VETERINARY VIRTUAL CARE ASSOCIATION

STATE OF THE VETERINARY VIRTUAL CARE INDUSTRY REPORT 2024

AN OVERVIEW OF COMPANION ANIMAL VIRTUAL CARE SERVICE UTILIZATION AND OUTCOMES FROM THE U.S., U.K., AND CANADA

A WORD FROM THE BOARD

In 2023, the Veterinary Virtual Care Association (VVCA) identified the year as crucial for the evolution of veterinary virtual care, with a strategic emphasis on global expansion. This focus underscores our dedication to our foundational pillars: enhancing access to veterinary care through education, the establishment of best practices, and advocacy. Recognizing the indispensability of a thorough comprehension and widespread dissemination of virtual care utilization and delivery trends, we embarked on this mission with a clear vision.

The invaluable support and collaboration with our sponsors, data aggregators, and the wider industry community greatly facilitated our journey toward this goal. These partnerships provided us with access to comprehensive, large-scale data sets previously unexplored, shedding light on the nuanced landscape of virtual veterinary care. This collaboration illuminates our path forward and reinforces our collective commitment to leveraging innovative data-driven insights for advancing veterinary care globally.

As the Executive Director of the Veterinary Virtual Care Association and representing our esteemed Board of Directors, I am thrilled to announce a significant milestone achieved through our collaborative efforts. Together, we have collected an extensive compilation of data, encompassing millions of data points derived from over 506,000 distinct virtual care interactions globally. This remarkable data collection serves as the cornerstone of our report, providing a comprehensive overview of virtual care practices worldwide. The insights gleaned from this vast dataset are instrumental in understanding the current landscape and future directions of veterinary virtual care, while also reflecting our continued commitment to its advancement.

This report is designed to give our global veterinary community in-depth insights into adopting and integrating virtual care. It showcases the forefront of innovative technologies and emerging best practices in virtual care aimed at informing and inspiring. Our goal is to highlight how virtual care is utilized worldwide, drawing from extensive data collected by large-scale data aggregators — a testament to the collective effort and support we've received from the industry.

We are deeply thankful to our sponsors and industry supporters for their steadfast commitment to advancing the field of veterinary virtual care. Their significant contributions have been instrumental in bringing this report to fruition. Together, we are not just witnessing but actively participating in the evolution of veterinary medicine.

This report is a milestone in our global engagement and education journey, underscored by our prioritization of data and evidence-based insights. It reflects our shared vision and the powerful synergy between our association, our sponsors, and the veterinary community worldwide.

Graysen Gilbraith Biensch
Executive Director, VVCA

INTRODUCTION TO CONSUMER UTILIZATION OF VIRTUAL CARE

In the dynamic landscape of modern veterinary medicine, a revolutionary shift is underway as virtual care technologies redefine how pet owners engage with their companion animal's healthcare. This report embarks on an exploration of virtual care in veterinary medicine, placing a spotlight on the United States, Canada, and the United Kingdom — nations at the forefront of this digital evolution, where the focus is not only on the veterinarian but also on empowering pet owners with innovative tools for their pets' well-being.

The advent of virtual care has not only transformed the veterinary profession but has also empowered pet owners to participate actively in their pets' healthcare journey. Through virtual care, mobile applications, and digital communication platforms, pet owners can now access remote consultations, monitor their pets' health in real time, and receive timely guidance — all within their homes' familiar comfort and confines.

This report explores the consumer-centric aspects of virtual care adoption, uncovering the trends, challenges, and opportunities that emerge when pet owners actively embrace these transformative technologies. Our analysis specifically focused on the nature of the conditions and symptoms for which pet owners engage with virtual care providers from a unique perspective of both regionally-driven and service design differences. Importantly, the cases surveyed did not include general wellness or behavioral questions. It should additionally be noted that the way cases are classified was found to be heavily influenced by each provider’s business model and specific regional regulatory guidelines, rather than by consumer behavior. This acknowledgment of scientific limitations, as well as the lack of "Evidence Based Veterinary Medicine (EBVM)" around telehealth globally, is crucial for understanding the data trends and variations we observe across different regions.

Our analysis also extends beyond the veterinary clinic to examine the evolving expectations of pet owners in a digital age. Firstly, we explore cutting-edge research into veterinary care deserts, personnel shortages, and access issues. Regulatory frameworks governing virtual care in each country, the role of emerging technologies in diagnostics, and treatment planning are also reviewed, providing a holistic understanding of the impact of virtual care on the pet-owner dynamic.

ACCESS TO CARE:

DATA ON VETERINARY CARE SHORTAGES IN THE U.S.

WHY VIRTUAL CARE IS NEEDED: ACCESS TO CARE CONCERNS

The need for virtual care in veterinary medicine has become increasingly apparent, particularly in the wake of the COVID-19 pandemic, with access to care emerging as one of the primary motivators for its adoption. Access to care concerns in the veterinary field refer to the obstacles that hinder or restrict pet owners from securing necessary health services for their pets. These barriers can stem from a variety of sources, including financial limitations, geographical distance, the availability of veterinary services, cultural and linguistic differences, staffing shortages, and varying levels of consumer knowledge about pet health.

To gain a deeper understanding of these challenges, we consulted with experts from the Veterinary Care Accessibility Project, who provided comprehensive data on both the accessibility of veterinary care and the capacity of veterinary services to meet demand, specifically focusing on the workforce within the United States. This insight is crucial for appreciating the full scope of the issues at play and underscores the vital role of virtual care in addressing these gaps relating to veterinary care accessibility and capacity for care regarding veterinary personnel within the United States.

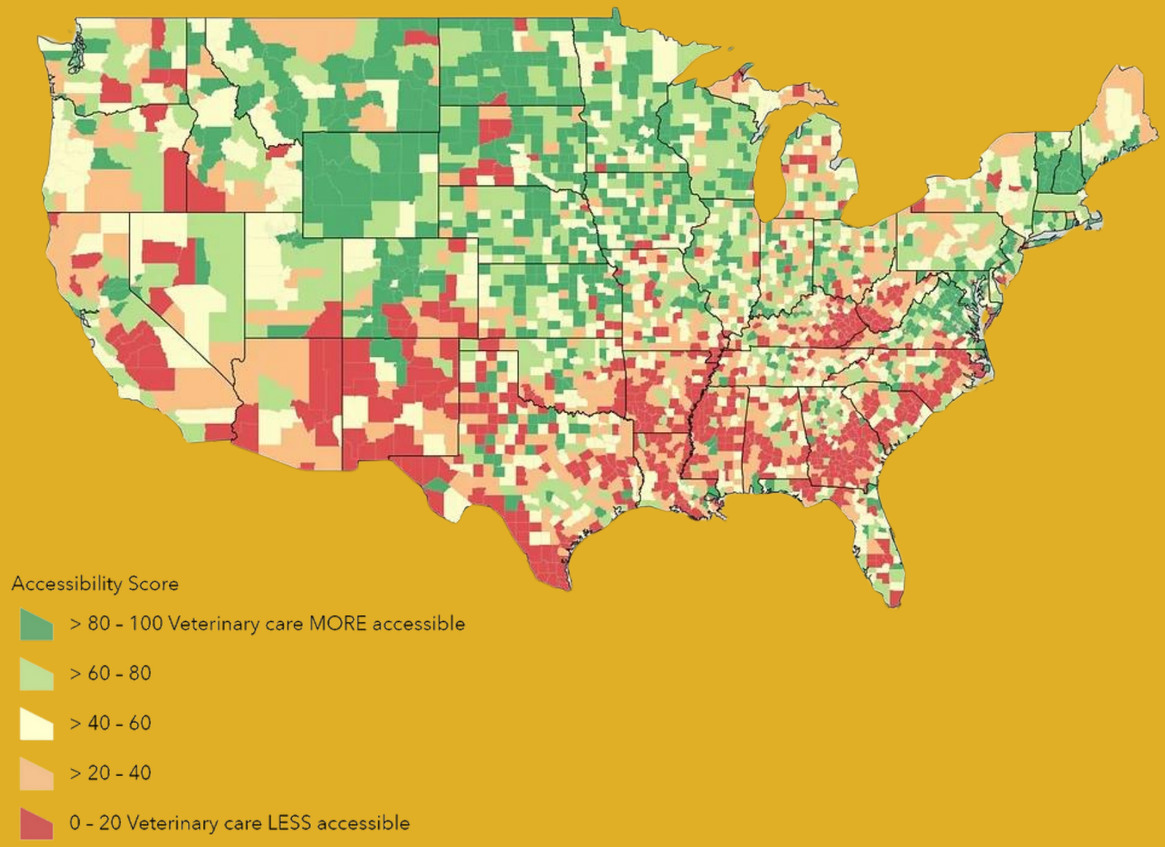
VCAP VETERINARY CARE ACCESSIBILITY SCORE (VCAS) MAP

The Veterinary Care Accessibility Score (VCAS) introduces a novel approach to addressing the intricate issue of unequal access to veterinary care across the nation. By leveraging data from a diverse range of sources, the VCAS provides a comprehensive measure of the various factors influencing access to veterinary services. This innovative index **distills the complexities of affordability, provider availability, transportation access, language barriers, and more into a single metric**, offering a clear view of veterinary care accessibility in different communities.

