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AAHA

FEBRUARY 2022
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Trends magazine

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12 Big Ideas for Finding Staff and Keeping Clients **22**

Meet Your President
An Interview with Adam Hechko, DVM **29**

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Trends magazine

Vol. 38, No. 2
FEBRUARY 2022

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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features

22 12 Ways to Fill Openings and Retain Clients

Practices are finding creative solutions to deal with staffing shortages, from giving techs more responsibility to hiring part-time staff and boosting telemedicine

by Kerri Fivecoat-Campbell

29 Leading the Way

Adam Hechko, DVM, AAHA's new president, took the reins as the veterinary industry began navigating its second pandemic year

by Tony McReynolds

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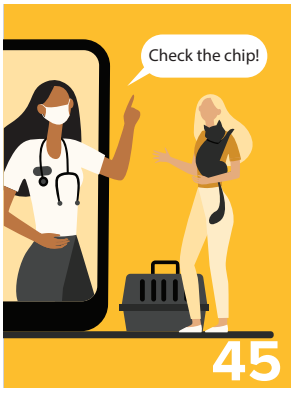

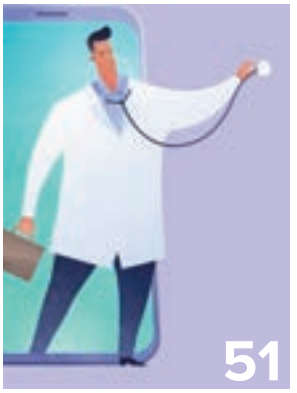

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from the editor's desk

WE ALL KNOW IT—there is a full-blown staff shortage going on in the United States and Canada, with over 11 million job openings in the US alone as of this writing. Assuming it is not going to get better any time soon—what is to be done? This month in *Trends* we look at 12 specific and creative ways that practices are dealing with staff shortages. From forming co-ops with other practices, to hiring part-time staff, to boosting telehealth services, AAHA practices are finding ways to get it done.

In our second feature, we interview AAHA's new president, Adam Hechko, DVM. Hechko took over late in 2021, but it's never too late for a good profile. Our own Tony McReynolds spoke with the new president and explored what it means to be a leader.

Another excellent profile this month is of the 2021 AAHA-Accredited Practice of the Year. The winner, ZimmVet in Zimmerman, Minnesota, is an outstanding practice that truly embodies what it means to provide the best possible care for animals.

MEMBER STORIES

We are looking for stories from you! Do you have a good story to tell about something that happened in your practice, or a team member who has become a rock star? We want to hear it and print it in *Trends*. Send your ideas to trends@aaha.org, or contact your practice accreditation specialist for more information. Tell them *Trends* editor Ben Williams sent you!

WE WANT YOUR OPINION!

The *Trends* team is always interested to hear what our readers have to say about the topics *Trends* is covering—and what we are not covering. Feel free to reach out any time with your thoughts or ideas for article topics.

And don't forget to nominate your own Employee of the Month to win a $100 gift card!

COMING NEXT MONTH

Coming up in March: We'll investigate how the pandemic has affected the growth of the Black DVM Network; take a look at the different pain scales that are used in pain management; and explore client communication around cats.

As always, let me know what you think at trends@aaha.org.

—Ben Williams, Editor

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PROFESSIONAL VETERINARY FORMULAS

View from the Board

Remote Technology: Moving from Science Fiction to Real-Life Tools

AS OUR WORLD BECOMES EVER MORE TECHNOLOGICALLY CONNECTED for better or worse, there are and will be many advances that allow remote monitoring of our pets and patients for personal and medical reasons. There will be further additions to our ability to enhance pet care while keeping remote observations at our fingertips. And it's another instance of the pet product market continuing to grow, which I hope veterinarians will find not just medically beneficial but financially beneficial. In fact, recent market analyses reports predict that the global pet wearable market will grow from $703 million in 2019 to $1.72 billion by 2024.

We have long had the Holter Monitor to evaluate cardiac rhythm, but now there are many more items in the marketplace. Many of us are using the Freestyle Libre to monitor a patient's blood glucose trends for as long as the disc stays on the pet (never the 14 days of human wear, but long enough to get good information).

In 2019, Dindog Tech in Spain debuted a wireless medical telemetry system for veterinary use called the DinBeat UNO to allow in-hospital or at-home real-time patient monitoring without cables for temperature, heart rate, electrocardiogram (ECG), respiration, position, and more. This wearable harness was developed with input and validation testing from several veterinary schools.

The advent of the supercomputer we call a cell phone is also pushing the development of apps linked to special pet collars or harnesses that have biosensing ability along with Cloud-based data analytics. These products use global positioning system (GPS) chips, radio frequency identification (RFID) chips, or different sensors to create smart collars that take advantage of WiFi, Bluetooth, and/or cellular connectivity to connect to cell phones. The longer-lasting batteries and better memory and displays of our phones puts instantaneous and continuous monitoring into the hands of pet owners.

Several of the invisible fence providers are promoting that future-generation products will expand health monitoring of an individual pet as technology allows them to move beyond just geofencing. Others, such as VetMeasure MeasureON!, are already monitoring body temperature, heart rate, respiration rate, and activity levels continuously with the ability to link in the veterinarian to real-time data. Vetrax adds to basic monitoring by tracking pet behaviors such as scratching and shaking to perhaps give insight into dermatologic and arthritis issues in the individual pet.

My research uncovered that even the back end of the dog may be up for scrutiny never seen with the new BrilliantPad self-cleaning dog potty. In addition to wrapping and sealing the waste products, the BrilliantPad Smart adds "dog-activated modes of automation operation, waste analysis and health insights, and WiFi and app connectivity for remote control." This includes a camera to maintain a "photo journal for review with your veterinarian."

There's much more to be found about emerging technology in this month's article, so enjoy, and I hope you find something that can enhance your team's care of our clients' special family members.

Margot K. Vahrenwald, DVM, CVJ, is vice president of the AAHA Board of Directors. She is owner of Park Hill Veterinary Medical Center in Denver, Colorado.

AAHA MEETINGS AND EVENTS

FEBRUARY

S	M	T	W	T	F	S
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6	7	8	9	10	11	12
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27	28					

MARCH

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27	28	29	30	31		

APRIL

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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Veterinary Management Institute

Call for AAHA Board of Directors

WVC in Las Vegas
AAHA booth #1926

To register for a learning program and learn more about AAHA's upcoming events, visit aaha.org.

DEAR AAHA

CATCH UP WITH DEAR AAHA

Each month, AAHA's Member Experience team answers an anonymous question from practices just like yours about a variety of topics related to evaluations, practice management, the *AAHA Standards of Accreditation*, and more. Browse the Dear AAHA archives at aaha.org/dearaaha.

Have a question you'd like AAHA to answer? Email us at dearaaha@aaha.org.

This month in AAHA's Publicity Toolbox . . .

Here are the downloadable social media images available for AAHA-accredited members at **aaha.org/publicity**:

National Cat Health Month
National Pet Dental Health Month
Spay and Neuter Awareness Month
Valentine's Day: February 14
World Spay Day: February 22
Mardi Gras

AAHA Research Recap

In 2021, AAHA began commissioning independent market research to better understand what the veterinary profession and our members need from us. We're excited to start sharing these results with you, so each month in this section of *Trends*, you will find takeaways from our research projects.

You're invited!

AAHA surveys are conducted by an independent research firm. Participation is optional and we greatly appreciate those of you who take part. The more responses we get, the more we can shape our strategy around your timely and candid feedback. Learn more at **aaha.org/research**.

AAHA OMNIBUS SURVEY

A monthly survey of AAHA members

Purpose

Monthly online survey to measure AAHA member satisfaction and determine trends over time to better serve members.

Who gets the survey?

Each month, one-twelfth of the AAHA membership is invited by email, so every member should get an invitation once a year. The survey is optional and anonymous, and there is no compensation, but it is an opportunity for members to tell us what you think.

Sample Questions from the Omnibus Survey:

What kind of AAHA member are you (accredited, affiliate, student)?

How much do you value your AAHA membership?

What are your most valued membership features and what new benefits do you want?

AAHA VETERINARY OUTLOOK SURVEY

A quarterly outlook on the veterinary profession

Purpose

Quarterly online survey to ask AAHA member and nonmember practice owners, managers, and teams about what's ahead for the veterinary profession.

Who gets the survey?

AAHA members are invited to participate on a rotating basis. Nonmembers are added to AAHA's list through a variety of sources, such as conferences, CE events, emails, and marketing outreach. Want to be added to the list? Email us at research@aaha.org.

Sample Questions from the Outlook Survey:

What is your role at your practice?

What are your predictions for your own practice in the next 6 months (e.g., revenue, number of patients, hiring and turnover)?

What changes, challenges, opportunities, or events should the profession be preparing for?

Spotlight on **Hiring**

In our first year of conducting the Omnibus and Outlook surveys, veterinary professionals identified finding, hiring, and keeping qualified staff as their biggest challenges.

Look for more AAHA Research highlights next month. Questions or feedback about the Omnibus or Outlook Survey? Email us at **research@aaha.org**.

From the OMNIBUS SURVEY

34% of AAHA members say **staffing, hiring, and pay** are their biggest professional challenges in the coming year.

Staffing issues doubled from being a top concern for just over 20% of respondents in Q1 of 2021 to being a top concern for more than 40% of people by Q3.

From the VETERINARY OUTLOOK SURVEY

What do practices most need to prepare for in the next 6 months?

22% **Wages** and being able to afford **qualified staff**

19% **Veterinary technician turnover** and **underutilizing techs**

Will your practice be hiring in the next 6 months?

81% of veterinary professionals say their practice expects to **hire new staff to fill new positions.**

73% of veterinary professionals say their practice expects to **hire replacement staff because of turnover.**

What are the biggest hiring pain points?

- **58%** Finding qualified veterinary technicians
- **57%** Finding any veterinary technicians to hire at all
- **41%** Finding qualified DVMs
- **42%** Finding any DVMs to hire at all
- **40%** Finding staff to work for a "reasonable" wage
- **42%** Knowing where to look for candidates

How is your practice addressing burnout?

27% Hiring more

AAHA ACCREDITED Practice of the Year

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Show us! Finalists are featured in *Trends magazine*, honored at Connexity, and more! Submit your practice's application at **aaha.org/awards.**

notebook

Study Shows Cats Mentally Map Their Owner's Location

In a recent study published in the journal *PLOS One*, researchers report findings from their observations of cats' responses to hearing their unseen owner's voice coming from different directions. The researchers, led by Saho Tagaki, department of psychology, Kyoto University, conclude: "Our results suggest that cats have mental representations about their out-of-sight owner linked to hearing the owner's voice, indicating a previously unidentified socio-spatial cognitive ability."

In one experiment, the cat subjects were individually placed alone in a familiar room. The cat's owner or a stranger called the cat's name from outside the room and the cat heard the voice over a speaker in the room or a speaker outside the room. Multiple test combinations of speaker location and sounds were used. "In line with our prediction," the researchers write, "cats showed most surprise [in a situation] where the owner suddenly seemed to be in a new place."

Ukususha/iStock via Getty Images, Willowpix/iStock via Getty Images

Research Shows Service Dogs Relieve PTSD Symptoms in Veterans

"Service dogs for PTSD are not a cure, but for some veterans they can offer benefits that make PTSD symptoms easier to manage," said Maggie O'Haire, PhD, associate professor of human-animal interaction, Purdue University College of Veterinary Medicine. O'Haire has led first-of-its-kind research revealing how service dogs can offer both physiological and behavioral benefits to veterans with post-traumatic stress disorder (PTSD).

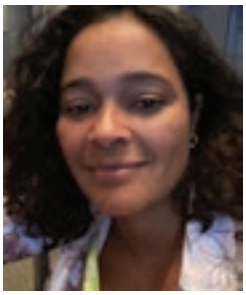
"We continue to hear that service dogs are saving veterans' lives. Our research is intended to measure this," O'Haire said. "The challenge is answering how exactly service dogs are helping and what to expect once you have one of them in your household." O'Haire's most recent work includes a study published in *Military Behavioral Health* that shows for the first time how couples are affected by a veteran's PTSD service dog.

In another recent study, published in the *Journal of Traumatic Stress*, O'Haire and graduate student Clare Jensen successfully replicated O'Haire's preliminary study of veterans and service dogs. "Our goal is to advance rigorous science instead of relying on intuition when it comes to how service dogs are helping veterans," O'Haire said. "We want these findings to help people understand what service dogs do."

And, she noted, they also hope to get rid of the stigma of service dogs helping people with invisible disabilities. Just because you can't see their disability doesn't mean they don't need help.

Five Veterinary Managers Awarded 2021 VMG-CVPM Scholarships

Five veterinary professionals have received scholarships to help them attain the Certified Veterinary Practice Management (CVPM) credential. “The 2021 VMG-CVPM Scholarship applicants are an impressive group,” said Christine Shupe, CAE, Executive Directorof the Veterinary Hospital Managers Association (VHMA). “The five scholarship winners and their practices should be extremely proud.”

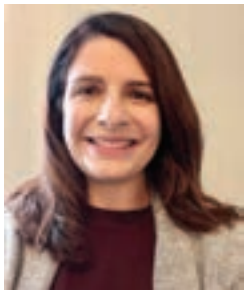


Ingrid Culver became the practice manager at Maybeck Animal Hospital, Melbourne, Florida, in 2013 and is now the manager of Maybeck’s second clinic and a 10% owner. Since 2016, Culver, has been earning the college credits needed to qualify for CVPM. She said of the scholarship, “It makes me feel so good about what I have achieved.”

Kristen Fuller was hired by Rehm Animal Clinic, Mobile, Alabama, in 2015 to manage one of their four facilities. Six years later, she manages four of their five facilities. Earning the CVPM credential is very important to her. About winning the Scholarship, Fuller said, “The financial aspect is monumental, and to finally be able to earn this designation for my clinics is just incredible.”

David Hannan has worked for Veterinary Innovative Partners (formerly Northern Virginia Veterinary Associates) for 12 years, including 3.5 years as practice manager at his current Westchester, New York location. As a practice manager, Hannan has aimed for the CVPM credential. He said of the scholarship, “It’s nice to be recognized, and I look forward to continuing to expand on the reasons why I was selected.”

Heike Mayes has been a practice administrator since 2009 and has held the position for Seattle Veterinary Associates, Seattle, Washington, for 1.5 years. Her current role covers a four-location, privately owned practice group poised to add a fifth location. Mayes has always wanted to earn her CVPM certification. She said of the scholarship, “It is a real gift to be able to have support and backing to properly prepare myself to become the best person I can be and a CVPM.”



Lindsey Shelton became Vogel Veterinary Hospital’s practice manager in 2017. The hospital is owned by her father, a veterinarian, and her mother, the former practice manager. Shelton pursued a master’s degree in human resources and worked for other employers before 2017. She said of the scholarship, “[The CVPM credential] earns me credibility in my role here and in the veterinary hospital manager field.”

