







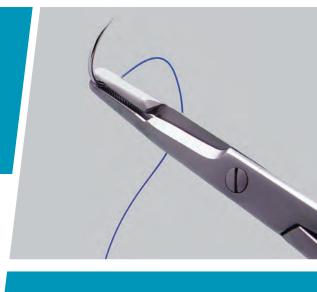
# Premium Suture

### More suture, less memory

- Standard offering includes 30" strands
- Dental offering includes 18" strands
- Racetrack packaging design delivers low suture memory
- Premium quality suture and needles
- One dozen packaging
- Proudly made in USA

### **Available Features**

- Premium Antibacterial "PLUS" Suture
- Cobra Black® Needles
- VisiPro<sup>™</sup> Fluorescent Non-Absorbable Suture
- Quick<sup>™</sup> Fast Absorbing Suture



### **Save Big**

Securos Surgical can save you up to 76% on suture when switching from the industry leader. The average savings per hospital based on the most common suture offerings is 42%.

Ask your MWI Animal Health sales representative about our 100% money-back guarantee and sample the Securos Suture line today!





Securos Surgical sold exclusively through MWI Animal Health

\$ 800.824.3703

Service Support: 877.266.3349

mwiah.com

securos.com

# Go Big and Go Home



Are you putting in too many hours on the job but too few doing what you love? With our collaborative back-office and management support – you can focus on caring for pets while we handle the rest! Join Banfield Pet Hospital and be our partner in providing quality proactive healthcare to every pet in communities across the country.



Banfield.com/about-us/hospital-acquisition





Vol. 34, No. 11 **NOVEMBER 2018** 

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







### **Editorial**

Editor Ben Williams

Senior Manager, Publishing Laura Esterman

Managing Editor Karie Simpson

Creative Services Manager Kate Moore Senior Graphic Designer Robin Taylor Graphic Designer Sadie Lewandowski

### **Advertising**

National Sales Manager Stephanie Pates Advertising Specialist Jennifer Beierle

Trends magazine, American Animal Hospital Association 12575 W. Bayaud Ave., Lakewood, CO 80228-2021 Phone: 800-883-6301 | Fax: 303-986-1700

Email: trends@aaha.org

Journal Highlights Abstracts of the current issue of JAAHA, Journal of the American Animal Hospital Association, are reprinted with permission. For masthead information, editorial review board, authors' guidelines, and subscription information, see the online publication at aaha.org or jaaha.org.

Subscriptions Trends magazine is provided to AAHA members as a member benefit (annual membership dues include \$60 for a subscription). Annual nonmember subscriptions: \$70. Single copies: \$20. To subscribe, call 800-883-6301.

Postmaster Trends magazine® (ISSN 1062-8266) is published 12 times per year (January, February, March, April, May, June, July, August, September, October, November, December) by the American Animal Hospital Association, at 12575 W. Bayaud Ave., Lakewood, CO 80228. Periodicals postage paid at Denver, Colorado, and at additional mailing offices. Canadian Post Agreement Number 40041253; send change-of-address information and blocks of undeliverable copies to P.O. Box 1051, Fort Erie, ON L2A 6C7. Printed in the USA. Postmaster: Send address changes to Trends magazine, 12575 W. Bayaud Ave., Lakewood, CO 80228-2021.

Publication in this magazine of any advertisement, article, product information, or other information or data does not necessarily imply that the American Animal Hospital Association endorses or approves the advertiser, the product, the service, or the authors' viewpoints. The information presented is intended to help you make good decisions, but it is not a replacement for appropriate financial, legal, or other advice. Neither this publication nor AAHA in any way endorses or guarantees the accuracy, reliability, or completeness of the facts, views, opinions, recommendations, information, or statements contained in this publication. In addition, nothing within these pages should be construed as an offer or solicitation to purchase or sell any investment items. Readers are urged to consult their attorneys, accountants, and other advisors on all practice-related decisions. No part of this issue may be reproduced in any form without written permission from the publisher. The sole exception is made for veterinary practices, which may make a limited number of copies for use within the practices. For all other uses, including all uses by commercial entities, please send your request to permissions@aaha.org. AAHA shall not be held liable for adverse reactions to or damage resulting from the application of this information or any misstatement or error contained in this work. AAHA shall be held harmless from any and all claims that may arise as a result of any reliance on the information provided.

©2018 American Animal Hospital Association, All rights reserved.

Cover image: ©AAHA/Sadie Lewandowski



Hill's<sup>®</sup> Prescription Diet<sup>®</sup> k/d<sup>®1</sup> is clinically shown in a recent study<sup>2</sup> to outperform Royal Canin<sup>™3</sup> at managing CKD.

### **NEW SIX-MONTH CLINICAL RESULTS**

Compared to Royal Canin<sup>™</sup> Veterinary Diet Renal Support A Feline, cats with chronic kidney disease (CKD) fed Prescription Diet k/d Feline with E.A.T (Enhanced Appetite Trigger) Technology:

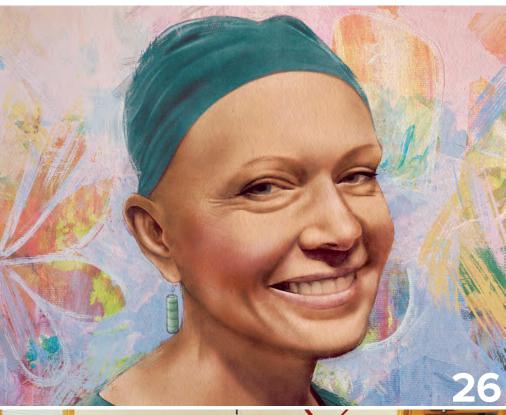
- Voluntarily consumed 23% more calories<sup>2</sup>
- Increased their body weight by 5.8% while Royal Canin™ cats lost 13%²
- Maintained their muscle mass while Royal Canin™ cats lost over 11%²

TAKE CONTROL TODAY — recommend the clinical strength of Prescription Diet® k/d."1

'Hill's\* Prescription Diet\* k/d\* feline with chicken dry food. <sup>2</sup>Data on file. Hill's Pet Nutrition, Inc. 2018. Results are average values with statistical significance (p value less than or equal to 0.05). <sup>2</sup>Royal Canin\* Veterinary Diet Renal Support A Feline, dry food sold in the US market. ©2018 Hill's Pet Nutrition, Inc. ®/\* Hill's, Prescription Diet, k/d and E.A.T. Technology are trademarks owned by Hill's Pet Nutrition, Inc. Royal Canin is a registered trademark owned by ROYAL CANIN SAS.



# features





### **26** Fighters

Cancer won't keep them down by Jen Reeder

# **34** Accredited Practice of the Year

Country Hills Pet Hospital gains top honor by Jen Reeder

### THE COMFORT OF

# Complete Coverage<sup>ss</sup>

ASPCA® Pet Health Insurance plans provide all the coverage pets need, the way their pet parents want, including exam fees, diagnostics, alternative therapies, and treatments.

### **WHAT'S COVERED:**

- Accidents
   Illnesses
   Behavioral Issues
- Hereditary Conditions
   Dental Disease
- Prescription Food\*
   Vitamins\*
   Supplements\*
- Stem Cell Therapy
   Microchipping

### **WHAT'S NOT COVERED:**

- Pre-existing Conditions
   Cosmetic Procedures
- Breeding Costs
   Preventive Care

### **EASY TO CUSTOMIZE:**

Annual Deductible: \$100 | \$250 | \$500

Reimbursement Percentage: 90% | 80% | 70%

Annual Limit: \$5,000 - UNLIMITED

Clients can choose their annual limit, annual deductible, and reimbursement percentage.

### ORDER FREE MATERIALS FOR YOUR CLINIC!

We've got lots of free materials for your clinic to help educate your clients on Complete CoverageSM and the benefits of pet insurance.

1-877-738-2677

aspcapetinsurance.com/order



PARTNERING FOR PET HEALTH

\*Coverage for prescription food, vitamins, and supplements do not include prevention or general health maintenance (including weight loss). Pre-existing conditions are not covered. Waiting periods, annual deductible, co-insurance, benefit limits, and exclusions may apply. For all terms and conditions visit www.aspcapetinsurance.com/terms. Preventive Care reimbursements are based on a schedule. Products, rates, and discounts may vary and are subject to change.

# departments









### **41** Feline Friendly

Getting Cats in the Door

Understand the barriers cat owners face

### **47** Money Matters

Financial Primer

Part 1 of a two-part series on managing your practice's finances

### 54 Infographic

Basics of Business Borrowing

It's all about what you can pay back

### 57 Get Smart

Pricing for the Future

Conventional pricing models are becoming obsolete

### the usual

- 9 From the Editor's Desk
- 10 Inside AAHA
- 15 Notebook
- 21 JAAHA Abstracts
- **62** Advertiser Index
- **64** In the Community



### GETS IT RIGHT THE FIRST TIME<sup>1</sup>



of dogs needed just 1 injection to resolve their skin infection, in a US efficacy study<sup>1</sup> **100% compliance:** gives patients an assured course of antibiotic therapy with a single injection<sup>1</sup>

**Fast and effective relief** for your patients and **peace of mind** for your clients

### Recommend CONVENIA for first-time resolution of bacterial skin infections

SPECIAL OFFER for your clients with dogs 20+ lb
Earn up to \$30 in rewards with CONVENIA! Details available
at conveniaoffers.com.

For more information, go to **convenia.com** or contact your local Zoetis or distributor representative.

**IMPORTANT SAFETY INFORMATION:** People with known hypersensitivity to penicillin or cephalosporins should avoid exposure to CONVENIA. Do not use in dogs or cats with a history of allergic reactions to penicillins or cephalosporins. Side effects for both dogs and cats include vomiting, diarrhea, decreased appetite/anorexia and lethargy. Please see Brief Summary of Prescribing Information on following page.

Reference: 1. Six R, Cherni J, Chesebrough R, et al. Efficacy and safety of cefovecin in treating bacterial folliculitis, abscesses, or infected wounds in dogs. J Am Vet Med Assoc. 2008;233(3):433-439.

\*10-year-old golden retriever with acute superficial pyoderma treated only with CONVENIA 8 mg/kg. Case photographs are actual images taken before and after treatment with CONVENIA. Other photos depict models of a similar breed. The only other treatment this dog received was an initial skin cleansing with a dilute topical antiseptic.
†In clinical studies, a single injection was clinically equivalent to a 14-day antibiotic regimen.

All trademarks are the property of Zoetis Services LLC or a related company or a licensor unless otherwise noted. ©2018 Zoetis LLC. All rights reserved. AIF-00607R1



**Brief Summary of Prescribing Information.** 



(cefovecin sodium)

Antimicrobial for Subcutaneous Injection in Dogs and Cats Only

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

### INDICATIONS:

### Dogs

CONVENIA is indicated for the treatment of skin infections (secondary superficial pyoderma, abscesses, and wounds) in dogs caused by susceptible strains of Staphylococcus intermedius and Streptococcus canis (Group G).

### Cate

CONVENIA is indicated for the treatment of skin infections (wounds and abscesses) in cats caused by susceptible strains of *Pasteurella multocida*.

CONTRAINDICATIONS: CONVENIA is contraindicated in dogs and cats with known allergy to cefovecin or to  $\beta$ -lactam (penicillins and cephalosporins) group antimicrobials. Anaphylaxis has been reported with the use of this product in foreign market experience. If an allergic reaction or anaphylaxis occurs, CONVENIA should not be administered again and appropriate therapy should be instituted. Anaphylaxis may require treatment with epinephrine and other emergency measures, including oxygen, intravenous fluids, intravenous antihistamine, corticosteroids, and airway management, as clinically indicated. Adverse reactions may require prolonged treatment due to the prolonged systemic drug clearance (65 days).

### WARNINGS: Not for use in humans. Keep this and all drugs out of reach of children.

Consult a physician in case of accidental human exposure. For subcutaneous use in dogs and cats only. Antimicrobial drugs, including penicillins and cephalosporins, can cause allergic reactions in sensitized individuals. To minimize the possibility of allergic reactions, those handling such antimicrobials, including cefovecin, are advised to avoid direct contact of the product with the skin and mucous membranes.

