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TABLETS

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# Trends

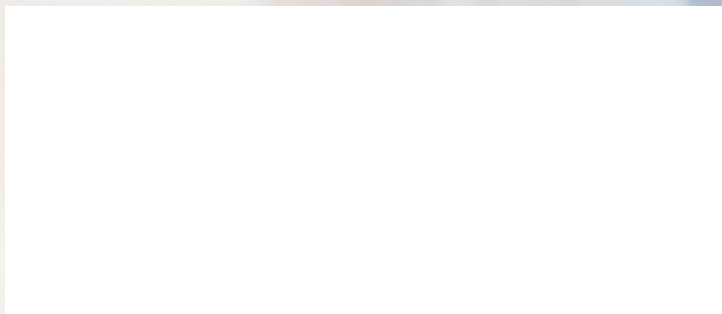
magazine



Treating Stage B2 MMVD patients early  
**starts here**

 **LOOK INSIDE**

**IMPORTANT SAFETY INFORMATION:** Adverse reactions not related to disease progression in dogs receiving VETMEDIN<sup>®</sup>-CA1 (pimobendan) included diarrhea, vomiting, pain, lameness, arthritis, urinary tract infection, and seizure. Do not administer VETMEDIN-CA1 to dogs with Stage A or B1 preclinical MMVD (2019 ACVIM Consensus Statement) due to the risk of cardiac pathology associated with exaggerated hemodynamic responses to VETMEDIN-CA1. **It is a violation of Federal law to use this product other than as directed in the labeling. Conditionally approved by the FDA pending a full demonstration of effectiveness under application number 141-556.** For more information, refer to the package insert.



# vetmedin<sup>®</sup>-CA1

(pimobendan) CHEWABLE TABLETS



## You can give your Stage B2 MMVD patients **more life to love**

- B2** Conditionally approved to **delay the onset of CHF** in dogs with **Stage B2 preclinical myxomatous mitral valve disease (MMVD)**
- Can give canines up to an average of **15.6 more months** of symptom-free life!
- Helps you manage MMVD prior to CHF and **maximize the therapeutic benefit** for your patients
- ACVIM-consensus recommended therapeutic treatment** for dogs with **Stage B2 preclinical MMVD\***



Scan to learn more about the conditional approval

\*ACVIM Specialty of Cardiology consensus panel guidelines

1. Keene, BW, Atkins, CE, Bonagura, JD, et al. ACVIM consensus guidelines for the diagnosis and treatment of myxomatous mitral valve disease in dogs. *J Vet Intern Med.* 2019; 33: 1127-1140.

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# Trends

December 2024 | trends.aaha.org

AAHA<sup>®</sup>

magazine



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# Trends

Vol. 40, No. 12, December 2024

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*Trends magazine* provides timely perspectives on the art and business of companion animal veterinary practice to all members of the practice team.

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# VETMEDIN®-CA1

(pimobendan)

## Chewable Tablets

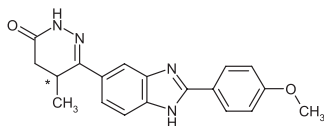
Cardiac drug for oral use in dogs only

**Caution:** Federal law restricts this drug to use by or on the order of a licensed veterinarian. Use only as directed.

**It is a violation of Federal law to use this product other than as directed in the labeling.**

**Conditionally approved by FDA pending a full demonstration of effectiveness under application number 141-556.**

**Description:** VETMEDIN-CA1 (pimobendan) is supplied as oblong half-scored chewable tablets containing 1.25 or 5 mg pimobendan per tablet. Pimobendan, a benzimidazole-pyridazinone derivative, is a non-sympathomimetic, non-glycoside inotropic drug with vasodilatory properties. Pimobendan exerts a stimulatory myocardial effect by a dual mechanism of action consisting of an increase in calcium sensitivity of cardiac myofilaments and inhibition of phosphodiesterase (Type III). Pimobendan exhibits vasodilating activity by inhibiting phosphodiesterase III activity. The chemical name of pimobendan is 4,5-dihydro-6-[2-(4-methoxyphenyl)-1H-benzimidazole-5-yl]-5-methyl-3(2H)-pyridazinone. The structural formula of pimobendan is:



**Indications:** VETMEDIN-CA1 (pimobendan) is indicated for the delay of onset of congestive heart failure in dogs with Stage B2 preclinical myxomatous mitral valve disease (2019 ACVIM Consensus Statement<sup>1</sup>).

Stage B2 preclinical myxomatous mitral valve disease (MMVD) refers to dogs with asymptomatic MMVD that have a moderate or loud mitral murmur due to mitral regurgitation and cardiomegaly.

**Dosage and Administration:** Always provide the Client Information Sheet to the dog owner with each prescription. VETMEDIN-CA1 should be administered orally at a total daily dose of 0.23 mg/lb (0.5 mg/kg) body weight, using a suitable combination of whole or half tablets. The total daily dose should be divided into 2 portions that are not necessarily equal, and the portions should be administered approximately 12 hours apart (i.e., morning and evening). The tablets are scored, and the calculated dosage should be provided to the nearest half tablet increment.

**Contraindications:** Do not administer VETMEDIN-CA1 in cases of hypertrophic cardiomyopathy, aortic stenosis, or any other clinical condition where an augmentation of cardiac output is inappropriate for functional or anatomical reasons.

Do not administer VETMEDIN-CA1 to dogs with Stage A or B1 preclinical MMVD (2019 ACVIM Consensus Statement) due to the risk of cardiac pathology associated with exaggerated hemodynamic responses to VETMEDIN-CA1.

### Warnings:

**User Safety Warnings:** Not for use in humans. Keep this and all medications out of reach of children. Consult a physician in case of accidental ingestion by humans.

**Animal Safety Warnings:** Keep VETMEDIN-CA1 in a secure location out of reach of dogs, cats, and other animals to prevent accidental ingestion or overdose.

At 3 and 5 times the recommended dosage, administered over a 6-month period of time, pimobendan caused an exaggerated hemodynamic response in the normal dog heart, which was associated with cardiac pathology (See **Target Animal Safety**).

**Precautions:** For use only in dogs with preclinical MMVD that have a moderate or loud mitral murmur due to mitral regurgitation and cardiomegaly (Stage B2 MMVD, 2019 ACVIM Consensus Statement). A diagnosis of MMVD should be made by means of a comprehensive physical and cardiac examination which should include radiography and echocardiography.

Stage B2 cardiomegaly is diagnosed based on meeting all three of the following criteria:

- Radiographic vertebral heart score (VHS) >10.5, and
- Echocardiographic left atrium/aorta ratio (LA/Ao ratio)  $\geq 1.6$ , and
- Echocardiographic left ventricular internal diastolic diameter normalized to body weight (LVIDDN)  $\geq 1.7$ .

Echocardiographic examination is recommended in all cases to diagnose MMVD and confirm cardiomegaly. If therapy is initiated prior to the development of cardiomegaly, treated dogs are at risk for cardiac pathology associated with exaggerated hemodynamic responses to VETMEDIN-CA1.

If only radiographic examination is possible, cardiomegaly may be diagnosed in cases where the VHS  $\geq 11.5$  and the vertebral left atrial size (VLAS)  $\geq 3.0$ <sup>1,2</sup>. If radiographic cardiomegaly does not meet both of these criteria, an echocardiogram should be performed prior to the initiation of therapy with VETMEDIN-CA1.

VETMEDIN-CA1 has not been evaluated in dogs receiving concomitant heart medications.

The safety of VETMEDIN-CA1 has not been established in dogs with asymptomatic heart disease caused by etiologies other than MMVD. The safe use of VETMEDIN-CA1 has not been evaluated in dogs younger than 6 months of age, dogs with congenital heart defects, dogs with diabetes mellitus or other serious metabolic diseases, dogs used for breeding, or pregnant or lactating bitches.

**Adverse Reactions:** In a controlled multi-center field study, 363 dogs with preclinical MMVD (Stage B2 MMVD, 2019 ACVIM Consensus Statement) received at least one dose of VETMEDIN-CA1 (n=182) or the placebo control chewable tablets (n=181) for up to 1563 days. During this long-term study, dogs were followed until the development of congestive heart failure (CHF). Adverse reactions were seen in both treatment groups with many findings associated with the progression of MMVD and comorbidities consistent with the age of the enrolled dogs.

The median time to the primary endpoint (development of left-sided CHF or cardiac death/euthanasia) was 38% longer in the VETMEDIN-CA1 group. Despite the longer duration on study, the incidence of reported adverse reactions was similar between treatment groups.

Cough was the most frequently reported adverse reaction. This clinical finding is commonly reported in cases of MMVD and the incidence was similar between treatment groups. Lethargy, inappetence, tachypnea, collapse, arrhythmia, and syncope may also be associated with the progression of MMVD and were reported in dogs receiving VETMEDIN-CA1.

Adverse reactions not related to disease progression in dogs receiving VETMEDIN-CA1 included diarrhea, vomiting, pain, lameness, arthritis, urinary tract infection, and seizure.

Mortality rate, regardless of reason, prior to CHF was similar between the VETMEDIN-CA1 and the control groups.

**Contact Information:** To report suspected adverse reactions, to obtain a Safety Data Sheet (SDS), or for technical assistance, contact Boehringer Ingelheim Animal Health USA Inc. at 1-888-637-4251. For additional information about reporting adverse drug experiences for animal drugs, contact FDA at 1-888-FDA-VETS or at <http://www.fda.gov/reportanimal>.

**Information for Dog Owners:** Always provide the Client Information Sheet with each prescription and review it with the dog owner or person responsible for care of the dog. Advise dog owners about signs of disease progression and possible adverse reactions with use of VETMEDIN-CA1.

**Clinical Pharmacology:** Pimobendan is oxidatively demethylated to a pharmacologically active metabolite which is then conjugated with sulfate or glucuronic acid and excreted mainly via feces. The mean extent of protein binding of pimobendan and the active metabolite in dog plasma is >90%. Following a single oral administration of 0.25 mg/kg VETMEDIN-CA1, the maximal mean ( $\pm$  1 SD) plasma concentrations ( $C_{max}$ ) of pimobendan and the active metabolite were 3.09 (0.76) ng/mL and 3.66 (1.21) ng/mL, respectively. Individual dog  $C_{max}$  values for pimobendan and the active metabolite were observed 1 to 4 hours post-dose (mean: 2 and 3 hours, respectively). The total body clearance of pimobendan was approximately 90 mL/min/kg, and the terminal elimination half-lives of pimobendan and the active metabolite were approximately 0.5 hours and 2 hours, respectively.

Plasma levels of pimobendan and active metabolite were below quantifiable levels by 4 and 8 hours after oral administration, respectively. The steady-state volume of distribution of pimobendan is 2.6 L/kg indicating that the drug is readily distributed into tissues. Food decreased the bioavailability of an aqueous solution of pimobendan, but the effect of food on the absorption of pimobendan from VETMEDIN-CA1 is unknown.

In normal dogs instrumented with left ventricular (LV) pressure transducers, pimobendan increased LV dP/dt<sub>max</sub> (a measure of contractility of the heart) in a dose dependent manner between 0.1 and 0.5 mg/kg orally. The effect was still present 8 hours after dosing. There was a delay between peak blood levels of pimobendan and active metabolite and the maximum physiologic response (peak LV dP/dt<sub>max</sub>). Blood levels of pimobendan and active metabolite began to drop before maximum contractility was seen. Repeated oral administration of pimobendan did not result in evidence of tachyphylaxis (decreased positive inotropic effect) or drug accumulation (increased positive inotropic effect). Laboratory studies indicate that the positive inotropic effect of pimobendan may be attenuated by the concurrent use of a  $\beta$ -adrenergic blocker or a calcium channel blocker.

**Reasonable Expectation of Effectiveness:** A reasonable expectation of effectiveness may be demonstrated based on evidence such as, but not limited to, pilot data in the target species or studies from published literature.

VETMEDIN-CA1 is conditionally approved pending a full demonstration of effectiveness. Additional information for Conditional Approvals can be found at [www.fda.gov/animalca](http://www.fda.gov/animalca).

A reasonable expectation of effectiveness for VETMEDIN-CA1 is based on results from a multi-site global field study. The study demonstrated a significant delay in the onset of congestive heart failure in dogs with cardiomegaly and heart murmur secondary to Stage B2 MMVD when treated with VETMEDIN-CA1 at the targeted total daily dose of 0.23 mg/lb (0.5 mg/kg) divided into two administrations approximately 12 hours apart.

A total of 363 dogs across various breeds were randomized to treatment. The resulting population evaluated for effectiveness consisted of 353 dogs receiving either pimobendan (VETMEDIN-CA1, n=178) or control product (placebo chewable tablets, n=175).

Dogs ranged between 6 and 17 years of age and weighed between 9 and 33 lbs at enrollment. Dogs were confirmed to have evidence of Stage B2 preclinical MMVD prior to enrollment, including a systolic heart murmur grade of  $\geq 3/6$  and evidence of cardiomegaly, including a VHS >10.5, and echocardiographic evidence of LA/Ao ratio  $\geq 1.6$  and LVIDDN  $\geq 1.7$ .

Dogs were ineligible if they were found to have current or previous evidence of cardiogenic pulmonary edema, clinically significant tachyarrhythmias, cardiac disease other than MMVD, significant systemic disease, evidence of pulmonary hypertension (RA:RV gradient > 65 mmHg), were pregnant or lactating female dogs, or if they were treated with prohibited concomitant medications for 14 or more consecutive days.

The primary outcome evaluated was a composite of the development of left-sided CHF or cardiac-related death or euthanasia. Left-sided congestive heart failure was confirmed by radiographic evidence of cardiogenic pulmonary edema. If a dog died in the absence of evidence of a non-cardiac cause of death, prior to radiographic confirmation of pulmonary edema, it was also considered to have reached the primary endpoint. The study was designed to follow individual dogs for up to 3 years or until disease progression into CHF.

At study termination, 41.6% of the dogs in the VETMEDIN-CA1 group had reached the primary endpoint, compared to 50.3% in the control group. The median time to the primary endpoint was 1228 days in the VETMEDIN-CA1 group compared to 761 days in the control group. Thus, administration of VETMEDIN-CA1 to dogs with Stage B2 preclinical MMVD resulted in the prolongation of the preclinical period by 467 days (15.6 months) compared to dogs receiving control product.

**Palatability:** In a laboratory study, the palatability of VETMEDIN-CA1 was evaluated in 20 adult female Beagle dogs offered doses twice daily for 14 days. Ninety percent (18 of 20 dogs) voluntarily consumed more than 70% of the 28 tablets offered. Including two dogs that consumed only 4 and 7% of the tablets offered, the average voluntary consumption was 84.2%.

**Target Animal Safety:** In a laboratory study, pimobendan chewable tablets were administered to 6 healthy Beagles per treatment group at 0 (control), 1, 3, and 5 times the recommended dosage for 6 months. See the table below for cardiac pathology results. The cardiac pathology/histopathology noted in the 3X and 5X dose groups is typical of positive inotropic and vasodilator drug toxicity in normal dog hearts and is associated with exaggerated hemodynamic responses to these drugs. None of the dogs developed signs of heart failure and there was no mortality.

### Incidence of Cardiac Pathology/Histopathology in the Six-month Safety Study

Severe left ventricular hypertrophy with multifocal subendocardial ischemic lesions	One 3X and two 5X dogs <sup>a</sup>
Moderate to marked myxomatous thickening of the mitral valves	Three 5X dogs
Myxomatous thickening of the chordae tendineae	One 3X and two 5X dogs
Endocardial thickening of the left ventricular outflow tract	One 1X, two 3X and two 5X dogs
Left atrial endocardial thickening (jet lesions) in 2 of the dogs that developed murmurs of mitral valve insufficiency	One 3X and one 5X dog
Granulomatous inflammatory lesion in the right atrial myocardium	One 3X dog

<sup>a</sup> Most of the gross and histopathologic findings occurred in these three dogs

Murmurs of mitral valve insufficiency were detected in one 3X (Day 65) and two 5X dogs (Days 135 and 163). These murmurs (grades II-III of VI) were not associated with clinical signs.

Indirect blood pressure was unaffected by pimobendan at the label dose (1X). Mean diastolic blood pressure was decreased in the 3X group (74 mmHg) compared to the control group (82 mmHg). Mean systolic blood pressure was decreased in the 5X group (117 mmHg) compared to the control group (124 mmHg). None of the dogs had clinical signs of hypotension.

On 24-hour Holter monitoring, mean heart rate was increased in the 5X group (101 beats/min) compared to the control group (94 beats/min). Not counting escape beats, the 3X and 5X groups had slightly higher numbers of isolated ventricular ectopic complexes (VEs). The maximum number of non-escape VE's recorded either at baseline or in a control group dog was 4 VE's/24 hours. At either Week 4 or Week 20, three 3X group dogs had maximums of 33, 13, and 10 VE's/24 hours, and two 5X group dogs had maximums of 22 and 9 VE's/24 hours. One 1X group dog with no VE's at baseline had 6 VE's/24 hours at Week 4 and again at Week 20. Second-degree atrioventricular heart block was recorded in one 3X group dog at Weeks 4 and 20, and in one dog from each of the 1X and 5X groups at Week 20. None of the dogs had clinical signs associated with these electrocardiogram changes.

Treatment was associated with small differences in mean platelet counts (decreased in the 3X and 1X groups), potassium (increased in the 5X group), glucose (decreased in the 1X and 3X groups), and maximum blood glucose in glucose curves (increased in the 5X group). All individual values for these variables were within the normal range. Three 1X and one 5X group dogs had mild elevations of alkaline phosphatase (less than two times normal).

Loose stools and vomiting were infrequent and self-limiting.

**Storage Information:** Store at 20° to 25°C (68° to 77°F), excursions permitted between 15° and 30°C (between 59° and 86°F).

### How Supplied:

VETMEDIN®-CA1 (pimobendan) Chewable Tablets: Available as 1.25 and 5 mg oblong half-scored chewable tablets - 50 tablets per bottle.