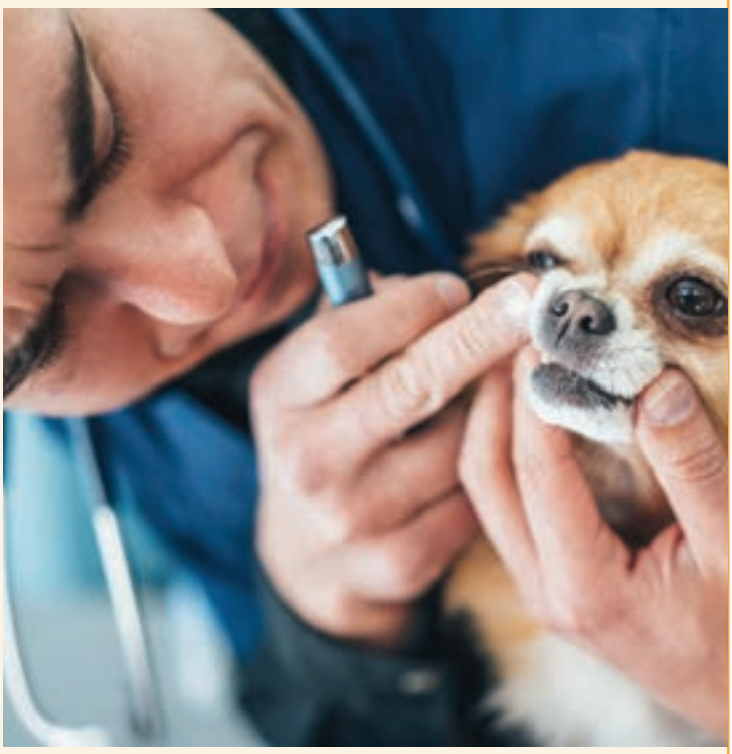
QUOTE OF THE MONTH

“It’s your place in the world; it’s your life. Go on and do all you can with it, and make it the life you want to live.”

—Mae Jemison, first Black female NASA astronaut

Photographer/collection via Getty Images

Parallels in Canine and Human Oral Tumors Could Speed New Therapies



A common, nonlethal oral tumor in dogs closely resembles a rare, often devastating oral tumor in humans. The resemblance between the two tumors had been noted by scientists and clinicians, but no one had confirmed any molecular similarities. In 2019, Santiago Peralta, DVM, DAVDC, associate professor at the Cornell University College of Veterinary Medicine, and his colleagues published a study in *Veterinary and Comparative Oncology* revealing that both the canine and human oral tumors share mutations in a well-known signaling pathway.

In a recent study appearing in *Scientific Reports*, Peralta and his team set out to better understand the biological consequences of these mutations. They discovered that the mutations were largely responsible for the tumors they were seeing. They also found that the canine and human tumors are very similar at a molecular level, reinforcing the notion that dogs represent a potentially useful natural model of the human tumor.

Because the canine tumors are much more common than the human tumors, researchers can rapidly enroll many more dogs in clinical trials and get more translatable data from those trials. “We’re not there yet, but we’ve made a major step toward that,” Peralta said. Any drugs that might prove effective in treating oral tumors in dogs could also be promising candidates for human patients.

New LINAC at UF Veterinary College Enhances Cancer Treatment for Animals

A new linear accelerator, or LINAC, is now available to animal patients at the University of Florida’s College of Veterinary Medicine. The Edge LINAC allows the use of highly targeted radiation to deliver more precise and faster treatment of tumors within the abdominal cavity or the chest. It is manufactured by Varian and was made possible by a $3 million gift from the Gauntt Foundation in 2020.

One of the first patients to be treated using the new LINAC was a nine-year-old dog named Lincoln who was diagnosed with a tumor deep inside his chest that threatened his heart. Keijiro Shiomitsu, DVM, an associate professor of radiation oncology with the College of Veterinary Medicine, commented, “I was confident that Lincoln’s mass would likely respond well to radiation therapy [and] at the time of his last treatment, a cone-beam CT scan revealed that the mass showed shrinkage.”

Chris Adin, DVM, chair of the college’s department of small animal clinical sciences, said, “Lincoln’s case is a great example of a situation where we are now able to target tumors that we previously would have been unable to deliver radiation to successfully. The new Edge LINAC will be a game changer for us and for all of the animals we will now have the ability to treat that we never could before.”

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4 Steps to Boost Cyber Security for Small Businesses

Cyber-attacks on small businesses are on the rise, as is the cost of post-cyber-attack recovery, warns Mark Madrid in a recent US Small Business Administration blog post. Madrid cites ransomware as an especially concerning form of cyber-attack on small businesses. Ransomware infects and restricts access to a computer until a ransom is paid. It is usually delivered via a phishing email and exploits vulnerabilities in a business's software.

Here are four steps small businesses can take to prevent and protect against ransomware attacks:

1. **Train employees.** Employee emails are a leading cause of data breaches for small businesses because they are a direct path into your systems. Training employees on basic internet best practices can go a long way in preventing cyber-attacks. Access www.stopransomware.gov for resources.
2. **Back up critical business data.** Your data should be backed up regularly and should be accessible off-site. Unplug backup drives from the internet. Use Cloud data storage solutions.
3. **Use and automatically update antivirus software and antispyware.** Equip your business computers with antivirus software and antispyware, available from a variety of vendors. Have updates installed automatically.
4. **Secure your network.** Use a firewall, encrypting information, and password protection. To hide your WiFi network, set up your wireless access point or router so it does not broadcast the network name.

Action Is the Key to Workplace Allyship

"Employees expect their organizations to do more than merely say they value diversity, equity, and inclusion (DE&I). They want action." That's the message Sonia Aranza delivered during a session called "Allyship: How to Recognize and Disrupt Bias" for the Society of HR Management's (SHRM) 2021 Inclusion conference. Aranza, CEO and principal consultant at Aranza Communications in Alexandria, Virginia, is the subject of a recent article in SHRM Online by editor Kathy Gurchiek.

"Saying you value DE&I and justice is no longer enough. [. . .] Allyship is your commitment to take action," Aranza said during the session. "Plant your feet; take your warrior stance," Aranza said. "Allyship is courageous action." She also presented Do's and Don'ts of workplace allyship. Here are some of them:

DO

- Commit to learning. "Seek input from the people [you] wish to ally with."
- Promote empathy. "Empathy is you putting yourself in someone's shoes. We've got to get out of our own dang shoes."
- Embrace that "allyship is for the long haul, not just when it's in vogue."

DON'T

- Speak about solidarity without taking action.
- Try to prove how virtuous you are.
- Act only because "others are doing it, so we better do it, too."

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Household Noises Can Trigger Stress in Dogs

Pet owners may not recognize that common household noises are causing stress in their dog. Even a vacuum cleaner or microwave oven can trigger anxiety. These findings are reported by researchers at the University of California, Davis, in a study published in *Frontiers in Veterinary Science*. They report that high-frequency, intermittent noises rather than low-frequency, continuous noises are more likely to cause a dog anxiety and even pain.

Cringing, trembling, or retreating are some common signs of dog anxiety; other signs are more subtle. Some signs of stress that could be overlooked or misinterpreted include a dog panting, licking its lips, turning its head away, or even stiffening its body. Sometimes its ears will turn back, and its head will be lower than its shoulders.

"There is a mismatch between owners' perceptions of the fearfulness and the amount of fearful behavior actually present [in their dog]," said lead author Emma Grigg, research associate and lecturer, UC Davis School of Veterinary Medicine. "We hope this study gets people to think about [. . .] sounds that might be causing their dog stress, so they can take steps to minimize their dog's exposure to it."

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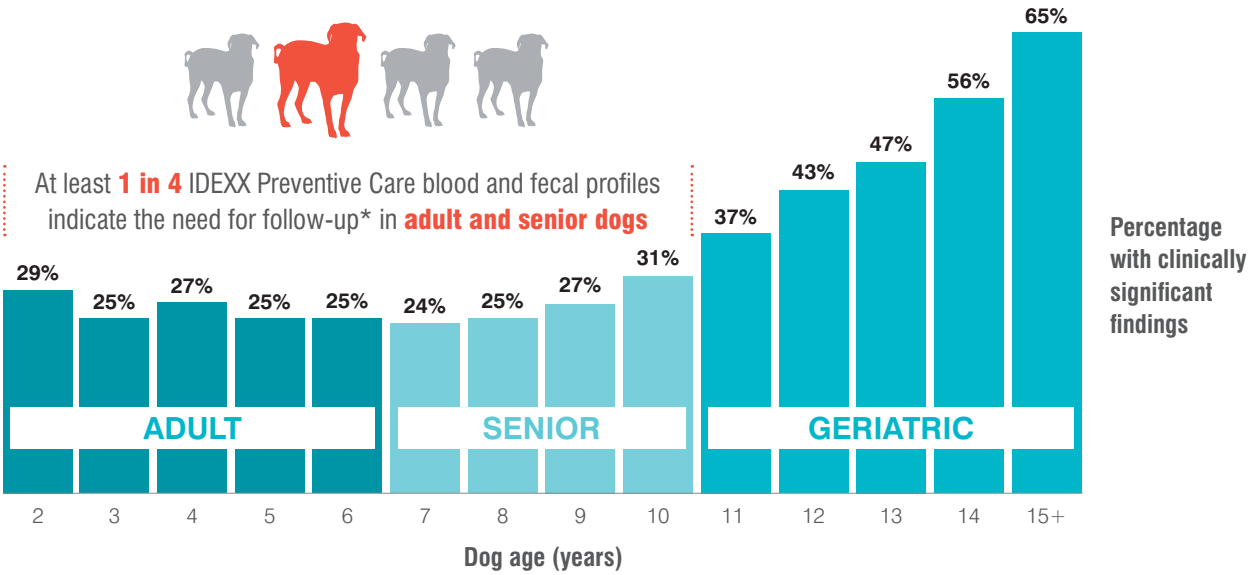
New evidence supports the value of preventive care profiles on all adult dogs

Preventive care profiles aren't just for senior and geriatric patients



Dogs as young as 2 years of age had clinically significant findings based on results of preventive care bloodwork and fecal testing[1]

Of the nearly 30,000 canine profiles included in this analysis, there was little variation in the rate of clinically significant findings between adult dogs and senior dogs.

The study was based on an analysis of IDEXX Preventive Care profiles (including the following categories: Chem 22 including the IDEXX SDMA® Test, IDEXX CBC testing with reticulocyte parameters, the Lab 4Dx® Plus Test, and Fecal Dx® antigen testing) run as part of wellness visits. While the number of clinically significant findings for each of these testing categories varied by age, all categories were important for adult, senior, and geriatric dogs.

These results are similar to a previous analysis that included cats as young as 2 years[2]

The previous analysis from more than a quarter of a million wellness visits that included a chemistry profile with an IDEXX SDMA® Test and a CBC, revealed significant findings required follow-up in:

1 in 7 adults (cats aged 2–8 years; dogs aged 3–6 years)
1 in 5 seniors (cats aged 9–13 years; dogs aged 7–10 years)
2 in 5 geriatrics (cats aged 14+ years; dogs aged 11+ years)

Routine preventive care testing has distinct medical benefits

There is ample evidence to support routine preventive care visits that include diagnostic testing. Results of routine bloodwork and fecal testing help veterinarians detect diseases and conditions, leading to earlier interventions that help patients of all ages live healthy lives for as long as possible. Once a veterinarian has baseline values, she/he can monitor trends and, if necessary, create individualized treatment plans. If no abnormality is detected, veterinarians and staff can—and should—celebrate the good news with clients. By communicating the value of every test result, practices reinforce the importance of routine wellness checks and the central role that clients play in the health of their pet. It's a win-win!

Review preventive care data and case studies at **idexx.com/1in4**

*Due to "clinically significant findings," which would indicate the need for follow-up, further consideration, or a change in action by the clinician. Clinical significance based on rules determined by an IDEXX veterinarian panel.

References

1. Data based on analyses of **29,795** canine wellness profiles (Chem 22 including IDEXX SDMA® Test, IDEXX CBC testing with reticulocyte parameters, the Lab 4Dx® Plus Test, and Fecal Dx® antigen testing) associated with wellness visits; testing performed at IDEXX Reference Laboratories on July 13, 2016–February 28, 2019. Represented U.S. regions by proportion of included profiles: Northeast (32.0%), South (41.3%), Midwest (17.4%), West (7.6%), and region not reported (1.7%).

2. Data on file at IDEXX Laboratories, Inc. Westbrook, Maine USA.

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12 Ways to Fill Openings and Retain Clients

Creative Solutions to Deal with Staffing Shortages

by Kerri Fivecoat-Campbell

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COLIN COMBS, DVM, OWNER OF AAHA-ACCREDITED WEST RIDGE ANIMAL HOSPITAL in Greeley, Colorado, oversees 70 employees between two hospitals. He currently has eight veterinarians on staff—the remainder are technicians and support staff—but he needs more.

"We should have nine-plus veterinarians and we're still down at least two techs," said Combs.

West Ridge had to alternate schedules between June and November so everyone could get scheduled breaks, lunches, and time off. The altered schedules cut doctor appointments down from 18 per day, per doctor to 12 per day, per doctor.

The altered schedules, combined with curbside service during COVID-19 restrictions, caused additional stress on staff, as well as frustration among clients who couldn't make a same- or next-day appointment as they were accustomed.

While the hospital is once again up and running at full capacity, Combs said it is a daily battle attracting and retaining staff in these post-COVID-19 times.

"Our whole team has been talking to practices facing labor shortages," said Margaret Spalletta, practice consultant for AAHA. "Practices are barely holding their heads above water. They are more swamped than they've ever been and can't keep up with their workload, which leads to compassion fatigue and people quitting."

Since the pandemic began, veterinarians say there has been an increase in demand for services. There are various theories for this, but many believe it's due to an increase in people adopting pets and possibly being more attentive and finding issues while they were home during lockdowns.

Veterinarian Shortages Stretching Practices Thin

The Bureau of Labor Statistics reports the veterinarian field will need 4,400 new veterinarians per year, each year through 2030 to replace those retiring or leaving the field. These statistics were gathered before 2019, and the pandemic likely has made the need greater.

Sarah Wooten, DVM, now the veterinary specialist for Pumpkin Pet Insurance in Silverthorne, Colorado, is an example of someone who left the practice field for something a little different. Wooten worked for practices for 16 years. "Until veterinarians have been in it a little while, they don't understand how stress affects your life, and I just wasn't willing to sacrifice that part of myself anymore," Wooten said.

Wooten started building a career in media and public speaking, as well as developing continuing education classes for practicing veterinarians. "I teach client communications and personal development, things I wish I'd learned

in vet school," said Wooten. "I felt I could make a greater impact on the profession teaching and speaking."

Combs said he believes there's a myriad of reasons there is such a shortage of veterinarians. "I had one go on maternity leave and didn't return," he noted. "I think another huge reason is the corporations are in vet schools and recruiting students by their junior year. As an individual practitioner, I can't have someone in the vet schools recruiting." West Ridge has also had to resort to hiring relief veterinarians to work the day shift. "It's expensive and they're sparse," said Combs. "We don't even try to fill our night shift with relief as it's too expensive."