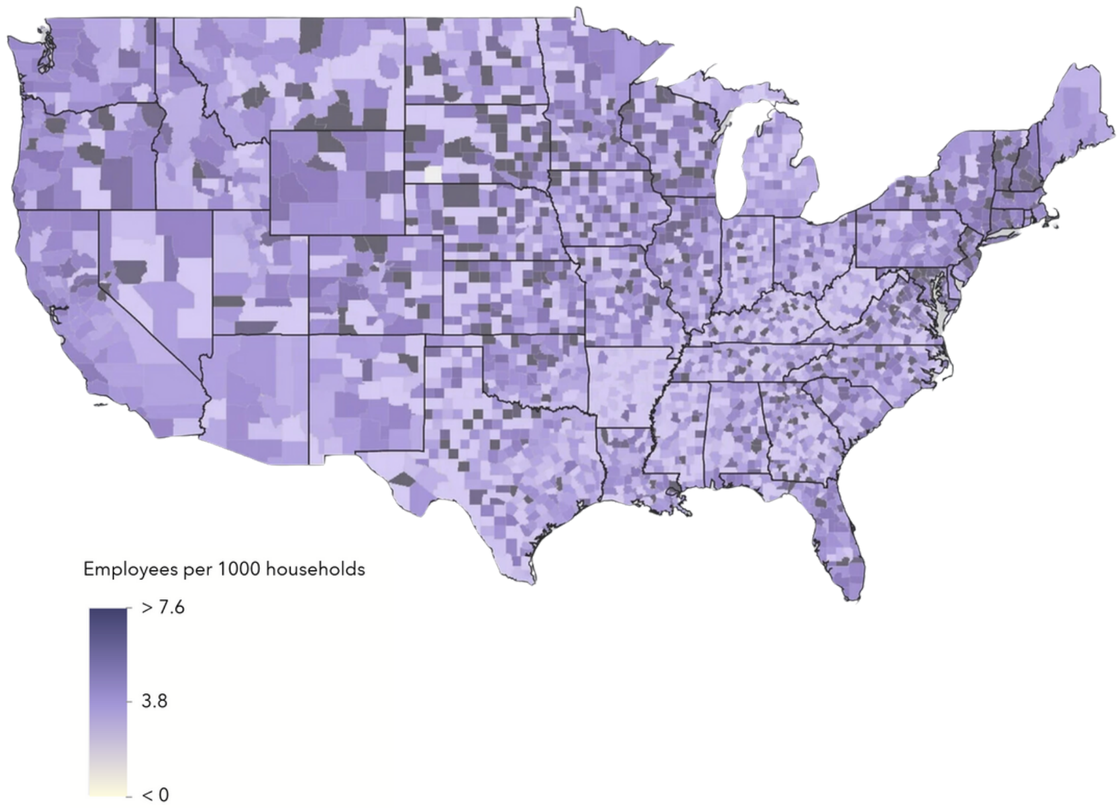
The factors that contribute to a county's score include number of households (US Census data), number of pets (AVMA), number of veterinary employees (ESRI), population identified as "speaking English less than well" (CDC SVI & US Census), individuals without access to a vehicle (CDC SVI & US Census), per capita income (CDC SVI & US Census), and poverty levels (CDC SVI & US Census).

This method allows for a detailed yet comprehensive assessment of veterinary care accessibility at the county level, chosen for its optimal balance of specificity and broad applicability. As a result, **each county receives a VCAS, which reflects its relative ease of access to veterinary care, offering valuable insights into where improvements are needed most.**

View the map - https://www.accesstovetcare.org/vcas-map



VCAP'S CAPACITY FOR CARE MAP



A critical indicator in understanding the landscape of veterinary service shortages is the Veterinary Employee Density (VED), which quantifies the number of veterinary staff per 1,000 households. This metric emphasizes "employees" over "hospitals" to better reflect differences in staffing across various facilities. **The VED in the United States spans from 0 to 170, with an average of 2.5.** By mapping this data against the number of pets and households per county, VCAP has provided a visual representation, displayed to the left.

Although the veterinary sector lacks precise data to establish the optimal VED for ensuring sufficient veterinary care access, it's clear that many counties do not meet the average VED threshold. By aiming to elevate every county to the mean VED of 2.5, **we identify a national shortfall of approximately 60,000 veterinary staff members required to achieve this benchmark**. It's important to note that this figure encompasses the entire clinic workforce, not just veterinarians, acknowledging the critical role each team member plays in providing care. Based on a typical staffing ratio of 4:1 (four non-veterinarian staff for every veterinarian), we estimate that about 12,000 veterinarians are needed to address the shortfall.

Virtual care emerges as a pivotal solution in areas unlikely to see the establishment of nearby veterinary hospitals, as even increasing veterinary staff would likely result in that staff living in the more populated areas of the country where veterinary care access is already established.

While virtual care is not a universal remedy for all challenges related to accessing veterinary care, virtual care represents a significant step forward. It can enhance service capacity and mitigate common obstacles to care such as provider availability, cost, and logistical difficulties in obtaining services. In essence, virtual care moves us closer to achieving equitable veterinary care access for all pets and their owners.

View the map - https://www.accesstovetcare.org/vet-employees-to-households

ACCESS TO CARE CONCERNS IN THE UNITED STATES:

KEY METRICS FROM VCAP

12K

VETERINARIANS

The shortage of veterinarians in the U.S. determined to be needed to fill the gap to bring all U.S. counties to a mean VED of 2.5.

48K

SUPPORT STAFF

The shortage of veterinary technicians and assistants in the U.S. determined to be needed to fill the gap in county VED scores.

694

NO ACCESS COUNTIES

Out of 3,143, 694 counties in the U.S. (or 22%) were identified as having zero veterinary employees (a VED score of 0) within those counties.

25.2M

COMPANION ANIMALS

Estimated number of pets in the U.S. residing in the lowest quintile of the VCAS map, with accessibility scores of less than 20.

VIRTUAL CARE DATA:

REGIONAL ANALYSIS AND COMPARISONS

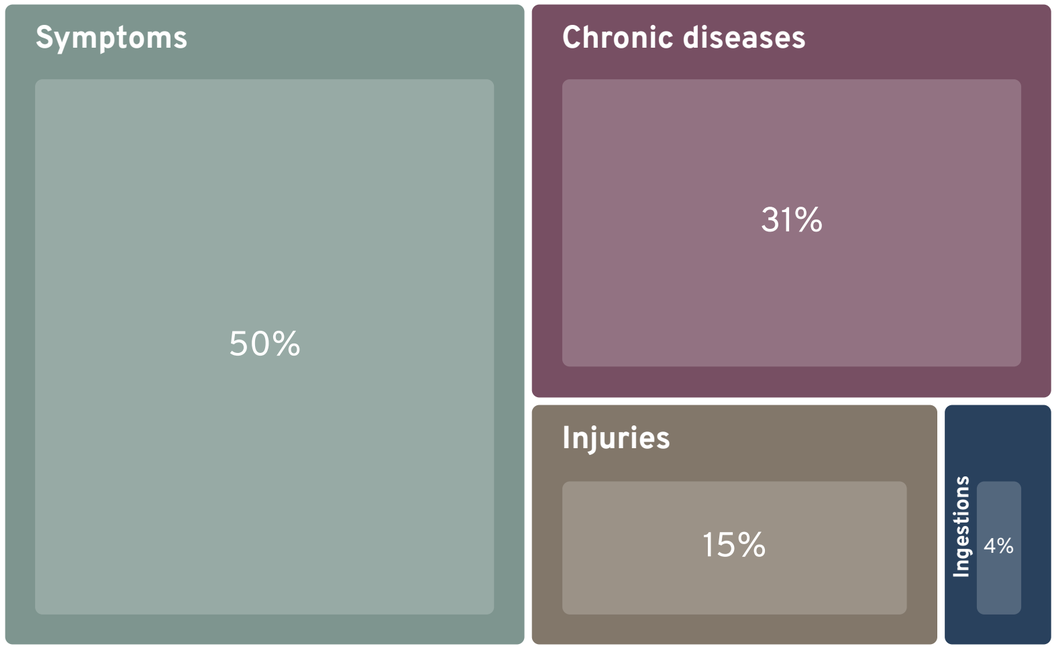
VIRTUAL CARE DATA FROM CANADA, U.S., AND U.K.

As virtual care gains traction in the field of veterinary medicine, it's crucial to analyze the issues that prompt pet owners worldwide to seek out these services. This investigation, carried out through surveys from partners of the Virtual Veterinary Care Association (VVCA), aims to **shed light on how often, where, and what types of cases are reported**. This effort is designed to enhance our understanding of virtual care's role in pet healthcare.

We employed a detailed methodology to examine data, which was anonymized and compiled from surveys of virtual care consultations for pets in the United States, Canada, and the United Kingdom. These surveys gathered data from between March 2020 to October 2023, though did not always cover the full period depending on providers' data availability or willingness to share. The survey also considered various business models within virtual care, from teletriage and telemedicine to hybrid forms that combine in-person and virtual consultations, adapting to both operational practices and regional regulations.