NDC 0010-4610-01 - 1.25 mg - 50 tablets

NDC 0010-4612-01 - 5 mg - 50 tablets

### References:

<sup>1</sup> Keene, B., et al. (2019) ACVIM consensus guidelines for the diagnosis and treatment of myxomatous mitral valve disease in dogs. *J Vet Intern Med.* 33(3):1127-1540.

<sup>2</sup> Malcolm, E.L. et al. (2018) Diagnostic value of vertebral left atrial size as determined from thoracic radiographs for assessment of left atrial size in dogs with myxomatous mitral valve disease. *J AM Vet Med Assoc.* 253(8):1038-1045.

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Revised 08/2023



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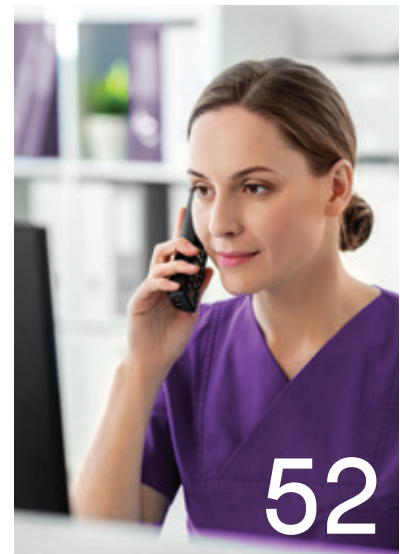
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## From the Editor

Well, *Trends* readers, here we are on the verge of change.

For the last 15 years, I have been working on *Trends*, first as an associate editor, then editor, and now editorial director. It has been an honor to be at the helm of this publication for you, and I will miss the monthly deadlines and routines I have had for the past decade plus. But, we must adapt to the changing times! We are certainly not the first long-time print publication to go digital—and will not be the last. And there will still be deadlines, thank goodness.

As *Trends* morphs into its digital form, my commitment to you is that we will continue to provide timely, relevant content that is usable and actionable for the entire practice team. That has been the goal for as long as I have been editor, and I know my predecessors would agree. So, as we boldly go where many printed publications have gone before, let's look into the future and say that this is not the end, but a new beginning!

While you will no longer be receiving a print edition of *Trends magazine*, going digital means we can provide lots of enhanced, interactive content, with up-to-date news stories, as well as the in-depth feature articles you have come to expect from *Trends*. To access *Trends* content, simply go to [trends.aaha.org](http://trends.aaha.org).

### The Future of the *Trends* Employee of the Month

This is the final print edition, but the Employee of the Month contest continues, thanks to the generosity of CareCredit. You can still head over to [aaha.org/EOTM](http://aaha.org/EOTM) to nominate one of your coworkers for the Employee of the Month, and you could still win \$100 for yourself, and \$400 for your nominee. It's free to enter and you get free money!

### Coming Next Month

Normally this spot is reserved for upcoming articles in the next issue of *Trends*. In the new digital *Trends*, look for lots of articles relating to the future of vet med. We'll be right there with you as the profession evolves and changes as it sails forward into the future.

In the words of one of my favorite authors, Douglas Adams, author of *The Hitchhiker's Guide to the Galaxy*: "It's not so much an afterlife, more a sort of après-vie." Stay tuned!

  
**Ben Williams**  
 Editor



↑ *Trends* has been forward-looking since it started. Above, the first cover of *Trends magazine*, from 1985. No, I was not involved in it.

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# Contributors



**Kristen Green Seymour**

Kristen Green Seymour is AAHA's copywriter. She lives in Florida with her family and three cats. She's experienced family-centered care as a client and is eager to help veterinary professionals learn more about this approach.



**Roxanne Hawn**

Roxanne Hawn brings 25+ years of experience writing about veterinary topics for professionals and consumers. She is the author of *Heart Dog: Surviving the Loss of Your Canine Soul Mate*.



**Kelly Smith**

Kelly Smith is an award-winning editor and writer who has enjoyed pet companions ranging from dogs and cats to birds, fish, frogs, pygmy goats, rabbits, guinea pigs, and more. She and her family live on a small acreage near Denver. Kelly is a regular contributor to *Trends* magazine.



**Maureen Blaney Flietner**

Maureen Blaney Flietner is an award-winning freelancer living in Wisconsin. She has won numerous awards for her writing in *Trends* over the years that she has contributed to the magazine.



**Lavanya Sunkara**

Lavanya Sunkara is a New York-based writer with two cats and a dog. She is an award-winning freelancer and world traveler who writes about travel, pets, conservation, and sustainability.



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Jen Reeder is an award-winning journalist and former president of the Dog Writers Association of America. She's written about pets for numerous publications, including *BBC News*, *Reader's Digest*, *PBS's Next Avenue*, *Woman's World*, the *TODAY* show's website, and *HuffPost*. Visit her online at [JenReeder.com](http://JenReeder.com).



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**CAUTION:** Federal law restricts this drug to use by or on the order of a licensed veterinarian.

### Description:

NexGard<sup>®</sup> COMBO is a topical solution containing esafoxolaner, eprinomectin and praziquantel available in 0.3 mL and 0.9 mL unit applicators to treat cats from 1.8 lbs to 33 lbs. Each mL of NexGard<sup>®</sup> COMBO contains 12 mg of esafoxolaner, 4 mg of eprinomectin, and 83 mg of praziquantel. Inactive ingredients: dimethyl isosorbide, unstabilized glycerol formal, and butylated hydroxytoluene.

Esafoxolaner is a member of the aryl isoxazole class of compounds. Its chemical name is 4-[(5S)-5-[3-chloro-5-(trifluoromethyl)phenyl]-5-(trifluoromethyl)-4, 5-dihydro-1,2-oxazol-3-yl]-N-[2-oxo-2-[(2,2,2-trifluoroethyl)amino]ethyl]-1-naphthamide.

Eprinomectin belongs to the avermectin class of anthelmintics and is a mixture of homologous components referred to as eprinomectin B1a and B1b. The chemical name for eprinomectin B1a is (4'R)-acetylamino-5-O-demethyl-4'-deoxyavermectin A<sub>1a</sub>. The chemical name for eprinomectin B1b is (4'R)-acetylamino-5-O-demethyl-25-de(1-methylpropyl)-4'-deoxy-25-(1-methylethyl)avermectin A<sub>1a</sub>.

Praziquantel is a pyrazinoisoquinoline anthelmintic. Its chemical name is 2-(Cyclohexylcarbonyl)- 1,2,3,6,7,11b-hexahydro-4H-pyrazino[2,1-a]isoquinolin-4-one.

### Indications:

NexGard<sup>®</sup> COMBO is indicated for the prevention of heartworm disease caused by *Dirofilaria immitis* and for the treatment and control of roundworm (fourth stage larval and adult *Toxocara cati*), hookworm (fourth stage larval and adult *Ancylostoma tubaeforme*, adult *Ancylostoma braziliense*), and tapeworm (*Dipylidium caninum*) infections. NexGard<sup>®</sup> COMBO kills adult fleas (*Ctenocephalides felis*) and is indicated for the treatment and prevention of flea infestations and the treatment and control of Ixodes scapularis (black-legged tick) and *Amblyomma americanum* (lone star tick) infestations for one month in cats and kittens 8 weeks of age and older, and weighing 1.8 lbs or greater.

### Dosage and Administration:

NexGard<sup>®</sup> COMBO is dosed at a minimum of 0.055 mL/lb (0.12 mL/kg), which delivers a minimum dose of 0.65 mg/lb (1.44 mg/kg) esafoxolaner, 0.22 mg/lb (0.48 mg/kg) eprinomectin, and 4.53 mg/lb (9.98 mg/kg) praziquantel.

### For heartworm disease prevention, apply once monthly for at least three months after last exposure to mosquitoes (see Effectiveness).

Administer the entire contents of a NexGard<sup>®</sup> COMBO unit applicator topically once a month as specified in the following table:

### Dosing Schedule

Cat Weight (lb)	Volume (mL)	Esafoxolaner (mg)	Eprinomectin (mg)	Praziquantel (mg)
1.8-5.5	0.3	3.6	1.2	24.9
5.6-16.5	0.9	10.8	3.6	74.7
16.6-22	0.3 + 0.9	14.4	4.8	99.6
22.1-33	0.9 + 0.9	21.6	7.2	149.4

A veterinarian or veterinary technician should demonstrate or instruct the pet owner regarding the appropriate technique for applying NexGard<sup>®</sup> COMBO topically to cats and kittens prior to first use.

Keep product in original packaging until ready to use



- Use scissors to cut the blister along the dotted line.
- Then pull the lid away.
- Remove the applicator from the package and hold it upright. Pull back the plunger slightly.
- Twist and pull off the cap.
- Part the hair on the midline of the neck, between the base of the skull and the shoulder blades until the skin is visible. Place the tip of the applicator on the skin and apply the entire contents directly onto the skin in one spot. The product should be applied to dry skin on an area where the cat cannot lick it off. If the weight of the cat requires a second application, apply the contents in the same manner as described above in the same location.
- Wash hands after use with soap and water.

### Heartworm Prevention:

For the prevention of heartworm disease, NexGard<sup>®</sup> COMBO should be administered once a month year-round. At a minimum, administration of NexGard<sup>®</sup> COMBO should start at least 1 month before the cat's first expected exposure to mosquitoes and monthly thereafter until at least 3 months after the cat's last seasonal exposure to mosquitoes (see Effectiveness). If a dose is missed and a 30-day interval between doses is exceeded, administer NexGard<sup>®</sup> COMBO immediately and resume the monthly dosing schedule. Treatment with fewer than 3 monthly doses may not provide complete heartworm prevention. When replacing another monthly heartworm preventive product in a heartworm prevention program, the first treatment with NexGard<sup>®</sup> COMBO should be given within one month of the last dose of the former medication. At the discretion of the veterinarian, cats older than 6 months of age may be tested to determine the presence of existing heartworm infection before treatment with NexGard<sup>®</sup> COMBO. Cats already infected with adult heartworms can be given NexGard<sup>®</sup> COMBO monthly to prevent further infections.

### Flea Treatment and Prevention:

For the treatment and prevention of flea infestations, the use of NexGard<sup>®</sup> COMBO may begin at any time of year. NexGard<sup>®</sup> COMBO should be administered year-round at monthly intervals or begin at least one month before fleas become active. However, an environmental infestation may persist for a short time after beginning treatment with NexGard<sup>®</sup> COMBO because of the development of adult fleas from eggs that were laid prior to the initiation of treatment.

### Tick Treatment and Control:

For the treatment and control of infestations with *Ixodes scapularis* and *Amblyomma americanum*, the use of NexGard<sup>®</sup> COMBO may begin at any time of year. NexGard<sup>®</sup> COMBO should be administered year-round at monthly intervals or begin at least one month before the ticks become active.

Treatment and Control of Roundworms, Hookworms, and Tapeworms: NexGard<sup>®</sup> COMBO provides treatment and control of roundworms (adult and fourth stage larval *Toxocara cati*), hookworms (adult and fourth stage larval *Ancylostoma tubaeforme*, adult *Ancylostoma braziliense*), and tapeworms (*Dipylidium caninum*). For the treatment of hookworm, roundworms and tapeworm infections, NexGard<sup>®</sup> COMBO should be administered once as a single dose. Monthly use of NexGard<sup>®</sup> COMBO will control any subsequent infections. Cats may be exposed to and can become infected with roundworms, hookworms, and tapeworms throughout the year, regardless of season or climate.

### Contraindications:

There are no known contraindications for the use of NexGard<sup>®</sup> COMBO.

### Human Warnings:

Not for human use. Keep this and all drugs out of sight and reach of children.

### Avoid direct contact with application site for 4 hours or until visibly dry.

### This product may act as a mild to moderate eye irritant.

Keep product in the original packaging until use. Wash hands after product administration. If the product accidentally gets into the eyes, rinse thoroughly with water. If wearing contact lenses, flush the eyes first with water and then remove the lenses and continue to flush thoroughly with water. In case of accidental ingestion, or if skin or eye irritation occurs, contact a poison control center or physician for treatment advice.

### Precautions:

Esafoxolaner, one of the ingredients in NexGard<sup>®</sup> COMBO, is a member of the isoxazole class. This class has been associated with neurologic adverse reactions including tremors, ataxia, and seizures. Seizures have been reported in cats receiving isoxazole class drugs, even in cats without a history of seizures. Use with caution in cats with a history of seizures or neurologic disorders.

Do not administer orally. Cats may salivate excessively if NexGard<sup>®</sup> COMBO is accidentally administered orally or is ingested through licking/grooming the application site (see Target Animal Safety).

The safety of NexGard<sup>®</sup> COMBO has not been fully evaluated in breeding, pregnant, or lactating cats.

The safety of NexGard<sup>®</sup> COMBO has not been tested in kittens less than 8 weeks of age or weighing less than 1.8 lbs (0.8 kg).

### Adverse Reactions:

In a field safety and effectiveness study, which included a total of 201 households and 380 treated cats (244 cats treated with NexGard<sup>®</sup> COMBO, 136 cats treated with an active control), the safety of NexGard<sup>®</sup> COMBO was evaluated over a 90-day period through in-clinic physical examinations or through reporting of abnormalities by the owner. The most frequently reported reactions in the NexGard<sup>®</sup> COMBO and active control groups are presented in the following table.

### Adverse Reactions by Treatment Group

EVENT	Treatment Group			
	NexGard COMBO		Active Control	
	n <sup>1</sup>	% (n=244)	n <sup>2</sup>	% (n=136)
Vomiting	16	6.56	8	5.88
Application Site Hair Change	9	3.69	0	0.00
Anorexia	7	2.87	4	2.94
Lethargy	6	2.46	5	3.68
Bacterial skin infection	4	1.64	1	0.74
Itching	4	1.64	0	0.00
Sneezing	4	1.64	5	3.68
Skin Peeling	3	1.23	2	1.47
Diarrhea	3	1.23	3	2.21
Epiphora	3	1.23	1	0.74
Hypersalivation	3	1.23	0	0.00
Hyperthermia	3	1.23	0	0.00
Alopecia	2	0.82	0	0.00
Dermal thickening	2	0.82	0	0.00
Ear Pruritus	2	0.82	1	0.74
Application Site Redness	2	0.82	0	0.00
Conjunctivitis	1	0.41	1	0.74

<sup>1</sup>Number of cats treated with NexGard<sup>®</sup> COMBO with the identified abnormality.

<sup>2</sup>Number of cats treated with Active Control with the identified abnormality.

### Contact Information:

To report suspected adverse events, for technical assistance or to obtain a copy of the SDS, contact Boehringer Ingelheim Animal Health USA Inc. at 1-888-637-4251 or [www.nexgardforpets.com](http://www.nexgardforpets.com).

For additional information about reporting adverse drug experiences for animal drugs, contact FDA at 1-888-FDA-VETS or online at [www.fda.gov/reportanimalae](http://www.fda.gov/reportanimalae).

The Safety Data Sheet (SDS) provides additional occupational safety information. For customer service or to obtain product information, including the SDS, call 1-888-637-4251.

### Clinical Pharmacology:

#### Mode of Action:

Esafoxolaner is a member of the isoxazole family, shown to bind to a site to inhibit insect and acarine ligand-gated chloride channels, in particular those gated by the neurotransmitter gamma-aminobutyric acid (GABA), thereby blocking pre- and post-synaptic transfer of chloride ions across cell membranes. Prolonged esafoxolaner-induced hyperexcitation results in uncontrolled activity of the central nervous system and death of insects and acarines. The selective toxicity of esafoxolaner between insects/acarines and mammals may be inferred by the differential sensitivity of the insects/acarines' GABA receptors versus mammalian GABA receptors.

Eprinomectin is an endectocide in the macrocyclic lactone class that binds to glutamate gated chloride channels that are present in invertebrate nerve and muscle cells and increases the permeability of the cell membrane to chloride ions that triggers hyperpolarization of the nerve or muscle cell in susceptible parasites, resulting in paralysis and death of the parasite.

Praziquantel's mode of action is not precisely known, but treated tapeworms undergo muscular paralysis accompanied by a rapid influx of calcium ions and the disruption of the tegument.

### Pharmacokinetics:

After a single topical administration to healthy male and female cats of a combined topical formulation containing esafoxolaner (12 mg/mL), eprinomectin (4 mg/mL), and praziquantel (83 mg/mL), at dose volumes of 0.06, 0.12, or 0.24 mL/kg, there was a dose proportional increase in the exposure of each ingredient based on maximum plasma concentration (C<sub>max</sub>) and area under the plasma concentration time curve (AUC). After repeated monthly doses of the combined topical formulation at the target dose of 1.44 mg/kg esafoxolaner, 0.48 mg/kg eprinomectin, and 9.98 mg/kg praziquantel, steady state was reached by the fourth dose for esafoxolaner and after the second dose for eprinomectin and praziquantel. Additionally, modest accumulation was observed for esafoxolaner (approximately 3-fold) and praziquantel (approximately 1.5- to 2-fold) between the first and fifth dose, whereas no accumulation was observed for eprinomectin.

### Effectiveness:

#### Heartworm Prevention:

In well-controlled laboratory studies, NexGard<sup>®</sup> COMBO (esafoxolaner, eprinomectin, and praziquantel topical solution) was 100% effective in preventing the development of heartworms in cats inoculated with infective larvae of *Dirofilaria immitis* 30 days prior to the first of three consecutive monthly treatments.

#### Flea Treatment and Prevention:

In a well-controlled laboratory study, NexGard<sup>®</sup> COMBO killed >92% of fleas within 24 hours. During subsequent weekly infestations, NexGard<sup>®</sup> COMBO killed >95.5% of fleas within 24 hours through Day 31 and killed fleas before they could lay eggs. The effectiveness against adult fleas at 24 hours post-infestation in the treated cats virtually eliminated flea egg production (99.8–100% control of flea egg production by 24 hours) throughout the remainder of the month. In a field safety and effectiveness study in the United States, conducted in households with existing flea infestations, the effectiveness of NexGard<sup>®</sup> COMBO against fleas was 97.8%, 99.6%, and 99.9% when assessed on Days 30, 60, and 90, respectively. Cats with signs of flea allergy dermatitis showed improvement in alopecia, dermatitis/ pyodermatitis, pruritus, erythema, papules, and scaling, as a direct result of eliminating fleas.