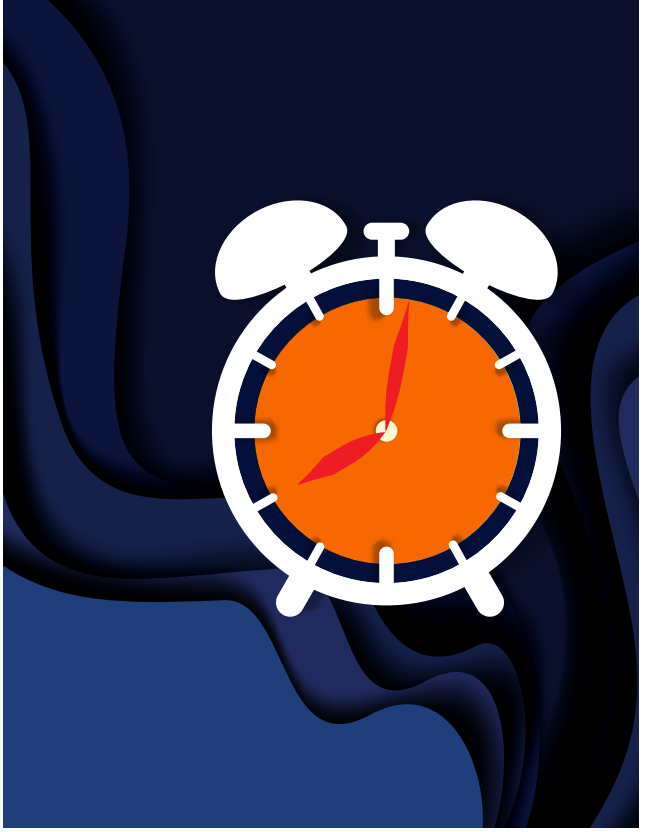
Keith Niesenbaum, VMD at Banfield Crawford in Garden City Park, New York (formerly Crawford Dog and Cat Hospital), said he's had personal experience with lucrative relief vet offers. "A practice offered me $250 per hour to work Christmas Day this past year," said Niesenbaum, who sold the practice to Banfield in 2020. "It was a very attractive offer, but I wanted to spend that time with my family."

A heightened sense of prioritizing family seems to be a theme in veterinary attrition. Christian Cumberbatch, DVM at easyvet Alpharetta in Atlanta, Georgia, said COVID-19 changed attitudes. "I think COVID made everyone look at work-life balance and shed a light on our practice culture," said Cumberbatch.

Veterinarian shortages are a problem in both urban and rural areas, but the problem in rural areas has been worsening for years. Prior to the pandemic, Animal Clinic of the Ozarks in Flippin, Arkansas, was open until 5 p.m. Monday, Wednesday, Friday, and Saturday and until 7 p.m. on Tuesday and Thursday. One of the three veterinarians moved out of the area and the two veterinarian partners made the decision to cut the hours to 8 to 5 Monday through Friday. "It worked better for us and for our entire staff," said Robyn Theobald, DVM. "We might do something different if we could get another vet, but we have to find someone who really wants to live in a rural area."

Vet Techs Are Burning Out Sooner

Stress of curbside service fell mainly on veterinary technicians, who also take the brunt of client frustration as well, said Elizabeth Maimon, DVM, MPH at AAHA-accredited Hills and Dales Veterinary Clinic in Kettering, Ohio. "One of the clients tried to intentionally run over a vet tech in our parking lot," said Maimon. "A vet tech quit and left the industry because of client abuse." Maimon added that those clients were fired by the practice, but she said it highlights the stress technicians have been under.



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"When I started two decades ago, we were expected to go, go, go long hours until we burned ourselves out. People do not want to do that anymore."

—CHRISTIAN CUMBERBATCH, DVM

Elizabeth Clark, hospital administrator at Ballard Animal Hospital in Seattle, Washington, said they lost six employees in the three weeks prior to talking to *Trends*. "I think there is a new surge of disrespect by clients and unrealistic expectations from people who have no type of awareness of what we can and cannot do to help their pets," said Clark.

Clark also noted that all the staff that have quit have been technicians or support staff at the five-vet practice. "I think many of them are suffering some form of PTSD from having to tell people we cannot get them in," said Clark. "We haven't taken any new clients in the past 10 months, and we have to refer 8 to 10 current clients per day to other clinics."

12 Creative Solutions

1. **Culture initiative:** Spalletta said AAHA is working diligently talking with practices and trying to help guide them through this difficult time. Spalletta added that one thing practices should create is a documented culture initiative that outlines the values, beliefs, and behaviors of your practice, keeping in mind it is always changing and growing. "It isn't a requirement to have this document, but it's recommended to put the policy in place," said Spalletta. "We can even speak to practices about how to get started."

2. **Form a cooperative with other offices:** Amanda Cavanagh, DVM, DACVECC, head of critical care and assistant professor of small animal emergency and critical care at AAHA-certified Colorado State University Veterinary Teaching Hospital in Fort Collins, Colorado, said one of the things that helped them through a temporary reduction of hours and services was forming partnerships with participating veterinarian offices to help cover the area-wide shortages of vet care. "We created a live document, and we were each posting when we would be open for new cases. This was especially helpful in knowing which emergency clinics were not taking patients that day," said Cavanagh. "We were also able to help them with certain services we knew they didn't have, such as blood transfusions and surgical capability." Cavanagh said she was "shocked" at how well the co-op system worked and continues to work.

3. **Adjust hours and pay:** While longer hours helped Theobald's practice grow and thrive, shortening the hours wasn't just about being down one veterinarian. "We found staffing hard on weekends, as many people wanted that time to spend with their families," said Theobald. "We learned no matter our hours, people will come in during those hours and this worked out better for our staff. They are happy to have two days off in a row."

   More quality time with family may be the driving factor for many these days, but pay is also still a great incentive to attract and retain employees, said Combs. "Pay for staff and technicians has lagged, but I think with COVID-19, it has caught up somewhat," Combs added.

   Cavanagh agreed. She sees the effect that pay—especially in public university hospitals—has had on their ability to keep employees. "I think it will come down to paying people what they're worth, especially techs," said Cavanagh. "In other fields, people are rewarded for their skill and knowledge, and this industry has been behind in that."

4. **Back up your staff:** It used to be that "if a client got upset, they weren't always right, but we were more tolerant and would say, 'we don't know what they're going through,'" said Combs. "Now, we're at the point of being intolerant with clients if they're cursing and abusing any of our staff." He noted that, while it hasn't added up to many, he implements the "one strike" rule, firing the client by sending them a letter and their records after one bad interaction.

   Clark said before the pandemic, they fired maybe two clients per year. "We've had to terminate quite a few clients," noted Clark. "I even posted on social media about being kind to your vet staff."

   Maimon said firing egregious clients shows the staff they are supported. "Vets really do value our staff and I don't know if they always know that."

5. **Give techs more responsibility:** It may seem counterintuitive to put more on vet techs, but if they're only serving as "kennel keepers," vets for this story agreed they should be used to their full potential, which should give them more gratification that they're using their skills. Of course, the amount of responsibility you can give your techs is outlined in state guidelines. However, Niesenbaum said you should be training and giving them what the law allows. "Our techs can administer meds, monitor anesthesia, and quite a bit more, short of diagnosing and prescribing drugs," noted Niesenbaum. "Our techs take the pet in, does a quick review, and gets all initial information for the doctor. This frees us up to do something else."

   Maimon added that if you're short at the front desk, you can ask someone else on support staff to

help. "We even have our bookkeeper answering the phones sometimes."

6. **Establish a drive-up, keep curbside, and offer drop off:** "We installed a drive-thru service for medicine and food refills," said Maimon. "Our techs do curbside and do things such as nail trims, changing bandages, and elective blood draws. We also allow for drive-thru surgery admission and discharges, and it moves things along quicker."

"Our techs do curbside and do things such as nail trims, changing bandages, and elective blood draws."

ELIZABETH MAIMON, DVM, MPH

Theobald said since shortening their hours, their drop-off program has become very popular among clients. "Everyone has such a busy life; we allow our clients to drop off their pets without an appointment. Our techs do the intake and initial vitals and we (the vets) fit the exam in between surgeries and appointments. Our clients can then pick them up after work or after we've seen their pet."

7. **Get creative in finding techs and vets:** "We've been using students from foreign vet schools as techs while they wait for their license," said Combs. "We then try to convert them into vets for our practice." Combs practice also looks for techs in many tech schools. "We try to be creative and we're lucky to be able to advertise the geography here," explained Combs. "We're not far from the beach or the mountains, which is a big draw for younger age groups."

8. **Hire vets and techs part time:** "Right now, there's a large group of female doctors, many of whom do not want to work full time due to their families," said Cumberbatch. "When I started two decades ago, we were expected to go, go, go long hours until we burned ourselves out. People do not want to do that anymore. Maybe you can't find someone who wants to work full time, but it might be easier to find two people who want to work part time."

9. **Utilize per diem or relief vets:** "Before, many practices didn't want to use relief vets or pay per diem as they typically didn't work out," said Cumberbatch. "Now, vets are coming right out of school and not signing on as an associate and going straight to per diem or relief work. Theobald stated they are using a relief vet for emergencies and after hours. Cumberbatch added that all practices who decide to do this should be prepared to pay. He said rates have increased 40–50% in some areas. "Some are charging up to $1,200 per day and demanding not to have to do surgery," said Cumberbatch. "Many are also very young."

10. **Consider a no-surgery model:** Cumberbatch advocated for the model easyvet has, which is to only examine pets, administer medication, and do other minor procedures; the practice doesn't perform any surgeries. He said this model frees up

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techs and doctors to see more patients and takes some of the stress off vets and techs. Pets requiring surgery and hospitalizations are referred to specialists. Wooten agreed this might be a good model to help alleviate stress and burnout. "I was so naïve when I entered vet school, I didn't realize all vets are required to do surgery," she said. "It wasn't something I wanted to do."

11. **Consider telehealth:** Some corporate practices, such as Banfield, have programs that allow certain clients to access a vet through a telehealth program. "They can answer questions, triage, and sometimes determine if they actually need to come in," said Niesenbaum. "It frees up our staff and phones."

    Some individual practices say it sounds like a great option but is less doable considering they are having a hard time finding vets for the practice. "If I had the vet staff I needed, I could use one just for that purpose," said Combs.

    While many veterinarians are leery of telemedicine, Cumberbatch sees this as one of the most promising ways to ease the staff and veterinary shortages. "I think there will be call centers eventually doing this," he said.

12. **Ensure staff is trained well—and help others if you can:** Finally, in addition to creating a culture initiative and using all the resources provided by AAHA to help you and your staff deal with today's practice challenges, Wooten added that if you're so inclined and find it your calling, helping others at conferences is a good way to give back to the profession. ※

Kerri Fivecoat-Campbell is a pet/animal writer who lives in a cabin in the Ozark Mountains with her five recycled (rescued) dogs. She is the author of the book, *Living Large in Our Little House: Thriving in 480 Square Feet with Six Dogs, a Husband and One Remote.*

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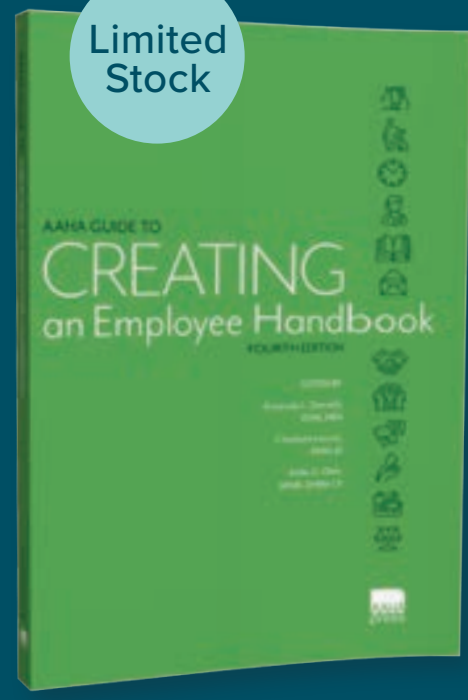

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*Assessment was conducted by IDEXX® and leveraged veterinary clinic PIMS transaction level data for 2019. This analysis included data from approximately 7,000 U.S. clinics that had consistent data from 2017 to 2019. To be included, patients needed to have at least one parasiticide transaction in the baseline year (2018). The analysis was limited to loyal patients, where loyalty was defined as having one flea/tick control brand during the full three-year period. The average number of months of *NexGard* purchased per year was 6.64, compared to 6.69 for BRAVECTO. This analysis overestimates the duration of efficacy for BRAVECTO. For comparison purposes, each BRAVECTO chew was assessed as providing three months of flea & tick protection versus the labeled 12-week coverage for fleas and three species of ticks, and 8-week coverage for Lone Star ticks.

1. Data on file at Boehringer Ingelheim. 2. Data on file at IDEXX Laboratories, Inc. Westbrook, Maine USA.

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Leading the Way

Adam Hechko, DVM, Is AAHA's New President

by Tony McReynolds

ADAM HECHKO, DVM, AAHA'S NEW PRESIDENT, took the reins as the veterinary industry began navigating its second pandemic year. It's a leadership journey that started, he said, with a "really raw, candid conversation" with his practice team at North Royalton Veterinary Hospital in North Royalton, Ohio, during the first weeks of the pandemic.

"Everything was shut down, and they said businesses are closed but veterinary medicine is an essential business," he said. "We were all worried and nervous and uncertain about what was going to happen. But at that time my team—and probably every team across the country—wanted to know that their leader had their back, that their leader had a plan, that their leader was not going to sit idle and was going to continue to be proactive."

So they had a staff meeting, and Hechko was looking at his team and they were looking back at him. And he saw how worried they were.

"They're scared," he said. "They're terrified. And they're looking to me as a leader and saying, 'I need some stability, I need some calm, I need to know that it's going to be okay.'"

Photo of Adam Hechko at Connexity 2021 courtesy of AAHA

And that's when he knew how utterly everything had changed, and what he needed to do.

"I realized that my job was to bring my team together and say, 'We've got this.' To remind them why we're in this industry and what we're about. We're about helping pets. We're about helping family. And we're about supporting those relationships."

History of Helping

Hechko learned about the symbiotic relationship between people and animals growing up on his family's farm near Cleveland, Ohio, where his parents raised hogs, goats, and steers. He vividly remembers shadowing the veterinarians who came to the farm to tend to the livestock. "I watched everything they did and offered to help with anything I could. I thought veterinary medicine was pretty cool profession."

Hechko loved rambling around the countryside, where he often came across orphaned animals—much to his parents' chagrin. "I'd always get in trouble for bringing them home," he recalled ruefully. "But I couldn't leave them. I always had to find help for them."

Eventually, his interests pivoted from livestock to pets. Hechko enrolled first in a pre-veterinary program at the University of Findlay in Findlay, Ohio—"a fantastic program," he said—and then at The Ohio State University (OSU) College of Veterinary Medicine.

He graduated in 2006—and promptly bought a practice.

It was an unusual move for a young veterinary grad, but it was an unusual opportunity. The practice in question—the same North Royalton Veterinary Hospital he owns today—had once belonged to his father-in-law, John Bryk, Sr, DVM, MD, who opened it in 1957. Hechko' s future wife, Jen, had grown up in the practice and had helped her dad run the place.

After Bryk died during Hechko' s freshman year, new owners bought the place but couldn't make a go of it. They put it up for sale a few years later—right around the time Hechko was graduating from OSU.

To Hechko, the chance to buy back the veterinary practice his wife grew up in seemed like fate. So, at a time in their careers where most veterinarians are out landing their first jobs working for experienced vets at established practices owned by other people, Hechko found himself an inexperienced vet working at an established practice that *he* owned.

"I literally took over the practice at graduation," he said.

It was a small practice with only four employees—including Hechko' s mom and his wife Jen. "I learned a lot in a very short period of time," Hechko said. "We go to vet school because we want to be veterinarians and practice medicine and take care of our patients. But very quickly, I learned I needed to not only do that, but I needed to be a leader."

Leader in the Making

It took some time to determine what kind of leader he wanted to be. Mostly, Hechko said, he was learning as he went. But gradually, he found himself gravitating to what he calls "servant leadership."

"We need to remember what our roots are, continue to celebrate our profession, and not get bogged down by the minutia of day-to-day."