### PRECAUTIONS:

Prescribing antibacterial drugs in the absence of a proven or strongly suspected bacterial infection is unlikely to provide benefit to treated animals and may increase the risk of the development of drug-resistant animal pathogens.

The safe use of CONVENIA in dogs or cats less than 4 months of age (see **Animal Safety**) and in breeding or lactating animals has not been determined. Safety has not been established for IM or IV administration. The long-term effects on injection sites have not been determined. CONVENIA is slowly eliminated from the body, approximately 65 days is needed to eliminate 97% of the administered dose from the body. Animals experiencing an adverse reaction may need to be monitored for this duration.

CONVENIA has been shown in an experimental *in vitro* system to result in an increase in free concentrations of carprofen, furosemide, doxycycline and ketoconazole. Concurrent use of these or other drugs that have a high degree of protein-binding (e.g. NSAIDs, propofol, cardiac, anticonvulsant, and behavioral medications) may compete with cefovecin binding and cause adverse reactions.

Positive direct Coombs' test results and false positive reactions for glucose in the urine have been reported during treatment with some cephalosporin antimicrobials. Cephalosporin antimicrobials may also cause falsely elevated urine protein determinations. Some antimicrobials, including cephalosporins, can cause lowered albumin values due to interference with certain testing methods.

Occasionally, cephalosporins and NSAIDs have been associated with myelotoxicity, thereby creating a toxic neutropenia. Other hematological reactions seen with cephalosporins include neutropenia, anemia, hypoprothrombinemia, thrombocytopenia, prolonged prothrombin time (PT) and partial thromboplastin time (PTT), platelet dysfunction and transient increases in serum aminotransferases.

### **ADVERSE REACTIONS:**

### Dogs

A total of 320 dogs, ranging in age from 8 weeks to 19 years, were included in a field study safety analysis. Adverse reactions reported in dogs treated with CONVENIA and the active control are summarized in Table 2.

Table 2: Number of Dogs\* with Adverse Reactions Reported During the Field Study with CONVENIA

Adverse Reaction	CONVENIA (n=157)	Active Control (n=163)
Lethargy	2	7
Anorexia/Decreased Appetite	5	8
Vomiting	6	12
Diarrhea	6	7
Blood in Feces	1	2
Dehydration	0	1
Flatulence	1	0
Increased Borborygmi	1	0

<sup>\*</sup>Some dogs may have experienced more than one adverse reaction or more than one occurrence of the same adverse reaction during the study.

Mild to moderate elevations in serum gamma glutamyl transferase or serum alanine aminotransferase were noted post-treatment in several of the CONVENIA-treated dogs. No clinical abnormalities were noted with these findings.

One CONVENIA-treated dog in a separate field study experienced diarrhea post-treatment lasting four weeks. The diarrhea resolved.

### Cats

A total of 291 cats, ranging in age from 2.4 months (one cat) to 21 years, were included in the field study safety analysis. Adverse reactions reported in cats treated with CONVENIA and the active control are summarized in Table 3.

Table 3: Number of Cats\* with Adverse Reactions Reported During the Field Study with CONVENIA.

Adverse Reaction	CONVENIA (n=147)	Active Control (n=144)
Vomiting	10	14
Diarrhea	7	26
Anorexia/Decreased Appetite	6	6
Lethargy	6	6
Hyper/Acting Strange	1	1
Inappropriate Urination	1	0

<sup>\*</sup>Some cats may have experienced more than one adverse reaction or more than one occurrence of the same adverse reaction during the study.

Four CONVENIA cases had mildly elevated post-study ALT (one case was elevated pre-study). No clinical abnormalities were noted with these findings.

Twenty-four CONVENIA cases had normal pre-study BUN values and elevated post-study BUN values (37 – 39 mg/dL post-study). There were 6 CONVENIA cases with normal pre- and mildly to moderately elevated post-study creatinine values. Two of these cases also had an elevated post-study BUN. No clinical abnormalities were noted with these findings.

One CONVENIA-treated cat in a separate field study experienced diarrhea post-treatment lasting 42 days. The diarrhea resolved.

<u>FOREIGN MARKET EXPERIENCE</u>: The following adverse events were reported voluntarily during post-approval use of the product in dogs and cats in foreign markets: death, tremors/ataxia, seizures, anaphylaxis, acute pulmonary edema, facial edema, injection site reactions (alopecia, scabs, necrosis, and erythema), hemolytic anemia, salivation, pruritus, lethargy, vomiting, diarrhea, and inappetance.

For a copy of the Material Safety Data Sheet (MSDS) or to report a suspected adverse reaction call Zoetis Inc. at 1-888-963-8471.

### STORAGE INFORMATION:

Store the powder and the reconstituted product in the original carton, refrigerated at 2° to 8° C (36° to 46° F). **Use the entire contents of the vial within 56 days of reconstitution.** PROTECT FROM LIGHT. After each use it is important to return the unused portion back to the refrigerator in the original carton. As with other cephalosporins, the color of the solution may vary from clear to amber at reconstitution and may darken over time. If stored as recommended, solution color does not adversely affect potency.

### HOW SUPPLIED:

CONVENIA is available as a 10 mL multi-use vial containing 800 milligrams of cefovecin as a lyophilized cake.

NADA# 141-285, Approved by FDA



Distributed by: Zoetis Inc. Kalamazoo, MI 49007

# from the editor's desk

IT'S SAFE TO SAY THAT NEARLY EVERYONE has had an experience with cancer. Maybe not personally, but someone you know—a family member, a friend. Veterinarians are no different, and when cancer affects someone in a practice, the tightly knit community of colleagues can be hit hard. This month's cover story is about women who have faced cancer, fought through it, and continued to operate their practices. The article also points out some support resources, in case you happen to be dealing with cancer in some way.

I also wanted to say a few words about AAHA's inaugural Connexity, which, as you may know, is the new model for the AAHA yearly conference. I had the pleasure of going to many of the featured talks and interactive sessions, and was inspired by the energy and passion displayed by the speakers and attendees alike. It was great to see some familiar faces, and meet some new people as well. Always a pleasure to connect with you—the awesome AAHA members! This month we have a feature on the 2018 Accredited Practice of the Year, which was announced at Connexity. If you are looking for some inspiration, look no further than the article on Country Hills Pet Hospital. It is truly an amazing practice.

All current and back issues of *Trends* are in PDF format on the AAHA website, viewable on your computer, phone, or tablet. Click over to the *Trends* archive page (trends.aaha.org), select the issue you want to view, and click or tap! If you have any thoughts about how to make the digital archive more accessible or more useful to you, please get in touch and let me know.

COMING NEXT MONTH: Hard to believe another year is almost in the books. In December, we'll look into DNA testing as a method of practicing preventive medicine. We'll also see Part 2 of our financial series, and an article on removing barriers to pet insurance. Also look for an executive summary and tables from the brand new 2018 AAHA Infection Control, Prevention, and Biosecurity Guidelines.

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

-Ben Williams, Editor



### View from the Board

### AAHA's Apex of Accolades

There is no bigger passion project for an AAHA-accredited practice team than the Accredited Practice of the Year Award application. It can seem like a daunting task to put together an application book that showcases your practice, team, and your dedication to AAHA accreditation. The team needs to illustrate how they make AAHA accreditation shine throughout their practice. While the application process takes a lot of effort and collaboration from the entire team, every winning practice of the past will likely tell you that is was well worth it.

You may look at the list of requirements for the Accredited Practice of the Year application and wonder if your practice measures up. The wonderful thing about the AAHA-Accredited Practice of the Year Award is that it is accessible to any AAHA practice, big or small. Pembroke Animal Hospital is a small practice in Ontario, Canada. Pembroke is not a booming metropolis; the practice does not boast specialists or board-certified surgeons and the equipment is not the most state of the art. It is a small companion animal practice with two even smaller wellness centers and a team of approximately 20, but this practice went on to win AAHA-Accredited Practice of the Year in 2016. In our application, we focused on our passion for AAHA and how we showcase that within our hospital. It's not about the size of your practice or clientele—it's about the size of your passion.

A practice can have the best doctors and the most current medical diagnostics, but what really makes a great AAHA practice is a passionate team that works together to live their core values. Each member of the team makes a huge impact on hospital culture. When applying for

the Accredited Practice of the Year award, it's important to have a team that is enthusiastic and willing to work together to showcase what makes them unique. Sourcing all of the documents and putting together the application booklet is hard work. It's extra work on top of the team's regular duties. Having all team members contribute can even out the workload and will give your application more diversity. More ideas and input from all team members can really make your practice stand out and personalize your application. Break it into parts and collect the needed documents, photos, and information. Most importantly, collaborate with your team about the message. How do you want to portray your team and their passion for AAHA? How does AAHA impact your culture? How does AAHA shape the way you interact with clients and treat your patients?

It's one thing to tell clients you are living up to the standards that AAHA sets for your practice, but how do you show them that you exemplify AAHA accreditation? If your team can convey that message to your clients honestly, passionately, and effectively, then you are ready to apply for AAHA-Accredited Practice of the Year. It may seem like a lot of work, but all you really need is an all-star team that is able to make AAHA shine brightly in your practice.

Applications for the 2019 AAHA-Accredited Practice of the Year Award are now being accepted at aaha.org/awards!

Guylaine Charette, DMV, is AAHA's new president-elect. After receiving her DMV from the Universitè de Montrèal in 1984, Charette joined 2016 AAHA-Accredited Practice of the Year Pembroke Animal Hospital in Pembroke, Ontario, Canada, where she still practices as an owner



### **CE Roundup**

From one-day workshops to immersive onsite programs, AAHA's CE offerings have you covered.

### Conferences

### Connexity by AAHA

September 12-15, 2019 | Indianapolis, Indiana Early registration pricing ends January 31 aaha.org/connexity

### Practice Management CE

### **Veterinary Management Institute (VMI)**

A three-part, executive-level, veterinary-specific management program February 14-16, 2019 | Fort Collins, Colorado June 20-22, 2019 | Fort Collins, Colorado November 21–23, 2019 | Denver, Colorado Early registration pricing ends January 8 aaha.org/vmi

### **Veterinary Management Series: Practice Essentials** (Formerly Veterinary Management School [VMS])

Essential skills for an exceptional practice April 17–20 or August 7–10, 2019 | Lakewood, Colorado aaha.org/vms

### **Veterinary Management Series:** Culture, HR, and Marketing

Because your practice deserves to thrive May 1-4, 2019 | Lakewood, Colorado aaha.org/vms

### Adventure CE

This year's educational content will focus on endocrinology January 27-30, 2019 | Vail, Colorado aaha.org/adventure

### Online and On-Demand Programs

### **New! Diabetes Educator Certificate Course**

Improve the quality of life of diabetic pets and the people who love them aaha.org/diabetescourse

### **New! Companion Animal Euthanasia Training Academy** (CAETA) Online Certification Program

Hone the comprehensive skillset required for companion animal euthanasia aaha.org/caeta

### **CE Highlight of the Month: Transform Your Management** Skills, Career, and Practice

Do your goals include helping your practice thrive, improving your management skills, or growing your career? The Veterinary Management Institute (VMI) can give you the tools to do just that.

Brought to you by AAHA and the Colorado State University College of Business, VMI's executive-level, veterinary-specific management program provides a unique opportunity for you to learn and grow with your colleagues through real-world veterinary case studies, interactive breakout sessions, and dynamic group discussions and lectures.

With the perfect combination of online and in-person learning led by accomplished, expert learning facilitators, you'll walk away with skills you can implement immediately to gain a competitive advantage while earning 63 CVPM-qualified CE hours in person and up to 21 additional CVPM-qualified CE hours in self-paced online sessions.