#### Tick Treatment and Control:

In well-controlled laboratory studies, NexGard<sup>®</sup> COMBO demonstrated >95.1% effectiveness against *Ixodes scapularis* 48 hours post-infestation for a month and >95.6% effectiveness against *Amblyomma americanum* 72 hours post-infestation for a month.

#### Treatment and Control of Roundworms, Hookworms, and Tapeworms:

In 2 well-controlled laboratory studies, NexGard<sup>®</sup> COMBO provided 98.9% and 100% effectiveness against natural and/or induced roundworm infections with the dose-limiting gastrointestinal nematode species (adult *Toxocara cati*) and hookworms (adult and fourth stage larval *Ancylostoma tubaeforme*, adult *Ancylostoma braziliense*) were conducted with an early formulation. The doses of eprinomectin in this early formulation are equivalent to that of the final formulation of NexGard<sup>®</sup> COMBO. In well-controlled laboratory studies, NexGard<sup>®</sup> COMBO provided on average 92.8% effectiveness against natural and/or induced infections with *Dipylidium caninum*.

### Target Animal Safety:

#### Margin of Safety Study:

NexGard<sup>®</sup> COMBO was applied topically to healthy kittens (8 to 9 weeks of age) at 1X, 3X, or 5X the maximum exposure dose six times at 28-day intervals; kittens in the control group were dosed with mineral oil. One kitten in the 5X group exhibited recumbency, tremors, hypothermia, ataxia, disorientation, and pupil dilation (responsive to light) 9 hours after the third dose. This kitten received supportive care, including washing the application site, and recovered within 48 hours post-dose. During necropsy, a dark red subcutaneous area (<5 mm diameter) was observed in the treatment site area of three cats in the 5X group, but microscopic examination revealed no histologic abnormalities. No significant changes related to NexGard<sup>®</sup> COMBO were observed for physical examination, body weight, clinical pathology (hematology, coagulation, and serum chemistry), histopathology, or organ weights.

#### Study in Heartworm Positive Cats:

Adult cats, 4.7 to 6.6 months of age, were experimentally infected with adult heartworms (*D. immitis*) by venous transplantation. All cats were negative for heartworm antibody, antigen and microfilariae prior to transplantation. Two weeks after transplantation, immunoserology verified positive antigen and the presence of microfilariae in all enrolled cats. A combination of ivermectin, eprinomectin, praziquantel, and (S)-methoprene was applied topically to cats at 1X or 3X the maximum exposure dose once every 28 days for three consecutive treatments; cats in the control group were dosed with mineral oil. One cat in the 1X group exhibited cyanotic mucous membranes and tachypnea for 24 hours following the first treatment. The cat recovered and exhibited no abnormal signs following two subsequent treatments. There was no difference between the treatment groups in the number of adult *D. immitis* recovered at the end of the study.

#### Oral Administration Study:

Oral tolerance was evaluated to assess the effects of accidental oral ingestion. Kittens (male and female) ranging in age from 7.4 to 8.9 weeks were orally administered NexGard<sup>®</sup> COMBO at 1X the maximum exposure dose; kittens in the control group were dosed with saline. Cats were observed for adverse reactions at 1, 2, 3, 4, and 8 hours following administration, then twice a day until Day 14. All 8 cats administered NexGard<sup>®</sup> COMBO immediately exhibited excessive hypersalivation after oral administration. However, all cats stopped salivating within 1 hour after exposure. No additional health-related observations were seen for the remainder of the study.

### How Supplied:

NexGard<sup>®</sup> COMBO is packaged as a single dose in 0.3 mL (for cats 1.8 – 5.5 lb) and 0.9 mL (for cats 5.6-16.5 lb) applicators. Each size applicator is available in cartons containing 1, 3 or 6 applications.

### Storage Information:

Store at 59° – 86°F (15° – 30° C). Brief periods up to 104° F (40° C) are permitted. Protect from light.

Approved by FDA under NADA # 141-570

**Marketed by:** Boehringer Ingelheim Animal Health USA Inc., Duluth, GA 30096

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184238-003 Rev. 04/2023  
US-PET-0187-2023-V2



## View from the Board

# Looking into the Future of Vet Med

**T**he future of veterinary medicine is being shaped by innovations that will make care more efficient, personalized, and accessible. This evolution not only enhances the quality of care for pets but also streamlines clinic operations, allowing veterinary teams to serve their clients more effectively. Central to this transformation are technological advancements, optimized workflows, and a growing focus on preventive care.

Technological advancements, such as telemedicine and artificial intelligence (AI), are revolutionizing how veterinary clinics operate. Telemedicine enables remote consultations, offering convenience for pet owners while providing veterinarians with the ability to assess pets' health without an in-person visit. AI-powered tools assist in diagnosing conditions by quickly analyzing large amounts of data, helping veterinarians make faster, more accurate decisions. Together, these technologies improve care delivery and accessibility, making it easier for pet owners to receive timely advice and treatment.

Preventive care is becoming a cornerstone of modern veterinary practices, with wellness plans gaining popularity. These plans offer regular check-ups, vaccinations, and screenings at a low monthly cost, ensuring pets receive consistent care while helping clinics maintain a steady revenue stream. By addressing potential health issues early, veterinarians can improve outcomes for pets and reduce long-term treatment costs for owners.

A key part of increasing efficiency in veterinary practices involves maximizing the role of credentialed veterinary technicians (CrVTs). By expanding the responsibilities of CrVTs to include tasks such as dental cleanings, administering anesthesia, and client education, clinics can enhance productivity and ensure high-quality care. This team-based approach allows veterinarians to focus on more complex cases while still meeting routine patient needs, improving overall efficiency and care standards.

Sustainability is also playing an important role in the future of veterinary care. Clinics are

adopting eco-friendly practices, such as paperless billing, digital records, and energy-efficient equipment, which not only reduce operational costs but also lessen their environmental impact.

Lastly, client education and engagement are becoming central to improving pet health outcomes. With the use of digital platforms and apps, clinics can provide real-time updates on pets' health, share educational resources, and maintain open lines of communication with pet owners. This empowers clients to make informed decisions about their pets' care, fostering a more collaborative relationship between veterinarians and pet owners.

As the field of veterinary medicine continues to evolve, efficiency will be key to delivering higher-quality, more accessible care. By embracing technology, optimizing team roles, focusing on preventive care, and adopting sustainable practices, veterinary clinics will be able to do more for pets and their owners, ensuring better health outcomes and a stronger connection with the communities they serve.

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**Mark Thompson, DVM, CCRP**, is immediate past-president of AAHA. He owns Country Hills Pet Hospital in Eden, Wisconsin.

# The Scoop

## Foundation Boosts Spectrum of Care Programs at CSU

Thanks to a generous \$4.5 million gift by the Frank Stanton Foundation, the Veterinary Health and Education Complex at Colorado State University (CSU)'s College of Veterinary Medicine and Biomedical Sciences is set to expand its program with a focus on the spectrum of care.

The Stanton Foundation defines "spectrum of care" as the range of medically sound diagnostic and treatment options veterinarians can reasonably recommend for their patients, whose owners come from a diverse range of socioeconomic backgrounds. After completing the program,

new veterinarians will be able to communicate the pros and cons of alternative treatments with accuracy and sensitivity about a client's financial abilities, as well as their cultural expectations and even physical location.

Beyond investment in spectrum of care educators, the Stanton Foundation's gift will allow CSU to construct treatment, operating, and dentistry suites that will allow veterinarians to treat companion animals holistically and comprehensively. The anticipated completion date for the new suites is June 2026.



studiodav/iStock via Getty Images Plus; Shepard, Ernest H., "Winnie-the-Pooh" (1926)



## Quote of the Month

Some people talk to animals. Not many listen though. That's the problem.

A.A. Milne, author of *Winnie the Pooh*



## Treating Canine Trauma Patients with Freeze-Dried Blood

A research study led by Colorado State University (CSU)'s Kelly Hall, DVM, and run in collaboration with Tufts University and other institutions, aimed to determine the effectiveness of administering freeze-dried blood products to canine trauma patients.

Trauma is the second leading cause of death in dogs in the US. Getting blood transfusions to excessively bleeding patients as quickly as possible can be a key to survival. But blood storage can be challenging.

A freeze-dried product doesn't need to be refrigerated, has a much longer shelf life than refrigerated plasma, and can quickly be reconstituted and given to a patient.

Hall said the results from the study, which enrolled about 50 dogs, have been promising. The project team is still finalizing the data. "The idea is to eventually push these products forward in the veterinary space," Hall said, "but there is clearly a need on the human side as well."





↑ Dr. Ximena Olarte Castillo, postdoctoral associate at the Baker Institute for Animal Health, prepares a sample for NextSeq 1000 sequencer. Photo courtesy of John Enright/CVM Animal Health Centers.

### Study Proves Transfer of Feline Coronavirus Between Domestic and Wild Cats

In a new study from Cornell University’s College of Veterinary Medicine, researchers report the first genetic evidence of feline coronavirus (FCoV) transmission between a captive wild cat and a domestic cat. The study was funded by the Cornell Feline Health Center.

The discovery has implications for combating this little-understood virus and its consequences, as well as other diseases.

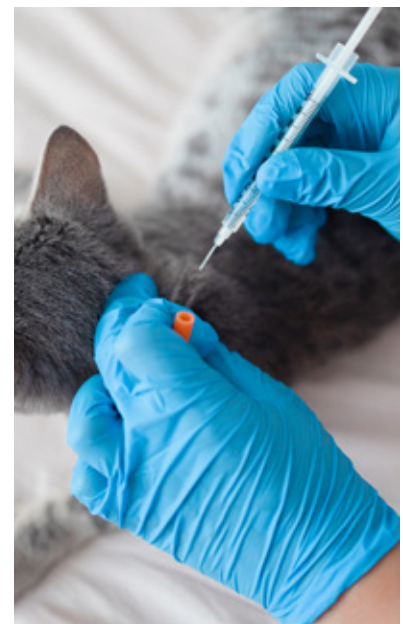
Researchers looked back at frozen tissue samples from a case of FCoV-1 transmission between a domestic cat and a wild felid known as a Pallas’ cat in 2008; both died of feline infectious peritonitis. They used the NextSeq 1000 sequencer to detect FCoV RNA in both subjects.

“By using a semi-targeted approach—known as hybridization capture—together with next-generation sequencing, we were able to detect and sequence the whole genome of FCoV-1 in both the domestic cat and the Pallas’ cat tissues,” said Ximena Olarte Castillo, PhD, first author of the paper, a postdoctoral associate in the laboratory of coauthor Laura Goodman, PhD.

### New Vaccine to Protect Against Feline Leukemia Virus

Merck Animal Health has announced the expansion of the USDA-approved NOBIVAC® NXT vaccine platform to protect cats against feline leukemia virus (FeLV). The NOBIVAC NXT FeLV vaccine targets one of the most common feline infectious diseases and is the first feline leukemia virus vaccine built on Merck Animal Health’s RNA-particle technology platform. This is the same technology used for NOBIVAC NXT Rabies, launched in Canada in June 2024, and NOBIVAC NXT Canine Flu H3N2, launched in the US in June 2024.

NOBIVAC NXT FeLV is a nonadjuvanted, low-volume 0.5 mL dose vaccine that harnesses the natural ability of the immune system to generate a robust response without compromising comfort or safety. It is labeled effective against persistent viremia and is indicated for the vaccination of cats eight weeks or older against FeLV.



## Partnership Aims to Define the Future of Animal Health and Pet Care

The North American Veterinary Community (NAVC), a nonprofit dedicated to supporting and advancing veterinary professionals worldwide, and Michelson Found Animals Foundation (MFA), an animal welfare organization, have partnered to define the future of animal health and wellbeing

into the next decade and beyond. The first event will be Compass, conceived as an annual global conference. NAVC CEO Gene O'Neill says, "Compass provides the platform for industry leaders from around the world to engage in novel, forward-looking dialogue with those across the entire animal health and pet care ecosystem."

Compass will launch on April 10–11, 2025, at the Gaylord National Harbor, near Washington, DC. MFA CEO Brett Yates describes it as a place to "advance technological development, collaborate on solving the issues ahead of us, and improve the lives of animals around the world long into the future."



## FDA Approves New Skin Treatment for Allergic Skin Conditions in Dogs

The US Food and Drug Administration has approved Zenrelia (ilunocitinib tablets), a new animal drug used to control itching associated with allergic dermatitis and to control atopic dermatitis in dogs one year of age and older. An immune suppressant, Zenrelia's active ingredient, ilunocitinib, is a nonselective Janus kinase (JAK) inhibitor.

A boxed warning for Zenrelia states that dogs should not be vaccinated at least 28 days before and after treatment, due to the risk of fatal vaccine-induced disease and inadequate immune response to vaccines. Zenrelia is sponsored by Elanco based in Greenfield, Indiana.

## Innovative Treatment Strategies Save Shelter Cats with FIP

Feline infectious peritonitis (FIP), which most commonly affects cats under 2 years old and has increased risk in purebreds and in shelters, has long been feared as one of the most deadly and untreatable diseases in cats. Antiviral medications that cure FIP (notably GS-441524) now exist but have been mired in regulatory struggles and availability issues.

Austin Pets Alive! has an ongoing collaboration with the research team at the Shelter Medicine Program at the University of Florida to compare the response

to FIP treatment in shelter cats with and without feline leukemia virus (FeLV) coinfection.

### Some interim results of the study show:

**High success rate:** A remarkable 75% of cats survive the 6-month treatment and observation period.

**FeLV-positive cats respond:** FeLV-positive status does not appear to impact treatment response rates. However, they still experience shorter survival times.

**Relapses are rare:** FIP relapses can usually be managed with a second round of treatment.





## Compounded Molnupiravir Combats FIP

Wedgewood is the first US veterinary compounding pharmacy to offer feline-friendly formulations of molnupiravir in a variety of doses designed to combat the different forms of feline infectious peritonitis (FIP): effusive, non-effusive, neurological, and ocular.

Originally developed for human viral infections, including COVID-19, molnupiravir has emerged as a promising option for both first- and second-line therapy of FIP, an often-fatal disease that affects an estimated 15,000 US cats each year.

Nicole Jacque, cofounder of FIP Global CATS, said, "The availability of compounded molnupiravir marks a significant advancement in FIP treatment for cats in the US," she said. "Critically, it serves as a vital rescue option for cats that may have developed resistance to other antivirals."

↑ Tube feeding is a specialized skill required when caring for kittens under four weeks old, but caregivers often learn it on an ad hoc basis when a newborn is most in need. Steven Lucero and Valerie Quiroz of the Translating Engineering Advances to Medicine Lab have teamed up with a professor of veterinary medicine to develop a model that improves access to training for this technique with a 3D-printed kitten model. Photo courtesy of Michael Bannasch/UC Davis.

## 3D-Printed Kittens Help Train Students

Gaining real-world experience with caring for underage and neonatal kittens is fraught with peril, since these tiny animals are fragile and often require round-the-clock care. Even training students on how to safely tube feed a neonatal kitten is tricky, because if done improperly it can lead to injury or death of the kitten.

Enter University of California, Davis professor Karen Vernau, DVM, DACVIM (Neurology), a faculty advisor for the Orphan Kitten Project. Vernau worked with a team of development engineers to improve and increase access to the training of this technique with a 3D-printed kitten model they created at the UC Davis.

The staff at Translating Engineering Advances to Medicine (TEAM) Lab worked with Vernau to create a life-sized model made of silicone, a soft plastic material

that's like rubber, as it lends a more lifelike feeling. The silicone model also features a trachea and esophagus, which helps provide immediate feedback to the user if they place the tube down the wrong path. With the TEAM Lab's design, if a user puts the tube down the trachea it pops out of the 3D-printed model's chest to alert them to try again.

"Underage and neonatal kittens have really not been a huge part of veterinary medicine," Vernau said. "They're the ones who are euthanized because they need such specialized, around-the-clock care."

She hopes that the 3D-printed models can help prevent the deaths of these vulnerable kittens by increasing training opportunities and providing a realistic but safe way to learn the tube feeding technique.

## Dog with Severe Fungal Infection Beats Overwhelming Odds

When Riley, a 7-year-old female German shepherd, was diagnosed with disseminated aspergillosis, her owners were told her best chance of survival was treatment at UC Davis veterinary hospital. What happened next was reported by Rob Warren in UC Davis Vet Med's "Case of the Month."

Riley's condition was a severe and widespread fungal infection resulting in discospondylitis (infection of the vertebra and intervertebral discs), kidney infection, and left eye infection. An MRI showed the infection had led to a compression of Riley's spinal cord. She was not a candidate for surgery.

Riley was hospitalized for a month on IV and oral antifungal therapies, pain medications, fluids, and supportive care. During hospitalization her left eye was removed.

Over the next several months, Riley's care continued as inpatient/outpatient and then to various levels of outpatient care, while continuing the antifungal medicine and rehabilitation exercises. Medication has eased the compression in her spinal column, and months of rehabilitation exercises have paid off in mobility.

More than a year later, she appears to be winning the battle.



↑ Riley overcame a severe case of aspergillosis after months of treatment at the UC Davis veterinary hospital. Photo courtesy of UC Davis School of Veterinary Medicine

## 5-Year Collaboration Aims to Advance Urinary Tract Health in Pets

A Nestlé Purina PetCare grant of nearly \$1 million spread over five years will support the UC Davis School of Veterinary Medicine's G.V. Ling Urinary Stone Analysis Laboratory (USAL). It will allow companion animal veterinarians to provide free urinary stone analysis results to their patients. The collaboration holds promise for future innovations in veterinary urology by investigating new diets and supplements to expand stone diagnosis and new devices for managing urinary diseases in companion animals. Under the grant agreement, the USAL will provide free analyses and interpretations along with consultations to veterinary practitioners for up to 800 new stone submissions a year. By utilizing data submitted and analyzed by the USAL, researchers hope to gain a better understanding of urolithiasis management and abnormal tissue mineralization.