Photos courtesy of Adam Hechko, DVM

"Servant leadership is where you put the needs of your team first, and the belief that supporting your team and providing them the resources they need also helps your business," he explained. "It helps your patients and helps everybody that you're trying to take care of. I really like celebrating my team and providing them with the support they need to grow as professionals and as people."

While Hechko didn't have mentors onsite like most new veterinarians on their first job, there was an upside. "It taught me to go with my gut, to go with my instincts, and to be confident in my decisions," he said. "AAHA was a really big part of that."

Hechko calls AAHA "my roadmap from the very beginning."

But ironically, North Royalton—the future 2015 AAHA Practice of the Year—was not AAHA accredited when he bought it. At 1,200 square feet, the building was too small, for one thing—and other pre-existing drawbacks meant North Royalton never would have met the standards of accreditation.

But Hechko had big plans for North Royalton—and they included AAHA.

"That was my goal from the very beginning: to be an AAHA-accredited hospital," Hechko said. "That was the standard I wanted to set. When I was having those moments of doubt, I relied a lot on AAHA standards and position statements and guidelines to give me the confidence that what I was doing was right."

He noted that AAHA gave him the courage to "stick with it. It helped me get where I am today. AAHA gave me the confidence that I needed to take care of my patients and to provide the best care for my patients and for the families in the community that we serve."

The practice grew, and as it grew, Hechko built out. He gained clients. He added staff. Eventually, North Royalton relocated to a 17,000 square foot facility. And in 2009, North Royalton received its AAHA accreditation.

The growth arc continued. In 2015, the hospital was voted AAHA Practice of the Year. That same year, Hechko joined the AAHA Board of Directors.

This year, North Royalton has 7 doctors and 58 employees. And Hechko is AAHA president.

Leading with a Vision

According to Hechko, the job of AAHA president has a dual focus, just like running a practice—especially during a pandemic. "Sometimes it's more about being a visionary," he said. "Looking to the future and figuring out and solving the problems and being innovative to provide care for our patients. But sometimes it's about focusing on the here and now, to care for our team and to make sure our team is safe and secure and happy and healthy so they can provide for those patients."

In the early days of the pandemic, Hechko said, we were all trying to figure things out and find our way. "Everybody was uncertain about what the future was going to hold."

Then, Hechko added, it made sense to focus on the present and "on bringing our team together and celebrating what we were and what we do on a daily basis."

"I told my team in the very beginning, when the pandemic hit, they should consider every pet an emotional support animal, and we're here to help those pets. Because if we can help those pets stay healthy, we're helping the families and the community that we live in, and that's one less thing that we all have to stress about."

Hechko says that philosophy became a kind of mantra during the pandemic: "We're not just here to help animals be healthy. We're also trying to help the community and part of our job with the community is taking that stress of pet health off of the family."

Hechko also strove to take the stress of caring for pets' health off of his staff during the pandemic by creating special and fun moments for his team. "It wasn't just about the patients, it was also about the people who were taking care of those patients."

Hechko's dual emphasis on present and future is at the forefront of his mind as he helms AAHA: "As we continue to navigate through the pandemic, I want to make sure that we continue to focus on what has made AAHA so special: our standards. Who we are and how we identify, and celebrating what veterinary medicine is about."

Hechko is realistic about the sad realities we all face in our practices such as compassion fatigue—especially during a continued pandemic—but says veterinary medicine has built-in resiliency that helps balance that out: "We have puppies and kittens that come in the door, and we have celebrations for pets when they were hospitalized and they got better and got to go home," he said. "We have to remember those things because those were things that we all thought about when we were going to veterinary school. I don't want to lose focus on that."

"We need to remember what our roots are, continue to celebrate our profession, and not get bogged down by the minutia of day-to-day. Even if we're having a hard day, there are probably a dozen families that we've helped along the way in that day that we'll probably never know about. I think that our impact with how we interact with our clients reaches far beyond what we'd probably recognize in veterinary medicine."Even in tough times, Hechko thinks veterinary medicine is primed to survive: "I think we're probably going to do better than a lot of industries because we have a mission. We do something that's really cool, and it's something the public thinks is really cool. We've got to remember that when we get bogged down."

Hechko is keenly aware that he's leading AAHA in a time of real crisis and a time of real change, both in the world and in the veterinary profession. And he admits that it's a little daunting. His solution: "I think we need to just take a step back and take a moment to look and say, 'What are our lessons from this pandemic?' And there are going to be a lot of them. What can we take from this and use to improve our practice of veterinary medicine?"

For Hechko, the biggest struggles—and opportunities—during times of social distancing and curbside care can be found in trying to maintain what he values most: relationships. "Finding ways to maintain relationships with our clients when we couldn't always be with them face to face," is so important he noted. The bright side? "Innovation in the industry has exploded because we were forced to make changes and find ways to continue to create those moments and create those connections with our clients."

Hechko and his wife, now a pediatric dentist, don't live on a farm, but he still spends a lot of time in the garden and with his own animals. The family has a dog, two goats, two peacocks, and a lot of chickens. When he's not working, Hechko also, unsurprisingly, enjoys teaching his three children—two sons ages 10 and 13, and a daughter aged 7—what he learned from his own parents: "We're going to raise these animals, and we're going to give them the best care and the best food and the best environment," he said. "We do everything we can to keep them healthy and happy." ※

Tony McReynolds is AAHA's NEWstat editor.

Photos courtesy of Adam Hechko, DVM

2021 AAHA/AVMA Telehealth Guidelines

for Small-Animal Practice

It's not about gadgets or technology.

It's about relationships and communication.

aaha.org/telehealth

These guidelines are a supplement to the *AVMA Guidelines for the Use of Telehealth in Veterinary Practice* found at **avma.org/telehealth.**

AAHA The Standard of Veterinary Excellence

AVMA Our Passion. Our Profession.

Boehringer Ingelheim Animal Health USA Inc., CareCredit, and Merck Animal Health have supported the development of the *2021 AAHA/AVMA Telehealth Guidelines for Small-Animal Practice* and resources through an educational grant to AAHA.

Meteoric Rise

Newly Accredited ZimmVet Wins Practice of the Year

AAHA ACCREDITED Practice of the Year

by Jen Reeder

AS A FORMER CERTIFIED VETERINARY TECHNICIAN and passionate rescue advocate, Carrie Erickson freely admits to being "very picky" about who works with her pets. The registered nurse and her husband currently have 2 dogs and 11 cats—all rescues with health issues.

Six years ago, she found the perfect practice for her family: AAHA-accredited ZimmVet in Zimmerman, Minnesota, near the Twin Cities. "They're amazing," she said. "They stick to their quality."

She appreciates that the practice's certified veterinary technicians (CVT) are highly educated and allowed to practice at the top of their skillset. For instance, she doesn't worry about which tech is monitoring a pet's anesthesia because they're all so capable.

But beyond technical abilities, she appreciates the compassion of everyone on the team—from taking turns carrying a tiny kitten Erickson rescued from the side of the road in the pocket of their scrubs, to a veterinary assistant who painstakingly cleaned diarrhea off of a beloved dog before a sudden need for euthanasia. "That was just a compassionate moment for me, something that is above and beyond," Erickson said.

To learn more about applying for the 2022 AAHA-accredited Practice of the Year award, visit aaha.org/awards.

Staff photo courtesy of ZimmVet

So Erickson is not the least bit surprised that the American Animal Hospital Association named ZimmVet the 2021 AAHA-Accredited Practice of the Year. "It is the only clinic that I will probably ever walk into, hand my dog or cat over, and leave knowing that they're being taken amazing, amazing care of while they're there," she said.

ZimmVet owner Maria Krenz, DVM, bought the practice in 2008 from a retiring owner. She ran it as a single-doctor hospital until about seven years ago, when she added another veterinarian and moved to a new location with a building three times the size of the former facility. "We expanded, and we had really rapid growth during that time," she recalled. "In our new building, we added extra services: day care, hotel, training, and grooming."

Newly Accredited

In 2019, the practice pursued and achieved AAHA accreditation. Krenz said she wanted to help ensure her hospital continued offering high-quality care, with all employees—including five veterinarians and six CVTs—on the same page in keeping with standards.

ZimmVet was one of the first clinics in the area to offer the canine influenza vaccine, is one of just a few that offers presurgical electrocardiograms (ECGs), and requires lab work for all surgeries. Krenz insists on providing top-notch care and works with every client to provide them the best options. "We believe in the best level of care—this is what we feel like we need to do to make sure it's safe for your pets," she said.

The continuing education opportunities offered by AAHA also appealed to Krenz. "With our practice culture, we like to encourage growth with our employees. So AAHA fits into that because we're always trying to grow and do better," she said. "It fits into our culture by always providing career growth options for people."

She's proud of the way her team rallied to face the ever-changing challenges posed by the coronavirus pandemic by not missing a beat even during curbside service on minus-30-degree winter days and problem-solving to find ways to accommodate the influx of appointment requests. "Everybody pulls together to work toward the common goal of helping pets and bettering pets' lives," she said.

Stacy York, DVM and lead surgeon at ZimmVet, agreed that the entire staff shares the mindset of wanting to provide the best care for patients while constantly striving to be better. She's seen it daily while working at the practice for the past seven years. "I think a lot of us approach our job as: How would we want our pet—our fur baby—to be treated? That's really what drives us to do what we do," she said. "And we do try to take care of each other."

The ZimmVet team was already doing many things that are part of AAHA standards according to York, but accreditation enhanced those efforts. One improvement involves educating clients after surgeries about what to do at home. Prior to accreditation, veterinary technicians spent a great deal of time verbally communicating information about aftercare, but now the practice also provides written instructions.

"Being able to communicate that to the client both verbally and in writing I think was a big thing because sometimes clients are overwhelmed with everything you're telling them at the time," she said. "We do want to continually improve, and AAHA is not a stagnant thing, right? And that's the other part of it: AAHA's not just about patients. It's about the whole picture. It's about your staff. It's about your clients and how we can make that better for all of them."

York is proud of ZimmVet for "deciding to go the AAHA route" and that everyone worked together to win the distinction of Practice of the Year. "It's a team effort—it wasn't just a one-person thing," she said.

Strides to Help the Profession

ZimmVet extends that team mentality to the veterinary industry as a whole. Its innovative Technician in Training Program is a prime example.

To help address the shortage of veterinary technicians in the industry—as well as the high number of vet tech schools in Minnesota that began closing or only offering classes online—ZimmVet launched the program just before the onset of the pandemic.

Essentially, ZimmVet hires students enrolled (or planning to enroll) in online veterinary technician programs as assistants who also gain personalized vet tech training

to complement their lessons and increase their skills. Throughout the course of their studies—typically two years—each technician pairs with a staff CVT to learn different skills, according to Kristin Rinkel, CVT and Technician in Training Program lead, who has been a CVT for more than 14 years (and worked at ZimmVet for 8 of them).

"Everybody's having a hard time finding certified vet techs. Our goal is to be able to have them ready to go out into the world and be that person that another clinic needs," she said. "Because they don't get the hands-on experience from school when they're learning through a computer—and being a vet tech is a lot more than what you can just read about."

The practice's CVTs are highly educated and allowed to practice at the top of their skillset.

To that end, a CVT starts by teaching the technician in training basic assistant roles, such as restraining and cleaning instruments. Then they'll add more skills, such as nail trims, anal gland expression, and using the therapy laser. Next up is lab work: learning to make blood slides and running in-house chemistries. "Once they've gotten the basics on how to prepare these tests, we start moving into actually reading them," Rinkel said. "So they'll be trained on how to read ear cytologies, what the different organisms are that are in the microscope. They'll look at blood slides."

The trainees rotate through different aspects of the clinic, from surgery to the front desk (the only time a CVT doesn't oversee the training). Every time they move through a different checklist of skills and have mastered them, the trainees get small, frequent raises, Rinkel added. "It's an incentive for them to work at it, learn about it, accomplish it, be able to do it on their own," she said. "If we can teach them best medicine, which is what AAHA has taught us, we give them that leg up in their careers to go on."

There are currently five students in the Technician in Training Program, and they seem grateful for the opportunity, according to Rinkel. "They'll say, 'You know, I was learning something online today and I just don't get it. Can you show me?' And we'll walk them through it," she said. "They're always very eager to get in there and learn and soak it all in."

The practice culture values the contributions of the CVTs on the team. Rinkel said they're allowed to work at their "top potential," which helps prevent burnout in both the technicians and veterinarians.

She also appreciates working with Krenz, whom she called a "visionary person" who provides opportunities for growth and advancement to her employees. "She encourages continuing education. If you have a specific role you want to take on, she will help get you there. It takes time out of being the owner, which you don't get a lot of when you have doctors that own clinics because they're so focused on the doctor part that they don't focus on their staff," she said. "I'm not saying that's with everybody, but that's one of the things that I've loved about being here: she always focuses on individual people and gives you the best opportunities."

Photo of Ashley Middendorf, CVT by microscope with technicians in training courtesy of ZimmVet

To help address the shortage of veterinary technicians in the industry—as well as the high number of vet tech schools in Minnesota that began closing or only offering classes online—ZimmVet launched the Technician in Training Program.

It's a sentiment shared by other members of the team. Ashley Middendorf, CVT leader (12 years as a CVT, with the past 7 of those at ZimmVet), said every year, Krenz checks in with each member of the staff to ask, "What works for you? What helps you? What motivates you? What's something you want to do? Where do you see yourself in five years? What's a career goal for you?"

"She's very focused on that and we make goals every year as to what we'd like to complete that year," Middendorf said. "I've worked for other clinics that have no interest in that. You just do your job and as long as you're doing it right, they pay you. They don't care about career development or anything like that. So it's definitely held my attention, because I do appreciate those opportunities and the growth aspect that the clinic offers."

Middendorf feels that each of the six CVTs on the team can share their knowledge with trainees in their preferred area—whether it's appointments, client communication, surgery, or laboratory work—and that teaching experience can strengthen overall communication abilities. "Everyone is very good about just helping each other out and always looking out for the best for each other, as well as the clients," she said.

Customer service leader Valerie Ferguson brought her dogs and cats to ZimmVet for 5 years before she started working at the practice several years ago. "I absolutely loved coming here with my pets," she said. "I felt like if I had to leave them for surgery, they were in great hands. The staff was always very caring and compassionate with them—and very knowledgeable, always answering the questions I had. And now that I work here, I can vouch for that."

She appreciates the positive ways ZimmVet supports patients, clients, and the community. The practice frequently donates wellness baskets to silent auctions and fundraisers for local rescue organizations and other nonprofits and hosts CPR training classes and dog bite prevention discussions for families with children. The staff also speaks about pet care at numerous schools and community events.

ZimmVet's day care also offers a puppy program in which trained staff work with pets under 4 months old in basic obedience, reinforcing what they are learning at home while making sure play interactions stay positive. Clients can attend evening classes with a certified trainer for puppy kindergarten and additional training. "There's just a lot of positive reinforcement and positive socialization," she said. That positive approach is incorporated into the grooming services, hotel, medicine, and all aspects of ZimmVet, according to Ferguson. "I feel like we're your other family doctor," she said. "Your pets are your family."

For more information, visit: www.zimmvet.com ※

Award-winning journalist Jen Reeder is former president of the Dog Writers Association of America.

Photo of Kristin Rinkel, CVT walking with technicians in training courtesy of ZimmVet

NexGard®
(afoxolaner) Chewables

Brief Summary: Before using NexGard® (afoxolaner) Chewables, please consult the product insert, a summary of which follows.