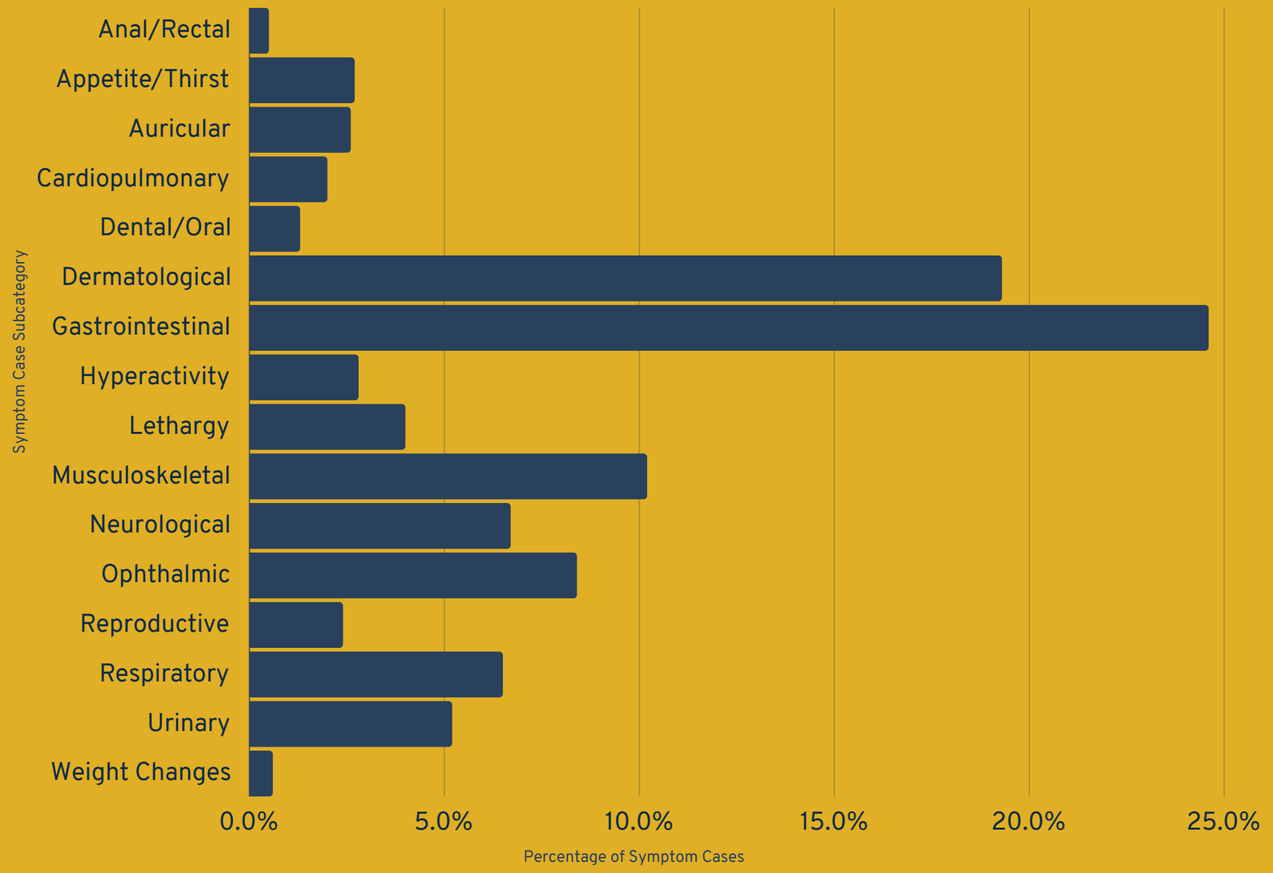
Data from the surveys was aggregated and analyzed across different groups, with **distinctions made based on both geographical locations and the type of virtual care model** used. This methodology allowed for the identification of trends related to the species of the companion animal, how pet owners initiated contact (phone, chat, email, asynchronous messaging, or video), and the primary reasons for the consultation. These reasons were detailed further into categories like symptoms, injuries, ingestion issues (including toxins and foreign objects), or chronic conditions. Additionally, **each provider reported on the initial level of care recommended following the virtual consultation, which could be one of four outcomes**: 1) monitoring the pet at home without in-person care, 2) referral for in-person primary care, 3) urgent referral for emergency care, or 4) escalation to a telemedicine appointment with a veterinarian for remote treatment.

By dissecting these trends, the aim of this report is to provide veterinary professionals and virtual care services with **insights into the needs of consumers and their pets**. It also seeks to enrich the ongoing conversation about how technology intersects with veterinary practice within the framework of regulatory standards, offering guidance for future developments in the field.



Percentage of Primary Category for all Virtual Care Cases Examined

PRESENTING SYMPTOMS: GLOBAL OVERVIEW



50% OF CASES GLOBALLY ARE SYMPTOMATIC
(NOT CHRONIC OR ASSOCIATED WITH AN INCIDENT)

LARGEST DEMAND: SYMPTOMATIC SUPPORT

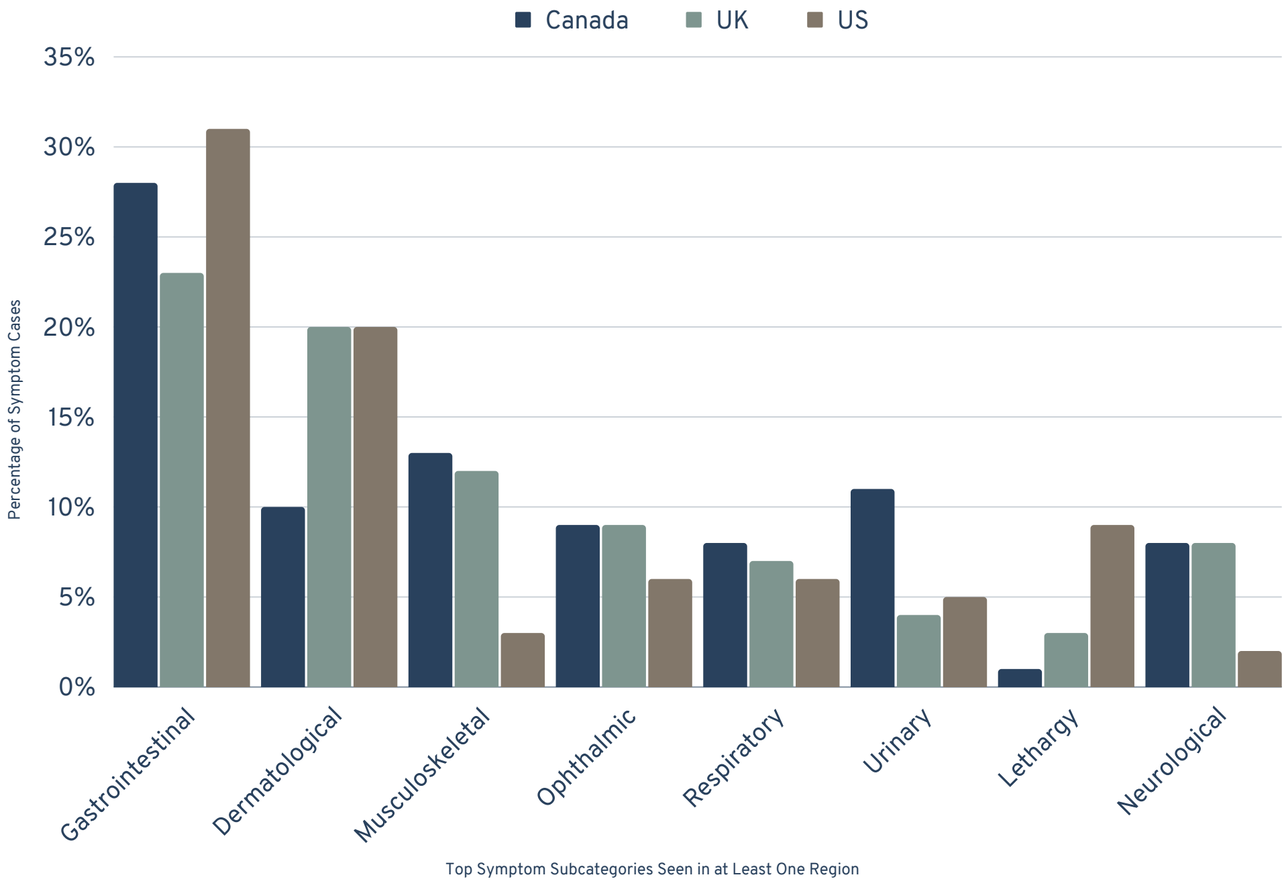
Our global survey reveals that the main reason pet owners are turning to virtual care is for help in figuring out or dealing with symptoms of illnesses.

More than half of all the virtual care consultations collected from our resource partners fell into the parent category of symptoms, meaning that the presenting concern from the pet owner was regarding an unknown condition (i.e. not pre-existing) and not associated with a known acute injury or accidental ingestion. Asking in this way **allowed for better differentiation** of, for instance, gastrointestinal symptoms which might be part of ongoing issues, like Inflammatory Bowel Disease (IBD), vs. new, sudden health problems, like an unexpected case of diarrhea.

It was found that, despite this instruction, the way cases are classified were **significantly influenced by the business model of each resource partner and specific regional regulatory guidelines**, rather than by consumer behavior, resulting in some unexpected variations between regions as we'll explore in the pages that follow.

The insight from our data collection underscores a compelling point: **a significant number of pet owners are seeking virtual care services for advice on symptoms.** This finding suggests that there's a considerable hesitation to opt for in-person veterinary visits unless the pet's symptoms appear severe or alarming.

PRESENTING SYMPTOMS: REGIONAL VARIANCES



GI IS THE TOP PRESENTING CONCERN ACROSS ALL REGIONS

WHY PET PARENTS REACH OUT

CANADA

TOP 5

1. Gastrointestinal (28%)
2. Musculoskeletal (13%)
3. Urinary (11%)
4. Dermatological (10%)
5. Ophthalmic (9%)

U.K.

TOP 5

1. Gastrointestinal (23%)
2. Dermatological (20%)
3. Musculoskeletal (12%)
4. Ophthalmic (9%)
5. Neurological (8%)

U.S.