## ASPCA Opens Community Veterinary Clinic in Queens

The American Society for the Prevention of Cruelty to Animals (ASPCA) has opened its third Community Veterinary Clinic in New York City. These clinics provide affordable veterinary services to tens of thousands of underserved pet owners each year.

The Long Island City, Queens, location was chosen for this ASPCA Community Veterinary Clinic because the surrounding area lacks affordable veterinary care. The clinic will serve residents of three nearby NYC Housing Authority developments, all within walking distance of the clinic. The three developments include 6,000

units, homes to many families and their pets.

This clinic is made possible by a leadership gift from The Rachael Ray Foundation, and donations from other supporters. It will offer partially and fully subsidized basic and preventive care to dogs and cats, including vaccinations, treatment for minor illnesses and injuries, and spay/neuter surgeries.



## Community

### How Does Your Practice Foster Open Communication and Collaboration?

How do you foster open communication and resolve conflicts in your practice, especially when you have different personalities and communication styles? Any tips for preventing frustration?

**A:** We hold an annual team retreat where we discuss everyone's top strengths, and throughout the year, we have meetings to revisit them. This ongoing focus really helps our team better understand and collaborate with each other.

**A:** We've done the DISC personality test and team meetings at our practice a few times. It's enlightening to see how our similarities and differences impact communication styles—very helpful!

**AAHA members, add to the conversation at [community.aaaha.org](https://community.aaaha.org). For help, email [community@aaaha.org](mailto:community@aaaha.org).**

## 2024 CATalyst Council Report Provides Insights on Feline Health

The CATalyst Council, a nonprofit committed to enhancing the lifelong health and welfare of companion cats, has released the CATalyst Report—State of the Cat: Wellness and Nutrition 2024. The report is based on surveys conducted with more than 400 veterinarians and 1,900 pet cat owners across the United States. It provides information and insights on feline wellness and nutrition for animal health professionals.

Jane Brunt, DVM, CATalyst Council executive director, said, “With this critical report on the latest trends in feline health, those who deliver feline care, products and services will be expertly equipped to do so.”



Some of the Report topics covered:

- Cat owners' sentiments toward their veterinarians
- The top three unmet needs in medical care for cats
- Nutritional recommendations for cat patients

# 5 Questions for a Epidemiology Specialist

## Rachael Kreisler, VMD, MSCE, DACVPM (Epidemiology)

Rachael Kreisler, VMD, MSCE, DACVPM (Epidemiology), is associate professor of Shelter Medicine and Epidemiology at Midwestern University's College of Veterinary Medicine. Kreisler is the founder and editor-in-chief of the *Journal of Shelter Medicine and Community Animal Health*.



### 1 What made you choose your specialty area?

My goal when I entered vet school was to become a clinician-researcher, and I knew that epidemiology was an essential tool for creating new knowledge. I really fell in love with epidemiology during vet school, and this was only reinforced during my Master of Science in Clinical Epidemiology. Board certification in Epidemiology seemed like the next step in supporting my love of epidemiology and joining a community of other veterinarians passionate about the same things!

### 2 What is one thing you wish you could tell general practitioners regarding your specialty?

I tell my students that the ability to interpret veterinary literature is the “one weird trick” for being better at anything they care about.

Most general practitioners care about being a better doctor, which is one reason they seek AAHA accreditation for their practices. Being up to date on the literature and practicing critical thinking also helps prevent us from getting stuck in old routines. Epidemiology is the basic science of clinical medicine, which can seem remote from the day-to-day practice of veterinary medicine. However, an understanding of epidemiologic principles is crucial for practicing evidence-based medicine.

### 3 What is one thing that pet owners could do that would make your job more satisfying?

I really appreciate it when owners are willing to enroll their pets in clinical trials. The only thing that would make it more satisfying is if they understood just how much study participation can help people and animals.

### 4 What is the most rewarding part of your job?

I hope it's not cheating to pick two things, but I love creating new knowledge and creating new veterinarians.

### 5 What advice would you give to someone considering your specialty?

Go for it! Our community is growing, and we'd love for anyone with a passion for and expertise in epidemiology to join us. To become board-certified in the epidemiology specialty, you first must become board-certified in Preventive Medicine, which is a hurdle, but one that is very achievable. While I became board-certified in Preventive Medicine mainly to become eligible for board certification in Epidemiology, it really provided insight into the breadth of the veterinary profession.

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AAHA MEMBER

# Employee of the Month

## Sabrina Gonzales, RVT

**Veterinary technician, dental focus**

Nichols Veterinary Care, Monterey, California

Year started in vet medicine: 2012

Years with practice: 4

### In their own words:



**Why do you love your job:**

I love being able to help dogs with dental pain feel better right away.



**Pets at home:**

Malcom is a GSD mix who goes on long walks on the beach with me every day before or after work.



**What brought you to the profession:**

I worked in business management, but my love for animals drew me back into veterinary work.



**Hobbies outside of work:**

I love to go to renaissance fairs.



**Favorite book/TV show:**

I love folklore and stories about dragons like *Game of Thrones*.

Nominated by  
Cynthia Nichols, DVM

**Why is Sabrina so awesome?**

Sabrina does an excellent job elevating the level of care in our dental center. She oversees quality control and coordinates all the work that needs to be done with the veterinarians and assistants that work with her.

**How does she go above and beyond?**

She is always looking for new ways to improve the quality of care we offer and is a very hard worker. She contributes to a positive workplace culture of support and collaboration.

Each month we will spotlight a team member from an accredited practice. Does your team boast an outstanding veterinarian, veterinary technician, veterinary assistant, customer service representative, or kennel worker? Nominate your employee at [aaha.org/EOTM](http://aaha.org/EOTM), and you and your employee can win \$500 in gift cards courtesy of CareCredit!



\*The Employee of the Month contest is administered by AAHA.





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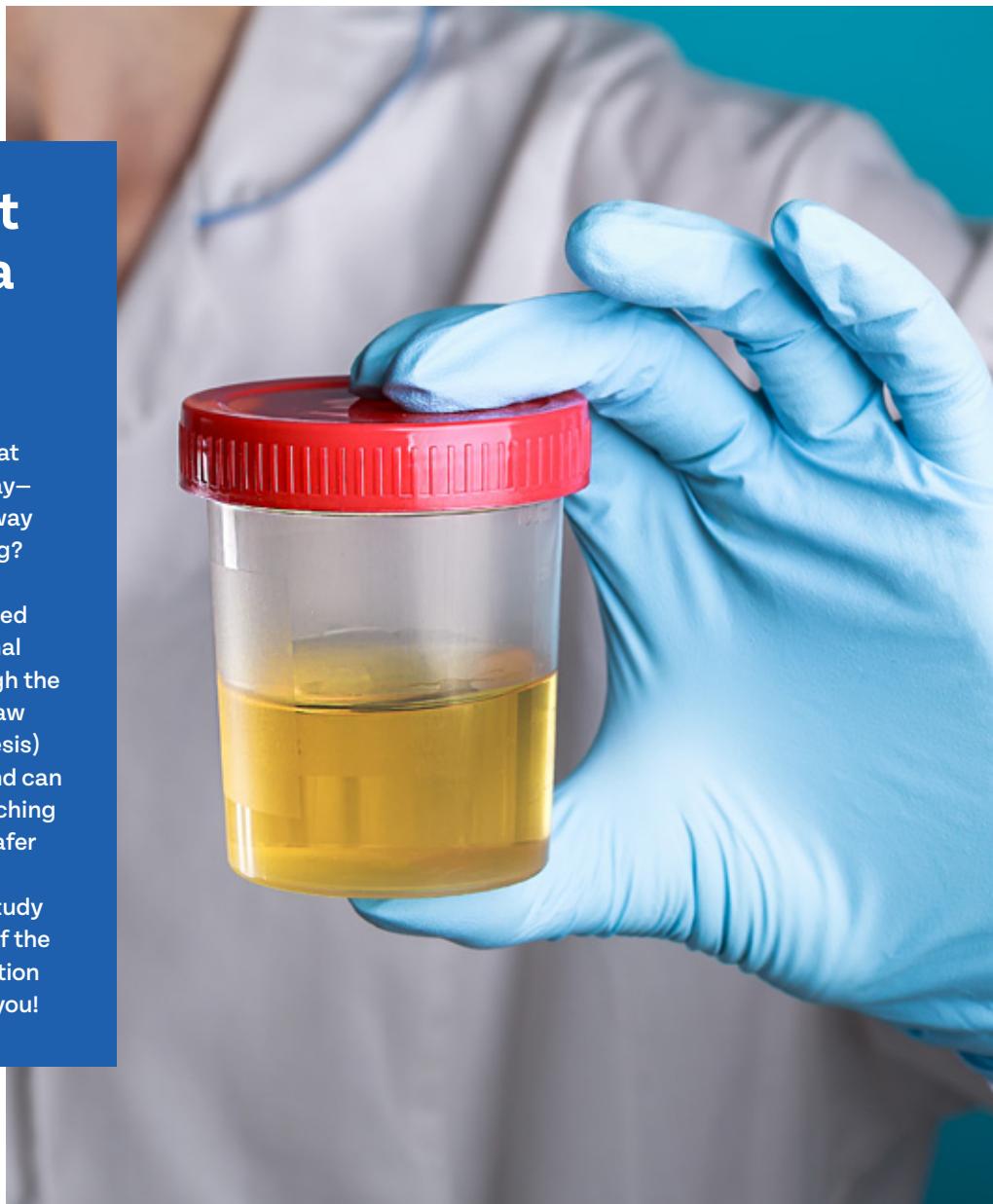
<sup>1</sup>Panasevich, M et al. Serum biomarkers predict improved body composition in overweight dogs fed a therapeutic diet. In Proceedings AAVN Clinical Nutrition & Research Symposium. Virtual, June 2-3, 2021.

<sup>2</sup>Frantz NZ et al. Novel food containing antioxidants and fish oil improves mobility scores in arthritic dogs. In Proceedings AAVN Clinical Nutrition & Research Symposium. Virtual, June 10-11, 2020.

# Case Report of the Month

## What Is the Best Way to Collect a Urine Sample?

Urinalysis and urine culture are so common in veterinary practices that they could be declared—dare we say—mainstream. But what is the best way to collect a urine sample from a dog? Samples that are clean-caught as they are voided can be contaminated by bacteria in the urethra or external genitalia. Inserting a needle through the patient’s abdominal wall to withdraw urine from the bladder (cystocentesis) is obviously much more invasive and can pose risks to the patient. So, is catching the midstream urine cleaner and safer than all other methods? That was the focus of an original study in the current issue of the *Journal of the American Animal Hospital Association (JAAHA)*. The results may surprise you!



To find out the best way to collect urine, read the full article **“Urine Contamination Prevalence Using a Midstream Collection Device Compared with Clean Voided Collections in Dogs”** in the latest issue of *JAAHA*, available at [jaaha.org](http://jaaha.org).

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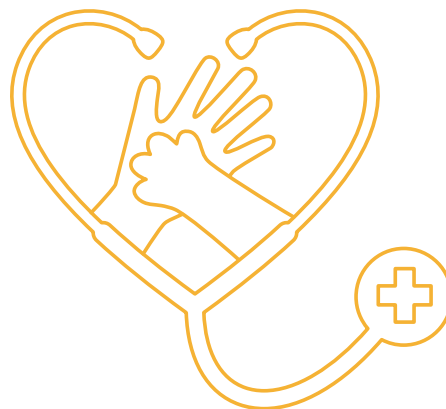
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# The Future of Vet Med Is Family Centered



## New Approach to Care Helps Your Team—and the Community at Large

BY KRISTEN GREEN SEYMOUR

**Y**our longtime client, Marcy, has always been a wonderful caregiver to her pets. She listens in appointments, asks questions, is compliant—everything you could ask for. But recently, she lost her job, and like so many people, she doesn't have the savings to cover an unexpected expense.

And so, when she comes in with her new puppy, Luna, who is exhibiting signs of parvo, your heart sinks. You know that Marcy would do anything she could to help Luna, but she simply doesn't have the funds to cover a hospitalization. And you also know that, despite how much you care and want to help, your veterinary practice is a business, and treatments cost money. You simply cannot provide services for free; if you did, you'd be out of business and unable to help any pets—or the people who love them.

Stories like these are all

too common in veterinary medicine, and they impact not only the patient and client but the veterinary team, too. Most veterinary team members know the worry and stress that comes with trying to help clients who cannot afford care, not to mention the anguish pet caregivers feel when they can't help their pet.

The dominant practice model in veterinary medicine requires out-of-pocket payment for services, which limits care access to those clients who can afford it. Not being able to provide care because of a client's financial situation puts veterinary practitioners at odds with their oath and mission, which often leads to moral distress.

Today, about two-thirds of American households include pets, and it's increasingly common for the people in those homes to consider their pets family. At the same time, as even more people are seeking healthcare for their pets, the field of veterinary medicine

is losing professionals at an unsustainable rate.

It's clear that change is needed. That's why family-centered healthcare is the future of vet med.

This requires a major shift—one that centers the patient and their family in the approach to care, rather than the veterinarian and team. By recognizing the barriers to care clients may face, it becomes possible to work with them to mitigate those barriers, which ultimately benefits pets, people, and even the planet.

### Understanding Family-Centered Care

Family-centered care isn't a new concept. It came about in human healthcare after World War II as a way to keep hospitalized children with their families. It gained wider and more defined reach in the 1980s.

According to the National Resource Center for Family Centered Practice at the University of Iowa School of Social Work, key components of family-centered practice (in human healthcare) include:

- Engaging with family members to understand their lives, goals, strengths, and challenges and developing a relationship between family and practitioner.
- Working with the family to set goals, strengthen capacity, and make decisions.
- Providing individualized, culturally responsive, and evidence-based interventions for each family.
- Family-centered practice spans the community-based services continuum and is not restricted to a specific service or model.

At its core, family-centered practice takes a holistic, nonjudgmental view of the family's situation to determine the best plan of care for a child and their family. Everything from finances to cultural beliefs to access to other services within the community is considered. Professionals practicing family-centered care prioritize solutions that keep children with their families, preventing out-of-home placements whenever safely possible.

### Defining Family-Centered Veterinary Practice

The recently released *2024 AAHA Community Care Guidelines* cite family-centered care as a core component (along with recognizing the urgency of the access-to-care issue and utilizing collaboration for increasing access to veterinary care) of community care, noting that:

- Family-centered veterinary practitioners recognize the fact that pet caregivers exist across the entire socioeconomic spectrum, and these practitioners promote health equity by taking the family's needs (financial and

otherwise) into account.

- Family-centered practice redefines the “gold standard” as high-quality, system-level care that ensures all caregivers can access care, regardless of barriers.
- Unlike the traditional approach to veterinary medicine, in which the focus is on disease management (sometimes in isolation from the context of the family), family-centered care considers the needs and circumstances for the patient and family.

Put into action, a family-centered approach:

- Prioritizes keeping pets with their families whenever possible.
- Offers multiple payment options, knowing that cost is the most significant barrier to care.
- Implements a spectrum of care (SOC) approach, including using the range of available diagnostics and treatments to provide care the family can access, recognizing when early referrals might be beneficial,

## What Is “Family?”

The term “family” is used here in the most inclusive sense possible, denoting any individual or group of individuals, regardless of biological or legal relationships, who live in a bonded relationship with one another. For example, Marcy and Luna—our patient and client mentioned in the beginning of this article—constitute a family. So would a couple who shares their home with an adult child and four cats, or roommates who, together, care for the animals in their home.



and utilizing technicians and other staff.

Many veterinary professionals may already be practicing one or more aspects of this approach, as family-centered care is a concept that's been gaining ground in the field for years. Our understanding of it, however, continues to develop and evolve, said Elizabeth Alvarez, DVM, DABVP (Canine and Feline Practice), a member of the Community Care Guidelines task force.

Alvarez has been working in small animal general practice for more than 20 years; about a decade ago, she began building an access-to-care veterinary clinic and teaching veterinary students in that setting. That's when she began to recognize how everyone carries implicit bias—and that doing so limits one's view, perspective, or understanding of a situation.

"Biases bring judgment and assumptions into decisionmaking," Alvarez said. "Studies in human medicine recognize that

this can result in poor health outcomes for their patients, often unintentionally."

That's why working with and educating families to allow for joint decisionmaking is central to the family-centered approach, Alvarez explained.

"Similar to how pediatricians work with families to treat young children, our families also know their pets so well and should have their thoughts and ideas heard and respected as an important component in the decisionmaking process," she said.

### Reassessing the Gold Standard

Historically, "gold-standard care" has referred to the most technologically advanced care available, which often aligns with the most expensive option.

But that's not helpful to families who can't afford it. In some cases, offering the best standard of care may mean offering evidence-based care that costs less, is more

manageable for the family, and has a high likelihood of success in treating and/or managing the pet's condition. This results in the best possible outcome for that pet on that day.

This supports the belief that veterinary care is for everyone, regardless of where they land on the socioeconomic spectrum, and that care of any kind is judgment-free. After all, the best care for any pet is the care you can realistically provide within the context of the family's situation.

### An Evolving Perspective

Raise your hand if you have ever taken in a pet that a client relinquished because they could not afford care. This has long been a common solution to the cost barrier, but family-centered care helps open up some other options.

A family-centered approach requires us to refute some prevailing attitudes within veterinary medicine—specifically, attitudes that may harm the human-animal bond.

For instance, a 2018 report by the Access to Veterinary Care Coalition found that nearly 95% of veterinarians surveyed agreed that all pets deserve some level of veterinary care, and around 87% said that the inability to obtain veterinary care for their pets had a negative impact on the wellbeing of families. However, in that same survey, roughly 60% of respondents disagreed with the statement that everyone should be able to keep a pet regardless of their circumstances. These respondents commented that "pets are not a right," and that people who can't meet their pets' basic needs should "not be bailed out for their poor decisions."

In other words, although the vast majority of veterinarians believe all pets deserve care, the attitude that clients who can't afford care shouldn't have a pet is quite common.

And, as anyone in clinical practice knows, offering a client no other option than to give up their pet is heartbreaking for the pet and the family—and it takes an emotional toll on the veterinary team, too.