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

Description: NexGard is a soft chewable for oral administration to dogs and puppies according to their weight. Each chewable is formulated to provide a minimum afoxolaner dosage of 1.14 mg/lb (2.5 mg/kg).

Indications: NexGard kills adult fleas and is indicated for the treatment and prevention of flea infestations *(Ctenocephalides felis),* and the treatment and control of *Ixodes scapularis, Dermacentor variabilis, Amblyomma americanum,* and *Rhipicephalus sanguineus* infestations in dogs and puppies 8 weeks of age and older, weighing 4 pounds of body weight or greater, for one month. NexGard is indicated for the prevention of *Borrelia burgdorferi* infections as a direct result of killing *Ixodes scapularis* vector ticks.

Dosage and Administration: NexGard is given orally once a month, at the minimum dosage of 1.14 mg/lb (2.5 mg/kg). See full product insert for dosing table and details.

Warnings: Not for use in humans. Keep this and all drugs out of the reach of children. In case of accidental ingestion, contact a physician immediately. Keep NexGard in a secure location out of reach of dogs, cats, and other animals to prevent accidental ingestion or overdose.

Precautions: Afoxolaner is a member of the isoxazoline class. This class has been associated with neurologic adverse reactions including tremors, ataxia, and seizures. Seizures have been reported in dogs receiving isoxazoline class drugs, even in dogs without a history of seizures. Use with caution in dogs with a history of seizures or neurologic disorders.

The safe use of NexGard in breeding, pregnant or lactating dogs has not been evaluated.

Adverse Reactions: In a well-controlled US field study, which included a total of 333 households and 615 treated dogs (415 administered afoxolaner; 200 administered active control), no serious adverse reactions were observed with NexGard.

Over the 90-day study period, all observations of potential adverse reactions were recorded. The most frequent reactions reported at an incidence of > 1% within any of the three months of observations are presented in the following table.

Table 1: Dogs with Adverse Reactions.

	Treatment Group			
	Afoxolaner		Oral active control	
	N[1]	% (n=415)	N[2]	% (n=200)
Vomiting (with and without blood)	17	4.1	25	12.5
Dry/Flaky Skin	13	3.1	2	1.0
Diarrhea (with and without blood)	13	3.1	7	3.5
Lethargy	7	1.7	4	2.0
Anorexia	5	1.2	9	4.5

[1] Number of dogs in the afoxolaner treatment group with the identified abnormality.
[2] Number of dogs in the control group with the identified abnormality.

In the US field study, one dog with a history of seizures experienced a seizure on the same day after receiving the first dose and on the same day after receiving the second dose of NexGard. This dog experienced a third seizure one week after receiving the third dose. The dog remained enrolled and completed the study. Another dog with a history of seizures had a seizure 19 days after the third dose of NexGard. The dog remained enrolled and completed the study. A third dog with a history of seizures received NexGard and experienced no seizures throughout the study.

Post-Approval Experience (July 2018): The following adverse events are based on post-approval adverse drug experience reporting. Not all adverse events are reported to FDA/CVM. It is not always possible to reliably estimate the adverse event frequency or establish a causal relationship to product exposure using these data.

The following adverse events reported for dogs are listed in decreasing order of reporting frequency for NexGard: Vomiting, pruritus, lethargy, diarrhea (with and without blood), anorexia, seizure, hyperactivity/restlessness, panting, erythema, ataxia, dermatitis (including rash, papules), allergic reactions (including hives, swelling), and tremors.

Effectiveness: See full product insert for details regarding Effectiveness.

Animal Safety: In a margin of safety study, NexGard was administered orally to 8 to 9-week-old Beagle puppies at 1, 3, and 5 times the maximum exposure dose for a total of six treatments. There were no clinically-relevant effects related to treatment on physical examination, body weight, food consumption, clinical pathology (hematology, clinical chemistries, or coagulation tests), gross pathology, histopathology or organ weights. Vomiting occurred throughout the study, with a similar incidence in the treated and control groups, including one dog in the 5x group that vomited four hours after treatment.

In a well-controlled field study, no adverse reactions were observed from the concomitant use of NexGard with other medications.

Contact Information: For a copy of the Safety Data Sheet (SDS) or to report suspected adverse drug events, contact Boehringer Ingelheim Animal Health USA Inc. at 1-888-637-4251. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or www.fda.gov/reportanimalae.

The information provided here is not comprehensive. The full FDA-approved product insert is available at www.nexgardfordogs.com. Consult your veterinarian for further information.

Product approved by FDA under NADA # 141-406

Marketed by: Frontline Vet Labs™, a Division of Boehringer Ingelheim Animal Health USA Inc. Duluth, GA 30096

NexGard® is a registered trademark and FRONTLINE VET LABS™ is a trademark of the Boehringer Ingelheim Group.

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Reference package insert: 1050-4493-09 Rev. 11/2019

Brief summary preparation date: 08/2020

US-PET-0735-2020

Heartgard® Plus
(ivermectin/pyrantel)

CHEWABLES

CAUTION: Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

INDICATIONS: For use in dogs to prevent canine heartworm disease by eliminating the tissue stage of heartworm larvae *(Dirofilaria immitis)* for a month (30 days) after infection and for the treatment and control of ascarids *(Toxocara canis, Toxascaris leonina)* and hookworms *(Ancylostoma caninum, Uncinaria stenocephala, Ancylostoma braziliense).*

DOSAGE: HEARTGARD® Plus (ivermectin/pyrantel) should be administered orally at monthly intervals at the recommended minimum dose level of 6 mcg of ivermectin per kilogram (2.72 mcg/lb) and 5 mg of pyrantel (as pamoate salt) per kg (2.27 mg/lb) of body weight. The recommended dosing schedule for prevention of canine heartworm disease and for the treatment and control of ascarids and hookworms is as follows:

Dog Weight	Chewables Per Month	Ivermectin Content	Pyrantel Content	Color Coding On Foil Backing and Carton
Up to 25 lb	1	68 mcg	57 mg	Blue
26 to 50 lb	1	136 mcg	114 mg	Green
51 to 100 lb	1	272 mcg	227 mg	Brown

HEARTGARD Plus is recommended for dogs 6 weeks of age and older. For dogs over 100 lb use the appropriate combination of these chewables.

ADMINISTRATION: Remove only one chewable at a time from the foil-backed blister card. Return the card with the remaining chewables to its box to protect the product from light. Because most dogs find HEARTGARD Plus palatable, the product can be offered to the dog by hand. Alternatively, it may be added intact to a small amount of dog food.The chewable should be administered in a manner that encourages the dog to chew, rather than to swallow without chewing. Chewables may be broken into pieces and fed to dogs that normally swallow treats whole.

Care should be taken that the dog consumes the complete dose, and treated animals should be observed for a few minutes after administration to ensure that part of the dose is not lost or rejected. If it is suspected that any of the dose has been lost, redosing is recommended.

HEARTGARD Plus should be given at monthly intervals during the period of the year when mosquitoes (vectors), potentially carrying infective heartworm larvae, are active. The initial dose must be given within a month (30 days) after the dog's first exposure to mosquitoes. The final dose must be given within a month (30 days) after the dog's last exposure to mosquitoes.

When replacing another heartworm preventive product in a heartworm disease preventive program, the first dose of HEARTGARD Plus must be given within a month (30 days) of the last dose of the former medication.

If the interval between doses exceeds a month (30 days), the efficacy of ivermectin can be reduced. Therefore, for optimal performance, the chewable must be given once a month on or about the same day of the month. If treatment is delayed, whether by a few days or many, immediate treatment with HEARTGARD Plus and resumption of the recommended dosing regimen will minimize the opportunity for the development of adult heartworms.

Monthly treatment with HEARTGARD Plus also provides effective treatment and control of ascarids *(T. canis, T. leonina)* and hookworms *(A. caninum, U. stenocephala, A. braziliense).* Clients should be advised of measures to be taken to prevent reinfection with intestinal parasites.

EFFICACY: HEARTGARD Plus Chewables, given orally using the recommended dose and regimen, are effective against the tissue larval stage of *D.immitis* for a month (30 days) after infection and, as a result, prevent the development of the adult stage. HEARTGARD Plus Chewables are also effective against canine ascarids (*T. canis, T. leonina*) and hookworms (*A. caninum, U. stenocephala, A. braziliense*).

ACCEPTABILITY: In acceptability and field trials, HEARTGARD Plus was shown to be an acceptable oral dosage form that was consumed at first offering by the majority of dogs.

PRECAUTIONS: All dogs should be tested for existing heartworm infection before starting treatment with HEARTGARD Plus which is not effective against adult *D. immitis*. Infected dogs must be treated to remove adult heartworms and microfilariae before initiating a program with HEARTGARD Plus.

While some microfilariae may be killed by the ivermectin in HEARTGARD Plus at the recommended dose level, HEARTGARD Plus is not effective for microfilariae clearance. A mild hypersensitivity-type reaction, presumably due to dead or dying microfilariae and particularly involving a transient diarrhea, has been observed in clinical trials with ivermectin alone after treatment of some dogs that have circulating microfilariae.

Keep this and all drugs out of the reach of children.
In case of ingestion by humans, clients should be advised to contact a physician immediately. Physicians may contact a Poison Control Center for advice concerning cases of ingestion by humans.

Store between 68°F - 77°F (20°C - 25°C). Excursions between 59°F - 86°F (15°C - 30°C) are permitted. Protect product from light.

ADVERSE REACTIONS: In clinical field trials with HEARTGARD Plus, vomiting or diarrhea within 24 hours of dosing was rarely observed (1.1% of administered doses). The following adverse reactions have been reported following the use of HEARTGARD: Depression/lethargy, vomiting, anorexia, diarrhea, mydriasis, ataxia, staggering, convulsions and hypersalivation.

To report suspected adverse drug events, for technical assistance, or to obtain a copy of the Safety Data Sheet (SDS), contact Boehringer Ingelheim Animal Health USA Inc. at 1-888-637-4251. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS, or online at http://www.fda.gov/AnimalVeterinary/SafetyHealth.

SAFETY: HEARTGARD Plus has been shown to be bioequivalent to HEARTGARD, with respect to the bioavailability of ivermectin. The dose regimens of HEARTGARD Plus and HEARTGARD are the same with regard to ivermectin (6 mcg/kg). Studies with ivermectin indicate that certain dogs of the Collie breed are more sensitive to the effects of ivermectin administered at elevated dose levels (more than 16 times the target use level) than dogs of other breeds. At elevated doses, sensitive dogs showed adverse reactions which included mydriasis, depression, ataxia, tremors, drooling, paresis, recumbency, excitability, stupor, coma and death. HEARTGARD demonstrated no signs of toxicity at 10 times the recommended dose (60 mcg/kg) in sensitive Collies. Results of these trials and bioequivalency studies, support the safety of HEARTGARD products in dogs, including Collies, when used as recommended.

HEARTGARD Plus has shown a wide margin of safety at the recommended dose level in dogs, including pregnant or breeding bitches, stud dogs and puppies aged 6 or more weeks. In clinical trials, many commonly used flea collars, dips, shampoos, anthelmintics, antibiotics, vaccines and steroid preparations have been administered with HEARTGARD Plus in a heartworm disease prevention program.

In one trial, where some pups had parvovirus, there was a marginal reduction in efficacy against intestinal nematodes, possibly due to a change in intestinal transit time.

HOW SUPPLIED: HEARTGARD Plus is available in three dosage strengths (see DOSAGE section) for dogs of different weights. Each strength comes in convenient cartons of 6 and 12 chewables.

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

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Rev. 08-2018

1050-1999-04.

US-PET-0199-2020.

Boehringer Ingelheim

Heartgard® Plus (ivermectin/pyrantel)

NexGard® (afoxolaner) Chewables

your trusted pair for protection

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*Assessment was conducted by IDEXX® and leveraged veterinary clinic PIMS transaction level data for 2020. This analysis included veterinary practices with consistent data from 2018 to 2020. To be included, patients needed to have at least one parasiticide transaction in 2019 and 2020. The analysis was limited to loyal patients, where loyalty was defined as having one flea/tick control brand during the full three-year period.

1. Data on file at Boehringer Ingelheim. **2.** Data on file at Boehringer Ingelheim. **3.** Data on file at IDEXX Laboratories, Inc. Westbrook, Maine USA.
4. Data on file at Boehringer Ingelheim. **5.** Data on file at Boehringer Ingelheim.

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Boehringer Ingelheim

Saving the Canine's Canine

Figure 1a: Marked gingival recession noted after dental scaling and polishing

Figure 1b: 8 mm attachment loss

Case Study: Lateral Sliding Flap to Treat Gingival Recession

by Jan Bellows, DVM, DAVDC, DABVP

A 24 kg female spayed four-year-old standard poodle presented for a second opinion to see if anything could be done to save the left maxillary canine affected by advanced periodontal disease. Conscious oral examination revealed moderate plaque and tartar covering the canines and cheek teeth. There was marked gingival recession as well as plaque and tartar covering the root of the left maxillary canine. Halitosis was also present. The dog's teeth were professionally cleaned under general anesthesia a year prior. Treats were fed daily. Consistent home care for plaque or tartar prevention was not practiced.

The dog was placed under general anesthesia and intubated after preanesthesia CBC, serum profile, and urinalysis tests provided normal results. Under anesthesia, a tooth-by-tooth examination including probing and full mouth intraoral radiograph diagnostics were performed. There were no significant pathologic findings other than an 8 mm attachment loss level affecting the left maxillary canine tooth on the facial surface. In that this attachment loss was greater than 50% of the tooth root, stage 4 advanced periodontal disease was diagnosed (Figures 1a and 1b).

Periodontal disease is considered progressive and painful; a discussion with the owner included options

Photos courtesy of Jan Bellows, DVM, DAVDC, DABVP

to care for the tooth including extraction versus performing a lateral sliding flap to eliminate the gingival recession. The client was alerted that home care including twice daily wiping the dog's teeth to remove plaque would be required for the best postoperative prognosis. The client agreed to the stringent home care including use of accepted Veterinary Oral Health Council (VOHC.org) plaque control products.

Treatment and Outcome

After ultrasonic dental cleaning and polishing with fine grit pumice, the oral cavity was thoroughly irrigated. To increase the zone of keratinized attached gingiva covering the receded area, a laterally repositioned pedicle flap was performed.

1. A V-shaped incision was made using a #11 scalpel blade following the peripheral margins of the free gingiva in the recession (Figure 2).
2. A reverse bevel incision extending to the underlying bone beginning at the free gingival margin and extending to the distal root of the second premolar was made.
3. A vertical releasing incision angled slightly distally was created (Figure 4).
4. A sharpened straight Molt#2 periosteal elevator was used to raise a full thickness flap closer to the recession area and a split thickness flap at the recipient site. The flap should be at least 1.5x the recipient site and extend into the alveolar mucosa to provide space for the zone of attached gingiva (Figure 5).
5. A stay suture was placed to handle the caudal extent of the flap (Figure 6).