VMI is designed to evolve with our ever-changing industry, which means you'll develop the skills you need to:

- Create a positive, uplifting work environment
- Gain a competitive edge and grow your practice
- Improve communication and handle difficult conversations with ease
- Increase employee retention and satisfaction

Invest in yourself and embrace excellence with VMI. The next in-person session will be held in Fort Collins, Colorado, February 14-16, 2019.

Learn more about the program and enroll at **aaha.org/vmi.** Register by January 8 to save \$500.





AAHA's Healthy Workplace Culture Initiative aims to help veterinary teams create work environments that foster overall wellbeing. You know that compassion fatigue, burnout, stress, and anxiety seem to plague the profession. What you may not know is that many studies and surveys are pointing to poor communication and negative work dynamics as contributing factors.

It's almost impossible to be happy, productive, and engaged in an unhealthy culture. The studies show that disengaged teams are less invested in their work and will consistently underperform.

Healthy practice cultures, however, create engaged and happy employees who "show up with their capes on." According to Curt Coffman, MBA, and Kathie Sorensen, PhD, authors of *Culture Eats Strategy for Lunch*, engaged

employees "consistently perform at significantly higher levels across outcome measures. They enthusiastically drive productive relationships with customers and associates. Continuous improvement and innovation are a personal quest."

The tools and resources that make up AAHA's Healthy Workplace Culture Initiative will help you and your team be the superheroes you've wanted to be by cultivating happy, more engaged team members who deliver a client and patient experience that consistently exceeds expectations.

Put on your cape and unleash the power of your team. Find out where your practice stands and how to take the next step to greatness at **aaha.org/culture**.

©AAHA/Tony Cole NOVEMBER 2018 13

# aaha.org/vmg

AAHA-ACCREDITED VETERINA
MANAGEMENT GROUPS

Truly great practices never stop improving.

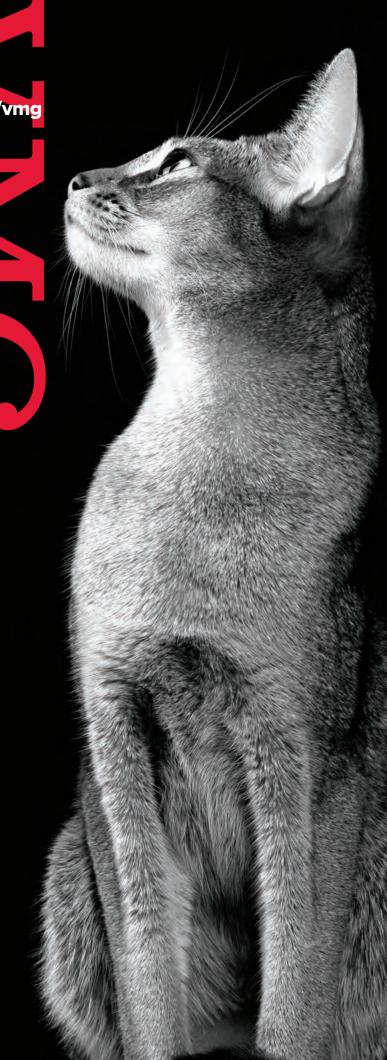
AAHA-Accredited Veterinary Management Groups (VMG) work together to help each other attain greater success.

Collaborate with the best of the best to help your practice achieve its full potential.

Are you ready to take your practice to new heights?

Learn more at aaha.org/vmg





### 6 Steps to Leaving Your Comfort Zone

"Change can be scary, but it is also rewarding," wrote Amanda Brunson, MHR, on the Society for Human Resource Management blog, Ask Amanda. But, because comfortable routines can be hard to give up, she offered the following tips for leaving your comfort zone and embracing change:

- 1. Set SMART goals. Specific, measurable, attainable, realistic, and timely (SMART) goals will help you pinpoint where you want to be and what you have to do to get there.
- 2. Partner up. Share your goals with someone who will mentor you and keep you on track. Find a mentor to share your aspirations with. This mentor will understand what she needs to do to help push you in the right direction. You will thank her eventually, even if you don't understand it now.
- 3. Push yourself. Brunson said, "Try pushing yourself to do something you might not normally do. This encourages your personal growth and promotes self-understanding."
- 4. Embrace the learning curve. Doing new things means accepting the fact that you will make mistakes. Learn from them. Stay positive. Try again.
- 5. **Dream big.** "Nothing ventured, nothing gained," says the old adage. "The worst thing anyone can ever tell you is no," said Brunson. "You will never know unless you try."
- 6. Never stop learning. Once you achieve one goal, don't slip back into your comfort zone. Stay committed to change. Set a new goal or tackle an existing one.

# notedon



### Promising New Therapy for Type 1 Diabetes in Dogs and Humans

Purdue University reports that researchers there, in collaboration with the Indiana University School of Medicine, have successfully developed a new therapy for Type 1 diabetes that shows promise for use in dogs and humans. A collagen formulation mixed with pancreatic cells, this is the first minimally invasive therapy to successfully reverse Type 1 diabetes in mice within 24 hours and maintain insulin independence for at least 90 days. In short, treatment involves a new set of pancreatic cells to replace the clusters of cells, called islets, that aren't releasing insulin to control blood glucose levels.

The next step is a pilot clinical study in dogs with naturally occurring Type 1 diabetes. This will be conducted in collaboration with Purdue's College of Veterinary Medicine. "We plan to account for differences from [mice] to human[s] by helping dogs first. This way, the dogs can inform us on how well the treatment might work in humans," said Clarissa Hernandez Stephens, first author on the work.

Type 1 diabetes affects approximately 1 in every 100 companion animals in the US, including dogs and cats, and nearly 1.25 million American children and adults. Because diabetes acts similarly in dogs and humans, treatment has, so far, been largely the same. Both need glucose monitoring and administration of insulin. This also means that dogs and humans could potentially benefit from the same cure. "It's as easy as it comes, just like getting a shot," said Sherry Voytik Harbin, PhD, professor of biomedical engineering and basic medical sciences at Purdue.

A YouTube video is available at youtu.be/vndD\_U2gb5Q.

### Stressed? Learn Something!

Writing in the *Harvard Business Review*, Chen Zang, MD, PhD, Christopher G. Myers, PhD, and David M. Mayer, PhD, described their investigation into the power of learning to relieve work-related stress. In the researchers' words, "Learning brings us new information and knowledge that can be useful for solving near-term stressful problems; it also equips us with new skills and capabilities to address or even prevent future stressors."

The researchers described a study of two groups: medical residents and employees in a variety of industries and organizations. They reported, "We found evidence that engaging in learning activities can buffer workers from detrimental effects of stress, including negative emotions, unethical behavior, and burnout."

The following are their research-based suggestions for using learning to deal with workplace stress.

### Change your internal messages about stress.

Instead of seeing an upcoming challenge at work as stressful, tell yourself it is an opportunity to learn and grow. Repeating this message over time will shift your mindset and better prepare you to handle the challenge.

Learn from and with coworkers. The authors suggested that "discussing a stressor with your peers and colleagues . . . might reveal hidden insights."

They cited the study of medical residents in which researchers reported "a correlation between team learning and reduced burnout" because of stress.

### Approach learning as a "break," not more work.

Seeing learning as a "break" from work makes it even more useful as a stress reducer. The authors explained, "Psychologically, taking time to . . . learn new things helps us develop . . . a sense of being capable of achieving goals and doing more."

The authors concluded with this advice: Incorporate learning at work even when you're not feeling stressed. It will help prepare you for stress when it appears.

### First Diagnosis of Rare Blood Disorder in Cat

In a recent "Case of the Month" report from the School of Veterinary Medicine at the University of California, Davis (UC Davis), Rob Warren described the case of Miao Miao, the first cat to be diagnosed with a congenital platelet disorder called Glanzmann thrombasthenia (GT).

Miao Miao's owners brought him to the veterinary hospital at UC Davis because of nosebleeds. The four-year-old male domestic shorthair's previous medical issues, including blood-clotting problems, prompted specialists at the hospital to run a series of tests. They ruled out anemia, inflammation, bleeding in bodily cavities, and abnormal platelet count. However, Miao Miao was kept in the hospital for observation and further review of his case.

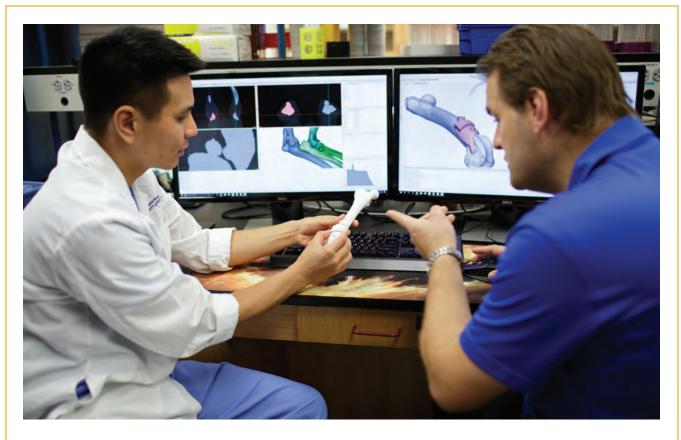
Ronald Li, DVM, MVetMed, DACVECC, PhD, critical care specialist at the UC Davis veterinary hospital, analyzed Miao Miao's platelets in his state-of-the-art platelet physiology laboratory. Li found that Miao Miao has GT, a disorder never before reported in a cat.

In humans and dogs, GT is caused by a genetic mutation in the genes responsible for making a platelet protein that is essential for clot formation. Li is currently analyzing Miao Miao's DNA to further characterize his genetic mutations. He hopes to identify the mutation so cats with a similar bleeding disorder can be tested in the future.

GT probably puts Miao Miao at risk for spontaneous bleeding for the rest of his life. Because he's the first cat diagnosed with GT, there is no standard protocol for treatment. However, his owners report success in treating him with a Chinese herbal formula with antihemorrhagic effects called Yunnan Baiyao.



16 TRENDS MAGAZINE ©UC Davis Veterinary Medicine



### Veterinary Medicine and Advanced 3D Technology at the University of Florida

The College of Veterinary Medicine at the University of Florida reports that Chance, a Greater Swiss mountain dog, has had a severe limb deformity corrected by surgeons using advanced 3D technology.

"We have the Rolls-Royce of 3D printers," said Adam Biedrzycki, BVSc, DACVS, DECVS, PhD, assistant professor of large animal surgery. "It can print parts . . . that are biocompatible for medical applications. . . . They can be used in live tissues."

This is important for creating bone models that "actually feel and handle like the real thing" during presurgery practice. "We can first make the cuts and simulate the repair and unite the bones virtually with plates and screws in the 3D computer environment, then print them out and complete the surgery using the printed models," Biedrzycki continued. "This leads to time saved in the operating room, greater patient safety due to reduced risk, and enhancement of surgical accuracy."

Chance, a rescue from Canada, was diagnosed with a bilateral patellar luxation as a result of limb deformities, with the right hind leg being the most severely affected. Thanks to help from the Greater Swiss Mountain Dog Rescue Foundation, he was transported to the University of Florida for surgery.

The process begins with inputting diagnostic computerized tomography (CT) scans into specialized software to plan the surgical procedure. Then, a model of the patient's bone is printed, to which a customized 3D printed surgical guide is attached. "We affix the guide with a couple of pins," said Stanley Kim, BVSc, MS, DACVS, associate professor of small animal surgery, who operated on Chance. "It's matched to the contour of the bone."

Following his successful surgery, Chance received water treadmill therapy and has continued to recuperate well.

Biedrzycki said, "We hope that the knowledge and expertise we have will allow this [3D technology] to become routine, benefiting many more patients."

## Iowa State University to Lead a National Institute to Fight Antimicrobial Resistance

The Association of Public and Land-Grant Universities (APLU) and the Association of American Veterinary Medical Colleges (AAVMC) have selected Iowa State University to lead the new Institute for Antimicrobial Resistance Research and Education.

The institute stems from recommendations made by a joint APLU/AAVMC task force, which called for research and education initiatives to address antimicrobial resistance. The institute will help coordinate and implement those recommendations at universities and veterinary medical colleges across the country.