TOP 5

1. Gastrointestinal (31%)
2. Dermatological (20%)
3. Lethargy (9%)
4. Respiratory (6%)
5. Urinary (5%)

- Gastrointestinal issues emerge as the primary concern for all pet owners
- Dermatological concerns follow closely behind, securing the second spot in the U.K. and the U.S., whereas in Canada, these cases were seen less frequently.
- Respiratory symptoms show a consistent presence across all three regions.
- Other notable variances were observed in the following categories:
  - Lethargy is noted in 9% of cases in the U.S., a stark contrast to 1% in Canada and 3% in the U.K.
  - Urinary issues constitute 11% of the virtual care cases in Canada, compared to 5% in the U.S. and 4% in the U.K.
  - Neurological symptoms represent 8% of cases in both the U.K and Canada, but only in 2% of those in the U.S.
- Model & jurisdictional factors likely contributed to some discrepancies.

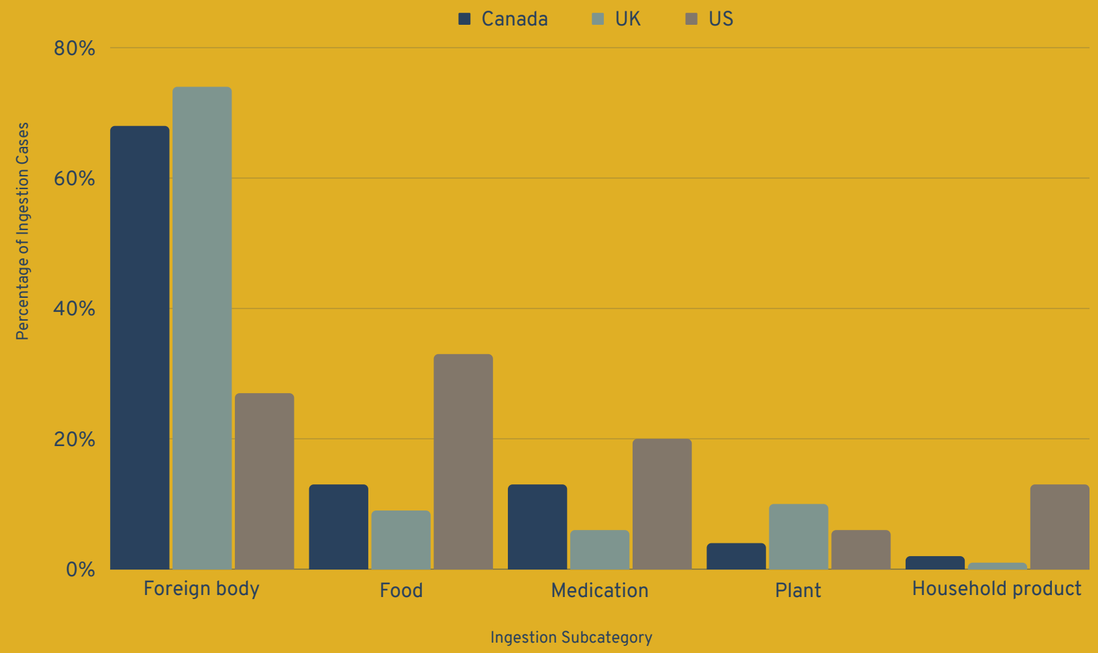
INGESTION: GLOBAL OVERVIEW & COMPARISON

FOREIGN BODIES ARE A PRIMARY CAUSE OF INGESTION-RELATED COMPLAINTS ACROSS THE GLOBE

Ingestion-related complaints accounted for 4% of all cases reported internationally, though it's important to note that **not all contributors classified ingestion incidents uniformly**. For example, in Canada, cases of marijuana ingestion might often be categorized as a neurological symptom due to different intake procedures in the region and amongst providers conducting telemedicine appointments.

Conversely, the classification of marijuana ingestion in other regions, while identified as an ingestion, could vary in subcategory depending on whether it's considered a plant or a medication. In the United States, providers indicated that marijuana would be categorized as a plant for recreational ingestion but as medication if it was prescribed or had a dosage label.

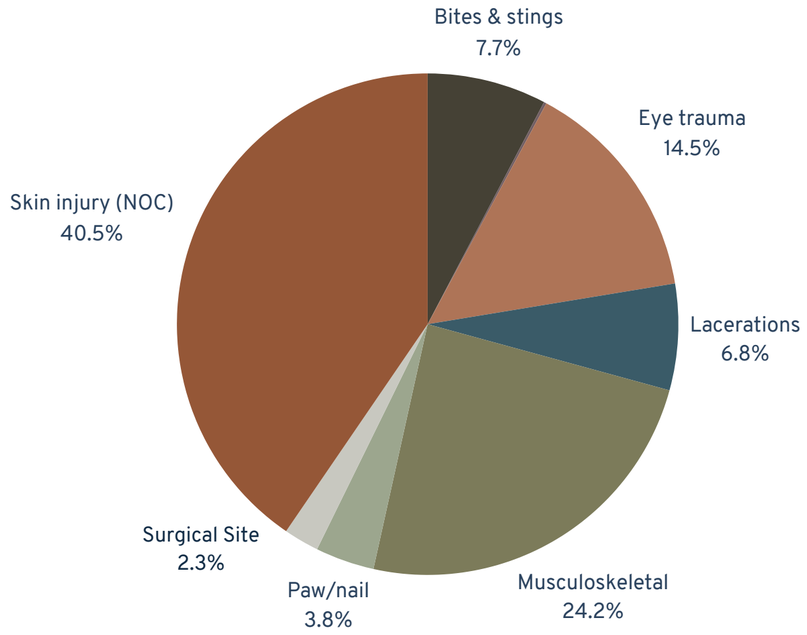
Globally, the most frequent ingestion incidents involved foreign bodies, followed by toxic foods and medications. Incidents involving plants and household products were less common, indicating a varied landscape of ingestion-related issues faced by pets globally, with regional nuances affecting classification and reporting.



UNDERSTANDING KEY DIFFERENCES BY REGION

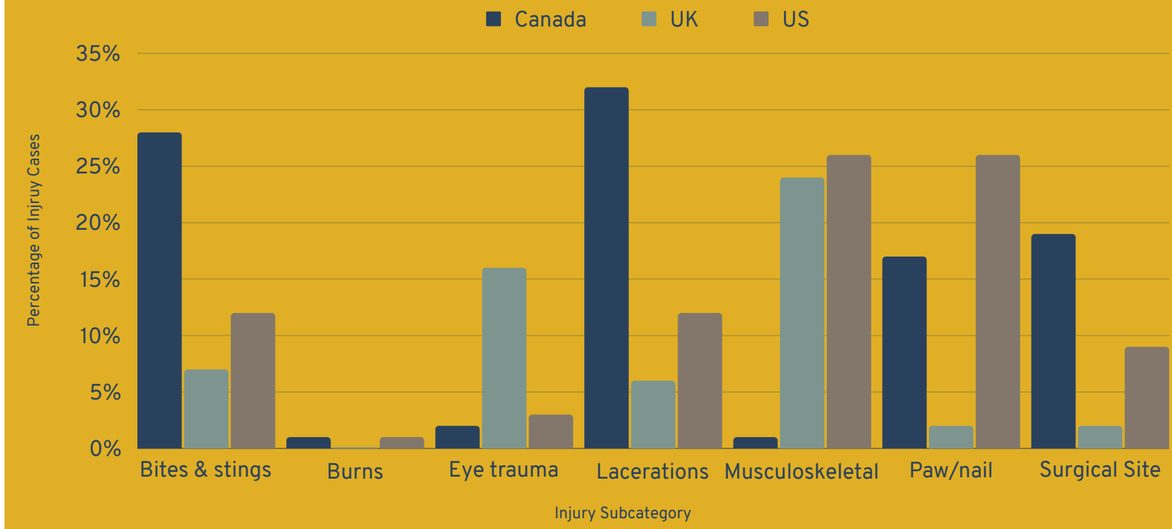
The predominant reason for ingestion-related veterinary visits in the U.K. (74%) and Canada (68%) pertained to foreign objects. Conversely, in the U.S., the leading cause of such consultations was due to food ingestion (33%), with foreign objects being the second most common reason (27%).

INJURIES: GLOBAL OVERVIEW & COMPARISON



In a global context, injuries represented 15% of the initial reasons for seeking virtual veterinary care for companion animals, although one survey participant was unable to provide specific data on injuries. Amongst these injury-related cases, not-otherwise-classified skin injuries (NOC) accounted for 40.5% of cases.

To better understand how consumers utilized injury support on a global comparative scale, skin injuries that were not otherwise classified were omitted to present more meaningful comparative views in the data to the right.



The observed differences in injury presentations across countries **might be attributed to the varied classification methods used by data providers**. For example, the U.S. reported prevalence of musculoskeletal symptom cases may appear lower due to these cases being **more frequently identified and categorized as injuries** rather than symptoms compared to other regions. Similarly, in Canada, dermatological issues might not be as prominently represented in symptom categories because **many such cases are accurately identified and recorded as resulting from an injury**.

REGIONAL VARIATIONS IN CATEGORIZATION SIGNIFICANTLY IMPACTED THE REPORTED INCIDENCE RATES OF INJURIES AND SYMPTOMS IN VIRTUAL CARE DATA

OTHER KEY HIGHLIGHTS & TAKEAWAYS

4.5

YEARS

The average age of the dogs and cats seen in each region between the time period of March 2020 to October 2023*.

*Range did not span entire period for all survey respondents

80:20

DOGS:CATS

Representation of dogs vs. cats globally, with little variance (+/- 1%) between each region. This ratio is consistent with the visits seen in physical practices in the U.S.

98.4%

SATISFACTION

Global satisfaction on a 1-5 scale. Regardless of model type or region, providers who conducted satisfaction surveys found an estimated* 98.4% of consumers had rated their experience a 4 or higher, 93.7% rating it a 5.