Instead of putting full responsibility on the pet owner (“If you can't afford care, you should relinquish your beloved pet”), family-centered healthcare prioritizes finding ways to keep the pet with the family who loves them.

This approach is not solely about treating a specific ailment. The goal becomes helping the family as a whole, so the needs of the pets and their people become part of the healthcare equation, and the practitioner offers options for care that fit that family's situation.

### Benefitting Pets, People, and Planet

The benefits of this approach to the family go without saying, and to many, the benefit to the veterinary team through reduction of moral distress may also be obvious.

The positives continue, because it also benefits the community,

which does not have to foot the bill to house the pet in a shelter. This, in turn, leaves more spots in shelters open for the pets who are still seeking a loving family.

And that's not all—there's the One Health aspect, too.

“Ensuring access to veterinary care is about more than compassion, as important as that is,” said Michael Blackwell, DVM, MPH, director of the Program for Pet Health Equity at the University of Tennessee, Knoxville. “When families don't receive veterinary care, zoonotic disease threats are not prevented and controlled, presenting risks to the family and their community.”

In fact, this benefit to the One

## Definitions

The following definitions are from the *2024 AAHA Community Care Guidelines*. Read the full guidelines at [aaha.org/community-care](https://aaha.org/community-care)

**Access to care:** Access to care means that pet caregivers have the “economic, physical, social, mental, and emotional resources necessary to secure, communicate with, and benefit from the services of a trusted veterinary service provider as needed to optimize the health and welfare of animals in their care.” It requires affordable and consistently available services for clients irrespective of race, socioeconomic status, location, culture, language, gender, and ability.

**Community care:** A healthcare system that enables care for all pets in a community across the socioeconomic spectrum and is accomplished by a diverse collection of service providers within a collaborative network.

**Financially fragile:** Clients with the inability to come up with \$2,000 in an emergency.

**Incremental care:** A stepwise approach to patient management based on medical and family priorities that avoids situations of not helping at all and/or turning patients away.

**Moral distress:** Emotional and psychological distress caused by “the feeling of not being able to do what you believe to be ‘the right thing to do’ because of constraining personal, professional, organizational, or client factors.”

**Spectrum of care (SOC):** The practice of providing a continuum of acceptable care that considers available evidence-based medicine, while remaining responsive to client expectations and financial limitations.



Health mission is part of what makes it so important to implement a family-centered approach sooner rather than later.

“Some zoonotic diseases are increasing in frequency, due in part to climate change. When these are not prevented and controlled, the family and community are at a higher risk of being affected, resulting in higher healthcare costs for the family and those who help fund their medical care, e.g., human health insurance companies and taxpayers,” Blackwell said. “Family-centric veterinary care is the frontline defense from preventable diseases that affect the family.”

### Putting It Into Practice

So, how do you actually make the shift to a family-centered approach—without negative impacts to your business?

It’s possible! Here are a few steps you can take toward implementing it in your practice.

#### 1 Start with Practice Culture

A family-centered approach requires the entire team to understand your practice’s goal of keeping pets with their families whenever possible. Make sure team members understand why this is important and educate them on their role (and the practice’s role) in preserving the human-animal bond. Confronting and dispensing of harmful ideas around who deserves veterinary care is paramount.

#### 2 Provide Payment Options

Cost is the biggest barrier to care. Actively providing multiple payment options—and training multiple members of the team on how to discuss those options—can make an unaffordable procedure

Raise your hand if you have ever taken in a pet that a client relinquished because they could not afford care. This has long been a common solution to the cost barrier, but family-centered care helps open up some other options.

possible for a family.

For instance, you could set up a payment plan within your office, billing a credit card on file each month—assuming you have the office infrastructure to make it happen and that it’s not such a frequent occurrence that it will strongly impact your monthly revenue.

You could also help clients set up a payment plan with an outside service like CareCredit, or you might work with a pre-existing system such as AlignCare.

#### 3 Adjust Discussions with Clients

Family-centered care relies on relationships, so take the time to build relationships with clients—which in turn will help you break down barriers.

Alvarez stressed the importance of self-reflection and being willing to actively work to be more curious, open, and empathetic in the exam room—and beyond. This, she said, is how one develops cultural humility.

“Without that,” Alvarez said, “you may feel you are supporting your clients and practicing family-centered care, but if you don’t take the time to understand where they are coming from

(their history, their beliefs, their values), their abilities (financially or mentally or physically or otherwise), you are likely only viewing the situation through your ‘lens’—through your lived experience.”

Is there a risk involved in not pursuing diagnostics that could present a clearer recommendation on a prognosis? Yes, absolutely. This is why, Alvarez said, the pros and cons of whether to perform more tests must be discussed clearly with the owner.

#### 4 Rethink Your Offerings

Depending on the legislation in your state, you may be able to increase access to care by creating technician-only or telehealth appointments for certain cases. A tech appointment might allow someone to come in sooner and/or at a lower fee, while telehealth enables those with transportation challenges to access care from their home.

Additionally, within your practice, consider offering more multilingual support. This could include hiring bilingual staff and/or training current staff on how to effectively use translation services, but even including multilingual

intake or educational forms could make a big difference.

## 5 Go Beyond Your Practice

Providing equitable access to veterinary care isn't something any of us can do alone. It's a complex issue that requires a collaborative approach. So, you may not be able to effect system-level change on your own, but there are steps you can take to start creating a community network wherever you may be.

Begin by talking to the team about what types of barriers to care they're seeing, as well as what concerns they have about how your practice is approaching them. Include all team members, keeping in mind that your CSRs may hear things on the phone or in the waiting room that clients don't share during the exam.

Then, ask your team to share any relationships or connections they have that might be useful in building this network.

Finally, identify a point person to conduct research and outreach to help your clinic build relationships with other potential community partners. This person can create a reference of community resources for the team to refer to.

## Final Thoughts

Let's go back to Marcy and Luna. You've diagnosed Luna with parvo. Your typical treatment is out of Marcy's budget—something you know because you've established a relationship with her and given her a chance to share challenges.

With a family-centered approach, your team has options for helping Marcy and Luna.

Maybe hospitalization isn't accessible for Marcy right now,



In some cases, offering the best standard of care may mean offering evidence-based care that costs less or is more manageable for the family. This results in the best possible outcome for that pet on that day.

but supportive, outpatient care is within reach. You can schedule daily subcutaneous fluids and recheck exams, prescribe antibiotics, pain medication, and antiemetics, and teach Marcy how to syringe feed Luna until she feels well enough to eat on her own.

While this approach may not be successful for every patient with parvo, it is an option to consider and discuss with Marcy.

If your practice is a partner with a service like AlignCare, you could direct Marcy to apply, and begin treatment immediately, knowing that your practice will receive

payment, even if Marcy is not accepted into the program.

The family-centered approach also means you're connected within your community, so you might know of a financial partner who can step in to help or be able to refer Luna to another veterinary practitioner who can provide hospitalization and care at a lower cost.

Each of these potential solutions supports the human-animal bond, allows the veterinary team to do work they can feel proud of, and—most importantly—keeps this family together. ■

# Guidelines at a Glance

Veterinary teams want to be able to help every pet that comes through the door, but they're often constrained by factors out of their control. What if practices could expand their offerings by collaborating with nonprofit organizations and the community beyond their walls?

The AAHA Community Care Guidelines helps practices expand their scope of care so they're not left with the painful decision to turn a patient away or have the client decline care for their pet. Community care is a creative way of thinking about health care access that mobilizes *all* available resources in a community. It is a collaborative, noncompetitive care model that places the family (people and pets) at its center.

Community care uses all the tools and resources available to veterinary practices to increase access to care, including:

- Using a spectrum of care approach
- Recognizing and mitigating barriers to care
- Adopting a family-centered approach to practice, including a commitment to keep pets with their families whenever possible
- Collaborating with nonprofit practices like shelters, spay and neuter practices, animal welfare organizations, and community practices
- Redefining what "gold standard" practice means to bring care options to more pets and families



The 2024 AAHA Community Care Guidelines for Small Animal Practice are generously supported by CareCredit, Hill's Pet Nutrition, Merck Animal Health, and Pawlicy Advisor.

Learn more about innovative strategies to bring veterinary care to all pets in the 2024 AAHA Community Care Guidelines for Small Animal Practice, available at [aaha.org/community-care](https://aaha.org/community-care).



## 3/2/1

### 3 Takeaways



Addressing access-to-care issues can help alleviate the moral distress veterinary practitioners feel when they are unable to provide care for clients with financial and/or other limitations.



"Gold standard" veterinary care has traditionally meant the most expensive or technologically advanced options. The new definition of gold standard includes:

- A range of diagnostic and treatment options
- Accessibility
- Consideration of the client's and pet's contextual needs
- High quality and safety of care
- High likelihood of positive outcomes for the patient
- Evidence-based medicine



A community care network relies on a system of diverse service providers who collectively eliminate gaps in care.

### 2 Actions



To begin building a community care network:

- Learn about resources in your area and keep a list of those resources handy for referrals
- Reach out to initiate a collaborative relationship
- Find out about community relationships and partnerships that team members already nurture



Consider appointing an interested, passionate team member to take on the role of community liaison for the practice. This team member can seek out connections, gather resources, and help to build relationships.

### 1 Thing to Never Forget



**Access to care** is the *goal* and **spectrum of care** describes the wide range of *tools and strategies* used to achieve that goal.



# The Future of Telehealth, Telemedicine, and Telemetry

What's Already Here, What's Hot, and What AI Uses Are Ahead

BY ROXANNE HAWN

**W**ith only so many hours in already packed clinical days, adding telehealth, telemedicine, and/or at-home patient telemetry feels daunting. It isn't that practitioners don't see the value of virtual appointments or increased patient data for certain cases. It isn't overly due to doubts about the technology—though many tools need validation and some platforms that gained users during the pandemic have already disappeared. It's more about feeling sketchy about somehow restructuring practitioners' time to include meaningful and

effective virtual care to clients and their pets. Plus, remember the complexities of state-by-state veterinarian-client-patient relationship (VCPR) rules and likely cybersecurity concerns.

Jessica Bell, DVM, is an associate professor in the veterinary teaching hospital and the community practice department at Washington State University (WSU). Recently, Bell has served as a member of a committee looking into telemed use on campus. She said the committee identified two questions that need answering first.

"I did ask my other committee members about what their

thoughts were, and we all agree on this [question]," she said. "How are we going to incorporate it into our daily, crazy routines? And, then, our second biggest struggle is how are we going to collect the payment, and how do we charge for it? Because it's so new, there are not a lot of good standards for it."

With so much still to sort through, let's set a baseline for what's happening now and what's possible in the future.

## Where Do Things Stand?

Maybe it helps to start with the things veterinary professionals already do. For example, both



general and ER/specialty practices provide teletriage services with either client services reps or veterinary technicians talking to clients by phone. They help determine how serious a case is, how soon to schedule the pet, and with which practitioner. Those same skills transfer to tools that allow for real-time texting, live chat, or video. Veterinary practice apps also often feature ways for clients to share updates or questions about at-home care.

Some pet insurance providers offer triage services 24/7 to policy holders via phone, live chat, or video. Pet owners can also pay one-time fees or subscription fees to online 24/7 veterinary telehealth providers. These are not ideal, though, because clients may not understand the costs and limitations of these services

up front and feel disappointed or even duped. It's too easy to autofill a credit card number online in a panic to connect with a third party immediately.

Beyond triage, though, the veterinary profession already uses at-home telemetry tools such as FreeStyle Libre for pets with diabetes mellitus and Holter monitors for those with heart conditions. Plus, many radiologists review diagnostic imaging remotely already. That's another existing service that may provide frameworks for other types of remote care.

Here's where many get stuck. All those conversations via either real-time or asynchronous contact take time that right now probably isn't charged. WSU plans to start telehealth integration within the specialty services. Bell explains,

"They actually keep track of those hours spent discussing cases with clients and other veterinarians. First, is how can we start charging for the work we're already doing on the side?" Essentially, once the various referral teams implement telehealth services and fees, then Bell's community practice team will look at creating telemed options for specific types of cases such as pet behavior cases and rechecks that don't require hands-on exams, labs, or imaging.

"A lot of the discussion surrounds whether or not one can establish a VCPR without an in-person exam, and the answer to that varies widely from state to state," says AAHA's Chief Medical Officer Jessica Vogelsang, DVM. "But even when a VCPR has already been established, many veterinary teams are hesitant

“A lot of the discussion surrounds whether or not one can establish a VCPR without an in-person exam, and the answer to that varies widely from state to state.”

Jessica Vogelsang, DVM, AAHA chief medical officer

to jump into telemedicine for a variety of reasons. That probably will be the case for some time. As we continue to move forward and we have more agreement on good use cases and inappropriate use cases, I think the comfort level will develop organically over time in identifying when it is and is not a good choice for a specific patient.”

### What’s Hot Now?

Ken Lambrecht, DVM, presents at webinars and major conferences about the venture he cofounded called Healthy Pet Connect (HPC). The new company pairs specialized at-home scales and other smart feeder tech with the HPC app that loads key home health data into a dashboard that veterinary teams can view.

Right now, the proof of concept and ongoing validation of the tech focuses on use in feline obesity cases. Rather than telemetry, the HPC team refers to it as remote patient monitoring (RPM). Lambrecht explains that their dashboard uses weight-loss guidelines from AAHA and the American Association of Feline Practitioners, giving each pet’s veterinarian full control of cases

and easily visualized data that he says allows early intervention and guidance.

“We’ve found that pet parents are much more engaged and compliant if they can become an integral part of measuring and monitoring progress,” he said. “Why wouldn’t we want to improve outcomes, increase access to care, and save veterinary team time, which we know is so valuable?”

Rather than relying on self-reported food consumption, HPC’s suite of tech tools provides validated health data that targets obesity as the first condition—among the other common comorbidities—to treat.

Find full details on a cat named Spudgie’s case in the fall 2024 issue of *The Feline Practitioner*, but here are the highlights: Spudgie initially weighed 37 pounds.

Over 18 months, Lambrecht used the HPC tools to provide more frequent, smaller meals and monitor his weight fluctuations. They got Spudgie down to 12 pounds. After another 18 months of monitoring, the cat maintained within 5% of his ideal weight.

Going through the case’s visual data during a webinar in September 2024, Lambrecht talks

## Tele What Now?

While telehealth, telemedicine, and telemetry are all related to the use of technology to remotely access healthcare services, they have different meanings. Let’s break it down, using the AVMA’s definitions:

**Telehealth** is the overarching term that includes all uses of technology to deliver health information, education, or care remotely.

**Telemedicine** is a subcategory of telehealth and involves using a tool, usually telecommunications technology, to exchange medical information electronically from one site to another to improve a patient’s clinical health status.

**Telemetry**, or telemonitoring, is the remote monitoring of patients who are not at the same location as the healthcare provider. Examples include portable glucose monitors and smart collars that transmit data such as heart and respiratory rates and body temperature.

through some of the unexpected fluctuations and how the flow of real-time data allowed the team to adjust accordingly and keep the cat safe. “The statistics,” he says, “pretty much speak for themselves.”

He admits to being scared when he watched some of Spudgie’s data dip into what’s widely considered the red zone for safe weight loss. But, the positive results encouraged his team to enroll a couple more big cats weighing 42 and 44 pounds.

The HPC tools also helped in a case of unintentional weight loss, which many veterinary clients chalk up to aging even though there’s often an underlying cause. Joey Goldthorpe, DVM, the HPC team’s feline chronic care lead, shared a case during the September webinar of a 14-year-old feline patient whose weight never fluctuated during frequent, at-home weigh-ins. Goldthorpe laughs, “It didn’t matter if she’d just used her litter box or just eaten, she was always 7 pounds, 13 ounces.” Until she wasn’t and dropped a couple of ounces.

“No big deal, what’s 2 ounces?” Goldthorpe asks, “But, after being stable for all that time, it’s a dip. So, just as important as individual data points is trends data.” Even though everything looked great three months prior at a senior wellness exam, the family brought the kitty in for an exam, and she’d dropped another ounce. Goldthorpe found stage two chronic kidney disease and instituted early management.

So much of the new pet tech begins outside traditional pet-care verticals—smart feeders, activity trackers, wearables aimed at TPR and even blood pressure, and other items that might provide useful

“As we continue to move forward and we have more agreement on good use cases and inappropriate use cases, I think the comfort level will develop organically over time in identifying when it is and is not a good choice for a specific patient.”

Jessica Vogelsang, DVM, AAHA chief medical officer

at-home monitoring. Lambrecht talks about the need for new tech to be pet friendly, veterinary centric, and validated before wider implementation happens. That’s what builds confidence and wider adoption.

### What Shows Future Potential?

Artificial intelligence looms the largest with future potential for streamlining veterinary care. From finding and flagging important elements in client communications, lengthy specialists’ reports, and exhaustive electronic medical records to noting key elements of diagnostic imaging and drafting routine correspondence for you, AI will play a role in the future of veterinary medicine.

“I think artificial intelligence is going to encompass a lot of things that we don’t even know or understand at this point,” Bell says. “I worry about the falseness of it, of not a real-life person filtering through those consoles.”

Vogelsang recognizes the

“tremendous interest and apprehension” about AI and its reliability—much like telemedicine “all over again.” She says right now the profession is gathering information and coming to grips with the concepts and terminology, calling it a “larval stage,” but she warns, “it’s going to move fast. Veterinary teams understandably want to feel confident they can trust in the applications before they are ready to lean into it, and it’s going to take time to understand what it means to validate the technology.”

As one example, Pumpkin Pet Insurance is working on an AI tool for reporting a pet’s body condition score from photos families upload—front view, side view, top view. Initial tests report accurate scores for 75–80% of breeds, with the areas of challenge being those with thick coats that mask their actual body profile.

Alex Douzet, Pumpkin cofounder and CEO, says, “It’s something we’re thinking of offering as a tool inside the experience on the Pumpkin website



for pet owners who don't get a body composition score from their veterinarian or it's not findable inside the medical record. We know from studies that if you keep your pet at their ideal weight for most of their life, then the pet has a chance to live a year or two years longer, so there's a meaningful benefit for the pet and pet owner."