Each year in the US, at least 2 million people become infected with bacteria resistant to antibiotics, and 23,000 people die as a direct result of these infections. Many more die from other conditions complicated by antibiotic-resistant infections, according to the Centers for Disease Control and Prevention. These drug-resistant "superbugs" also harm the ecosystem and cost billions annually in medical costs and economic losses.

"Antimicrobial resistance touches each of us in our daily lives. This new institute provides a great resource for the entire country as we work to build strong, collaborative research and educational programs to mitigate this risk," said Paul Plummer, DVM, DACVIM, PhD, associate professor at the Iowa State University College of Veterinary Medicine. He will serve as executive director of the Institute for Antimicrobial Resistance Research and Education.





Veterinary Insulin Approved for Both Dogs and Cats<sup>1</sup>



with you for life

### With Proven Efficacy:

- Achieved glycemic control and reduced clinical signs in diabetic dogs<sup>1</sup>
- Matches canine insulin, minimizing risk of anti-insulin antibodies<sup>2</sup>
- Predictable efficacy in cats and comparable remission rates to glargine<sup>3</sup>
- 40 IU/mL concentration for more accurate dosing in small dogs and cats

With the convenient VetPen®, you can offer clients 2 administration options for Vetsulin® in BOTH diabetic dogs and cats.

### The traditional method.

- Standard option widely used in diabetic pets
- Cost-effective delivery option for larger diabetic pets



### An easy option.

- The first insulin pen designed exclusively for diabetic pets
- A reassuring option for owners of newly diagnosed pets





# With Full Support for Your Practice and Pet Parents:

- www.vetsulin.com
- https://usa.petdiabetesmonth.com
- Training Videos
- Pet Diabetes Tracker App

### Go to www.vetsulin.com to find out more.

Vetsulin\* should not be used in dogs or cats known to have a systemic allergy to pork or pork products. Vetsulin\* is contraindicated during periods of hypoglycemia. Keep out of reach of children. As with all insulin products, careful patient monitoring for hypoglycemia and hyperglycemia is essential to attain and maintain adequate glycemic control and prevent associated complications. Overdosage can result in profound hypoglycemia and death. The safety and effectiveness of Vetsulin\* in puppies and kittens, breeding, pregnant, and lactating dogs and cats has not been evaluated. See package insert for full information regarding contraindications, warnings, and precautions.

### Please see other side for full prescribing information.

**References 1.** Data on file, Merck Animal Health. **2.** Davison LJ, Walding B, Herrtage, ME, Catchpole B. Anti-insulin antibodies in diabetic dogs before and after treatment with different insulinpreparations. *J Vet Intern Med.* 2008;22:1317-1325. **3.** Feldman EC. Diabetes remission in cats: which insulin is best? *Compend Contin Educ Vet.* 2009;31(7 Suppl A).



Copyright © 2017 Intervet Inc., d/b/a Merck Animal Health, a subsidiary of Merck & Co., Inc. All rights reserved. US/VTS/1017/0032

### vetsulin®

### Intervet/Merck Animal Health

(porcine insulin zinc suspension) NADA 141-236, Approved by FDA

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

### DESCRIPTION

vetsulin® is a sterile aqueous zinc suspension of purified porcine insulin. Each mL contains:

purified porcine insulin (35% amorphous and 65% crystalline)	40 IU
Zinc (as chloride)	0.08 mg
Sodium acetate trihydrate	1.36 mg
Sodium chloride	7.0 mg
Methylparaben (preservative)	1.0 mg

pH is adjusted with hydrochloric acid and/or sodium hydroxide

### INDICATION

vetsulin® (porcine insulin zinc suspension) is indicated for the reduction of hyperglycemia and hyperglycemia-associated clinical signs in dogs and cats with diabetes mellitus.

### DOSAGE AND ADMINISTRATION

FOR SUBCUTANEOUS INJECTION IN DOGS AND CATS ONLY

Vials: USE OF A SYRINGE OTHER THAN A U-40 SYRINGE WILL RESULT IN

Shake the vial thoroughly until a homogeneous, uniformly milky suspension is obtained. Foam on the surface of the suspension formed during shaking should be allowed to disperse before the product is used and, if required, the product should be gently mixed to maintain a homogeneous, uniformly milky suspension before use. Clumps or white particles can form in insulin suspensions: do not use the product if visible clumps or white particles persist after shaking thoroughly.

Cartridges: VETSULIN® CARTRIDGES SHOULD BE USED EXCLUSIVELY WITH VETPEN™ AND 29G/12 MM PEN NEEDLES. Prior to loading vetsulin® cartridges, shake the cartridge until a homogeneous, uniformly milky suspension is obtained. Clumps or white particles can form in insulin suspensions: do not use the product if visible clumps or white particles persist after shaking.

The detailed instructions for use provided with VetPen™ should be strictly followed.

The injection should be administered subcutaneously, 2 to 5 cm (3/4 to 2 in) from the dorsal midline, varying from behind the scapulae to the mid-lumbar region and alternating sides.

Always provide the Owner Information Sheet with each prescription

### Dogs

The initial recommended vetsulin® dose is 0.5 IU insulin/kg body weight. Initially, this dose should be given once daily concurrently with, or right after a meal

Twice daily therapy should be initiated if the duration of insulin action is determined to be inadequate. If twice daily treatment is initiated, the two doses should each be 25% less than the once daily dose required to attain an acceptable nadir. For example, if a dog receiving 20 units of vetsulin® once daily has an acceptable nadir but inadequate duration of activity, the vetsulin® dose should be changed to 15 units twice daily.

The veterinarian should re-evaluate the  $\log$  at appropriate intervals and adjust the dose based on clinical signs, urinallysis results, and glucose curve values until adequate glycemic control has been attained. Further adjustments in dosage may be necessary with changes in the dog's diet, body weight, or concomitant medication, or if the dog develops concurrent infection, inflammation, neoplasia, or an additional endocrine or other medical disorder.

The initial recommended dose in cats is 1 to 2 IU per injection. The injections should be given twice daily at approximately 12 hour intervals. For cats fed twice daily, the injections should be given concurrently with, or right after each meal. For cats fed ad libitum, no change in feeding schedule is needed.

The veterinarian should re-evaluate the cat at appropriate intervals and adjust the dose based on clinical signs, urinallysis results, and glucose curve values until adequate glycemic control has been attained. Further adjustments in dosage may be necessary with changes in the cat's diet, body weight, or concomitant medication, or if the cat develops concurrent infection, inflammation, neoplasia, or an additional endocrine or other medical disorder

### CONTRAINDICATIONS

Dogs and cats known to have a systemic allergy to pork or pork products should not be treated with vetsulin®. vetsulin® is contraindicated during periods of hypoglycemia.

### WARNINGS

User Safety: For use in animals only. Keep out of the reach of children. Avoid contact with eyes. In case of contact, immediately flush eyes with copious amounts of water for 15 minutes. Accidental injection may cause clinical hypoglycemia. In case of accidental injection, seek medical attention immediately. Exposure to product may induce a local or systemic allergic reaction in sensitized individuals

Animal Safety: Owners should be advised to observe for signs of hypoglycemia (see Owner Information Sheet). Use of this product, even at established doses, has been associated with hypoglycemia. An animal with signs of hypoglycemia should be treated immediately. Glucose should be given orally or intravenously as dictated by clinical signs. Insulin should be temporarily withheld and, subsequently, the dosage should be adjusted, if indicated. Any change in insulin should be made cautiously and only under a veterinarian's supervision. Changes in insulin strength, manufacturer, type, species (animal, human) or method of manufacture (rDNA versus animal-source insulin) may result in the need for a change in dosage.

Appropriate diagnostic tests should be performed to rule out endocrinopathies in pets that are difficult to regulate (e.g., hyperadrenocorticism in dogs and

hyperthyroidism in cats).

### PRECAUTIONS

Animals presenting with severe ketoacidosis, anorexia, lethargy, and/or vomiting should be stabilized with short-acting insulin and appropriate supportive therapy until their condition is stabilized. As with all insulin products, careful patient monitoring for hypoglycemia and hyperglycemia are essential to attain and maintain adequate glycemic control and prevent associated complications. Overdosage can result in profound hypoglycemia and death. Progestogens, certain endocrinopathies, and glucocorticoids can have an antagonistic effect on insulin activity. Intact bitches should be ovariohysterectomized.

Progestogen and glucocorticoid use should be avoided

### Drug Interactions:

In the US clinical effectiveness studies, dogs and cats received various medications while being treated with vetsulin® including antimicrobials, antivirals, antifungals, antihistamines, analgesics, anesthetics/tranquilizers, diuretics, bronchodilators, corticosteroids (cats), NSAIDs, thyroid hormone supplementation, hyperthyroid medication (methimazole), internal and external parasiticides, anti-emetics, dermatological topical treatments and oral supplements, ophthalmic preparations containing antimicrobials and antiinflammatories, and various vaccines. No medication interactions were reported. This drug was not studied in

Reproductive Safety: The safety and effectiveness of vetsulin® in breeding, pregnant, and lactating dogs and cats has not been evaluated.

Use in puppies and kittens: The safety and effectiveness of vetsulin® in puppies nas not been evaluated

### ADVERSE REACTIONS

### Dogs

In the field effectiveness and safety study, 66 dogs were treated with vetsulin®. Sixty-two dogs were included in the assessment of safety. Hypoglycemia (defined as blood glucose < 50 mg/dL) with or without associated clinical signs occurred in 35.5% (22/62) of the dogs at various times during the study. Clinical signs of hypoglycemia were generally mild in nature (described as weakness, lethargy, stumbling, falling down, and/or depression). Disorientation and collapse were reported less frequently and occurred in 16.1% (10/62) of the dogs. Two dogs had a seizure and one dog died during the seizure. Although never confirmed, the presumptive diagnosis was hypoglycemia-induced seizures. In the rest of the dogs, hypoglycemia resolved with appropriate therapy and adjustments in insulin dosage. Seven owners recorded the following observations about the injection site on the home monitoring forms: swollen, painful, sore, and a bleb under the skin.

The following clinical observations occurred in the field study following treatment with vetsulin® and may be directly attributed to the drug or may be secondary to the diabetic state or other underlying conditions in the dogs: hematuria, vomiting, diarrhea, pancreatitis, non-specific hepatopathy/pancreatitis, development of cataracts, and urinary tract infections.

In a 21-day field safety and effectiveness study, 40 dogs, already well controlled on vetsulin®, were administered vetsulin® using a VetPen™ insulin pen loaded with a pre-filled 2.7 mL vetsulin® cartridge and 29 gauge/12 mm pen needles. All dogs enrolled in the study were evaluated for safety. Loss of diabetic control was reported in 10 dogs, 3 of which were withdrawn from the study. Four dogs' loss of control resolved after dose adjustment while still using the insulin pen. For the remaining 3 dogs, the loss of diabetic control was reported at the end of the study and outcome was not documented. Two dogs had injection site reactions: edema in one dog and two instances of crusting in another. Poor appetite and weight loss

In a field effectiveness and safety study, safety data was reported for 78 cats receiving vetsulin  $^{\rm @}$ . Hypoglycemia (defined as blood glucose < 50 mg/dL) was reported in 61 cats (88 total incidences). Fifteen of the occurrences (involving 13 cats) were associated with clinical signs described as lethargy, diarrhea, decreased appetite/anorexia, vomiting, and hypothermia. One cat had seizures following accidental overdosing by the owner and again during the subsequent dose adjustment period. The cat responded to supportive therapy and had no further hypoglycemic episodes. In all cases of hypoglycemia, the clinical signs resolved following symptomatic treatment and/or dose adjustment. Polyneuropathy was reported in 4 cats. Two injection site reactions were reported; one as a mildly thickened subcutaneous tissue reaction and the second as a mild bruising.