*data submitted included yes/no, 10-point, and 5-point surveys

37/29/33

PHONE/CHAT/VIDEO

Among providers offering at least two channel options (phone, chat, email, asynchronous messaging, & video), 37% of consults were conducted by phone, 33% by video, and 29% by live chat. Email and asychronous were elected least often at 0.7% and 0.3% respectively.

VIRTUAL CARE DATA:

SERVICE MODEL ANALYSIS AND COMPARISONS

VIRTUAL CARE MODELS & OUTCOMES OVERVIEW

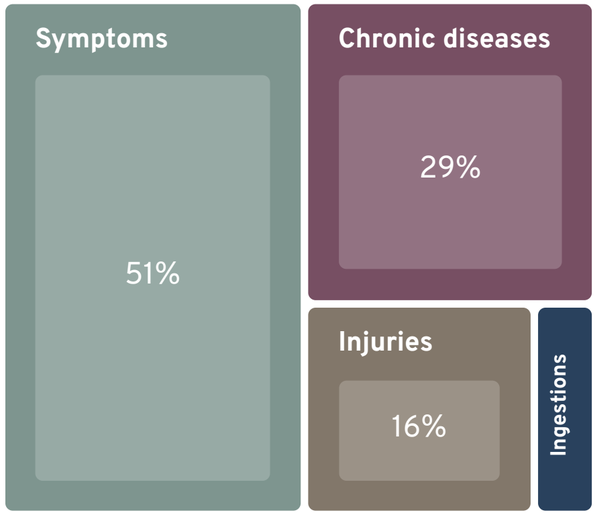
Our research not only compared virtual care usage across different geographic regions but also recognized the necessity to **distinguish between various virtual care delivery models used by providers**. This differentiation was crucial for understanding the reasons behind the diverse trends observed in our data. The analysis categorized virtual care providers into two primary groups based on their service models: those focused on providing guidance to assess the urgency of care needed, and those offering services marketed more heavily toward treatment of conditions, including capabilities for remote diagnosis and prescribing.

Providers in the first category, herein referred to as **guidance-oriented models**, primarily offered services marketed to address high-acuity or unknown cases, including teletriage and teleadvice, directing pets to the appropriate level of care based on the urgency of their condition. This group was characterized by a significant portion of their cases being referred to emergency care, primary care, or recommended for at home monitoring/no immediate in-person intervention after initial assessment. Some guidance services did extend to the delivery of telemedicine; however, limitations related to the temporary nature of such offerings or challenges in tracking data for cases that escalated to a pet's primary veterinarian for virtual assessment excluded them from the treatment provider category.

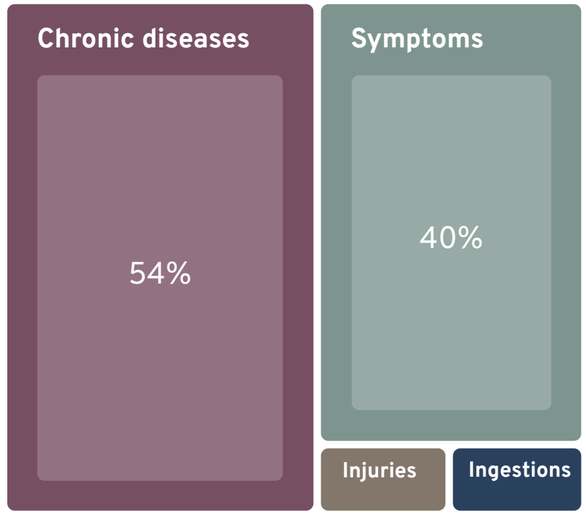
The second group included providers who marketed their services and operated heavily on **treatment-oriented models**. These would include providers who had either conducted some form of an in-person examination, had direct access to primary care personnel or pet medical records, and/or had operated direct-to-veterinarian in 100% of their reported cases and at least half of those cases resulted in a telemedicine appointment as an outcome. In cases where the jurisdiction's legislative landscape considers all telehealth, teletriage, guidance, or advice services to be classified as telemedicine, resource providers were classified in the treatment-oriented group as well.

This nuanced comparison shed light on the evolving landscape of virtual veterinary care, revealing variations in the main reasons pet owners sought out these services, as highlighted by the data on primary complaints presented by pet owners, listed to the right.

GUIDANCE-ORIENTED



TREATMENT-ORIENTED



GUIDANCE-ORIENTED MODELS:

RESOURCE PARTNER SELECTION CRITERIA

The veterinary virtual care providers falling under the category of guidance-oriented models **operated with a primary focus on addressing cases of high acuity or uncertainty**. These providers employed a range of services, including teletriage and teleadvice, which were designed to **assess the severity of a pet's condition and provide guidance on the next steps** in their care journey. Guidance-oriented services often involved thorough evaluation of symptoms and medical history to determine the urgency of the situation, while tele-education initiatives aimed to **empower pet owners with knowledge about common ailments, preventive care measures, and when to seek professional assistance**.

Within this group, a significant emphasis was placed on efficiently **directing pets to the most appropriate level of care** based on their individual needs. This involved assessing the severity of the pet's condition and making recommendations for further action, which could include referral to emergency care facilities for immediate intervention, scheduling an appointment with a primary care veterinarian for non-emergent issues, or providing guidance for watchful monitoring when no immediate intervention was necessary.

While the primary focus of guidance models was on teletriage and tele-education, some providers within this category also offered telemedicine consultations as part of their services. However, **data contributors were not excluded from the guidance category** if at least 50% of their cases were handled by veterinary technicians and/or no more than 50% of their cases resulted in telemedicine appointments as an outcome.

TREATMENT-ORIENTED MODELS:

RESOURCE PARTNER SELECTION CRITERIA

The second group of survey respondents represented a wider array of veterinary virtual care providers, but each contained a **similar thread of operating with a primarily treatment-oriented business model**. These providers varied in their approach and capabilities, encompassing a range of criteria to qualify for inclusion in this category.

Firstly, some had **conducted in-person examinations prior to or in conjunction with** the reported virtual consultations (in other words, had established a traditional in-person VCPR) or had **direct access to the pet's primary care doctor or medical records**.

An additional subset of these providers **established a legally recognized virtual veterinary-client-patient-relationship (VCPR)**. In some cases, providers exclusively engaged in direct-to-veterinarian consultations, bypassing technician assessments commonly seen in guidance models; however, it's crucial to note that **veterinarian handling alone did not qualify a contributor for this category unless at least half of these cases resulted in telemedicine appointments** as a designated case outcome or unless otherwise required by law.

Speaking to legal restrictions, for some contributors, **jurisdictional requirements predicated the placement of some data providers within the treatment category** if they delivered any form of triage, guidance, advice, or remote education. Despite this complicating factor, all of our data contributors were found to have met one of the previous criteria.

MODEL IMPACT ON SYMPTOMATIC OUTREACH

GUIDANCE-ORIENTED

TOP 5

1. Gastrointestinal (25%)
2. Dermatological (20%)
3. Musculoskeletal (10%)
4. Ophthalmic (8%)
5. Neurological (7%)

- Model types were found to be a primary driver in utilization differences.
- Dermatological cases were represented in the top 5 for both models, but represented 20% and 12% of cases respectively.

TREATMENT-ORIENTED

TOP 5

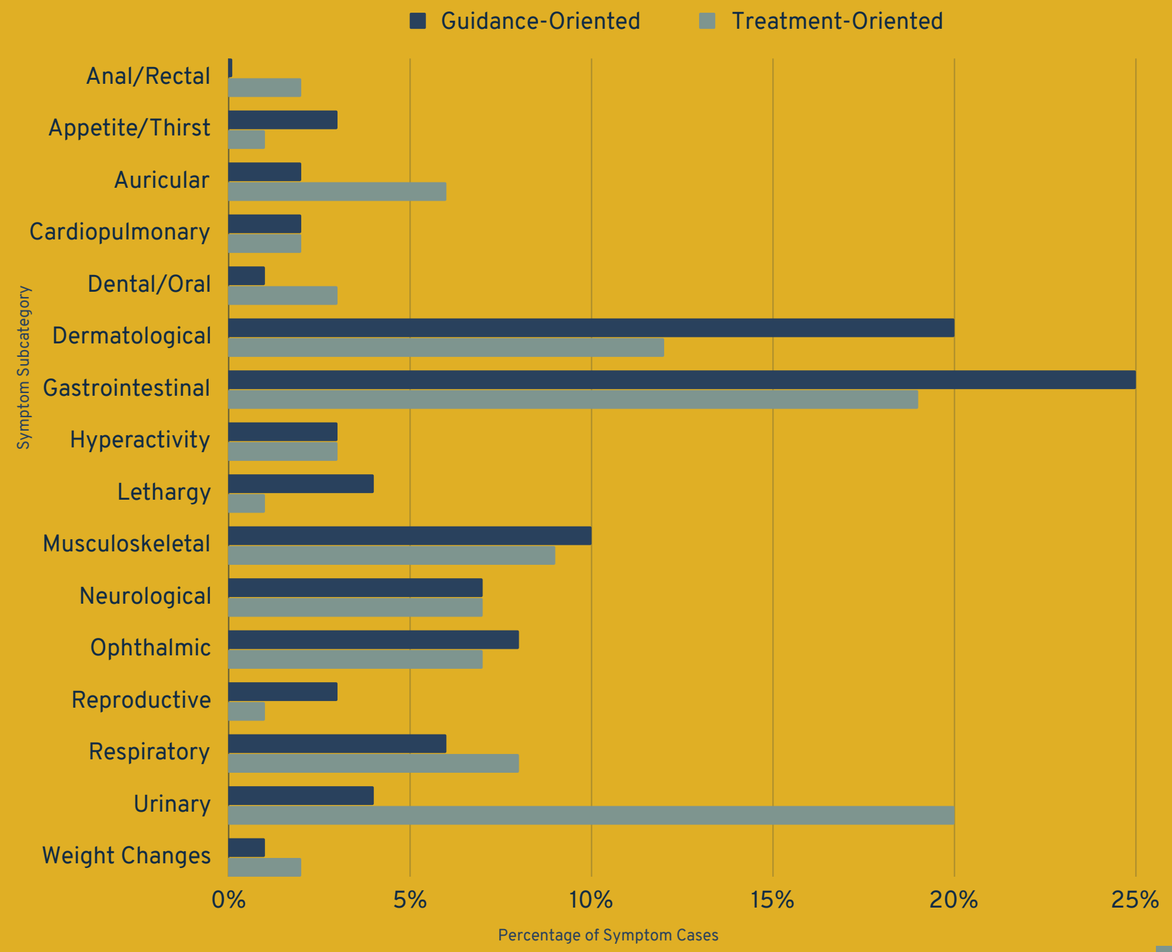
1. Urinary (20%)
2. Gastrointestinal (19%)
3. Dermatological (12%)
4. Musculoskeletal (9%)
5. Respiratory (8%)