Figure 2: Mesial incision in the receded area

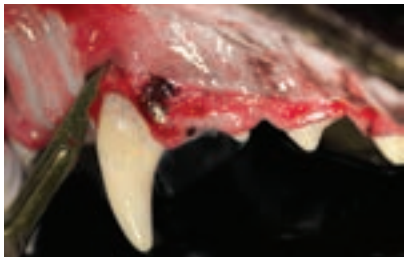

Figure 3: Reverse bevel incision to protect the underlying teeth

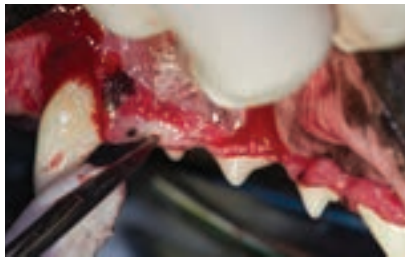

Figure 4: Vertical releasing incision

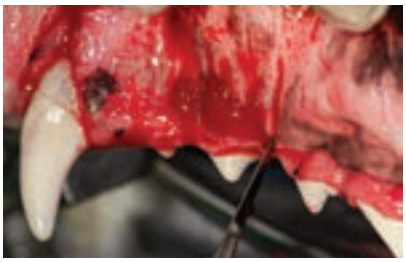

Figure 5: Raising the full and split thickness flap

Figure 6: Stay suture placed

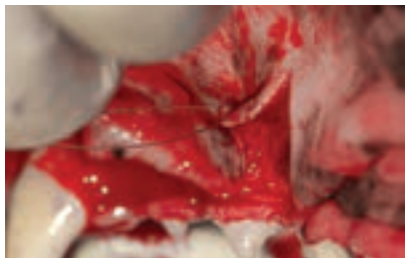

Figure 7: Curette used to clean recipient site

Figure 8: Plaque and tartar removed from the recipient site

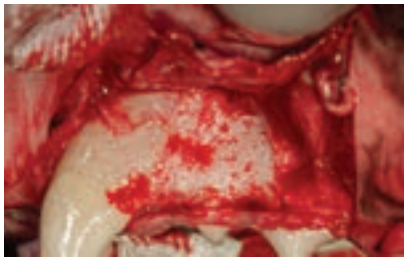

Figure 9: Sliding flap sutured without tension

Figure 10: Appearance at six weeks after surgery

Photos courtesy of Jan Bellows, DVM, DAVDC, DABVP

6. Retained plaque and tartar were removed from the recipient site with a curette (Figures 7 and 8).
7. The flap was positioned on the recipient site and sutured with 4-0 catgut on a reverse cutting P3 needle beginning at the coronal mesial point (Figure 9).

The dog was sent home on gabapentin (20 mg/kg) to decrease pain. The client was instructed to feed softened food for 10 days. On reexamination at two weeks, the flap was intact and residual sutures were removed. The owner was instructed to lightly wipe the dog's teeth twice daily with dental wipes. The dog was reexamined at six weeks (Figure 10). Complete coverage of the gingival recession was clinically apparent. Follow-up plans included professional oral prevention, assessment, and treatment visits, and twice-daily dental wiping and use of a VOHC-accepted water additive were recommended. A good to excellent prognosis is expected.

Discussion

Gingival recession occurs secondary to the apical migration gingival margin. The distance between the cementoenamel junction and the gingival margin is the level of recession. The recession may extend past the mucogingival junction. Gingival recession is most caused by periodontal disease, trauma, and abnormal occlusal relationships.

The lateral repositioned pedicle flap preserves existing keratinized gingiva, allows thorough removal of plaque, calculus, and inflamed tissue from the area affected by periodontal disease, and generally gives a positive predictive result as long as optimum home care is practiced.

Additional Reading

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Wiggs, Robert B. and Heidi B. Lobprise. "Periodontology." In *Veterinary Dentistry Principles and Practice*, edited by Robert B Wiggs and Heidi B. Lobprise, 186–231. Philadelphia, PA: Lippincott–Raven, 1997. ※

Jan Bellows, DVM, DAVDC, DABVP (canine and feline specialties), is in private practice in Weston, Florida. He is a frequent national and international lecturer on topics related to companion-animal dentistry. He is a past president of the American Veterinary Dental College and is currently the president of the Foundation for Veterinary Dentistry.

He is a coauthor of the *AAHA Dental Guidelines for Dogs and Cats* (2010, 2013, and 2019) and the author of the books *Feline Dentistry* (2010) and *Small Animal Dental Equipment, Materials and Techniques, Second Edition* (2019).

AAHA Dental Standards

Did you know? AAHA has many standards related to dental care. Here is a look at some of them.

All dental procedures must be performed under general anesthesia with patients intubated and supplemental oxygen being administered.

Veterinarians must perform thorough examinations of the teeth and structures of the oral cavity in patients presented for dental procedures.

Only properly trained practice team members may perform dental procedures.

Dental procedures with potential for aerosolization of infectious debris must be performed in a properly ventilated area set apart from other patients and practice team activities.

Practice team members should document an oral health assessment utilizing the AVDC guidelines for staging periodontal disease during a dental procedure.

Appropriate dental instrumentation and equipment should be utilized, including:

- Ultrasonic scaler/piezo scaler
- High-speed drill
- Hand instruments such as elevators, curettes, scalers, and probes
- Low-speed polisher

Contact your AAHA support team to learn more, at 800-252-2242 or aaha@aaha.org

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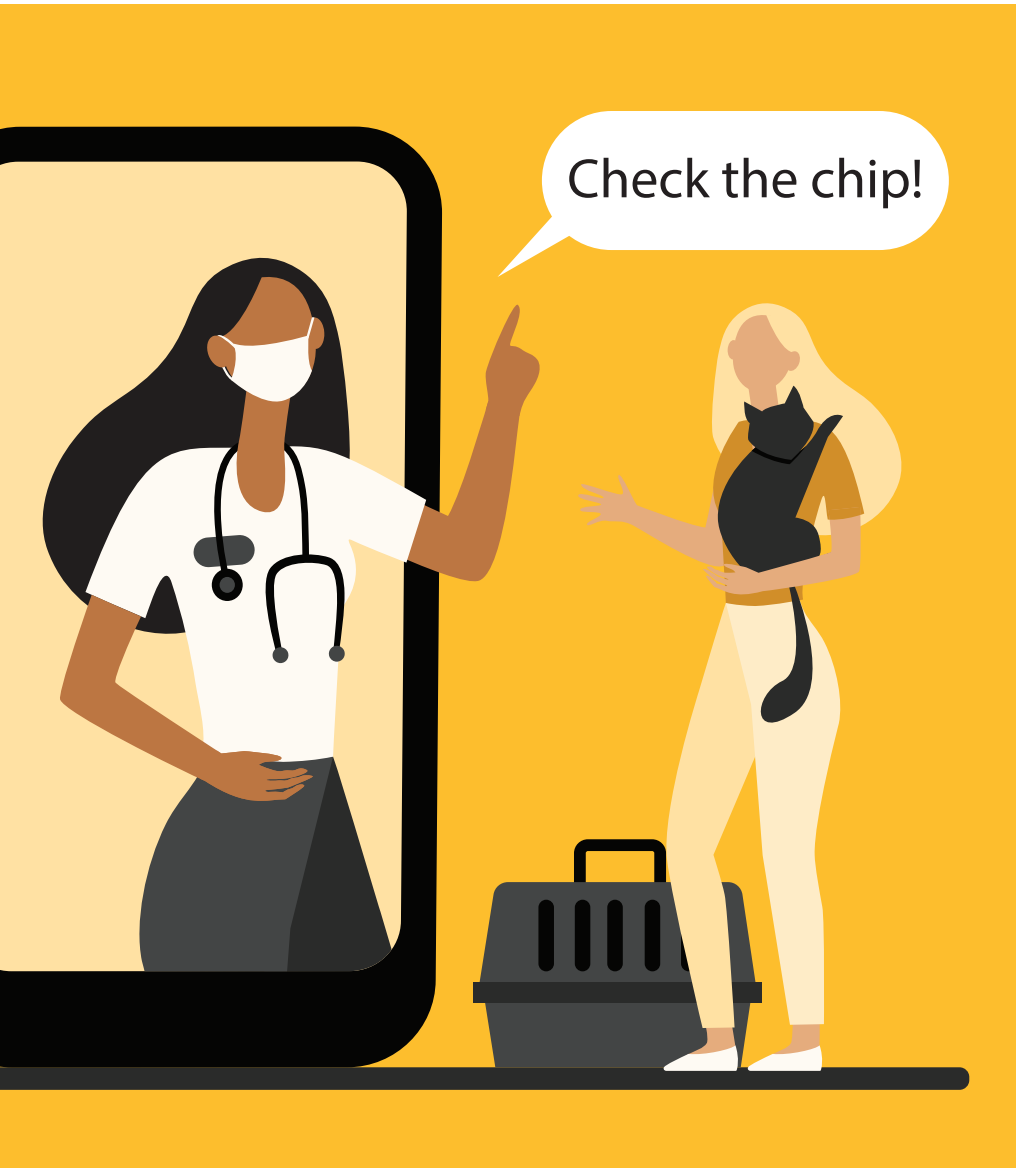
Chip Check—PIMS Can Help Manage Microchip Updates



Put this on your calendar: Check the Chip Day is August 15.

Promote Check the Chip Day All Year Round

by Constance Hardesty

Microchip installed: Check. Registered: Check. Info updated regularly? Maybe not. The good news is, you can use your practice information management system (PIMS) to get the job done.

The best microchip in the world won't do much good if pet owners don't do their part. That's one reason why AAHA and the American Veterinary Medical Association launched Check the Chip Day in 2013. It creates a moment for pet owners to make sure all their info is up to date in the microchip register. If you plan your marketing six months out, put this on your calendar: Check the Chip Day is August 15. Use it to celebrate pet owners who protect their pets all year long and encourage others to get updated.

But what about the clients who are new to your practice or whose contact information changes in April or December, long before or after Check the Chip Day?

Thanks to automation and communications tools built into your PIMS, you can reinforce the message with reminders that touch clients only when needed. Unlike "drip" campaigns that send out a stream of messages throughout the year, a check-the-chip reminder can be linked to specific events, like when new contact information is entered in the client record.

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Use your PIMS to automatically remind clients to check and update their contact info with microchip registries.

It's a great idea "if the hospital uses the PIMS and sets it up correctly," said Kelly Baltzell, founder and CEO of Beyond Indigo Pets. Unfortunately, many team members don't know how to code the software to perform the function. And, with practices already in high gear, can you really ask anyone to take time out to learn new software tricks?

We've got it. *Trends* asked the makers of several widely used PIMS to explain how they would set up a year-round check-the-chip promotion. The key takeaway: A series of clicks is all you need to set up your system to automatically register microchips and send reminders to clients.

Here you'll find general tips that an experienced practice manager or system administrator can easily implement. Step-by-step instructions for NaVetor, IntraVet, Neo, Cornerstone, ezyVet, and VetRadar are posted as a link in this article at trends.aaha.org. If instructions for your PIMS are not there, ask for help from your IT consultant or PIMS vendor.

Use Your Templates

There are several ways PIMS can help automate the task of keeping microchip information registered and up to date for pet owners.

To start, when you first implant the microchip, register its number with the microchip databases like Home Again or PetLink. Several PIMS integrate with at least one database so that when you register the microchip number, the information is sent directly to the database. To help clients keep track of important information, create a note that contains the microchip registration contact details. Link that note to the invoice or create a document that can be printed separately.

To be sure that microchips are checked annually, take advantage of PIMS templates. First, choose which type of visit(s) will serve as a good prompt for the microchip check. It might be the new pet, spay/neuter, annual wellness, or dental visit. You might also decide to scan the chip at irregular appointments, such as boarding or before an MRI is performed.

Once you've chosen the type of visit, simply add "check the chip" as a routine item or task to the visit template. Use the document or messaging section of the template to link a reminder message to the task.

What should the message say? Like the following sample message, keep it brief. Explain why clients need to maintain up-to-date contact information in the microchip registry. Provide simple, brief instructions to help clients verify and update their information with at least one registry. That's it! Be sure to associate the reminder message with the check-the-chip task in the visit template. That way, the message will automatically accompany the invoice (print or email).

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MRI and Microchips

There is some concern about susceptibility artifacts caused by microchips, particularly in scans of the neck and cranial thoracic regions of cats and small dogs. As more general practices offer MRI services, *Trends* asked neurologist Simon Platt, DACVIM Neurology, DECVN, FRCVS, RCVS & EBVS® European Specialist in Veterinary Neurology, to clear up misperceptions and explain just what's going on with microchips and MRI.

What do general practitioners and certified technicians need to know about susceptibility artifacts caused by microchips?
Microchips occasionally cause a problem when performing an MRI scan of the neck and cranial thoracic regions of cats and small dogs, with sagittal images most likely to be affected. They sometimes require removal due to their interference with a diagnostic image being acquired based on loss or distortion of local signal termed a susceptibility artifact.

Microchips themselves are not affected by the magnetic field and the chip number is not erased. In addition, susceptibility artifacts are less pronounced with low-field than with high-field systems.

What does an artifact caused by a microchip look like, and how can doctors recognize it? If a dark spot appears on an MRI image, is there a way to determine whether it is caused by a microchip?
Susceptibility artifacts due to the presence of a metallic object such as a microchip in the field of view creates areas of signal loss, with bright curved margins, surrounded by image distortion. The artifact may either obscure or mimic lesions, rendering some studies nondiagnostic.

Images in the dorsal plane, ventral to the chip, may be acceptable, as may transverse images immediately cranial and caudal to the chip. The characteristics of the artifact detailed here help to distinguish it from other causes of signal drop-out, but association can also be confirmed with the radiographs to localize the chip's presence.

In your experience, are susceptibility artifacts caused by microchips common and problematic, or (given relatively low rates of microchipping) do they rarely occur, or (because of where microchips are typically located) are the artifacts irrelevant?
Susceptibility artifacts from microchips cannot be avoided, and many patients have these identity chips placed in the soft tissues of the neck. They will only distort local signal, so a microchip in the neck will only very infrequently affect interpretation of the brain and won't affect interpretation of the thoracolumbar and lumbosacral vertebral column.

Even when interested in imaging the neck, many patients can still have a diagnostic study, depending on the region of interest and the potential to limit the effect with some technical adjustments.

It is becoming more common to see MRI machines in practices. For those practices: In preparing the patient, conducting a scan, or reading it, is there anything veterinarians or certified veterinary technicians can do to prevent microchips from interfering with the image?
Although removal of the microchip may be necessary in some cases, the artifact created by a microchip may be reduced by displacing the tissue around it using tape or a stay suture.

The effect of the susceptibility artifact may be minimized by some technique adjustments made to the image acquisition parameters, which include changing the slice direction, decreasing voxel size and/or field of view, decreasing the TE, increasing receiver bandwidth, or changing the frequency and phase encoding directions.