The following clinical observations occurred in the field study following treatment with vetsulin® and may be directly attributed to the drug or may be secondary to the diabetic state or other underlying conditions in the cats: vomiting, lethargy, diarrhea, decreased appetite/anorexia, pancreatitis, dermal events, respiratory disease, urinary tract disorder, renal disease, dehydration, weight loss, polydipsia, polyuria, behavioral change, and ocular discharge/conjunctivitis. In a smaller field effectiveness and safety study, 14 cats were treated with vetsulin®. Hypoglycemia was reported in 6 cats (8 total occurrences). Lethargy not associated with hypoglycemia was reported in 4 cats (6 total occurrences). The following clinical observations occurred in the field study following treatment with vetsulin® and may be directly attributed to the drug or may be secondary to the diabetic state of other underlying conditions in the cats: foul odor to stool, diarrhea, dull coat, rapid, shallow breathing, stiff gate in rear, gallop rhythm, and pruritus with alopecia.

During the 1998-2007 period, the following adverse events in 50 cats treated  $\,$ with porcine insulin zinc suspension were reported to Intervet International and Intervet Inc: Death, seizures, lack of effectiveness/dysregulation, hypoglycemia, allergic or skin reaction, lethargy, vomiting/diarrhea, injection pain, hyperthermia, nystagmus, PU/PD, and abnormal behavior.

In a 21-day field safety and effectiveness study, 36 cats, already well controlled on vetsulin®, were administered vetsulin® using a VetPen™ insulin pen loaded with a pre-filled 2.7 mL vetsulin® cartridge and 29 gauge/12 mm pen needles. Loss of diabetic control was reported in three cats all of which resolved after dose adjustment while still using the insulin pen. Hypoglycemia was reported in one cat. The cat recovered with supportive care and dose adjustment.

ort suspected adverse drug experiences, call Merck at 1-800-224-5318

For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS, or <a href="http://www.fda.gov/AnimalVeterinary/SafetyHealth">http://www.fda.gov/AnimalVeterinary/SafetyHealth</a>

### GENERAL PHARMACOLOGY

vetsulin® is a mixture of amorphous and crystalline insulin resulting in immediate and prolonged insulin activity. In dogs, vetsulin® may show two peaks of activity In a laboratory study, 12 healthy adult Beagles were administered vetsulin® at a

dose of 0.5 IU/kg. The onset of activity varied from 0.5 to 2 hours: the time to peak activity varied from 1 to 10 hours; and the duration of activity varied from 10 to 24 hours. In diabetic dogs, vetsulin® has two peaks of activity following subcutaneous administration (the first occurs at 2 to 6 hours and the second at 8 to 14 hours). The duration of activity varies between 14 and 24 hours.

In cats, vetsulin® has a single peak of activity. In a laboratory study, 12 healthy adult cats were administered vetsulin® at a dose of 0.5 IU/kg. The onset of activity varied from 0.5 to 2 hours; the time to peak activity varied from 2 to 6 hours; and the duration of activity varied from 8 to 24 hours. In diabetic cats, the peak activity following subcutaneous administration of vetsulin® occurs between 1.5 and 8 hours, and the duration of activity varies between 8 and 12 hours.

The peak(s) of activity, duration of activity, and dose required to adequately control diabetic signs vary between individuals and may vary in the same individual from day to day. The time ranges should only be considered as initial guidelines.

### **EFFECTIVENESS**

Dogs
A total of 66 client-owned dogs were enrolled in and 53 completed the effectiveness and safety field study. The dogs completing the study included 22 breeds of purebred and various mixed breed dogs ranging in age from 4.8 to 14 years, and ranging in weight from 4.2 to 51.3 kg. Of the dogs completing the study, 25 were spayed females and 28 were male (21 neutered and 7 intact)

Dogs were started on vetsulin® at a dose of 1 IU/kg plus a body weight-dependent dose supplement once daily. The initial treatment time to reach acceptable glycemic control (Dose determination period) ranged from 5 to 151 days. Dogs were evaluated for treatment effectiveness three times at 30-day intervals (Study Period). The blood glucose curve means and mean nadirs were compared pre- and post-treatment to assess effectiveness. Glycemic control was considered adequate if an acceptable blood glucose curve was achieved (reduction in hyperglycemia and a nadir of 60 - 160 mg/dL), clinical signs of hyperglycemia (polyuria, polydipsia, and ketonuria) were improved, and hypoglycemia (blood glucose < 50 mg/dL) was avoided. The blood glucose curve mean was reduced from 370 mg/dL pre-treatment to 151 mg/dL, 185 mg/dL, and 184 mg/dL at the three treatment period evaluations. The blood glucose mean nadir was reduced from 315 mg/dL pre-treatment to 93 mg/dL, 120 mg/dL, and 119 mg/dL at the three treatment period evaluations. Sixty days after an adequate vetsulin® dose was initially established, 94%, 96% and 83% of study dogs experienced a reduction in polyuria, polydipsia, and ketonuria, respectively. Investigators reported adequate glycemic control an average of 81% of the time during the Study Period.

In a 21-day field safety and effectiveness study, 40 dogs, already well controlled on vetsulin®, were administered vetsulin® using a VetPen™ insulin pen loaded with a pre-filled 2.7 mL vetsulin® cartridge and 29 gauge/12 mm pen needles. Thirty-eight of 40 dogs were evaluated for effectiveness. Thirty-seven of the 38 owners (97.4%) said they were able to learn how to use the pen. Thirty-five of the 38 owners (92.1%) said the pen was well tolerated by the dogs. For 34 of the 38 dogs (89.5%), the investigators said that the diabetes was not negatively affected by the use of the pen.

### Cats

A total of 85 client-owned cats (53 males and 25 females-all neutered) of various breeds were enrolled in a 60 day field effectiveness and safety study with continued use up to Day 180. Seven cats were removed from the study prior to the Day 7 evaluation. The remaining cats ranged in age from 3 to 17.5 years and in weight from 1.9 to 10.8 kg. Seventy-two cats completed the study to Day 60 and 66 cats completed to Day 180. The cats were started on vetsulin® at an initial dose of 1 to 2 IU insulin twice daily. Scheduled evaluations occurred at Days 7, 14, 30, 60, and 180. Dose adjustments were allowed at and between the evaluations. Effectiveness was based on blood glucose curve mean, blood glucose nadir and improvement in clinical signs. Blood glucose curve means decreased from 394 mg/dL on Day 0 to 217 mg/dL on Day 60. The mean blood glucose nadir decreased from 343 mg/dL on Day 0 to 146 mg/dL on Day 60. Fourteen client-owned cats (10 males and 4 females-all neutered) of various breeds were enrolled in a 60 day effectiveness and safety field study. The cats ranged in age from 5 to 14 years and in weight from 3.40 to 6.97 kg. Twelve cats completed the study. The cats were started on vetsulin® at an initial dose of 1 to 2 IU insulin twice daily. Scheduled evaluations occurred at Days 7, 14, 30, and 60. Dose adjustments were allowed at and between the evaluations. The blood glucose curve means decreased from 354 mg/dL on Day 0 to 162 mg/dL on Day 60. The mean blood glucose nadir decreased from 321 mg/dL on Day 0 to 99 mg/dL on Day 60.

In a 21-day field safety and effectiveness study, 36 cats, already well controlled on vetsulin<sup>®</sup>, were administered vetsulin<sup>®</sup> using a VetPen<sup>™</sup> insulin pen loaded with a pre-filled 2.7 mL vetsulin<sup>®</sup> cartridge and 29 gauge/12 mm pen needles. Thirty-six owners (100%) said they were able to learn how to use the pen. Thirty-four owners (94.4%) said the pen was well tolerated by the cats. For thirty-five cats (97.2%), the investigators said that the diabetes was not negatively affected by the use of the pen.

### HOW SUPPLIED

vetsulin® is supplied as a sterile injectable suspension in multidose vials containing 10 mL of 40 IU/mL porcine insulin zinc suspension or in multidose cartridges containing 2.7 mL of 40 IU/mL porcine insulin zinc suspension. Vials are supplied in cartons of one, 10 mL vial. Cartridges are supplied in cartons of 10, 2.7 mL

### STORAGE CONDITIONS

Store in an upright position under refrigeration at 2°C to 8°C (36°F to 46°F). Do not freeze. Protect from light. The loaded VetPen™ can be stored on its side.

### Use contents within 42 days of first puncture.

Additional information about vetsulin®, VetPen™, and diabetes mellitus can be found at www.vetsulin.com

Distributed by: Intervet Inc (d/b/a Merck Animal Health), Madison, NJ 07940

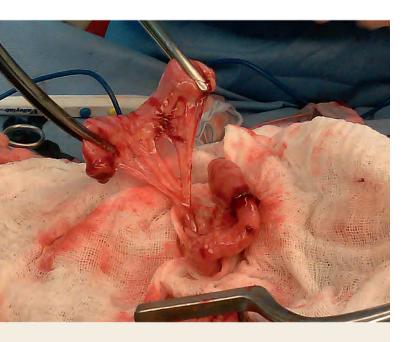
Copyright © 2017 Intervet Inc., a subsidiary of Merck & Co., Inc. All rights reserved. Intervet Inc. d/b/a Merck Animal Health, Madison, NJ 07940

152234 R2

CPN: 1047430.5

# JAAHA

# ABSTRACTS



### 54.6 NOV/DEC 2018

Editor in Chief Alan H. Rebar, DVM, PhD, DACVP, North Carolina State University, Raleigh, North Carolina Associate Editor Linda Ross, DVM, MS, DACVIM (SAIM), Tufts University, North Grafton, Massachusetts Managing Editor Laura Esterman

JAAHA, Journal of the American Animal Hospital Association is published as an official scientific and educational publication of the American Animal Hospital Association. The purpose of the journal is to publish accurate, timely scientific and technical information pertaining to the practice of small animal medicine and surgery. JAAHA is available in print and online. Log onto jaaha.org for more information. If you are interested in becoming a reviewer for JAAHA, please contact jaaha@aaha.org.

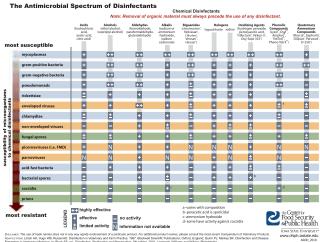
JAAHA, Journal of the American Animal Hospital Association 12575 W Bayaud Ave, Lakewood, CO 80228 Phone: 303-986-2800 | Fax: 303-986-1700 jaaha@aaha.org | jaaha.org

©2018 AAHA. All rights reserved.

### VETERINARY PRACTICE GUIDELINES

2018 AAHA Infection Control, Prevention, and Biosecurity Guidelines

J W Stull, E Bjorvik, J Bub, G Dvorak, C Petersen, H L Troyer A veterinary team's best work can be undone by a breach in infection control, prevention, and biosecurity (ICPB). Such a breach, in the practice or home-care setting, can lead to medical, social, and financial impacts on patients, clients, and staff, as well as damage the reputation of the hospital. To mitigate these negative outcomes, the AAHA ICPB Guidelines Task Force believes that hospital teams should improve upon their current efforts by limiting pathogen exposure from entering or being transmitted throughout the hospital population and using surveillance methods to detect any new entry of a pathogen into the practice. To support these recommendations, these practice-oriented guidelines include step-by-step instructions to upgrade ICPB efforts in any hospital, including recommendations on the following: establishing an infection control practitioner to coordinate and implement the ICPB program; developing evidence-based standard operating procedures related to tasks performed frequently by the veterinary team (hand hygiene, cleaning and disinfection, phone triage, etc.); assessing the facility's ICPB strengths and areas of improvement; creating a staff education and training plan; cataloging client education material specific for use in the practice; implementing a surveillance program; and maintaining a compliance evaluation program. Practices with few or no ICPB protocols should be encouraged to take small steps. Creating visible evidence that these protocols are consistently implemented within the hospital will invariably strengthen the loyalties of clients to the hospital as well as deepen the pride the staff have in their roles, both of which are the basis of successful veterinary practice.