The Pumpkin team is also in phase three of investigating AI that assesses pets' motion based on client videos. "We hear from veterinarians these can be situations that are hard to replicate inside of the exam room," Douzet says.

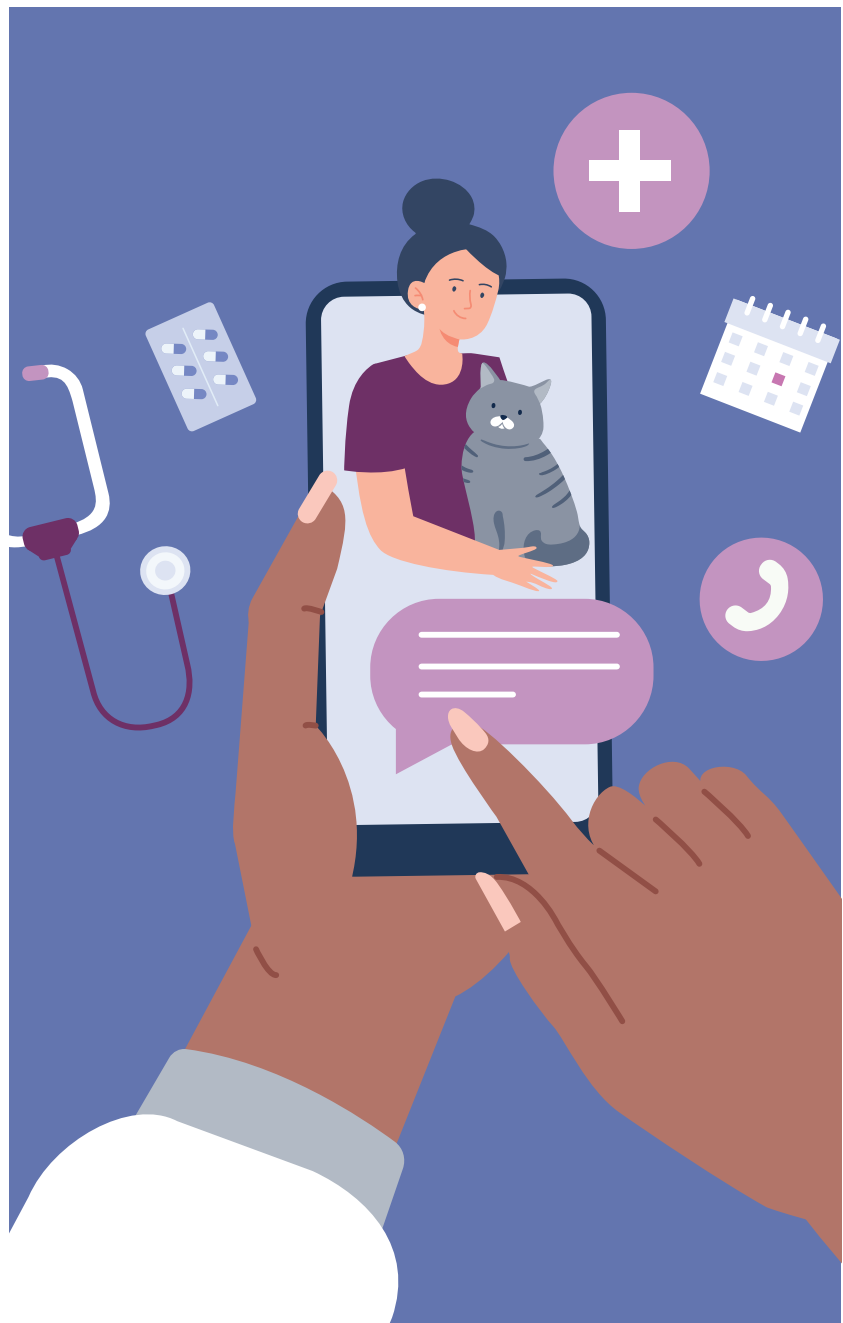
The AI movement analysis tool is meant to "spark a meaningful discussion by looking at the motion diagnostics, like a gait analysis. That's the framework that's sort of well established; then we can basically apply a generative AI tool on top of it," he explains.

Video quality and environment present challenges, though. It requires a relatively distraction-free space, without other dogs, cats, or people moving in the camera's frame. Otherwise, it's a garbage in/garbage out situation.

"We feel that this is something that could actually work really well if, let's say, we were to bring pets into a controlled environment, like a room where we have a pet treadmill," Douzet says. "What the AI tool does really successfully is identifying the joints and then detecting motion of those joints and how they perform through the movement and to be able to make an assessment."

### What Saves Time Now?

Vogelsang recommends focusing on the time-saving benefits of new technologies, since that is what



impacts daily practice activities and veterinary teams' mental bandwidth.

"People like to jump to the furthest possibility and talk about robots delivering pets to the clinic where someone in another state will be performing the surgery using a VR headset," she says,

"but in reality, the biggest impact right now is people understanding things like how AI scribes can save hours of record writing or summarize complicated medical histories to help veterinarians about to head into an exam room. We're just beginning to scratch at the other opportunities." ■



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- The types of vaccines available and why they are important
- The current core and noncore canine vaccine recommendations
- Factors to consider if recommending and interpreting serologic titers
- What to do when vaccines are overdue or an unknown vaccine history
- Best practices to ensure vaccine effectiveness
- How to correctly store and handle vaccines
- Why adverse reactions to vaccines happen and what to do to reduce the risk
- Ways for team members to increase client compliance through education
- Things to consider for vaccination of shelter dogs and puppies



Learn more about canine vaccination and other guidelines at: [aaha.org](http://aaha.org)



MONEY MATTERS / **PET INSURANCE**

# Got It Covered?

The Pet Insurance Industry Is Poised for Growth, but Obstacles Remain

BY KELLY SMITH

iStock via Getty Images Plus; AAAHA/Robin Taylor

Once the provenance of elite racehorses and show dogs, pet insurance has risen from humble beginnings into a multibillion-dollar industry.

In order to better understand the future of pet insurance, it may help to take a look at where it came from. Pet insurance dates to 1890, when Swedish insurance agent Claes Virgin wrote a farm insurance policy for livestock and horses. The first policy for a dog was written in 1924 in Sweden, followed 20 years later by policies in Britain. The first policy was issued in the United States in 1982 for Lassie, the TV and movie collie. In 1997, all dogs and cats became insurable in the United States.

A decade later in 2007, National Pet Insurance Month was created to raise awareness of the importance of pet insurance. One last steppingstone in our walk down memory lane is the 2007 founding of the North American Pet Health Insurance Association, (NAPHIA), an organization that provides education, marketing, and other support and promotes professional standards and ethical conduct in the industry.

Since those early days, the popularity of pet insurance has grown exponentially. According to NAPHIA, upward of 6.25 million pets were insured across North America in 2023. They report that the 2023 total premium insurance policy volume in the US surpassed \$4 billion, a more than 150% jump from 2018.

According to independent marketplace and AAHA Preferred Business Provider Pawlicy Advisor, most plans cover events such as accidental injuries, unexpected illnesses, chronic disease, dental illnesses, and surgery, while some cover alternative treatments

such as physical therapy and acupuncture, breeding and pregnancy expenses, and end-of-life care, euthanasia, and cremation or burial. Plans do not typically cover pre-existing conditions, pet supplies, elective surgeries, vaccinations, boarding, or personal liability claims.

### Where to Now?

Market research and consulting firm Grand View Research reports that the global US pet insurance market is expected to grow at a compound annual growth rate of 17.5% from 2024 to 2030, to reach an estimated \$10 billion market size by 2030.

They credit factors such as the rise in pet ownership, introduction of pet insurance in markets that are yet to be fully explored, escalating costs of veterinary care, and the continuing trend of treating pets like family members as leading causes for that continued growth.

One factor feeding that growth is the number of pet owners in the US, which has increased, especially during the COVID era. The American Veterinary Medical Association (AVMA) reports that the percentage of households that own at least one dog increased from 38% to 45% between 2016 and 2020, then leveled off by 2022. In their 2022 AVMA Pet Ownership and Demographics Sourcebook, they state that in 2020, at the height of the COVID pandemic, people who worked remotely were eight times as likely to acquire a pet.

While the statistics point to a rosy future for the industry, there are factors to consider alongside the numbers.

Forbes Advisor conducted research that included asking

dog owners the primary reasons that they are unlikely to purchase pet insurance. They say that the perceived cost garnered the highest response, with 42% stating they believed pet insurance to be too expensive. Twenty-four percent of owners didn't think they would actually need it, and 21% didn't believe insurance was worth the expense. The remaining respondents either didn't understand the product or didn't understand how to procure coverage.

The Forbes research reports that 89% of dog owners estimate that the cost of pet insurance is higher than it actually is. They say that 11% of dog owners correctly estimated an average cost below \$50 a month, and that 76% of dog owners overestimate the cost of pet insurance by at least three times the average price.

### Other Considerations

According to the NAPHIA 2024 State of the Industry Report, one of the barriers to growth in the pet insurance industry is the veterinarian's level of comfort with recommending a product.

The report found that 39% of veterinarians stated that pet insurance is not worth the money, 35% reported that it was a hassle for them and their staff, and 19% felt it was a hassle for the pet owners. Forty-two percent of veterinarians stated that pet insurance has too many exclusions, 40% felt it was not their job to sell insurance, and 15% said they had a bad experience with insurance in the past.

Research is mixed regarding the impact of pet insurance on veterinarian visits. One study states that owners who have pet



insurance spend more money at the veterinarian, but not specifically that they visit more frequently. A team of researchers published their results, “The Impact of Pet Health Insurance on Dog Owners’ Spending for Veterinary Services” in the journal *Animals*.

“While owners with pet insurance spend more at the veterinarian, they may be likely to utilize services in one visit, as opposed to spreading it throughout the year on multiple visits,” the study said. “Among the factors that do impact the number of visits, we found that a wellness plan, expenditures on non-health-related areas, where the pet sleeps at night, past illnesses, and perceived risk of future illness had a positive

The global US pet insurance market is expected to grow at a compound annual growth rate of 17.5% from 2024 to 2030, to reach an estimated \$10 billion market size by 2030.

impact. Factors such as a dog’s age and lower education levels had a negative impact on the number of visits.”

In other research, Nationwide Insurance collaborated with veterinary industry analytic firm VetSuccess on a study that assessed

almost 10 million pets, served by close to 2,000 veterinary practices. They report that pet owners who purchase pet health insurance are more likely to bring their pets in at the first sign of trouble and to follow their veterinarian’s treatment advice.

Among their findings, the study found that those with pet health insurance:

- **Spend more on veterinary care.** Revenue per patient increases 92% for insured dogs versus uninsured dogs. For cats, revenue increases 76% versus those with no pet health insurance.
- **Visit their veterinarians more often.** For dogs, that's 4.2 annual visits per insured patients versus 2.4 visits per patient for uninsured pets. For cats, yearly veterinary

visits were 2.5 visits versus 1.8 for cats with no insurance.

- **Approve surgical procedures more often.** Insured dogs are 51% more likely to receive surgical treatment, with a 17% increased spend. Insured cats are 20% more likely to receive surgical treatment, and 38% more is spent on those procedures.
- **Stick with their veterinary practice.** After three years, 81% of insured dog owners are at the same clinic versus

46% of uninsured dog owners. For cats, 69% of insured cats are at the same clinic in three years versus 33% of uninsured cats.

“We’ve long known from our internal research that pets insured by Nationwide see their veterinarians more often, with the predictable results of catching disease early and getting consistent follow-up care for conditions that need it,” said the company’s Chief Veterinary Officer Jules Benson, BVSc, MRCVS.



iStock via Getty Images Plus; AAHA/Robin Taylor

## According to the NAPHIA 2024 State of the Industry Report, one of the barriers to growth in the pet insurance industry is the veterinarian's level of comfort with recommending a product.

Even so, the rising costs of care are influencing how policy renewals are handled. Earlier this summer, Nationwide announced that it will drop as many as 100,000 pet insurance policies over the next year, citing the rising cost of going to the veterinarian as a major reason for their decision.

A recent Consumer Price Index from the Bureau of Labor Statistics indicates that the price of veterinarian services increased 7.6% over the past year. Along with this, however, there has continued to be growth in the pet insurance business; the pet insurance sector in the US and Canada saw an almost 22% increase in revenue in 2023, according to the NAPHIA 2024 State of the Industry report.

### In the Trenches

Along with all the data, veterinary practices are in the trenches every day, providing care for animals and managing the role of pet insurance in their business dealings.

Michelle Hall, LVT, is practice manager at Hayden, Idaho's Hayden Pet Medical Center. She relates that while their practice doesn't bill the insurance company, they work with clients, such as keeping an alert on a file if a client is on a specific insurance, in

order to track special needs that insurance may require.

"Our policy is to have the client pay for services rendered and let the client receive the reimbursement check," she says. "This keeps our protocol the same for all insurances. Most veterinary clinics do not have the staff, money, or time to have a dedicated insurance person." She anticipates that as the veterinary industry imitates the human healthcare industry, this practice will change.

As for the future of pet insurance, Hall says, "As the economy skyrockets, pet owners will have to consider other options for paying for pet healthcare." They currently have a large client base who uses a health and wellness credit card, "Therefore, we have a CareCredit portal in our practice management system. I see the same thing happening with insurance."

Bill Cicero is Hospital Director for Wheat Ridge Animal Hospital in suburban Denver and is responsible for the overall operation, financial health, and growth of the hospital.

He says that his practice is a proponent of pet insurance, for a variety of reasons.

"It helps alleviate the financial component of the treatment

equation, allowing an owner to focus solely on what is best for them and their pet," he says. "At a time where the scope of treatment options has grown so large, owners have a lot more information to digest when their pet requires care. Pet insurance largely removes the financial constraint from the situation so they can make the best decision possible. This, I feel, results in more positive outcomes."

Cicero relates that there is little consistency across the range of insurance providers. "This can make it challenging to accept them all as it carries a high administrative burden," he says.

He says that Wheat Ridge Animal Hospital tries to accept as many insurance carriers as possible and that they will continue to do so. Along with this, the practice offers pet insurance to its employees, and they are happy with what it provides for staff and their pets.

"I think more could be done to educate people about insurance options and how beneficial they can be," Cicero says, noting that he has done so with his own family members.

On the surface, the future of the pet insurance industry appears bright. Owners can plan ahead for the financial impact of some pet care and take comfort in the safety net that insurance can provide. Veterinarians whose clients use pet insurance may see an increase in visits, compliance, and, potentially, revenue. While there are mitigating factors to the glowing data forecasts including some owner and veterinarian resistance and a need for further education, the future trend for the pet insurance industry appears on the whole to be positive. ■



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# *diabetes management*

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- How to recognize the clinical signs of diabetes in dogs and cats
- How to correctly dose, handle, and administer insulin
- How to differentiate between clinical diabetes mellitus and patients with temporary hyperglycemia
- The types of insulin available for use in dogs and cats and indications for different insulin types
- What lifestyle and diet guidelines modifications may help control diabetes in cats and dogs



Learn more about canine vaccination and other guidelines at: [aaha.org](http://aaha.org)





GET SMART / **EMERGENCY CARE**

# Emergency Care Not There?

Hospitals Work to Meet Care Challenges  
with Alternative Approaches

BY MAUREEN BLANEY FLIETNER

**W**hen 10-year-old Max vomited and had diarrhea on the Saturday before a long holiday weekend, his owners rushed him to their local veterinarian. The dog was stable after being given intravenous fluids and antibiotics. A blood test did not indicate a problem, but a further workup was not possible as the hospital was closing. The owners planned to return when the hospital reopened Tuesday.

However, when Max's signs returned early that Tuesday morning, they contacted the local emergency hospital only to find it closed for the holiday. When they reached out to another emergency hospital about 40 minutes away, they found it was open but at capacity. Not aware of any alternatives, the owners were left to comfort Max at home until he passed away at 5 a.m.

The veterinary industry's challenges could see more pet owners face such heart-breaking situations.

Mars Veterinary Health, for example, currently operates 75 VCA hospitals and 103 BluePearl hospitals, according to Molly McAllister, DVM, MPH, chief medical officer. However, as of May 2024, only 59 VCA hospitals and 49 BluePearl hospitals offered 24/7 emergency services.

"The industry is facing a chronic shortage of veterinary professionals, and this includes emergency veterinarians and support staff," McAllister said. "Across our US practices alone, we have hundreds of emergency veterinarian openings, along with 1,200-plus open credentialed veterinary technician positions, many of which are in our emergency hospitals."

Veterinary candidates want work-life balance and flexibility,

so positions where they work evenings and weekends are less sought after, explained McAllister.

However, emergency situations have prompted some alternative approaches to arise.

### Relationships Matter

Tracy Nyberg, DVM, owns Stuga North Veterinary Care in Marquette, Michigan. She said it is the expectation in this small, tight-knit community on the shores of Lake Superior that hospitals have a veterinarian available for emergencies.

But rather than be a detriment, Nyberg sees these often-stressful cases as having molded her "into the capable clinician I am today. In order to obtain the trust and relationship with clients that we value so much, offering this additional care is a necessity."

With the closest 24/7 emergency hospitals 170 and 180 miles away, she said, "clients are very appreciative and willing to pay for emergency services. Whether it's just talking through an issue on the phone or coming in for a full workup or surgery, clients are reassured someone is always there for them."

When she opened the practice in fall 2020, she was the only veterinarian. She set up a separate emergency number and put it on business cards, magnets, and invoices to let clients know that she was available after hours and rotated weekends with another solo practitioner.

When two associates joined, they shared the after-hours calls and rotated weekends with another local hospital. She has talked with other hospitals about setting up other rotations but has not yet figured out the logistics.

"Giving doctors one day off a week while making sure there aren't too many on-call days in a row has been a healthy trend," Nyberg explained. They also educate clients about when to call an emergency number and about the strain offering emergency care can place on an already-stressed veterinary team.

"Trying to keep an open communication with my associate veterinarians and giving them the autonomy to refer or say they can't help nonclients is key to making sure we don't burn out. All three of us have young children and struggle tremendously with the work-life balance. We talk about this openly and regularly and try to carry extra weight for each other when we need to and show each other a tremendous amount of respect and trust.