- Lethargy cases represented 4% of guidance volume, but less than 1% of treatment volume.
- Musculoskeletal, neurological, and ophthalmic cases were found to have similar usage across model types.

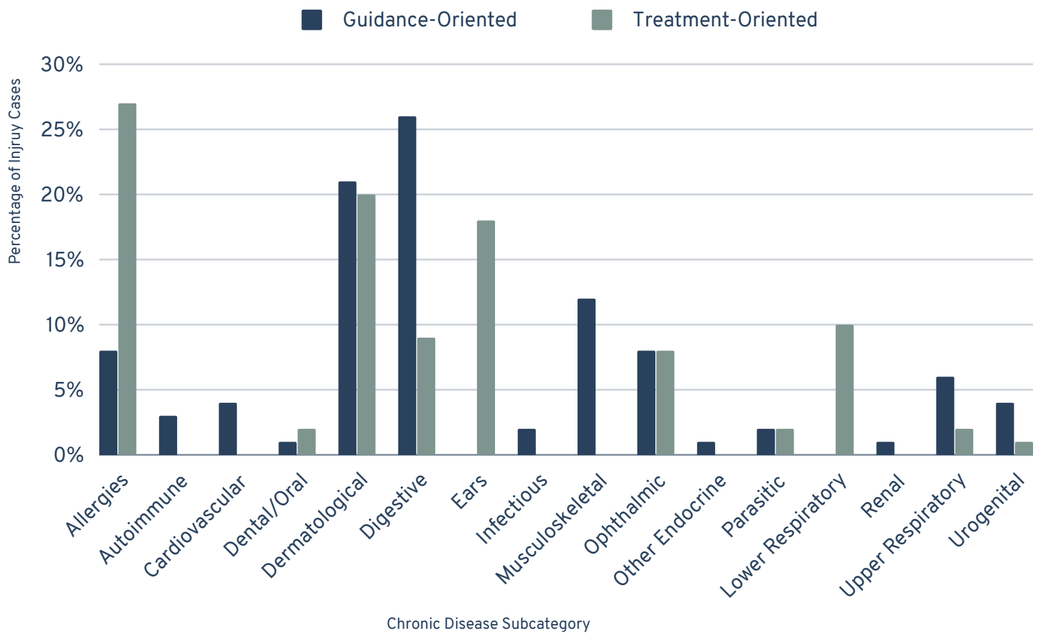
We can expect biases such as pet owner awareness, how services are being offered, regional availability, and financial constraints to have some impact on consumer outreach behavior. As the adoption of virtual care services becomes more prevalent, we can expect to see some of these variances become more nuanced.

DERM & GI AMONG TOP SYMPTOMS FOR BOTH MODELS

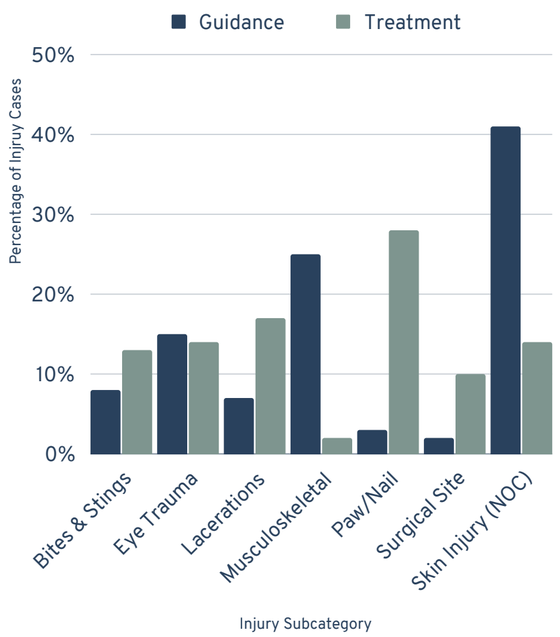
PRESENTING SYMPTOMS: MODEL OVERVIEW



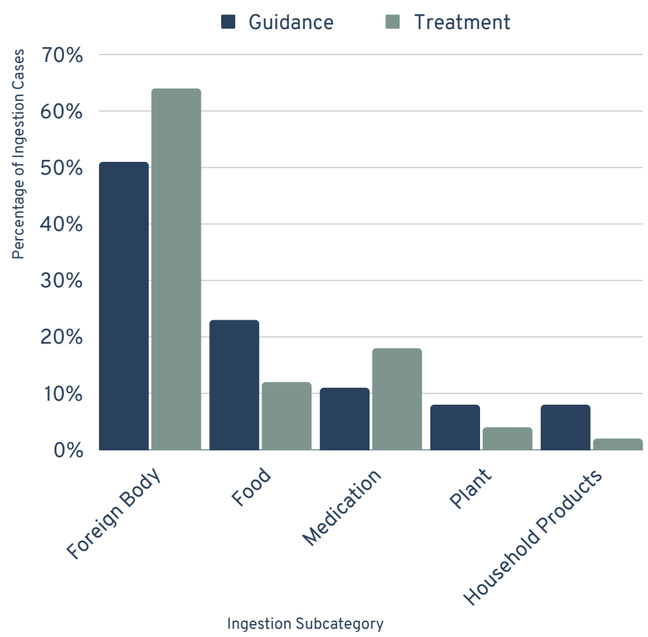
CHRONIC DISEASES: MODEL COMPARISON



INJURY: MODEL COMPARISON



INGESTION: MODEL COMPARISON



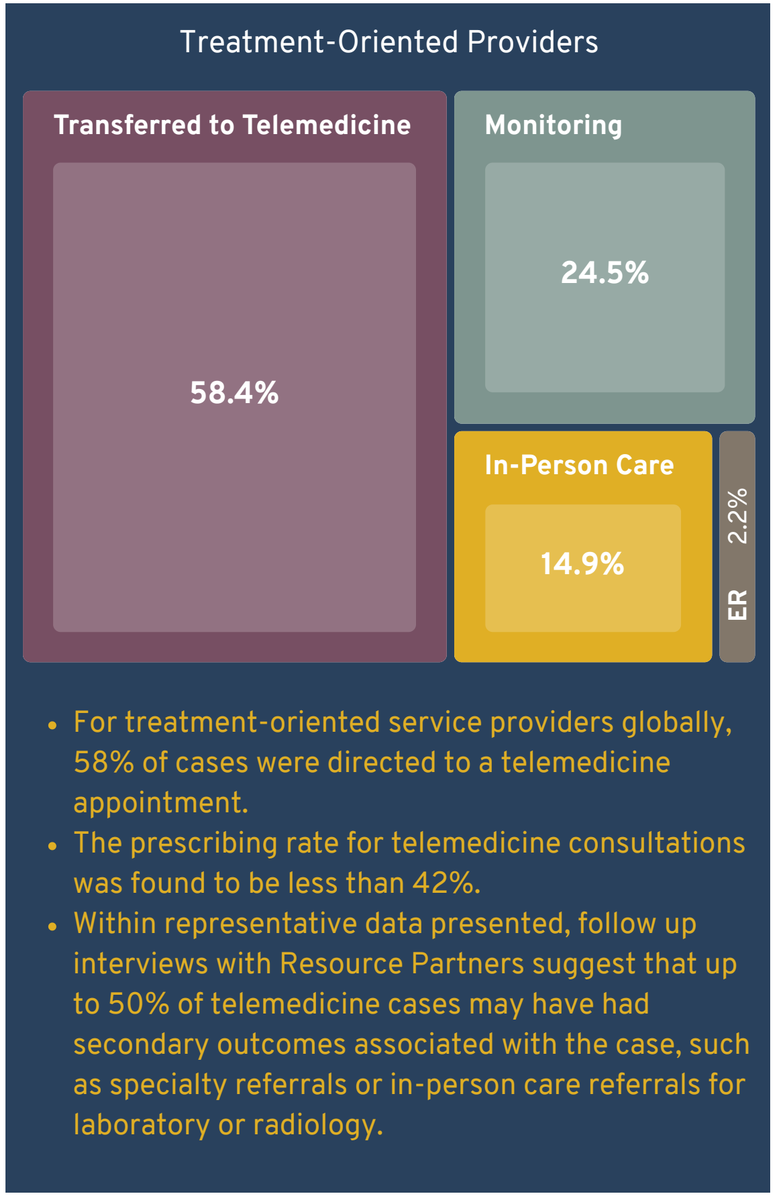
MODEL IMPACT ON DISEASE, INJURY, AND INGESTION ENGAGEMENT

- **Chronic disease management exhibited considerable variation** as follows:
  - Guidance-Oriented saw more cases requiring **ongoing education and support regarding care,** such as digestive disorders (26%), musculoskeletal issues (12%), and cardiovascular conditions (4%)
  - Treatment-Oriented services saw **more conditions that could be considered more amenable to remote management,** such as allergies (27%) and ear issues (18%)
- In the realm of injuries **guidance services dealt with a higher proportion of not otherwise classified skin injuries (41%)** compared to treatment services (14%), consistent with a classification barrier in the absence of forming a diagnosis.
- Regarding ingestions, there was a **noticeable difference in the management of food-related incidents**, with guidance models handling 22% of cases (vs. 11%).