### ORIGINAL STUDIES

### Assessing the Efficacy of Maropitant Versus Ondansetron in the Treatment of Dogs with Parvoviral Enteritis

L Sullivan, J P Lenberg, P Boscan, T B Hackett, D C Twedt Antiemetics are commonly prescribed during the treatment of canine parvoviral enteritis. This blinded, randomized prospective study compared the quality of clinical recovery and duration of hospitalization in canine parvoviral dogs receiving either maropitant (1 mg/kg [0.45 mg/lb] IV q 24 hr, n = 11) or ondansetron (0.5 mg/kg [0.23 mg/lb] IV q 8 hr, n = 11). All dogs were treated with IV fluids, cefoxitin, and enteral nutrition. Frequency of vomiting and pain scoring were recorded twice daily. Rescue analgesics and antiemetics were administered as dictated by specific pain and vomiting criteria. Clinical severity scoring, body weight, and caloric intake were monitored daily. When comparing dogs receiving maropitant versus ondansetron, respectively, there were no differences in duration of hospitalization (3.36  $\pm$  0.56 versus  $2.73 \pm 0.38$  days, P = .36), requirement of rescue antiemetic (3/11 versus 5/11 dogs, P = .66), duration of vomiting (5 versus 4 days, P = .65), or days to voluntary food intake (2 versus 1.5 days, P = 1.0). Results of this study suggest that maropitant and ondansetron are equally effective in controlling clinical signs associated with parvoviral enteritis.

### ORIGINAL STUDIES

### Evaluation of Pulse Oximetry in Healthy Brachycephalic Dogs

S Arulpagasam, C Lux, A Odunayo, J Biskup, X Sun Brachycephalic airway syndrome (BAS) is characterized by increased upper airway resistance due to conformational abnormalities occurring in brachycephalic dogs (BD). In this prospective study, we evaluated pulse oximetry (SpO2) and arterial blood gas values in 18 healthy BD and compared these values with those of 18 healthy mesocephalic and dolichocephalic dogs (MDD). All dogs were assigned a BAS score based on an owner questionnaire. Inclusion criteria included presentation to the hospital for a problem unrelated to the respiratory system and unremarkable blood analyses and physical examination. In awake dogs, SpO2 values were obtained from a minimum of two sites. Dogs were then sedated, and SpO2 values were obtained again concurrently with an arterial blood gas sample. The SpO2 values were significantly lower in BD compared with MDD, but there were no statistically significant differences between BD and MDD for any arterial blood gas parameters. Based on the BAS score, BD who were moderately BAS affected (n = 5), had significantly lower arterial saturation of hemoglobin with oxygen values on arterial blood gas when compared with MDD (n = 18). Although BD had statistically lower SpO2 values than MDD, the mean SpO2 values for both groups were within the normal range.

### RETROSPECTIVE STUDIES

### Utility and Prognostic Significance of Neutrophil-to-Lymphocyte Ratio in Dogs with Septic Peritonitis

N Hodgson, E A Llewellyn, D J Schaeffer

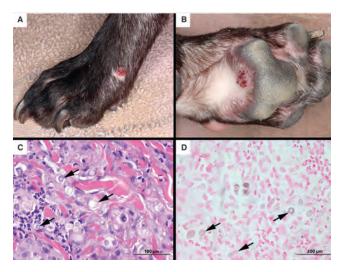
Systemic inflammation is known to cause WBC abnormalities, specifically neutrophilia and lymphopenia. The neutrophil-tolymphocyte ratio (NLR) is a simple and affordable biomarker that has been used in human clinical settings of sepsis but has not been investigated in veterinary species. We evaluated NLR in dogs with septic and nonseptic systemic inflammatory diseases and compared with a healthy dog population. An NLR ≥6 had an 84.39% sensitivity and 86.95% specificity to identify dogs with systemic inflammatory states; however, no ratio distinguished septic and nonseptic causes. The NLR was not associated with length of hospitalization, morbidity based on the acute patient physiologic laboratory evaluation scoring system, or mortality. The disassociation may be due to the retrospective nature of the study, including a restricted population size and acquisition of only a one-time blood sample. NLR is currently of limited use for diagnosis and prognosis in systemic inflammatory states in dogs, and larger, prospective studies are necessary to further evaluate NLR.

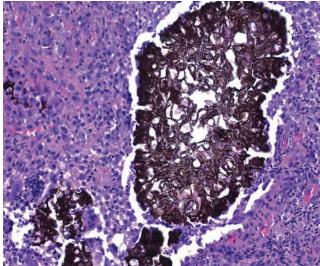


Suspected Carboplatin Extravasation Reactions in Seven Dogs

K B Miller, A Lejeune, R Regan, A Szivek, K Kow Carboplatin is a platinum chemotherapeutic agent commonly used in veterinary oncology that is currently classified as an irritant to local tissues when extravasated. To the authors' knowledge, there are no reports of vesicant injuries associated with carboplatin administration reported in the veterinary literature. In this case series, seven dogs are described to have experienced injuries following a suspected carboplatin extravasation resembling vesicant injuries a median of 7 days

after carboplatin administration (range 4-15 days). Wounds healed with a variety of treatments, including medical management and/or surgical debridement, a median of 25.5 days (range 7-49 days) after observation of the suspected extravasation injury. There were no obvious similarities involving carboplatin administration among patients to explain why these reactions occurred. Extravasation injury should be considered a possible local complication associated with carboplatin chemotherapy.





**REVIEW ARTICLES** Opportunistic Fungal Infections in Small Animals

A Dedeaux, A Grooters, N Wakamatsu-Utsuki, J Taboada Opportunistic fungal infections have long been recognized as rare causes of disease in immunocompetent dogs and cats. Recently, the escalating use of multiagent immunosuppression protocols (especially those that include cyclosporine) has resulted in an increased number of patients with opportunistic fungal infection encountered by small animal practitioners and has altered the typical

case phenotype. Based on histologic and cytologic features such as pigmentation, hyphal diameter, and distribution in tissue, these opportunistic mycoses can be placed into categories such as phaeohyphomycosis, hyalohyphomycosis, and eumycotic mycetoma. This review aims to summarize the clinical presentations, methods for diagnosis, treatment recommendations, and prognosis for both immunocompetent and immunosuppressed patients with opportunistic fungal infections. An example case description is included to illustrate the most common current clinical presentation.

### ONLINE CASE REPORTS

### A Case of Animal and Domestic Abuse Initially Diagnosed as Legg-Calve-Perthes Disease

### I Roth, J Martin

A 1 yr old castrated male shih tzu was evaluated for an acute right rear limb lameness and hyphema in the anterior chamber of the right eye. On initial examination, the dog was non-weight bearing on his right rear limb. Ophthalmic examination revealed a centrally located, superficial corneal ulcer in the right eye and blood in the anterior chamber. Radiographic findings of the pelvis and right rear were suggestive of avascular necrosis of the right femoral neck with resultant fracture and possible avascular necrosis of the left femoral neck. The dog presented 20 days later for evaluation of an acute left rear limb lameness. A left distal femur Salter-Harris type II fracture; a nondisplaced, healing right pubic fracture; and a healing right zygomatic arch transverse fracture were seen on radiographs. The dog's initial injuries were attributed to a routine fall at home, and radiographic interpretation suggested that this was plausible. Subsequent patient visits, evaluation of additional injuries, and interviews with the owner indicated that both animal and domestic abuse had occurred. Veterinarians must be alert to recognize signs of animal abuse and must be aware of the connection between animal and domestic abuse.

### **ONLINE CASE REPORTS**

Long-Term Treatment and Survival in Three Apparently Immunocompetent Dogs with Disseminated Fungal Infection Caused by Phialosimplex caninus

M Townsell, A M Legendre, D A Bemis, E Behrend, S Phillips Disseminated fungal infections cause morbidity and mortality in dogs. The prognosis varies depending on the infecting agent. Phialosimplex caninus is a recently recognized type of hyalohyphomyces. Knowledge regarding the clinical course of *P caninus* infection in dogs is limited to two previous case reports. The clinical features, diagnostic findings, responses to medical therapy, and long-term outcomes of three dogs with disseminated P caninus are presented in this study. All dogs had improved quality of life once itraconazole administration, with or without terbinafine, was instituted. Long-term disease remission was maintained even after discontinuation of antifungal therapy in a single dog.



### ONLINE CASE REPORTS

### Jejunocystoplasty and Bilateral Ureteral Reimplantation in a Dog Following Total Cystectomy

E A Maxwell, L Allen

A 6 yr old Boston terrier presented with acute onset of vomiting and anuria 4 days following a caesarian section and ovariohysterectomy for treatment of dystocia. A total cystectomy with ligation of both ureters was diagnosed via exploratory laparotomy surgery. A jejunocystoplasty was performed in addition to a bilateral reimplantation of the ureters into the reconstructed bladder and proximal urethra. Postoperative complications included a retained ureteral stent, persistent pyelectasia, persistent hydroureters, recurrent urinary tract infections, and intermittent urinary incontinence. Four years postoperation, the dog is doing clinically well with intermittent urinary incontinence and periodic urinary tract infections. Jejunocystoplasty with bilateral ureteral reimplantation should be considered as a treatment option for dogs following total cystectomy that occurred because of a surgical error. Owners should be informed of potential complications prior to surgery.

### ONLINE CASE REPORTS

### Evaluation of Zoledronate as Treatment for Hypercalcemia in Four Dogs

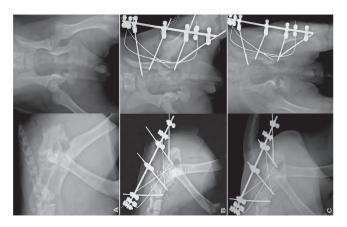
A Schenk, C Lux, J Lane, O Martin

Hypercalcemia is a biochemical abnormality that, when left untreated, can lead to life-threatening complications including renal failure. Bisphosphonates are routinely used to treat hypercalcemia, but most literature on veterinary patients describes the use of pamidronate. This retrospective case series describes the use of zoledronate for treatment of hypercalcemia in four dogs. Information including signalment, clinical signs, treatment, and outcome was collected. All dogs showed a decrease in total and ionized calcium concentrations after treatment with zoledronate. All treatments of zoledronate administered were well tolerated, but a previously unreported local hypersensitivity reaction was observed in one dog. This report is the first to document the efficacy of zoledronate for treatment of hypercalcemia in dogs.

### ONLINE CASE REPORTS

### Urine-Filled Large Prostatic Cystic Structure in Two Unrelated Male Miniature Dachshunds

J McGill, K M Thieman Mankin, J C Parambeth, J Edwards, A Cook A 1 yr old intact male miniature dachshund presented for posturing to urinate without voiding and nocturia. Physical examination revealed congenital reproductive abnormalities and a fluid-filled structure caudal to the urinary bladder. The dog was diagnosed with a prostatic cyst and underwent an exploratory laparotomy with an attempt to remove the cyst. Twelve weeks later, the dog returned with recurring clinical signs, and the cyst was found to have returned back to its original size. A second intact male miniature dachshund presented at 7 mo of age for stranguria. Physical examination revealed congenital reproductive abnormalities and a fluid-filled structure on rectal palpation, much like the first dog. The dog was diagnosed with a prostatic cyst and underwent an exploratory laparotomy. An attempt was made to close communication between the prostate and cyst. The dog re-presented 3 wk later for recurrence of clinical signs, and the prostatic cyst was found to have increased in size. Both dogs were euthanized because of recurrence of clinical signs. This report describes the presence of prostatic cysts in two young dogs with congenital abnormalities of the genital and reproductive tracts and the similarities seen in human boys diagnosed with prostatic utricles.



