *Schedule virtual tech appointments just like in-clinic appointments!*



Vet techs can acquire data

AUSCULTATION REPORT

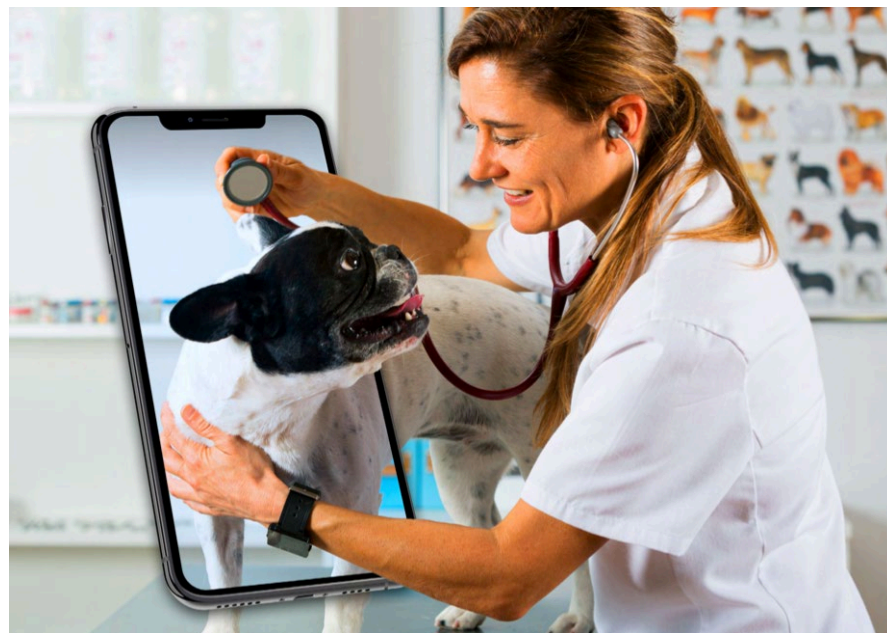
Patient Name : Gracie Teller
Patient ID: 1111

Age :

Animal Type : Dog
Recorded on : February 04, 2010



Getting Paid for Virtual Care





Payment Considerations

- What are your costs in offering virtual care, and to what extent will telemedicine visits take time away from in-person exams?
- Will the added flexibility offered by virtual visits offset the perceived value of an in-person exam in your clients' minds?
- Would your clients be willing to pay more or less for a video virtual visit?
- Should you consider charging less for telemedicine when first introducing it, to encourage clients to utilize it?
- If a telemedicine visit leads you to recommend an in-person exam, will you charge full price, a recheck fee, or nothing for the office visit?

~Courtesy of AVMA Telehealth Resource Center

Pricing Structure

- Pay per use—can be a flat fee or graduated based on length of time *or* type of visit
- Bundled pricing—part of a wellness package or included in the charge for a procedure (i.e., post-op recheck)
- Subscription model—set fee per month or per animal
 - Determine if this covers “X” visits per month or is unlimited access



Pet Insurance, Health Care Services, & Telehealth



- Embrace
- Prudent Pet pet insurance
- FirstVet (Europe)
- Banfield Optimum Wellness Plan with Vet Chat
- PetFirst (with airVet)
- VetsChoice (with Televet)
- Pets Best (with WhiskerDocs)
- PetIQ (with WhiskerDocs)
- Lemonade
- Petco's Pet Coach

Technical Difficulties

Audio outages or gaps

- History-taking
- Diagnosis
- Treatment plan
- Monitoring
- Drug doses

What's your back-up plan?

- *Hint: use the phone*

Video issues

- Cannot see area of interest
- Poor image quality
- Poor lighting

What's your back-up plan?

- *Have client text/email images*
- *Correct lighting issues*

If problem cannot be resolved, the client will need to bring in the patient for exam and further care.

Case studies

*“Telemedicine is a tool of practice and has many useful indications to help with patient care. **Use it wisely,**” said Dr. Lori Teller, clinical associate professor of telehealth at Texas A&M University College of Veterinary Medicine & Biomedical Sciences.*