"We may be a unicorn clinic/community up here but, after almost four years open with no turnover, I think we are doing something right. Greater cooperativity in a small community like ours or a 24/7 emergency hospital would be ideal," said Nyberg.

### A Nonprofit with Committed Leaders

When the emergency veterinary hospital in the Rochester, N.Y., area reduced services and availability before closing in late 2023, pet owners had to make the hour-plus drive to Buffalo, Syracuse, Albany, or Ithaca emergency hospitals in the middle of the night with their pets. Some of those pets reportedly did not survive the trips.

Three local veterinarians decided to take action. Brenda Buck, DVM, owner of Animal Hospital of Rochester; Bruce Ingersoll, DVM, a professor in

“Across our US practices alone, we have hundreds of emergency veterinarian openings, along with 1,200-plus open credentialed veterinary technician positions, many of which are in our emergency hospitals.”

Molly McAllister, DVM, MPH,  
chief medical officer,  
Mars Veterinary Health



Genesee Community College’s Veterinary Technology program and co-owner of York Animal Hospital; and Isadora Marion, DVM, founder of Doorbell Vet, founded Rochester Emergency Veterinary Service (REVS), a 501(c)(3) nonprofit.

They got the ball rolling in October 2023, and thanks to hundreds of donations, REVS opened the first week in February 2024, according to Adam Edwards, CEO of the nonprofit. As of May 2024, the organization was seeing about 20 patients a night, focusing on those in critical need.

“We have already seen plenty of patients that would not have been able to survive the hour-plus trip,” said Edwards, “so I’m hoping fewer people will need to experience the losses our community had to face before REVS opened.”

The hospital accepts new cases 7 p.m. to 7 a.m. weeknights and 24 hours Saturdays and Sundays. If a patient is hospitalized and requires care outside of “open” hours, there is staff working 7 a.m. to 7 p.m. weekdays to ensure needed 24-hour care.

How are they able to find staff for weekend and overnight shifts? Several factors figure in, explained Edwards:

- Staff members who had worked at the now-closed hospital preferred and were happy to again work those shifts.
- A core value of the nonprofit is treating employees fairly so they can maintain a good

work-life balance.

- The organization offers competitive pay and benefits and additional overnight and weekend pay differentials.

Filling veterinarian positions, however, has been “a little more difficult,” said Edwards. As of mid-May, most day shifts were worked by Buck and most overnight/weekend emergency shifts by Ingersoll—both committed to long workweeks until a full team is aboard.

“We offer competitive pay, benefits, and mentorship opportunities to all doctors, whether they are per diem or full-time; a limited number of required weekend shifts in a month; generous CE allowances; and flexible time off and scheduling,” he said. “We want our staff to enjoy working with us. We know that the work our staff does is physically, mentally, and emotionally draining at the best of times so we’re committed to open communication channels and transparency.”

While REVS shares a facility with Buck’s hospital, the plan is to move into its own larger location to provide true 24/7 emergency care

at a volume the area needs and eventually offer specialty services and develop an internship program to bring more students and new graduates to the area.

“We hope to become, and remain for many years, a pillar of support for the greater Rochester area. We don’t want the community to face the loss of local emergency care again,” said Edwards.

### Pet Owner Education

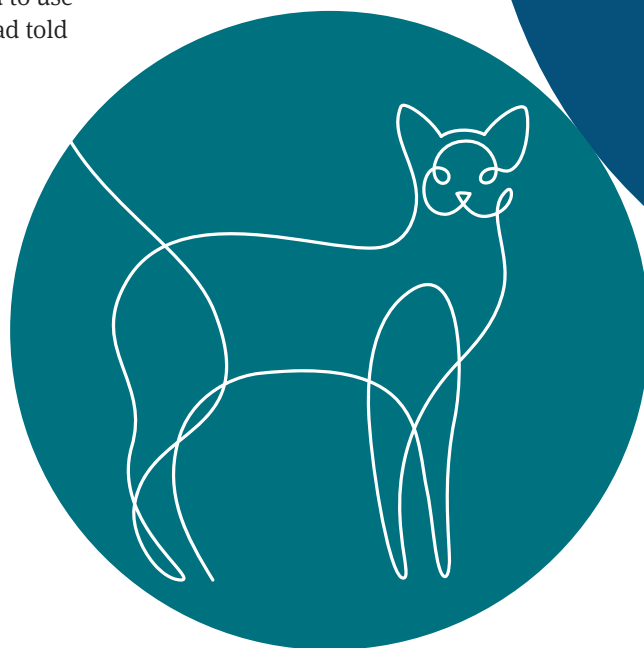
Max’s owners wished their long-time veterinarian had prepared them for what he might experience and what they might be able to do; had told them that the after-hours emergency hospital that clients were supposed to use would not be open; and had told them about any other 24/7 options in the area.

Bobbi Conner, DVM, DACVECC, president of the American College of Veterinary Emergency Critical Care (ACVECC), said that those are great suggestions for veterinary hospitals.

“Pet owners should absolutely

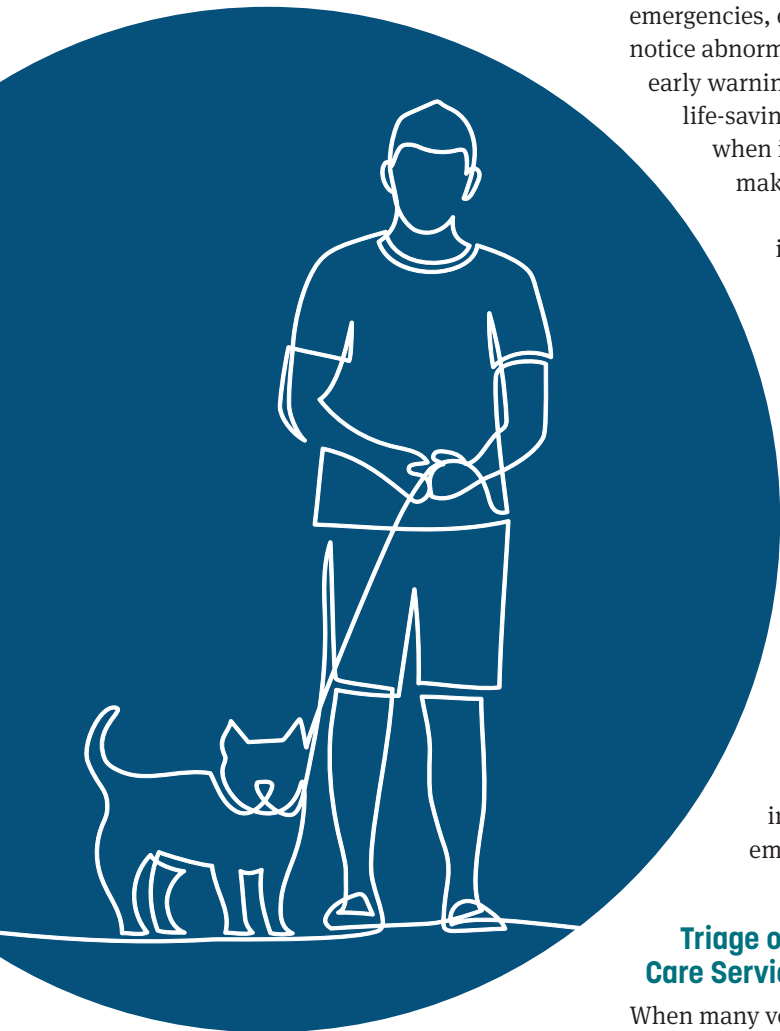
speak with their veterinarians about their pets’ specific conditions and what kinds of things could indicate an emergency,” Conner said. “It’s also great to know where you might bring your pet if that were to happen.”

Conner, a clinical associate professor and service chief of emergency and critical care at Virginia-Maryland College of Veterinary Medicine, said owners also should have the basic details—diagnosis, medications and dosages—readily



“We have already seen plenty of patients that would not have been able to survive the hour-plus trip, so I’m hoping fewer people will need to experience the losses our community had to face before REVS opened.”

Adam Edwards, CEO, Rochester Emergency Veterinary Service (REVS)



emergencies, explains how to notice abnormalities and detect early warning signs, and teaches life-saving techniques for when immediate action can make all the difference.

While Conner said it is “generally a good thing that general practitioners are creating boundaries for themselves and not making themselves available 24/7,” she said that they should have a plan in place “for what their clients should do and who they should turn to during the inevitable emergencies.”

### Triage or Urgent Care Services

When many veterinarians turned away pet owners during COVID, Lamoille Valley Veterinary Services (LVVS) in Hyde Park, Vermont, was starting triage services for same-day problems and emergencies.

“The hospital started the service so we could at least get them in and have a veterinary technician or higher-level assistant get a history and take vitals,” said Katy Weigel, LVVS practice manager. “Depending on how the animal is doing and our schedule, we can then offer an estimate for diagnostics and possible treatments.

“Once they’ve gotten permissions, staff can run bloodwork. Once the diagnostics are done, the pet will go to an

available doctor who will review the case and diagnostics, examine the pet, review with the owner, and come up with the treatment plan. The doctors are freed up to see more patients with the technicians doing the preliminary workup.

“Sometimes if the doctors are at capacity, we still see the triages and, if stable, will schedule an appointment with the doctor for later. Or we may send them to the emergency clinic if necessary,” said Weigel.

Staff are scheduled to triage 8 a.m. to 4 p.m. Monday through Friday. From 4 p.m. to 8 p.m. Monday through Friday and 8 a.m. to 8 p.m. weekends, visits are considered emergencies with patients seen by a doctor.

While the hospital no longer offers the 24-hour emergency services it had for years, it has a staff member present 24/7 for hospitalized patients to provide needed treatment and to answer emergency calls. A doctor also is on call if there is a question, if needed to come in for hospitalized patients, or to refer a client to emergency hospitals an hour or more away.

Weigel said LVVS also offers its clients guidance on how to deal with various conditions and what to watch for in chronic illnesses.

### Teletriage and Teleadvice

If no local care is available and/or the after-hours/emergency hospital that clients are referred to is closed, at capacity, or long hours away, teletriage and teleadvice are alternatives.

They fall under the overarching term of telehealth that describes virtual care between patient/client and veterinarian with both parties in different geographic locations.

available for an emergency team.

Veterinary hospitals might even suggest that pet owners take a pet first aid course or have a pet first aid kit available specific to the individual pet, which can provide some reassurances for pet owners regarding what does and doesn’t constitute an emergency, said Conner. The American Red Cross, for example, offers a cat and dog first aid online training class and a pet first aid app for smartphones.

Conner herself developed an online pet first aid class for ProPetHero, part of ProTrainings. That class teaches first aid to address common cat and dog

The services, however, are not part of telemedicine, which requires a veterinarian-client-patient relationship (VCPR).

Teletriage is deciding whether a pet's condition is a medical emergency with immediate referral to a hospital needed. Teleadvice is giving advice to a client regarding their pet, explained Shadi Ireifej, DVM, DACVS, founder and chief medical officer of VetTriage.

VetTriage has been a 24/7 global provider of bilingual veterinary telehealth services since 2019. It allows pet owners to connect via video chat from any computer or mobile device so VetTriage veterinarians can view a live stream of their pet.

In a VetTriage encounter, for example, the veterinarian troubleshoots and constructs a plan to keep the pet as comfortable and stable as possible until the client can access care. At a minimum, teletriage and teleadvice offer the pet owner a level of education and understanding regarding their pet's ailment, he said.

The services may also help avoid unnecessary emergency visits that can be stressful and expensive and could involve long, torturous rides if far from a hospital. In addition, preventing nonemergency cases from presenting themselves to the hospital allows for pets with critical or life-threatening conditions to be seen in a more timely manner.

"Frequently hospitals are understaffed or reach capacity and are unable to intake patients, even critical ones. Some facilities leverage us because they have very long emergency wait times and others will leverage us during inclement weather. Whatever the reason, access and spectrum

## Veterinarians should have a plan in place "for what their clients should do and who they should turn to during the inevitable emergencies."

Bobbi Conner, DVM, DACVECC, president of the American College of Veterinary Emergency Critical Care

of care to pets is available 24/7," said Ireifej.

A partnership with VetTriage is at no cost to the veterinary hospital, he said, explaining that the pet owner pays a flat fee to access the services of one of the more than 70 US-licensed DVMs who have been interviewed and trained by him.

### Working to Address the Need

ACVECC's Conner said she does not think there will be enough new graduates to meet the demands, even though she has seen "strong interest from current veterinary students and recent graduates to pursue both emergency medicine broadly as a career as well as emergency and critical care specialization." She said the ACVECC is currently working with leaders from specialty and general veterinary organizations to address the shortage.

McAllister said Mars Veterinary Health also is working to address the shortage. Among its efforts:

- Strengthening career pathways through training and mentorship programs like BluePearl's EmERge™ Emergency Veterinarian Training and innovating care

delivery through VCA Urgent Care and Banfield Virtual Petcare and Pet Chat™.

- Supporting mental health and wellbeing through MVH4You.com and "ASK – Assess, Support, Know" and in-house mental health professionals, Spring Health, Lyra, and Headspace.
- Promoting inclusion through partnerships such as the Diversify Veterinary Medicine Coalition.
- Building a bigger talent pipeline through youth engagement such as Banfield Pet Academy, sponsorship of the Purdue University College of Veterinary Medicine's League of VetaHumanz, and academic partnerships and scholarships.

"As pet owners increasingly view their pets as family members and not just pets, we are seeing owners looking for more extensive and higher-quality care," explained REVS' Edwards. He encourages veterinary hospitals to consider expanding into that service if there is a need, noting that "you can see the immediate positive difference you're making with each patient you see." ■



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# The Newest Professional Association

## Introducing the North American Association of Veterinary Receptionists

BY LAVANYA SUNKARA

It was a sad day when we learned that the receptionist at our dog's oncologist had left. This exceptional customer service representative (CSR) was there from the moment we walked through the clinic's doors last year. He knew our names and always greeted our senior dog, Andy, with kindness and enthusiasm during our increasingly regular visits.

He responded promptly to our questions and requests for appointments and medication via email and phone and advised us when we needed to bring Andy in immediately. He cheered when Andy successfully completed radiation. This individual was more than a receptionist for us; his presence made our time at the clinic easier during a tough stretch.

Front desk staff are the unsung heroes of the veterinary world.

Yet, they don't get the attention or recognition they deserve. A new nonprofit, the North American Association of Veterinary Receptionists (NAAVR), launched in the summer of 2024, hopes to change that.

NAAVR is the brainchild of Jill Clark, DVM, an expert in learning and team development. Clark is also the founder of IGNITE Veterinary Solutions, an educational company elevating the knowledge of veterinary teams around the world. The idea for the association came to Clark when students who completed IGNITE's Veterinary Receptionist Certificate of Excellence Program wanted to advance their skills with additional training. Clark enlisted the help of Debbie Boone, CVPM, who had spent most of her career teaching client communication and working

with front office teams, as well as Ronda Bell, CVPM, an expert in social media and marketing, to get the nonprofit incorporated in Texas off the ground. Within the first two weeks of launching this summer, the association gained 100 members.

The purpose of NAAVR is multifold. It aims to give CSRs a voice in the veterinary community, help them be recognized as valuable and integral members of their teams, advocate for their interests, create a code of ethics, and, most importantly, provide educational opportunities and a safe space for sharing.

"I know how hard the CSRs work and the challenges they face. They're so intelligent and so gifted that it's so wonderful to finally have an organization being built to help them," shares Judy Rose





# NAAVR

## North American Association of Veterinary Receptionists

Lanier, CVPM, CVA, DES, learning program manager at AAHA, who recently joined the board of NAAVR as the director of education and community. She is excited for NAAVR to empower people within the industry and to finally recognize CSRs for all their skills and talents.

### The Value of Well-Informed and Trained CSRs

At first glance, a CSR's job seems simple. They answer calls, make appointments, and collect payment afterward. However, a well-informed CSR can be a true asset to the practice. "The more educated your front office team is, the better your hospital performs financially because the CSRs have the ability to touchpoint with the client three times more than the

medical team," shares Boone, who serves as vice president of the association. The CSR takes the initial call and gets clients in the door. They greet pet owners and are the last to speak with them about additional services. They do this while fielding questions from existing and prospective clients via phone and email.

"If a receptionist is rude, the potential client is not going to make an appointment, and that has nothing to do with how good the doctor is, how good the team is, or how good the medicine is," shares Mississippi-based Caitlin Palmer, who has been a CSR for 13 years. "Without the people walking in, you don't get to treat their pets."

According to Boone, the veterinary industry has approximately 126,000 front desk team members nationwide.

"We help explain things to clients. It's a lot more than just answering phones and making appointments. We are the front line for our patients."

Debbie Boone, CVPM

Because there aren't specific qualifications needed to work at the front desk, having the relevant medical and nonmedical knowledge will be extremely handy. Palmer uses the institutional knowledge gained from years on the job to assist her practice's clients better. For example, knowing when something is an emergency helps her properly advise the client. If it's a male cat who can't pee, it can't wait until tomorrow, she recalls telling one pet parent. "We help explain things to clients. It's a lot more than just answering phones and making appointments. We are the front line for our patients."

Similarly, at the end of a vet visit, a well-informed CSR can help get the client to return when necessary. If the doctor made a recommendation and the client is on the fence about it, having a trustworthy CSR confirm what the vet said will make the difference in getting that follow-up appointment.

When clients have confidence in the CSR, they rely on them for nonurgent recommendations as well. "There's no reason that your CSR cannot talk to somebody with a new puppy or kitten and talk to them about the beginning of the training that they need, the food that they need, the vaccines that are going to have to happen, how old they would be when they get spayed," says Boone. She adds that in the practice she manages, the CSRs can triage cases, take medical history, know the medical terminology, and coach people on food and on the most appropriate heartworm and flea preventives. This is all possible because they had all been highly trained and tested on that material. "They are not an afterthought; they are the

intent of the education."