### **ONLINE CASE REPORTS**

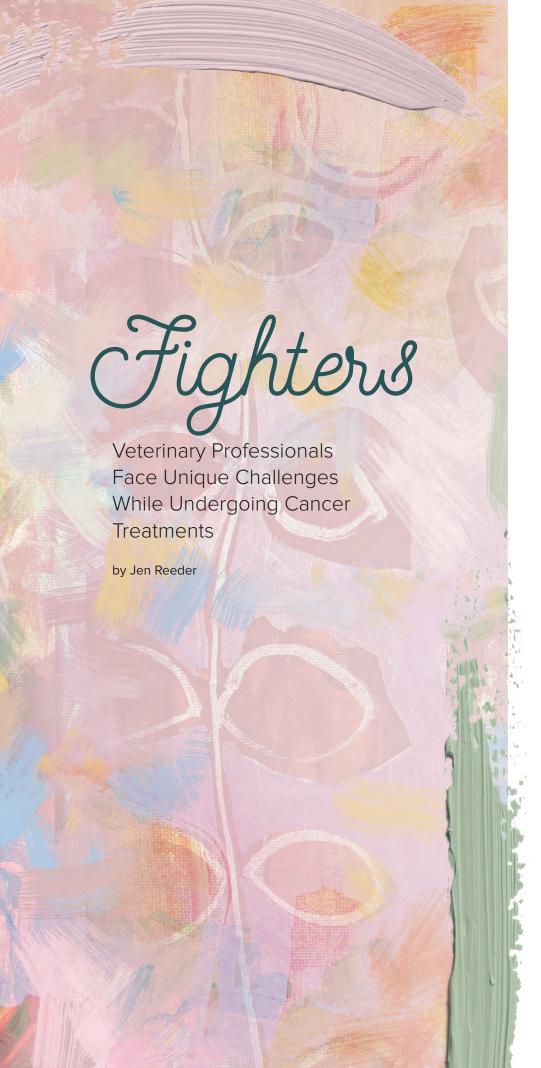
### Physeal Acetabular Fracture in a Dog Treated with External Fixation

T C Graville, J M Gambino, J A Syrcle

An acetabular physeal fracture in a 13 wk old dog was treated with open fixation using Kirschner wire cross pins and a four-pin Type 1A external fixator, resulting in successful healing of the fracture. Three years following the surgery, marked osteoarthrosis of the affected hip was noted, although clinical function of the hip was good. The authors suggest this fixation method be considered a viable option for fixation of acetabular physeal fractures in dogs.







DELIA SURROZ, DVM, OWNER OF AAHA-ACCREDITED VITALITY PET HOSPITAL in Salem, Oregon, was having a hectic morning at her practice, but the lump she'd found during a self-exam wouldn't leave her mind. She took a minute to call her doctor to see if her biopsy results were in, and the nurse who answered the phone blurted, "Oh, yes. You have cancer."

As a veterinarian, she began asking for details: What type? What stage? But the nurse told her to schedule time with the doctor to get additional information.

"Now I'm at work with all my employees and all these patients, and I can't leave because I'm the only doctor there, and I'm just trying to deal with this incredibly terrible blow," she recalled. "I had to be there for an hour by myself before the other doctor got there."

That moment in April 2016 was the start of an ordeal that lasted more than a year. During breast cancer treatments, Surroz, then 45, underwent a lumpectomy, four months of chemotherapy—which immediately put her in menopausethen 12 weeks of another chemotherapy protocol, followed by 6-and-a-half weeks of radiation.

Despite the exhaustion and pain, she worked through it all.

"I'm a major breadwinner for my family," Surroz said. "It's extremely costly to have a relief vet in, and you're trying to pay off all these medical bills. It's a big investment to own a practice. You don't want to lose it."

So Surroz would go to radiation five mornings a week and then work the rest of the day. When her white blood cell count crashed from the chemotherapy protocol, she'd have to give herself injections of Neulasta in the skin on her abdomen, which would swell her bone marrow and make every bone painful. Even leaning against a chair hurt, so when big, untrained dogs would slam into her, her pain would reach "a very scary level."

Staff helped with restraint, and she was able to pick and choose her cases to some degree. But, while the veterinarians on her team were "absolutely wonderful," four support staff quit while she battled the cancer.

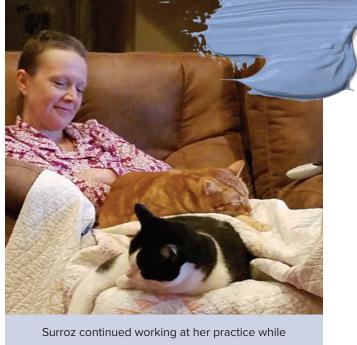
As the owner of her own practice, she couldn't take leave under the Family and Medical Leave Act (which the employer pays). She did have disability insurance, though because she was still working, she had to submit about eight inches of paperwork to get a "paltry" amount.

"Essentially, unless you don't go to work, they don't want to give you your disability. I kept saying, 'I am losing income because I'm not well enough to see as many rooms, to do the surgeries I would be doing.' I fought enough that I got at least some. But a lot of veterinarians don't even have disability coverage."

Then there was the issue of treating patients with breast cancer while she herself was battling the disease and, in some instances, having to euthanize.



Delia Surroz, DVM, owner of AAHA-accredited Vitality Pet Hospital in Salem, Oregon, was diagnosed with breast cancer in 2016.



she was receiving her cancer treatments.

"In the human medical profession, you don't have to deal with that. You may see lots of people with cancer, and I'm sure that would be incredibly devastating as well and have its own share of issues. But in our profession, we have to actually take the life of these patients," she said.

A major challenge Surroz found was the lack of resources for veterinarians with cancer. When she asked her oncologist what precautions she needed to take while performing the duties of her job, he told her, "You should be fine." She pressed him about zoonotic issues and all the things veterinarians are exposed to, and he eventually suggested wearing gloves. He also didn't have any advice about using X-rays during radiation, so she still doesn't assist with X-rays at her practice.

"I felt like I was on my own trying to figure out what to do and how best to protect myself," Surroz said.

Now she's passionate about starting a conversation in the veterinary profession about the unique challenges facing veterinarians and technicians coping with cancer. After surviving cancer, she found a Facebook group called "VDC-Veterinarians Dealing with Cancer," and realized she's not alone in the struggle. In fact, she noted that about one in eight women will develop breast cancer in her lifetime.

Because women are increasingly practicing veterinary medicine—in 2017, veterinary school enrollment was 80.5% female, according to the American Veterinary Medical Association—the problem will undoubtedly become more widespread in the profession. VDC also has

28 TRENDS MAGAZINE Photos courtesy of Delia Surroz numerous male members coping with prostate cancer; the issue touches everyone in the profession.

Early cancer detection is crucial, so Surroz hopes veterinarians will have regular checkups—even when working 60-hour weeks—and have a plan for what they would do if diagnosed with cancer. She urges practice owners to offer good health insurance policies to employees and understand that if an employee is diagnosed with cancer, they will need frequent breaks between seeing rooms and that surgery could be challenging due to neuropathy or other side effects of treatment. She'd love to potentially see retired or semiretired veterinarians volunteer as relief veterinarians for local veterinarians diagnosed with cancer.



Surroz says she would like to see more discussions about human cancer in the veterinary profession.

"I really feel it's an important conversation for the veterinary profession to have," she said. "We are unique with some of the things that we have to deal with."

Len Lichtenfeld, MD, deputy chief medical officer for the American Cancer Society, agreed. He was surprised that in more than 45 years as an oncologist, he'd never previously been asked what precautions veterinarians undergoing cancer treatments should take.

"Patients who are not veterinarians have to be concerned about exposures to animals, but vets are an even higher-risk category because of the frequency [with which] those exposures may occur," he said. "Each

### **Choosing Health Insurance** for Your Team

Cory Friedman, vice president of benefits consulting at Alera Veterinary (a division of Alera Group), suggested employers consider a group insurance plan when financially feasible because in almost every market, there are far more options available for group plans than for individuals.

For small groups with fewer than 50 employees, he said a fully insured plan is likely the best option when someone is undergoing cancer treatment because the overall health of the population has no impact on price.

"The fully insured market is what most people have come to know as 'health insurance' and is typically purchased with the help of a broker (like us at Alera Veterinary) through United Healthcare, Aetna, Blue Cross, Anthem, Humana, etc.," he explained.

Younger, heathier groups might want to consider a self-funded or level-funded health plan, Friedman said. The cost savings can be significant, but there are additional compliance requirements, and someone definitely needs to do their homework before going down this path.

"Regardless of how the health plan is purchased, I would encourage an employer to seek out additional programs that they can offer in tandem with the core health benefits. For example, we're seeing a lot of employers introduce healthcare advocacy programs, direct primary care programs, or even second-opinion services," Friedman said.

situation tends to be different: the type of cancer, the type of treatment, the intensity of the treatment, the degree of immunosuppression, the length of immunosuppression. All of those are factors. It's a question I would ask my infectious disease experts."

Dimitri Drekonja, MD, MS, chief of the Infectious Disease Section at the Minneapolis Veterans Affairs Health Care

System, associate professor of medicine at the University of Minnesota, and a member of the Infectious Diseases Society of America, concurred that there are degrees of compromise involved in immunosuppression. He suggested veterinarians start by asking their oncologist, "How long am I immune suppressed? How profound is my immune suppression?"

An oncologist should be able to answer those questions, but if they don't know risks specific to veterinarians, consider asking for a referral to an infectious disease specialist. Also take common-sense precautions, such as practicing good hand hygiene, wearing gloves any time you might come into contact with body fluids, and keeping a bottle of hand sanitizer in your pocket at all times.

"If I was a veterinarian, and I knew I was going to be going through cancer therapy, I would make sure I talked with my staff and said, 'Let's make sure that our alcohol dispensers are always full. Let's make sure that we always are wiping down the rooms between patients. Please stay home if you're sick, like you should be doing anyway. Cover your cough, wear a mask.' Now is the time to make sure that you're not cutting corners and that you are following all your standard precautions quite well," he advised.

While immunosuppressed, Drekonja said it's particularly important to keep even minor scratches from being licked by an animal. In particular, the *Capnocytophaga canimorsus* bacterium in the saliva of healthy dogs can lead to a fatal infection. If a dog licks a scratch while your immune system is compromised, seek antibiotics immediately.

Veterinarians at large animal practices face their own distinct risks while immunosuppressed, he noted, such as potentially inhaling *Rhodococcus equi* when working with horses. In those cases, he advises wearing a mask in barns and having a friend or assistant do particularly dirty tasks, like mucking out the stable.

"You can't mitigate all your exposures, but you can avoid the things that will put you into contact with the most bugs," he said.

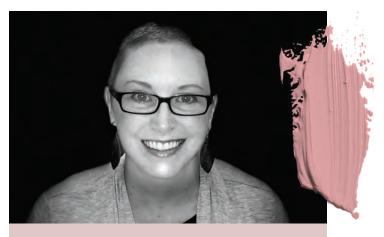
Piper Norton, DVM, DACVIM (LA), had just gotten married and given notice at the large animal practice where



Piper Norton, DVM, DACVIM (LA), at her wedding, three weeks before her cancer diagnosis. (Photo by Hyde Park Photography, hydeparkphoto.com.)

she worked because she was planning to start her own practice in Austin, Texas. The next day, she was diagnosed with breast cancer—invasive ductal carcinoma. She had a double mastectomy on November 16, 2017, which happened to be her 38th birthday. Then she underwent fertility treatments and harvested embryos in case she and her new husband ever choose to have children.

She began chemotherapy in January 2018, then underwent radiation—which left her with painful second-degree burns covering her rib cage—in May and



Norton on the day she finished radiation therapy. (Photo by Lisa Willis, DVM.)

30 TRENDS MAGAZINE Photos courtesy of Piper Norton



Although the Occupational Safety and Health Administration (OSHA) doesn't have guidelines that specifically reference veterinarians, OSHA's website on hazardous drugs addresses the connection between the drugs and a specific, immune-compromising diagnosis, such as leukemia and other cancers: osha.gov/SLTC/hazardousdrugs/hazards.html.

June. She developed lymph edema, which causes swelling that can lead to severe infections if nicked by a claw or tooth because the lymph drainage doesn't work properly.

Now she is cancer free with a less than 10% recurrence rate and is preparing to launch her mobile consulting business, Texas EMA. She's grateful that she had good insurance coverage-\$411,000 has already been billedand that she was able to delay starting her business until finished with cancer treatments.