~JAVMA News, March 31, 2020

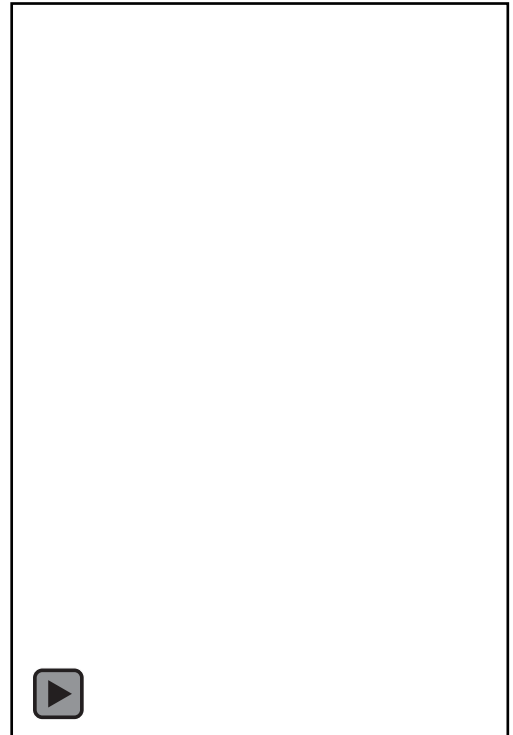
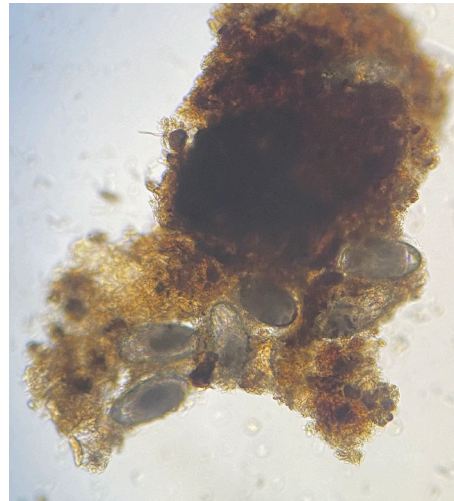
TAMU CVM VirtualVets: ears

Problem: Max, 6y, DSH, black discharge in both ears, excoriation rostral to left pinna, has a Seresto collar; not on heartworm prevention.

O concerned about transporting cat during COVID lockdown. Sent pictures of facial lesion and could visualize an otherwise seemingly healthy cat on video. O could obtain swabs from both ears and dropped off at VMTH.

Cytology revealed an active ear mite infection.

Dispensed otic medication to treat ear mites and excoriated lesion.
Dispensed Revolution.



TAMU CVM

VirtualVets: med refill

Junior

10y, MN, Lab

Hx:

- HW dz treated with Immiticide and negative since—has been consistently on Heartgard
- CKD secondary to previous leptospirosis infection
- Hypertension secondary to CKD; stable on amlodipine past 2 rechecks
- Due for HW test and BP recheck

Can this be handled virtually during COVID crisis?

Conducted virtual visit where O could demonstrate (on video) dog's condition and report that dog's appetite, water consumption, urine/BM are unchanged and normal. MM pink and CRT <2 sec on video. O could take pulse: ~88

Plan: refill 2 months supply of amlodipine and Heartgard and recheck Junior at VMTH before needs another refill.



TAMU CVM VirtualVets: Equine Cushing's

Bask, 34 y.o. Arabian mare

- BCS 6/9
- Poor hair coat-patchy growth, wavy areas
- Bilateral, symmetrical masseter muscle atrophy

- Dx: Equine Cushing's (Pituitary Pars Intermedia Dysfunction)

- Plan: Start Pergolide now
 - Test for PPID and insulin resistance in the fall



TAMU CVM VirtualVets: skin



- Dynamo, 4 y.o, MN, in/out DSH
- Sneezing a lot past week-clear discharge
- Itchy with scabs on trunk and neck
- On Advantage Multi—last dose applied 2 weeks ago
- Dx: allergies, superficial bacterial dermatitis
- Tx: topical antibacterial ointment, oral prednisolone

TAMU CVM VirtualVets: skin, part 2

- Dynamo, 3 weeks later
- Sneezing is minimal
- Scabs on trunk and neck are resolved
- New bald spot on back of neck; is not itchy
- Applied Advantage Multi 1 week ago
- Dx: reaction to topical prevention
- Tx: tincture of time



TAMU CVM VirtualVets: vomiting & diarrhea

- Beckham, 9 month-old mixed breed, MN puppy
- Frequent, loose stools started 2 days ago, no blood seen
- Vomited 5 times this morning, mostly yellow liquid
- Not eating or drinking today
- Did not receive his DHPP booster at 16 weeks (last booster at 12 wks)
- Got into trash and ate chicken with chicken bones 3 days ago
- Plan: Recommend go immediately to ER for further diagnostics and treatment to r/o parvo vs intestinal damage vs other

TAMU CVM VirtualVets: skin

- Petunia, 4 y.o., FS DSH, indoors
- On Revolution and PVD HA
- Chewing a sore on leg that has gotten progressively worse over the past 3-4 days
- Recently started stealing kibble from dog's bowl
- Dx: Food allergy
- Tx: Topical steroid ointment, eliminate access to dog's food, e-collar



TAMU CVM VirtualVets: behavior

- Popcorn, 11 y.o., FS, DSH, indoors
- Had in-clinic exam to treat ear infection 2 weeks ago and was fractious; virtual visit was recommended for follow-up

Virtual visit:

- Ear infection resolved
- Popcorn is attacking new dog in house, a very tiny Chihuahua, obtained 1 wk ago
- Tx: Behavioral modification plan
 - Fluoxetine daily
 - Gabapentin daily until fluoxetine reaches therapeutic levels
- Follow-up in 1 month

Questions?



May you live in interesting times