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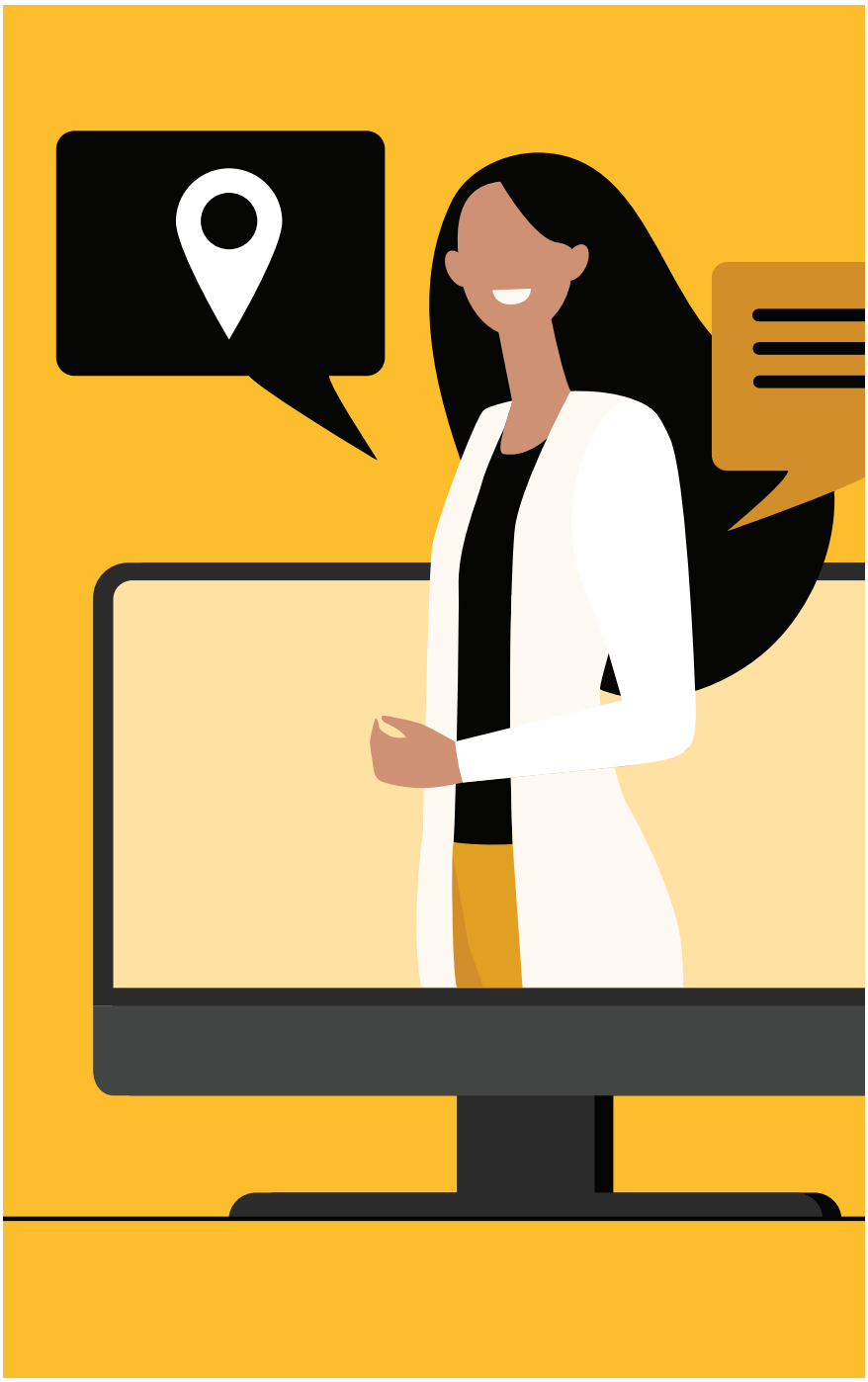
Similarly, in Cornerstone, you can create a zero-dollar product, then create a picklist template that includes the zero-value product as a billing trigger for certain appointment types. Link that to an automatic email reminder to be sent after the appointment.



Link reminders to events, like the pet's birthday or the anniversary of the date the chip was implanted.

Send Reminders

Clients' contact information can change throughout the year. So it makes sense to set up automated reminders, separate from the check-the-chip tasks. These reminders prompt clients to review and update their microchip registration information even if they are not scheduled for a visit.

Various PIMS handle reminders differently, but most platforms allow you to set automated reminders for certain annual events, like the pet's birthday.

Mel Heinz, software product manager, Patterson Veterinary Supply, recommends that reminders be sent annually based on when the microchip was first registered rather than after an annual exam. "That way," he explained, "if the client misses an annual exam, the microchip reminder will still be sent."

In NaVetor, for example, Heinz explained, integration with the Home Again and PetLink databases means clients can check and update their microchip information via their patient portal, and that information is then automatically sent to the microchip databases.

The Message

Write a note that will appear on the invoice, on a separate printed document, or in a follow-up email/text. The note should provide the client's current microchip registration contact details and the URL they can use to update their information.

Give the client a good reason to go through the trouble to update their info. Here is a sample message you can use.

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Success! Your pet's microchip is in place and working! Next up: Update your contact information with the microchip registry.

Currently, your contact information with [autofill this field with the name(s) of the microchip databases you use, e.g., Home Again] is: [autofill this field with information from the registry].

If that's not right, correct it by going to [autofill this field with the URL for the appropriate microchip registry].

Keep your contact info up to date so you can be reunited with your pet!

Let the client take it from there. A PIMS that is integrated with the microchip registries may make it easy for you to update client information, but you should never do that without the client's express permission. You don't know what may have prompted the change of contact info and whether the client wants the registry to reflect the new information.

If clients insist they aren't able to update their information at home, refer them to their local public library. Most libraries have computers, WiFi, and staff who help patrons use them. ※

Online Bonus Content

Read this article online at **trends.aaha.org** for step-by-step instructions from some software vendors.

Constance Hardesty, MSc, is an award-winning writer and editor.

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Remote Patient Monitoring

The Next Wave for Telemedicine

by Terrisha Buckley

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Imagine waiting a month and a half for the opportunity to have a 10-minute conversation. Then, when the opportunity comes, you have to wait another four to six hours to get into the room with the person you are anxious to talk with. At first glance, it may seem as if we are in the days of the Pony Express.

Now, let's add the layer of stress that comes with that conversation being about a sick, uncomfortable, or recovering pet. Things may begin to look familiar. This is the current status of many veterinary clinics across the nation: overbooked and understaffed. Everyone is feeling the burnout, from the veterinary staff to the clients and especially the patients.

The pandemic unfortunately drew attention to an issue that had been recurring for a long time. Veterinary clinics are not able to keep up with the massive need for veterinary care across this nation. One solution is to increase the number of veterinary professionals entering the field. But, in order for that to work, there needs to be more professionals joining than those who are leaving due to burnout. One more realistic solution is a larger-scale implementation of telemedicine, in particular remote patient monitoring (RPM).

> "The biggest asset to telemedicine has been and is currently a high-definition camera attached to the internet."
>
> —AARON SMILEY, DVM

What Is Remote Patient Monitoring?

RPM is the process of monitoring a patient outside of a clinical setting. In human medicine, this is commonly

seen when monitoring glucose levels in diabetic patients, blood-oxygen levels, pulse, blood pressure, and so on. In veterinary medicine the idea is the same.

Remote monitoring allows for the patient to go about their day in their familiar environments, reducing stress levels and providing more accurate data. (For example, an elevated pulse at home is different from an elevated pulse in the clinic.) Once the patient is being monitored constantly, there are two modes of care that can be pursued.

In the first mode, the veterinarian receives information directly from the device. The data reveals a pattern, and if the pattern is within normal limits, all is well. If not, the veterinarian may contact the client to request additional information and possibly schedule an office visit.

In the other mode, the client may notice a change in their pet and contact their veterinarian. The veterinarian will be able to converse with the client while looking at the information gathered from the remote patient monitoring. If there is no immediate cause for concern, more monitoring can continue. If there is a cause for concern, the veterinarian may make a recommendation remotely or the patient can again be brought in for an office visit.

Both scenarios reduce the need for follow-up and check-in appointments. This creates room in a practice's schedule for more urgent cases and new clients. Then, the cycle repeats.

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While there is still some pushback with telemedicine in the veterinary profession, the persistent need for a change isn't going away soon.

How Does Remote Monitoring Relate to Telemedicine?

According to the National TeleHealth Resource Center Partners, telemedicine is broken up into four sections:

- Synchronous (teleconferencing)
- Asynchronous (electronic communications)
- Remote Patient Monitoring
- Mobile Health (text messages, alerts, and reminders)

As a branch of telemedicine, RPM has the same benefits as the rest and can be easily combined with all of them. Patients that need to be monitored (but not necessarily in a clinic) benefit greatly from this because they get to return to their normal routines. This has been shown to decrease stress levels and allow for more accurate diagnoses and treatments. In addition, a patient monitored from home opens

up space for more critical patients that do need to be monitored in the clinic.

When a follow-up or a check-in is needed, RPM can be combined with teleconferencing or asynchronous communication in order to eliminate the need for in-person scheduling. The veterinarian can talk directly with the client, see the pet on a video, and view what needs to be viewed. The appointment is completed within a few minutes without adding stress to the patient, the client, or the veterinary staff!

Why Is This So Important?

While there is still some pushback with telemedicine in the veterinary profession, the persistent need for a change isn't going away soon. According to the American Pet Products Association's 2017–2018 survey, there were 89.7 million dogs and 94.2 million cats owned in the United States. In their 2019–2020 study, 63.4 million US households had at least one dog and 42.7 million households had at least one cat. The numbers don't lie: 67% of US households have at least one pet. That number isn't declining. In fact, with the pandemic we have seen an increase in pet adoptions.

In addition to all of that, the highest expense most of these owners cite is their veterinary expenses (both routine and surgical). In other words, a lot of people are owning pets and have a desire to take care of them and see them in good health. The demand is there—it is the supply that is the issue. There are only so many appointments that can be scheduled within a day. Even larger hospitals are becoming overwhelmed by the volume.

Allowing nonurgent cases and questions to be solved remotely takes some of the load away, resulting in a reduction in the amount of in-person appointments being scheduled through the day. As a result, this makes room for more urgent appointments and emergencies.

An even bigger issue is access to care. Veterinary practices are not everywhere. In some areas, a veterinary clinic can be hours away by car, even if a client has guaranteed transportation. For those that have no way of transportation, this presents an even bigger problem. Many of these clients have no issues making arrangements for long drives for an emergency or even a yearly check-up. However, follow-up and check-in appointments at any frequency are not as feasible. RPM is the best option in these cases.

Ways to Implement RPM Now

In areas or clinics where telemedicine is newer or in more established areas where there are some financial constraints, remote monitoring can still be used.

"The biggest asset to telemedicine has been and is currently a high-definition camera attached to the internet," said Aaron Smiley, DVM, a veterinary telemedicine advocate and consultant. "The biggest move forward in telemedicine has been the invention and mass production of the smartphone."

Because of this, he has been able to implement asynchronous telemedicine within his own practice and serve his clientele remotely. Smiley utilizes remote monitoring in combination with asynchronous communication.

> "Rapid shift is happening when it comes to overall virtual care."
>
> —BRUCE TRUMAN, BLT TECHNOLOGY AND INNOVATION GROUP

If patients have to check-in or follow-up on a procedure that doesn't yet require an in-person visit, he messages the clients through a secured app and receives videos and updates on whatever he needs. He could take a resting respiratory rate from a short video of a pet actually resting at home as opposed to attempting to take a rate in a clinic from an already excited pet. He can also watch an arthritic patient move in their familiar environment and observe for pain management.

For patients that have at-home monitoring systems already for chronic illnesses, he asks them to report the more recent readings within the same app. The readings are then recorded in the patient's records. From there, Smiley says he is able to make his recommendations, and if an in-person appointment is needed, those are easy to do. According to Smiley, the biggest step is making sure that everyone is comfortable using the technology involved. Everyone can use a smartphone at some capacity. The rest is just a small learning curve.

In addition to that, access to care also includes cost. Many clients with chronically ill pets already have the devices needed at home to monitor their pets. Asking them to buy another device when they can just report the readings through asynchronous communication could be an unnecessary cost.

The Future of RPM

According to Bruce Truman, founder and president of BLT Technology and Innovation Group, "Rapid shift is happening when it comes to overall virtual care." The overall need is too great for things to stay the same. The critical need for access to veterinary care has resulted in several companies providing solutions to these issues.

Petcare companies that have catered more to supplies have begun offering virtual veterinary care services, which includes 24/7 on-call veterinary advice. These services don't completely replace a local veterinarian but can supplement in instances when a client just has a question or is seeking advice. Other platforms feature veterinarians that provide more specialized care, such as dermatological and behavioral care.

In addition to all of that, pet tech is a fast-growing industry, with many companies coming directly from Silicon Valley. These companies are creating devices that can attach directly to the pet via a collar or onto the crate at home. These devices have capabilities of monitoring temperature, pulse, and respiratory rate; behavior; sleep tracking; and potentially even some simpler blood chemistry.

These devices are comparable to the FitBit or Apple Watch. They are meant to allow the client to be more hands-off with the monitoring. Instead of the client having to input the information into an app every time, the device uploads all the information, and it can be accessed by the veterinarian as needed. From there, if the veterinarian needs to recommend a change to the treatment(s), that can be done via remote messaging or during an in-person appointment as needed.

Cost and durability are the biggest selling points for these devices. Nevertheless, the convenience of being more hands-off while still providing the best care to a pet is often worth it.

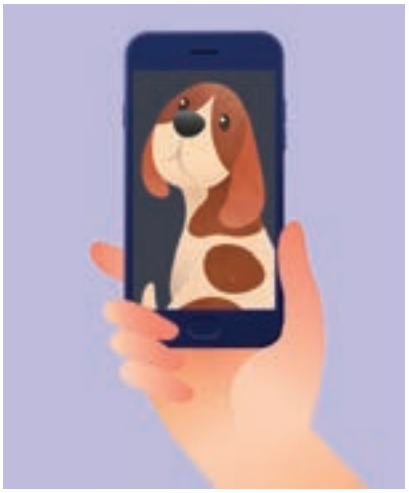
Final Thoughts

It is a recurring theme that progress for the sake of progress should be discouraged. However, what if progress is the only way to solve the problem? At this point, veterinary medicine has reached a split in the path and we can either carry on as we are and see what happens (not promising) or innovate and move forward.

To continue as things have been will bear the same results. People will continue to be overwhelmed. Veterinarians, techs, and other staff members will continue to leave the profession due to the stress. Clients will continue to be frustrated, and we will all have this discussion again and again with hopes of making better decisions.

The Veterinary Virtual Care Association (VVCA.org) has a list of recommendations for implementing and assessing a practice's capabilities for providing virtual care including remote monitoring. Some of the diseases it recommends for remote monitoring include (but are not limited to) diabetes, heart failure, and thyroid disease.

At the end of the day, veterinary clinics and hospitals have a mission to see to the needs of as many pets as possible. Continuing as the way things are means turning away more patients. It means more clients consulting Dr. Google and making decisions that aren't based on medical knowledge. It means greater delays in accurate diagnoses and treatments. It means more suffering for our patients. Virtual care is not the ultimate solution, but it is a step in the right direction. ※



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> "The biggest move forward in telemedicine has been the invention and mass production of the smartphone."
>
> —AARON SMILEY, DVM

Terrisha Buckley is a freelance writer with a bachelor's degree in biology and an extensive background in research as well as experience working in the veterinary profession.