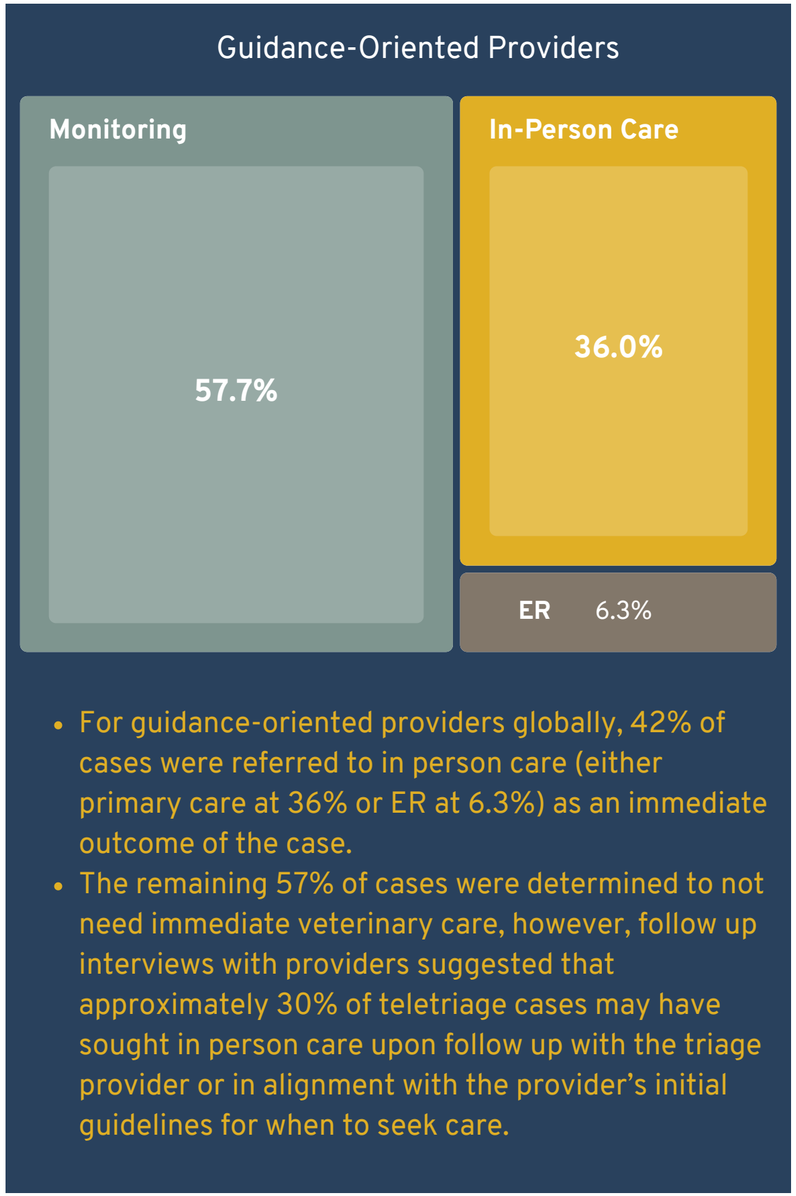
UNDERSTANDING OUTCOMES AND CARE REFERRALS

The variations in both the legislative frameworks and the design of service models play a significant role in shaping consumer engagement with virtual care services and the data on care referrals. Resource Partners were asked to report the proportion of cases that either did not necessitate veterinary intervention, required primary veterinary care, necessitated urgent or emergency in-person care, or were suitable for telemedicine as an outcome. However, **compiling this data introduced specific challenges due to the differences in program designs and regional legislation** affecting the reported outcomes.

For example, in Ontario, Canada, all cases managed through guidance models or teletriage are automatically deemed telemedicine cases by law. Despite these complexities, the findings for **guidance-oriented and treatment-oriented providers aim to initiate a discussion** on how these services could globally influence pet care and the veterinary industry.



- For treatment-oriented service providers globally, 58% of cases were directed to a telemedicine appointment.
- The prescribing rate for telemedicine consultations was found to be less than 42%.
- Within representative data presented, follow up interviews with Resource Partners suggest that up to 50% of telemedicine cases may have had secondary outcomes associated with the case, such as specialty referrals or in-person care referrals for laboratory or radiology.



- For guidance-oriented providers globally, 42% of cases were referred to in person care (either primary care at 36% or ER at 6.3%) as an immediate outcome of the case.
- The remaining 57% of cases were determined to not need immediate veterinary care, however, follow up interviews with providers suggested that approximately 30% of teletriage cases may have sought in person care upon follow up with the triage provider or in alignment with the provider's initial guidelines for when to seek care.

OWNER REPORTED OUTCOMES

Aligning clinical outcomes in virtual care proves challenging due to various factors, including data structure limitations and hurdles in accessing follow-up information after a patient has received treatment or seen care, regardless of whether the patient was referred in person or treated remotely.

Fortunately, two of our resource partners reported that they had conducted specialized surveys following their cases to help determine the pet's condition, even though true clinical response to treatment would be otherwise unavailable. Each represented a different model segment. On the treatment-oriented side, one resource partner was able to **supply survey results for over 2,000 telemedicine appointments**, and on the guidance-oriented side, another resource partner was able to **share results from over 14,000 decision support cases.**

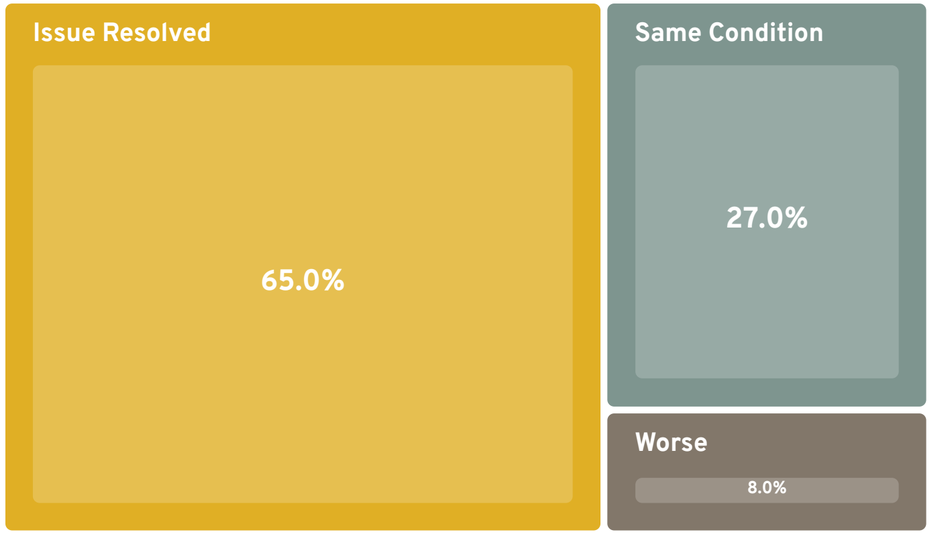
The treatment model exhibited effective results, with a substantial 65% of respondents reporting resolution of their pet's issues. Moreover, 26.9% indicated no change in their pet's condition, while 8.1% reported a worsening condition.

Similarly, the decision support **guidance model demonstrated significant effectiveness, with 62% of the pet owners reporting issue resolution and an additional 26% indicating notable improvement** in their pet's condition. Only 9.5% of pet owners noted no change and 3% indicated a deterioration.

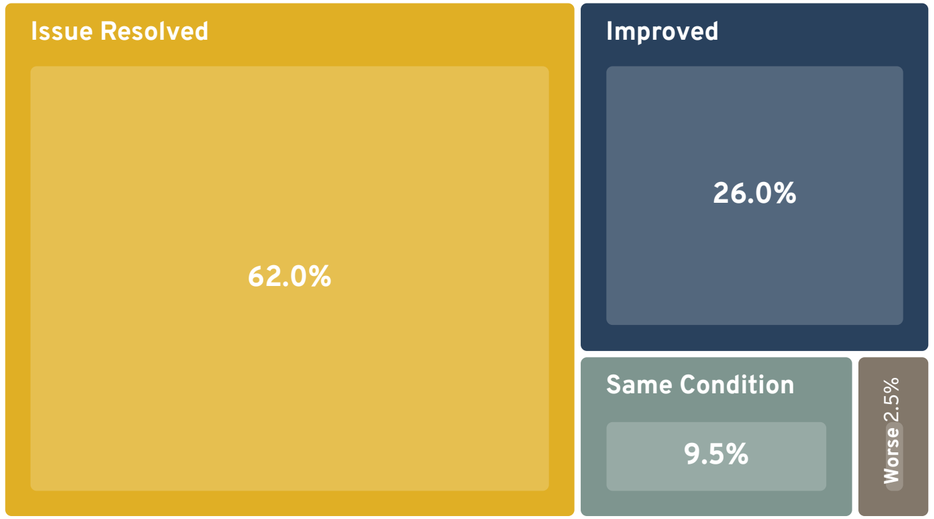
Future improvements may enhance shortcomings in gathering clinical and owner reported outcome data, including:

- cross-platform communication
- medical record sharing
- synchronization with pet insurance claims data
- access to outcome data from traditional models for comparative analysis

Treatment Model: Results from owner surveys



Guidance Model: Results from owner surveys



LEGISLATIVE LANDSCAPE:

TELEMEDICINE AND VIRTUAL VCPR APPROACHES

UNITED STATES, CANADA & UNITED KINGDOM

LEGISLATIVE LANDSCAPE

UNITED STATES AND CANADA

This report section outlines the Veterinary Virtual Care Association's (VVCA) proactive approach and organizational stance on legislative advancements in virtual veterinary care, along with a detailed explanation of proposed reforms. It underscores the urgent need for laws to enhance accessibility, promptness, affordability, and safety of virtual care. These legislative changes hold the potential to significantly improve pet health and welfare, ensuring all animals receive essential care, irrespective of their physical proximity to traditional veterinary care, while maintaining the highest medical safety and quality standards.