CSRs act as traffic police, creating workflows for hospitals and practices. Medical knowledge also allows CSRs to provide detailed notes for the medical team and allot the right amount of time for each appointment. "They understand that if the dog was vomiting and had diarrhea and maybe had gotten into the garbage, they need to book 10 minutes longer because we would have to take an X-ray," says Boone.

Lack of training could lead to inefficiency in scheduling,

according to Boone. They may schedule wellness visits on Monday, leaving no room for urgent care, and then, two days later, there's nothing on the books. "You have to train them to look at an entire week as far as scheduling goes and balance out the workflow, and the rest of the team has a much happier life when we do it well at the front desk."

### Benefits of NAAVR Membership

While seasoned front desk staff have honed their skills and



“If a receptionist is rude, the potential client is not going to make an appointment, and that has nothing to do with how good the doctor is, how good the team is, or how good the medicine is. Without the people walking in, you don’t get to treat their pets.”

Caitlin Palmer, CSR for 13 years

garnered expertise over time, many receptionists haven’t had opportunities to receive adequate training and obtain credentials. NAAVR members will benefit from an online platform that links to various resources and gives access to a private community forum to engage and exchange ideas and challenges in a safe space. NAAVR will offer opportunities for members to get credentials in the future.

NAAVR hopes to achieve its key objective of advancing learning by creating a repository for learning on the website, NAAVR.org, with links to information that’s already out there, sorted by subject matter, so that practice managers and front staff can easily find valuable and pertinent information on things CSRs need to know well. This material will be reviewed and approved by people who have done the job before, CVPMS, experienced consultants, and those working in associations like AAHA, which already has a wealth of medical and nonmedical

content freely available that would benefit CSRs. “I personally have done webinars that are free and available on everything from how to forward book to how to handle a euthanasia telephone call, which is something they all want to learn how to do,” shares Boone.

Lanier says they want to “identify things out there that we feel that our CSRs could benefit from, whether it be an online webinar, a live event, or even books or periodicals.” The site will also have links to help people understand emotional intelligence

and unconscious bias, as well as websites like the Harvard Implicit Bias Test so that people understand their biases and judgments. This knowledge base is beneficial for small practices that do not have any formal training set up for CSRs. It allows managers to find information easily to train their staff using the resources in the education hub and even track progress.

In the near future, NAAVR will offer opportunities for members to enroll in various certificate-level programs using the materials already available. “Then, the big goal is to have this as a professional certification, very similar to CVPM, so that they are a certified client experience professional,” says Boone. “A certification requires prequalification, some education level, an experience level doing the job, and then passing an accredited test. They’re the ones who probably have a deeper medical knowledge of triage.” Certification will require continuing education to maintain it.

“The idea of us being able to be credentialed to have that recognition within the veterinary community is so meaningful,” says Palmer. “I’ve been told I’m just a receptionist. I’m more than just a receptionist, so that validation and recognition of having letters after my name means a lot to me.” ■

## Sign Me Up!

Annual membership in NAAVR is priced at \$25. Individuals as well as practices can sign up. For more information on how to sign up, click the Register tab at [naavr.org](http://naavr.org)



SPECIAL SECTION / APOY

# Yes, They Can!

## Canobie Lake Veterinary Hospital named 2024 Accredited Practice of the Year

BY JEN REEDER

**W**hen Melissa Magnuson, DVM, won a student award from AAHA as a senior in veterinary school at University of Minnesota, she had never heard of the American Animal Hospital Association. Fortunately, her professors nominated her for the award, which came with a cash prize and free admission to AAHA's 1998 annual conference.

She attended and was deeply impressed by the experience and organization.

"That's when I decided, 'I'll be AAHA accredited when I have my own hospital,'" she recalls.

Magnuson realized that goal in 2007 after founding Canobie Lake

Veterinary Hospital in Windham, New Hampshire (after initially operating a house-call practice and working in research and development for the feline leukemia vaccine). She was the practice's only veterinarian in the early days and closed the doors for two hours each Wednesday to meet with her five team members to divvy up AAHA standards and discuss strategies to achieve each one.

She went on to found two more New Hampshire practices—All Pets Veterinary Hospital and Greenland Veterinary Hospital—which also achieved AAHA accreditation. Today, the three practices employ more than 100 people, including 16 veterinarians.

It all started with an AAHA award in vet school. In a full-circle moment, Canobie Lake Veterinary Hospital is the 2024 AAHA-Accredited Practice of the Year.

"It's an incredible honor to be chosen as 2024 AAHA-Accredited Practice of the Year, especially given the caliber of the other three finalists. We are all hospitals driven to provide excellence in care to pets and people," Magnuson says. "We are grateful to have AAHA recognize us as the best because we are constantly striving to be better and better every single day. . . I truly believe the people are what make our practice special. I have awesome people, and I have awesome clients."



↑ Melissa Magnuson, DVM (left), and Sara Cantara hold their trophy.

Fittingly, the motto of Canobie Lake Veterinary Hospital is “Trust our family with your family.” The practice treats feline and canine family members as well as pocket pets, birds, and exotics.

Patti LaRouche, customer service supervisor at Canobie Lake Veterinary Hospital—which was also a 2019 finalist for AAHA-Accredited Practice of the Year—says the practice has a “homey feeling.”

“We’re basically like a tight-knit family,” she says. “It’s the first job that I’ve ever worked where I actually enjoy coming to work and I enjoy the people that I work with.”

LaRouche loves interacting with the practice’s “really great clients.”

CSR team members recognize many clients and pets and call them by name. They also try to return every client call the same day, which often surprises and delights pet owners used to longer waits in human medicine.

Area resident Kate Wallace has been a loyal client since Magnuson ran a house call practice and made special accommodations to care for her cat George, who disliked anyone outside of the family. In the decades since, Magnuson and her team have cared for the Wallace family’s nine cats and three Labrador retrievers.

Recently, the team helped her cat Milo through bladder surgeries, diet changes, and supplements,

and he’s made a remarkable turnaround. Thanks to such terrific care, Wallace said she recommends Canobie Lake Veterinary Hospital to other animal lovers all the time.

“What you get is consistency, kindness, empathy, knowledge, and willingness to work with you,” she says. “And it’s clean—absolutely beautiful.”

### Class Acts

Mentorship is a hallmark of Canobie Lake Veterinary Hospital, and the practice offers internships and jobs to local high school students. Wallace encouraged a young woman who was classmates with her twin sons to volunteer

at the practice for her sophomore class project.

The young woman dreamed of becoming a veterinarian, so she volunteered at the practice. She liked it so much that after completing her class project, she became a paid kennel assistant and continued working there as a technician whenever she returned home from college and later, veterinary school at the University of Pennsylvania.

Now Katherine Wallace, VMD, is an associate veterinarian at Canobie Lake Veterinary Hospital (and shares the name of her now mother-in-law!).

“I truly love Canobie Lake Veterinary Hospital,” Wallace says. “They’re almost like my second family. Even in high school when I was an assistant, if there was a cool case, it would be like, ‘Oh Katie—come look at this. If you want to be a vet, this is something that you’ll see.’ I was always learning something, and I always had people who were teaching me and supporting me and getting me to my career goals.”

Now she pays it forward by supporting aspiring veterinarians at the practice. For instance, she had to slightly delay the interview for this article to show an assistant a radiograph of a mass in a dog’s belly. She also continues to learn on the job by working with exotics.

Wallace continually learns about self-care through Magnuson’s Conscious Care

program, which aims to boost the wellbeing of veterinary professionals. Every two weeks, the team meets to discuss pillars of the program and to share updates on their “homework,” like logging exercise or reaching out to an old friend.

“That’s her way of making sure that her employees are taking care of themselves and filling up their cup,” she says.

For her part, Magnuson loves seeing her employees thrive and watching the progress of high school students who start out and often stay at her practice.

“It’s so fun to watch these kids grow up in your practice and teach them and see their dreams come true,” she says. “I think that is just amazing.”

Veterinary assistant Jonathan Gallo also started at Canobie Lake Veterinary Hospital as a high school student and hopes to become a veterinarian. He graduated from college earlier this year and recently applied to veterinary schools because working at Canobie Lake Veterinary Hospital strengthened his resolve to become a veterinarian.

“It’s been amazing,” he says. “I couldn’t have asked for a better opportunity.”

### Culture of Learning

Gallo agrees that Canobie Lake Veterinary Hospital fosters a culture of learning for the staff

## The Future of the Practice of the Year Contest

Anthony Merkle, AAHA’s director of accreditation, said, “This year, the AAHA Accredited Practice of the Year Award continued its evolution, aligning with our mission of ‘Simplifying the Journey to Excellence for Veterinary Practices.’ We recognized that excellence is not a destination but a journey, celebrating practices beyond just the Practice of the Year. We honored their passion in areas like culture and retention, innovation, community involvement, and staff wellness—qualities that make veterinary medicine so rewarding and AAHA-accredited practices stand out.

This year, practice consultants nominated practices, using their evaluation experience to identify those dedicated to continuous improvement. We also introduced the AAHA Veterinary Impact Award, celebrating an international practice for their groundbreaking work in canine mitral valve repair surgery.

As AAHA continues its own journey to excellence, we will keep elevating practices, team members, and their contributions to veterinary excellence. Stay tuned as we move toward next year’s celebrations!”

“I truly believe the people are what make our practice special.”

Melissa Magnuson, DVM



↑ Melissa Magnuson, DVM, performs surgery alongside Andrea Arena, CVT.

as well as clients. He loves learning about animal behavior and sharing it with clients. For instance, the practice focuses on decreasing stress for patients, so he's grateful for the chance to explain to concerned clients that seemingly aggressive behavior by their pets in the clinic could be related to stress. In such cases, the team might suggest trazodone before an exam or other stress-reducing techniques.

"I think we do a good job of explaining that they're not bad dogs. It's just a stressful environment," he says. "By taking that slow approach and explaining that to the owners, we have really good compliance and understanding."

For the past six years, Heather Spellman and her family have been loyal clients of Canobie Lake Veterinary Hospital, which currently cares for their three rabbits, two cats, and two dogs. She never feels judged by the team.

"It's always in the spirit of kindness and teaching me how to be a better pet parent and kind of nurturing me as well as my animals," she says. "There is such

a recognition of the fact that these animals are my family."

When asked what makes the practice special, she immediately answered: "Everything."

The team saved her son's frog Calvin from bloat, and when her daughter's rabbit Finn stopped eating, they were able to diagnose him with a necrotic testicle. With care, the bunny bounced back and even joined her daughter at college.

The team really came through for Spellman during the onset of the coronavirus pandemic when her beloved senior dog, Chewie, was failing. Chewie was her "heart and soul" and felt nervous around strangers, so it was difficult to have to be separated during his euthanasia because of social distancing. But the team did all they could to help her feel cared for and not rushed.

"Their philosophy behind 'as little stress as possible for the animal' meant I didn't worry about Chewie being in there with so-called strangers because he was always going to be handled in the way that he needed to be," she recalls. "It was so appreciated. They have lifelong clients with us

because never once did I question the care that we were getting."

That kind of trust from clients means the world to team members like Samantha Pauwels, CVT.

"We work great as a team," she says. "It's really rewarding."

She enjoys seeing so many different species—and personalities—of animals; she's drawn blood on tortoises and bearded dragons and intubated ferrets and even snakes. The practice is "highly tech oriented," so certified veterinary technicians like herself get the chance to use their skills because the veterinarians trust and respect them.

## Community-Minded Culture

A key component of the culture at Canobie Lake Veterinary Hospital is giving back. The practice offers discounted veterinary care to local nonprofits like Animal Rescue Network of New England, Mainly Rat Rescue, MSPCA (where Magnuson also volunteers at vaccine clinics), and Salem Animal Rescue League. Additionally, the team supports events like Blackout Cancer Week to bring awareness to pediatric cancers and the community's Strawberry Festival to support the local library.

Maria West, office manager at Canobie Lake Veterinary Hospital, met Magnuson back in 2007 when they were both working at The Humane Society for Greater Nashua. She went on to join the practice in 2011, working as an assistant and then technician.

After she gave birth to her first child, the practice supported her moving into a less physical role at reception and later promoted her into management.

West has been a loyal member of the team for over a decade

## Did You Know?

AAHA has been celebrating top practices for 15 years! The contest started in 2010 and has consistently been a tight contest with absolutely amazing practices as finalists and winners.

Here is a look back at the past winners. For the full list of winners and finalists with links, check out [aaha.org/about-aaha/awards](https://aaha.org/about-aaha/awards).

### 2024:

Canobie Lake Veterinary Hospital  
Windham, New Hampshire

### 2023:

Upper Arlington Veterinary Hospital  
Columbus, Ohio

### 2022:

Lafayette Veterinary Care Center  
Lafayette, Louisiana

### 2021:

ZimmVet  
Zimmerman, Minnesota

### 2020:

Manheim Pike Veterinary Hospital  
Lancaster, Pennsylvania

### 2019:

Saint Francis Veterinary Center  
Woolwich Township, New Jersey

### Referral:

Pet Specialists of Monterey  
Del Ray Oaks, California

### 2018:

Country Hills Pet Hospital  
Eden, Wisconsin

### 2017:

Loving Family Animal Hospital  
Aurora, Colorado

### 2016:

Pembroke Animal Hospital  
Pembroke, Ontario, Canada

### Referral:

MedVet Medical & Cancer Centers for Pets  
Fairfax, Ohio

### 2015:

North Royalton Animal Hospital  
North Royalton, Ohio

### Referral:

Coral Springs Animal Hospital  
Coral Springs, Florida

### 2014:

Prescott Animal Hospital  
Prescott, Arizona

### Referral:

MedVet Medical & Cancer Centers for Pets  
Worthington, Ohio

### 2013:

Macungie Animal Hospital  
Macungie, Pennsylvania

### Referral:

NorthStar VETS  
Robbinsville, New Jersey

### 2012:

Wellington Veterinary Clinic  
Wellington, Colorado

### Referral:

Veterinary Emergency and Specialty Center  
Richmond, Virginia

### 2011:

Norwalk Veterinary Medical Center  
Norwalk, Ohio

### Referral:

Upstate Veterinary Specialists  
Greenville, South Carolina

### 2010:

Countryside Veterinary Hospital  
Chelmsford, Massachusetts

Practice of the Year



“There is such a recognition of the fact that these animals are my family.”

Heather Spellman, client

because it’s such a positive work environment.

“Everyone tries so hard to get along and communicate with each other,” she says. “It trickles down from the top.”

She’s proud that at the practice, veterinarians who think a patient could benefit from a holistic approach can essentially provide an “internal referral” to Ayse Washington, DVM, who has a particular interest in treating

geriatric pets and animals with chronic conditions.

The entire team shares a dedication to offering top-notch care to clients and their pets, West notes.

“It is such a big group effort,” she says. “Everyone contributes to the practice.”

Sara Cantara, director of practice operations, agrees. She’s worked at Canobie Lake Veterinary Hospital for 14 years because she

loves the culture—from big-picture aspects like mentorship to being able to bring pets to work or work four 10-hour shifts so she has an extra day off to spend time with her family and horse.

Above all, she deeply admires the practice’s founder.

“Dr. Magnuson is by far the best person I have ever known,” Cantara says. “She’s just fantastic. You’ll never meet a person like her ever in your lifetime.”

Perhaps unsurprisingly, Magnuson is all about her team and giving back to the profession she loves so much. She’s launching Conscious Care for other practices (find her on social media as The Conscious Vet) so that veterinary professionals have resources to be as resilient as possible in what she fervently believes is a “really cool profession.”

“We make pets and people feel better,” she says. “I love what I do. It’s exciting to me.”

Of course, she’s also incredibly excited that Canobie Lake Veterinary Hospital is the 2024 AAHA-Accredited Practice of the Year.

“It’s a great honor. This is not an easy achievement. It has taken years of growth and a dedicated team that shares in our vision. Having buy-in from team members is key to achieving excellence,” she says. “Our practice manager told our team, ‘This is like winning the Super Bowl!’ This is a great analogy because just like a football team that achieves this level of accomplishment, you must have the right mission, culture, teamwork, trust, communication, and commitment from all team members. We are so grateful to have found the right mix and have the guidance from the AAHA team to make the Super Bowl of hospitals happen!” ■



↑ The team celebrates their APOY win back in New Hampshire.

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## Telehealth Attitudes

Telehealth is a great tool for improving client compliance, providing timely consultations, and broadening access to care. And guess what? Clients love it and want it. The below excerpt, from the 2021 AAHA/AVMA Telehealth Guidelines for Small-Animal Practice Toolkit, shows just how clients feel about different aspects of telehealth.

Download the full toolkit for even more on the uses of telehealth and tips on how to start implementing telehealth services today.

### How do pet owners feel about telehealth?

Offering telehealth services means meeting your existing (and future) clients where they're at. Don't believe us? Let's look at the numbers.

★★★★★  
**93.7%**  
of pet owners<sup>1</sup>  
are highly satisfied with their virtual interactions and rate their experience a 5 out of 5.

**86.8%**  
of pet owners<sup>2</sup>  
felt they were better able to communicate with their primary care veterinarian about the situation after a telemedicine consultation.

**91.9%**  
of pet owners<sup>2</sup>  
with a primary care veterinarian would use alternative methods of communication, if provided.

**89.3%**  
of pet owners<sup>2</sup>  
felt they were better informed about their pet's situation after a telemedicine consultation.

**Phone, chat, and video<sup>1</sup>**  
were highly preferred for pet owners over email or other asynchronous connections.

**Over 60% of pet owners<sup>1</sup>**  
reported resolution of the issue after a telehealth visit.

### Why are pet owners relying on telehealth services?<sup>3</sup>

Instant, digital access to medical care encourages pet owners to have a greater knowledge base and a proactive approach to their pet's health.

**Top reasons for telehealth consults:**

- Behavioral changes
- Skin issues
- Nutrition
- Gastrointestinal issues
- Urgent/emergency

1. VVCA, [vca.org](https://vca.org)  
2. National Library of Medicine, [pubmed.ncbi.nlm.nih.gov/31837750](https://pubmed.ncbi.nlm.nih.gov/31837750)  
3. Chewy Health, [www.chewy.com/health](https://www.chewy.com/health); VVCA 2024 Report, [vca.org](https://vca.org)

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