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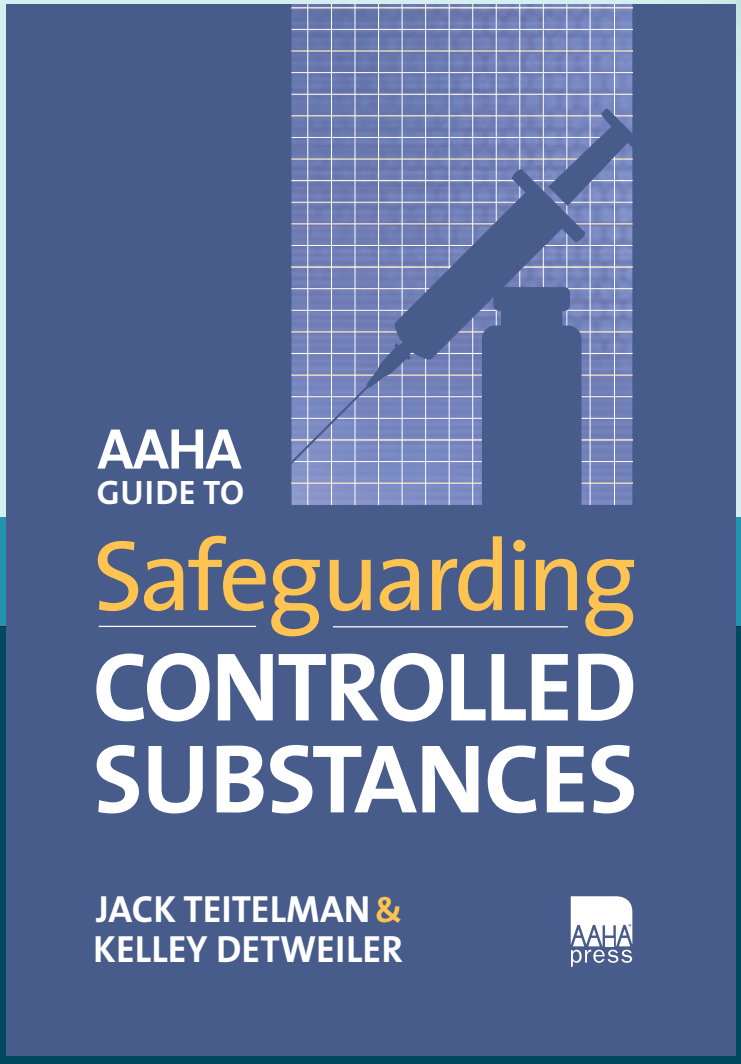

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Pain Management Case of the Month: Harley

Multimodal Pain Management for Acute Episode of Suspected Intervertebral Disc Disease

by Jenna Cook, BSc(hons), RVT, CCRP, CCMT, CVPP

Signalment and History

An 8-year-old male neutered Tibetan terrier, 17 kg, was presented to the family veterinarian for lethargy and ataxia for the past two days. Harley had previously seen another vet when his owners were at their cottage, who prescribed meloxicam and gabapentin, unknown dosages. His owner reported that Harley had not had a bowel movement in two days.

On neurological examination by the referring veterinarian, Harley displayed proprioceptive ataxia in both hind limbs with moderate proprioceptive deficits. Harley yelped and defecated immediately with palpation at the thoracolumbar junction. The family veterinarian gave Harley a presumptive diagnosis of intervertebral disc disease (IVDD) and injected dexamethasone 0.3 mg/kg SQ and dispensed prednisone 0.6 mg/kg q 24 hours, omeprazole 1.18 mg/kg q 24 hours, misoprostol 0.003 mg/kg q 6–8 hours for seven days, and gabapentin 12 mg/kg q 8 hours. Strict rest and rehabilitation were recommended.

Physical Examination and Diagnostics

Harley was presented to me for rehabilitation and assessment one week later. Harley was being crate rested and carried outside for elimination breaks with mild discomfort when posturing for defecation. His owners noted improvement in pain since his initial injury. Harley was ambulatory on four limbs, displaying moderate bilateral paraparesis and ataxia in the hind end, more severe on the right hind than left.

His gait was rigid with decreased flexion of hips and stifles, and occasional knuckling of the right hind. Moderate

kyphosis of the thoracolumbar spine and moderate tucking of the pelvic region was noted during ambulation and a stance position. Pain was scored at a 2/4, using the Colorado State acute pain scale, on palpation of T13-L. No pain was elicited elsewhere in the spine and joints of the long bones.

Myofascial pain was scored 1/4 with palpation of both iliopsoas muscles. Nociception was present in all digits bilaterally, and a crossed extensor reflex was not present. Conscious proprioception reflexes were tested with a dorsal paw placement test and were absent on right hind and moderately delayed in the left hind.

Moderate muscle atrophy was noted in both hind limbs. Harley continued to receive all medications as prescribed by the referring veterinarian. Crate rest was continued with slow leash walks for elimination. Harley was fitted for a Help'em Up Harness to allow the owner to support Harley's hind end while ambulating.

Further evaluation by a neurologist was declined, and the risks and safety concerns of rehabilitation of an undiagnosed neurologic condition, long-term prognosis, and treatment limitations were discussed with the owners.

Photo courtesy of Jenna Cook

The owners understood the risks and consented to a treatment plan tailored to an open diagnosis of IVDD.

Treatment Plan

Harley was enrolled into an in-clinic twice-weekly rehabilitation program consisting of laser therapy, neuromuscular electrical stimulation, and acupuncture/electroacupuncture for the first two weeks. Once Harley showed improvement in pain and ataxia, hydrotherapy and gentle strengthening exercises would be added. Photobiomodulation in the form of low-level laser therapy (class 3b) was provided to Harley (Dosage: 810 nm, 4 x 500 mW, continuous wave). Acupuncture was performed for the suspect area simultaneously with laser therapy. Electrical muscle stimulation (ESTIM) was applied with Harley supported over a peanut stability ball and hind paws placed on a proprioceptive disc, to achieve a standing position.

These parameters were used to promote motor activation, muscle strengthening, and proprioceptive neuromuscular facilitation. Harley responded favorably to ESTIM therapy; the owners noticed larger degrees of flexion of the hind limbs immediately after treatment. Harley was prescribed a home exercise program including manual therapies and proprioceptive training exercises.

Clinical Outcome

The owner reported continued favorable results after two weeks of ESTIM and laser and acupuncture treatments. Harley's pain was scored 1/4 with palpation of T13-L1, mild proprioceptive ataxia was seen bilaterally in the hind limbs, and conscious proprioception reflexes had improved to mildly delay bilaterally. The owners had also reported Harley's mentation had greatly improved in the home. Hydrotherapy was initiated in week three and consisted of short intervals of slow-paced, full-buoyancy walking in the underwater treadmill. Intervals of time and speed were increased gradually as tolerated by Harley. Harley responded favorably to aquatic therapy, showing an increase in strength, endurance, and willingness to go on walks. Acupuncture, laser therapy, and hydrotherapy were continued twice weekly. After four weeks of treatment, Harley was weaned off prednisone and omeprazole as directed by the referring veterinarian with no compromise to pain or mobility. At this point in time, the owners discontinued rehabilitation treatments for financial reasons.

On week five of treatment, the owner thought Harley was doing well, so they reduced the gabapentin dose from 200 mg q 8 hours to 100 mg q 12 hours. In the clinic, Harley was scored at 2/4 pain score with gentle palpation of T13-L1. Moderate tension was palpated in thoracolumbar epaxial muscles bilaterally and frequent muscle spasms of the epaxials were elicited with gentle palpation. Harley vocalized with tail jack manipulation; pain was scored at 3/4. Increase in kyphosis at the thoracolumbar junction at a standing position; there was no change in neurological status.

TENS therapy was reinstated, gabapentin was increased back to 200 mg q 8 hours, and methocarbamol (44 mg/kg divided) was prescribed at 250 mg q 8 hours. Harley responded favorably to the increase of gabapentin and addition of TENS and methocarbamol.

Within seven days, Harley was ambulating with mild hind end ataxia and had a pain score of 0/4 with spinal palpation. Harley continued with once-weekly laser therapy, TENS, and hydrotherapy in-clinic. Harley responded favorably to this treatment protocol for the next 2 weeks, maintaining a pain score of 0/4. Harley was decreased to BID dosing for both gabapentin and methocarbamol for 1 week. Pain was scored 0/4. Gabapentin was discontinued, and then methocarbamol the week after. Harley maintained pain score of 0/4, with mild neurological deficits and kyphotic posture.

Harley was weaned to every-other-week in-clinic treatments, then once monthly for maintenance. Harley continues to attend rehab sessions for laser therapy, TENS, and hydrotherapy, as the owner notices an increase in kyphotic posture as treatment time approaches. Harley has maintained a pain score of 0/4, with all medications discontinued.

Discussion

Extrusion or protrusion of intervertebral disc material results in mechanical compression, neuronal damage, and repetitive firing of the afferent nociceptive pathways, which in turn contributes to ischemia and stimulation of the inflammatory cascade. Abnormal processing of pain pathways within the central and peripheral nervous systems results in the development of neuropathic pain.

IVDD treatment options are commonly neuroprotective and

Photographer/collection via Getty Images

neuroregenerative in nature. Treatment options are commonly specific to reducing inflammation, oxidative stress, excitotoxicity, intracellular calcium accumulation, blood spinal cord barrier disruption, extracellular matrix derangement, and caspase activation. Confinement to one room in the house was recommended for four weeks after the injury in an attempt to promote healing and prevent further injury to the nucleus pulposus and reduce pain and inflammation associated with nerve roots and meninges.

When treating IVDD, it is imperative to treat secondary myofascial trigger points and inflammation in the paraspinal muscles. Laser therapy can significantly shorten the time to functional recovery and avoid the need for surgical intervention. Acupuncture modulates the autonomic nervous system and neuroimmune system as well as aids in hormonal regulation.

Thermotherapy provides analgesia via inhibition of motor neurons, thereby breaking the cyclic pain related to muscle spasms. In this case, thermotherapy was used to promote general relaxation of painful muscles in the spine, and decrease muscle tonicity, preventing secondary muscle compensation and pain during ambulation.

Maintaining a steady state of pain management was challenging with Harley, owing to frequent alterations in pharmaceutical dosage and frequency by the owner. Pain management may have been achieved in less time if pharmaceuticals were given consistently and as prescribed.

Conclusion

This case demonstrates how IVDD episodes may be successfully managed conservatively using a multimodal plan consisting of pharmaceutical and modality-based therapies, as well as proper exercise restrictions. ※

Jenna Cook, B.Sc.(hons), RVT, CCRP, CCMT, CVPP, is a registered veterinary technician, certified canine rehabilitation practitioner, certified canine massage therapist, and certified veterinary pain practitioner in Toronto, Canada. Jenna has a strong passion and love for neurologic rehabilitation, geriatric care, and pain management. Jenna loves spending time outside and hiking with her husband and two dogs, Roxie and Olga.

Comments from Mike Petty, DVM, CCRT, CVPP, DAAPM

I think that the most important takeaways from this pain case are 1: that not all cases of IVDD need surgery and, 2: treatment should be considered in a multimodal fashion as was done in this case.

In my own treatment of IVDD cases, I do not insist on cage rest, only restricting the dog from using stairs and running after other pets in the household or wildlife outside. Most rehabilitation practitioners feel that an early return to function can be facilitated by normal day-to-day activities.

Comments on medications: Try as I might, I cannot find a canine study that definitively shows that methocarbamol is helpful in cases of IVDD. My own suspicion is that it causes drowsiness and that is sometimes interpreted as pain relief. The original veterinarian on this case put the dog on three medications I have issue with. The first is prednisone, and it seems that most neurologists are in either the corticosteroid camp or the nonsteroidal anti-inflammatory drug (NSAID) camp when it comes to treating pain and inflammation. I generally defer to the NSAID camp because of the reduced side effects compared with a corticosteroid. The second issue I have is with omeprazole. A recent study article in the American Veterinary Medical Association has shown that giving omeprazole with a corticosteroid actually *increases* the likelihood of a gastric ulcer. And finally I also have an issue with misoprostol, which, while it is excellent at stopping gastric ulcers, can also cause spontaneous abortions if the owner handling the drug is pregnant; in my mind, not worth the risk.

Michael C. Petty, DVM, CCRT, CVPP, DAAPM, is in private practice in Canton, Michigan. He is a frequent national and international lecturer on topics related to pain management. Petty offers commentary on each Pain Case of the Month (and occasionally writes one himself). He was also a member of the task force for the *2015 AAHA/AAFP Pain Management Guidelines for Dogs and Cats.*

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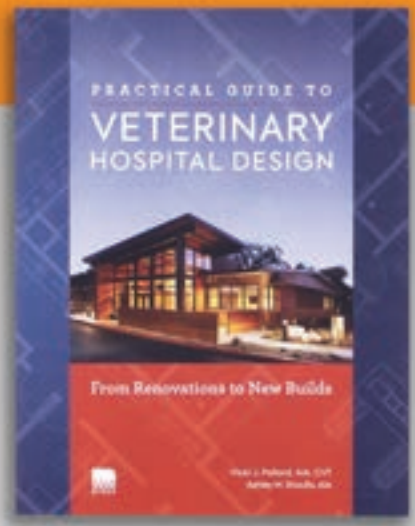

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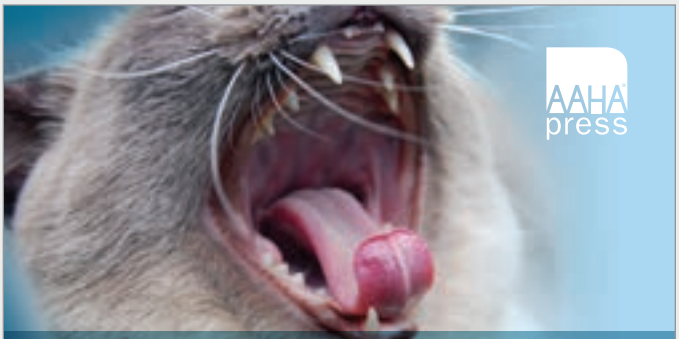

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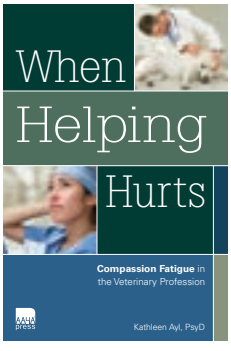

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Employee of the Month

NAME:
Angie Clark

PRACTICE NAME:
Happy Tails Veterinary Emergency Clinic, Greensboro, North Carolina

OCCUPATION:
Customer Service Representative

YEAR STARTED IN VET MEDICINE: **2011**

YEARS WITH PRACTICE: **10**

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Why Is Angie So Awesome?

Angie is awesome for so many reasons, but what stands out most about Angie is her adaptability. She is a prime example of grace under pressure. Angie is always willing to shift toward the client's expectations and staff's individual needs to ensure the best possible patient outcomes. If something isn't working, Angie is always there with an alternate strategy and applies her out-of-the-box thinking to challenges that come up in practice, both big and small. Not only that, but she also does it all with a smile or a disarming joke that puts everyone at ease, even in the tensest and most tiring of situations.

How Does She Go Above and Beyond?

Angie trains our new CSR staff members but goes above and beyond by telling to reach out if they're ever on shift and feel stuck, regardless of whether she is off or not. She's always considering staff member suggestions and uses them to modify and improve our workflow and front desk manuals. Angie's goal is to make learning the job and the experience of working in veterinary medicine as enjoyable as possible.

In Her Own Words

Why do you love your job? I love my job because I get to be a part of an amazing team of doctors, techs, and customer service providers. Every day we save lives, end suffering, and comfort owners. We see the best and, unfortunately, the worst. I've cried and laughed with pet owners. It's just the best job ever.

Pets at home: I have two cats: Chester, an eight-year-old black and white handsome man, and Eloise, a five-year-old tabby. Both are courtesy of Happy Tails and the fact that I'm a crazy cat lady with a bleeding heart.

What brought you to the profession? I've been in healthcare just about my entire working career. I started in human medicine and then transitioned to animals. Animals are more fun.

Hobbies outside of work: Outside of work, I love spending time with my family, working in my yard, and taking road trips.

Favorite book/show: Favorite book is hands-down *To Kill a Mockingbird*. Favorite show? Not anything specific, but I am known for loving my cheesy Hallmark holiday movies. ※

Photo courtesy of Happy Tails Emergency Clinic

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