The VVCA was established in April 2020 amidst the initial stages of the COVID-19 pandemic. The establishment of the VVCA was significantly influenced by the groundbreaking efforts of the Veterinary Innovation Council (VIC) in 2016, which resulted in the first definition of a policy supporting a telemedicine-based Veterinary Client-Patient Relationship (VCPR) with specific safeguards. This policy sparked widespread interest and led to an extensive two-year evaluation by the American Association of Veterinary State Boards (AAVSB), culminating in adopting a telemedicine-friendly VCPR model policy in September 2018.

In collaboration with the Animal Policy Group, the VVCA Board yielded the creation of a Telemedicine Map, which is freely accessible to the public. This resource provides detailed information on the laws and regulations pertaining to telemedicine and the VCPR across all 50 states and Washington, D.C. The map has proven to be a valuable tool for veterinarians, veterinary technicians/nurses, staff, the broader industry, and the general public, facilitating a better understanding of telemedicine practices in veterinary care.

The VVCA has initiated efforts across several states to investigate and, where feasible, implement policies that support a telemedicine-based Veterinary Client-Patient Relationship (VCPR) with established safeguards. In 2023, the VVCA placed a strong emphasis on its global expansion initiatives across various regions, which notably included the development of telemedicine maps for both Canada and Europe, ensuring that practitioners in these regions benefit from enhanced information regarding telemedicine laws and regulations.

TELEMEDICINE MAPS

The VVCA United States telemedicine map identifies nine state categories regarding VCPR:

- No VCPR
- Absolutely NO telemedicine VCPR
- Must-have "seen/acquaintance with" the animal
- Must-have physically examined animal
- Time limits on when animal last seen
- Virtual VCPR allowed
- Prescription exception
- COVID-19 pandemic changes
- Telemedicine VCPR is allowed except for prescriptions

These categories create different standards state-by-state and inevitably cause confusion and uncertainty. Various organizations have pursued legislation and veterinary board action in some states to close the door to a telemedicine VCPR.

The Veterinary Virtual Care Association (VVCA) has partnered with a range of veterinary industry stakeholders, including animal welfare and shelter organizations, to advocate for pro-telemedicine legislation with established safeguards, as seen in Arizona and California. Additional states are anticipated to adopt similar measures in 2024.

THE PATH FORWARD

In working toward the expansion of pro-telemedicine legislation across the globe, the VVCA and other stakeholders rely on these core rationales:

1. Telemedicine does not replace in-person visits to veterinary clinics but is a tool or resource when a pet owner cannot gain an appointment, travel to a clinic, or afford private veterinary care.
2. This same rationale has led all 50 states in human healthcare to adopt telemedicine as a vital tool for access to care.
3. Telemedicine requires consent from both the pet owner and the veterinarian; it is not a compulsory channel to accessing care.
4. During the COVID-19 pandemic, 19 states in the U.S. allowed some form of telemedicine. Additionally, the province of Ontario, Canada has allowed telemedicine for seven years. No jurisdictions have reported injuries or harm to animals from the use of telemedicine. Speculation about widespread harm to animals and the veterinary profession is just that: pure speculation.

In the vast majority of cases, core rationales used by veterinary professionals and organizations in opposition to a telemedicine VCPR include the following:

1. In all cases, in-person care is better than telemedicine care.
2. Telemedicine will lead to widespread fraud, injuries, malpractice, etc.
3. There are no lessons to be learned from telemedicine and human healthcare.
4. Because the FDA requires in-person VCPR for extra-label drug prescriptions, this must mean that a telemedicine VCPR is banned in all circumstances.

While many contrary rationales lack evidence-based analysis, it is clear that the debate surrounding telemedicine in veterinary care hinges on a nuanced balance between accessibility, quality of care, and regulatory concerns. As the discourse evolves, it becomes evident that navigating the integration of telemedicine into veterinary practice requires careful consideration of both its benefits and drawbacks, with a focus on safeguarding animal welfare and maintaining the integrity of the veterinary profession.

To maintain the crucial equilibrium of protecting pet owners, their pets, and the veterinary profession, thoughtful attention has been devoted to the following Principles of Veterinary Telemedicine.

THE VETERINARY VIRTUAL CARE ASSOCIATION (VVCA) PRINCIPLES OF VETERINARY TELEMEDICINE IN THE U.S.

1 Telemedicine does not prevent or compete with in-person visits.

2 Telemedicine is a tool for veterinarians to provide care to animals and owners unable to come to a clinic or secure an appointment at a clinic. It's not meant to be a replacement for in-person care. Rather than either/or, it's a both/and.

3 Telemedicine does not involve prescriptions of controlled substances without an in-person examination.

4 Telemedicine is voluntary and subject to the consent of both the animal owner and the veterinarian.

5 Telemedicine is only permitted if the veterinarian is licensed in the jurisdiction in which the animal resides.

6 Telehealth is not the same as telemedicine. Telehealth is general advice about animal care, not necessarily provided by a veterinarian, but does not involve providing a diagnosis, prognosis, or prescription for an individual animal. Telemedicine is only provided by a veterinarian.

7 Practices may provide telemedicine/telehealth services to new clients and existing clients. These services may be provided by practice employees, independent contractors, or outsourced to veterinary professionals with telemedicine/telehealth platform companies. These third parties are subject to the same veterinary laws and regulations as in-person veterinary professionals.

8 Telemedicine services should be documented in medical records in the same manner and detail as in-person veterinary services.

*The VVCA most recently revised these principles in October 2023.

LEGISLATIVE LANDSCAPE

UNITED KINGDOM

In the United Kingdom, the Royal College of Veterinary Surgeons has issued new guidelines regarding the 'under care' requirements and the prescribing of prescription-only veterinary medicines (POM-Vs), which were implemented starting 1 September 2023.

From the RCVS guidance, the five key changes are:

1. 'You will no longer need to carry out a physical examination to take an animal under your care. Under the new guidance, an animal is taken under your care when you are given, and accept, responsibility for it.
2. When you take an animal under your care, you or another veterinary service provider on your behalf, must be able to provide in-person follow-up care on a 24/7 basis.
3. As now, before prescribing POM-Vs, you will have to carry out a clinical assessment. From 1 September, it is up to you to decide whether this clinical assessment needs to include a physical examination, in all but a number of circumstances (see point 4, below).
4. You must always perform a physical examination in the following circumstances:
    a. where a notifiable disease is suspected
    b. when prescribing controlled drugs (unless there are exceptional circumstances)
    c. when prescribing antibiotics, antifungals, antiparasitics or antivirals (unless there are exceptional circumstances)*.
    d. *NB The proximity of physical examination to prescribing will be slightly different depending on the species being treated.
5. It is your decision, once you have assessed the situation, whether or not to prescribe medicines remotely. To support you in using your professional judgement, we have set out a list of factors to consider when deciding whether a physical examination is necessary (visit the link below for more information).'

*more information can be found here: https://www.rcvs.org.uk/setting-standards/advice-and-guidance/under-care-new-guidance/

CLOSING REMARKS

This report underscores the transformative impact of virtual care within the veterinary industry, highlighting its significant role in addressing veterinary care shortages, enhancing access to quality care, and facilitating the remote management of chronic conditions and early-stage symptom assessment. By analyzing millions of data points from virtual care interactions across the globe, this report reveals a growing acceptance and utilization of virtual care among pet owners and veterinarians, driven by the necessity for remote consultations during the COVID-19 pandemic and beyond. This shift towards embracing virtual care as a tool not only broadens the scope of veterinary services but also presents new opportunities and challenges in regulatory standards, service delivery models, and integrating technology in veterinary practices, ultimately aiming to improve pet healthcare accessibility and quality globally.

The data revealed fascinating variations in symptoms and cases across regions, highlighting the critical necessity for uniform data gathering to enhance the incorporation of virtual care into veterinary services. The first quarter of 2024 has been spent focused on developing more strategic and all encompassing questions to ask future data Resource Partners with an objective of obtaining more clinical and owner reported outcomes that are consistently measurable across the globe.

We are calling on virtual care providers to participate in our upcoming report cycle, targeting the completion of a 2024 global virtual care overview to be presented in early 2025. More information will be released in late Spring 2024. Such a collective endeavor is vital for the evolving field of veterinary virtual care.

Graysen Gilbraith Biensch
Executive Director, VVCA

VVCA DATA RESOURCE PARTNERS

VVCA SPONSORS

Not all Sponsors and/or Resource Partners are listed; some have chosen not to be acknowledged publicly.