"I was pretty darn sick with chemo, and I don't see, as a large animal veterinarian, how many people could be able to work through that. You're in a barn that's not air conditioned and dealing with a 1,000-pound horse and trying to have the strength to be able to do that... and Salmonella, E. coli, Clostridium perfringens and difficile, and so many other bacteria are potentially zoonotic in a large animal veterinary practice."

Like Surroz, Norton has found support through the VDC Facebook group. The closed group welcomes those in the veterinary field who either have cancer or are supporting a loved one with cancer. It was founded on October 15, 2017, by two veterinarians who were dealing with cancer themselves: Colleen McCoy, MS, DVM, and Drury Reavill, DVM, DABVP (Avian and Reptile and Amphibian Practice), DACVP.

Reavill, who survived ovarian cancer and owns the Zoo/ Exotic Pathology Service in Carmichael, California, said the members of the group support each other and feel safe sharing things they might not even tell loved ones.

"One of the things I found was that you can overburden your support system 'in real life.' You really want to try

and 'be strong' and not complain, but you are really scared," she said. "I like that this forum provides us a place to just 'say it."

Her cofounder, McCoy, was diagnosed with Ewing sarcoma in February 2017, when she was two months into a six-month internship and had just been accepted into a residency. She finished the internship during chemotherapy and was able to defer her residency until completing her 10 months of treatment. She is now cancer free and is a veterinary postdoctoral associate in the Division of Comparative Medicine at the Massachusetts Institute of Technology.

"Veterinary professionals are a unique breed: we are highly empathetic, ambitious, and independent. We are multitaskers, working hard full days with few breaks, balancing intense lives with work and family. Many of us are practice owners and so are also juggling the management of personnel and finances of a business. We have a unique perspective on cancer, as most of us have diagnosed it at some point in our patients and have guided owners through treatment for their pets," she said. "To have a group of us who share these characteristics and circumstances together in one place is a resource and a blessing."

Both founders encourage veterinarians dealing with cancer to join their Facebook group.

"We welcome new members personally, with an invitation to share as much as they feel comfortable or to simply exist within the group," McCoy said. "Cancer is a difficult journey. It scars you for life, both physically and mentally. There is no reason to try to do this all alone, not when there are others who share your experience who can help you." \*



Freelance journalist Jen Reeder is inspired by the tenacity of veterinary professionals dealing with cancer.

# Building a practice is difficult—building a hospital can be overwhelming . . .

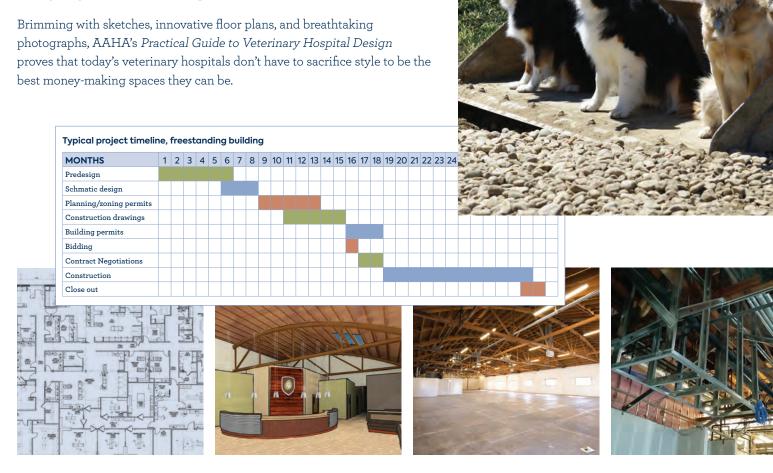


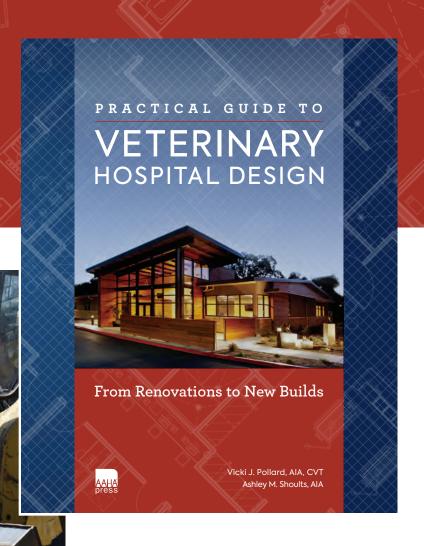
# This book makes it much easier!

New from AAHA, *Practical Guide to Veterinary Hospital Design* is a comprehensive, easy-to-follow guide to a complicated task—planning, designing, and building a state-of-the-art veterinary hospital.

Written for veterinarians and practice managers by the animal hospital architects at Animal Arts, and based on the best and most recent industry knowledge, this book will guide you every step of the way through facility renovations, additions, leasehold buildouts, and new builds, from initial planning through construction and move in.

Critical topics like project planning, interior design, and building systems and finishes are covered in detail. Chapters include everything from budgeting and timelines to mechanical systems and electrical and plumbing requirements. Information on Fear Free<sup>SM</sup> principles, animal-friendly colors, and lighting to create low-stress spaces can be found here as well.





Includes a companion website with updated AAHA building standards information, more Fear Free design tips, and tons of guidance and inspiring photos!

Don't even think about calling your contractor until after you read *Practical Guide to Veterinary Hospital Design*, available now from AAHA Press.

Order your copy today at press.aaha.org/design







"This book is a must-read for any veterinary practitioner who is planning to undertake any building project.

The authors present a wealth of information in a simple, logical manner that is extremely readable. Architects, engineers, interior designers, and other professionals designing or constructing a veterinary facility should use this book as a reference."

—Daniel D. Chapel, AIA, NCARB, Chapel Associates





# **Practice Makes Perfect**

Country Hills Pet Hospital is the 2018

AAHA-Accredited Practice of the Year



by Jen Reeder

ASK MARK THOMPSON, DVM, OWNER OF AAHA-ACCREDITED COUNTRY HILLS PET HOSPITAL in Eden, Wisconsin, what makes him most proud of his practice, and he doesn't hesitate with his response: "My staff."

"My leadership is really more of an inclusive leadership. I want everyone to play their role and become leaders in their own right here," he said. "We're all really focused on that greater goal of getting better and doing the best job we possibly can for that pet.... It's not my practice, it's our practice."

That focus on excellence through teamwork has paid off: The American Animal Hospital Association just named Country Hills Pet Hospital the 2018 AAHA-Accredited Practice of the Year.

Thompson has been an advocate for AAHA since veterinary school at the University of Wisconsin–Madison, where he was an AAHA ambassador throughout his four years of veterinary school, organizing speaking events featuring AAHA members. It drove home the value of accreditation in the veterinary field.

34 TRENDS MAGAZINE Photos courtesy of Country Hills Pet Hospital

"Only the top hospitals are going to be AAHA accredited," he said. "If you're an AAHA-accredited practice, you do set yourself apart."

A year after graduating in 1996, Thompson joined the staff of Country Hills Pet Hospital as an associate veterinarian and the only small animal doctor at the mixed practice. The small animal part of the practice achieved AAHA accreditation in 2000. Thompson became a co-owner in 2001, eventually becoming the sole owner in 2008 and establishing the hospital as a small animal—only practice.

Now the practice consists of two doctors (the other is Stephanie Winske, DVM), five certified veterinary technicians, two data entry specialists (the practice is paperless), one veterinary assistant, two customer service representatives, and an office manager. The entire team helps make videos about AAHA standards to educate one another as well as clients.

"Even before I was an owner, I recognized that AAHA was the thing to do as far as getting accredited and taking that step to increasing the quality of the practice," Thompson said.

Part of quality care involves boosting client compliance, and Country Hills Pet Hospital has implemented initiatives to do just that. Thompson credits promoting wellness plans with increasing compliance in senior screenings, dentals, and other preventive care.

The wellness plans enable clients to pay for services over a 12-month period, including vaccinations, routine blood screens, stool and urine samples, heartworm checks, and other preventive measures. The plans automatically renew every year and include discounts on other services. Clients can also opt to add dental cleanings to their wellness plans in order to spread out payment. As a result of this—and other initiatives to increase compliance—Country Hills has gone from doing around 50 dentals a year to more than 150 annually.

Last year, the team set a group goal of enrolling new clients in the wellness "Petly Plans," and when they achieved that goal, Country Hills treated the staff to a wine tasting. The surge in wellness plans led to an increase not only in pets receiving care but in overall revenue growth.

"I think it's made a huge difference," he said. "This year, our growth rate is more than 20%. This has been a huge, huge positive year for us. It comes to [this]: Do a good job, treat your clients like you want to be treated, and that'll come back and help you. We do a lot of community service to try and give back."

That's an understatement. Country Hills Pet Hospital gives back to the community in myriad ways. The practice sponsors the K9 unit for the local police department with free vaccinations, heartworm and tick screenings, fecal exams, routine blood screens, leptospirosis screens, and urinalysis, with discounts for other services. The practice donates to scholarship funds for veterinary students and numerous charities and organizations, from a women's shelter to the youth soccer association. Country Hills has also worked with veterinary technical schools to help students finish their externships.

Thompson's wife is a social worker in elementary schools, so Country Hills collaborates with the school system to educate kids about veterinary medicine. They visit classrooms for "Teddy Bear Clinics," during which the children's dolls can get stitches or casts, and they host



In 2017, the practice spent \$90,000 to create a two-acre dog park on the hospital grounds to give pets a safe, clean place to exercise.

students, Scouts, and 4-H groups at a special event for "mock C-sections" at the practice. The young people dress in surgical scrubs and learn to "deliver" stuffed animal puppies. Later, each child gets to take home a plush toy.

"Hopefully it makes an impression on them as far as a positive for veterinary medicine long term," Thompson said.

Country Hills Pet Hospital is also a major supporter of the local animal shelter. The practice recently donated 24 new dog runs—worth \$24,000—to the Fond du Lac Humane Society to double its size. In addition to



"Do a good job, treat your clients like you want to be treated, and that'll come back and help you." donating to the shelter's various fundraisers, Country Hills offers free initial wellness exams to people who adopt a pet from the shelter and provides free neuters, free or reduced-cost spays, and reduced-cost rabies vaccinations to the shelter itself. The total retail value of donated services from January 2016 to January 2018 was \$186,365.

Country Hills has also invested in the community's pets on its own property. In 2017, the practice spent around \$90,000 to create a two-acre dog park on the hospital grounds to give pets a safe, clean place to exercise. The dog park is free to use for pets who are up to date on vaccinations. There are special rails and playground equipment for dogs undergoing physical therapy, water stations, two large fenced areas, and a 650-gallon swimming pool. Newly installed solar panels generate electricity for the lights that keep the dog park accessible at night (they also provide energy for the hospital). There's even a 24/7 self-serve dog wash available, so after playing in the park, dogs can go home clean.

"We said, 'Let's see if we can provide something that's safe and gets those dogs doing what we're actually recommending in the room,'" Thompson explained. "If we're recommending that they lose weight, how are they going to lose weight if they can't go to a dog park in town without feeling like you're compromising their health?"

Sarah Zurmond, CVT, CCRP, staff manager, has commuted 45 minutes each day—each way—for the past nine years to Country Hills Pet Hospital because it's such





The AAHA logo is printed on plaques and the glass doors at each entrance, table mats in exam rooms, the dog park sign, staff uniforms, business cards, posters, vaccination certificates, invoices, discharge instructions, client education handouts, and receipts.

a special place. She agreed that AAHA accreditation is a vital part of Country Hills Pet Hospital and said it's a source of pride for the team. She's personally taken an AAHA management course and said AAHA has been a "guiding factor" in her career.

The team discusses the value of AAHA in every staff meeting, often in innovative ways. For instance, they once filmed a surgical procedure and then played it for the entire team, discussing the differences that might exist with a nonaccredited practice, highlighting how and why Country Hills adheres to AAHA standards.

Zurmond said the contrast is also apparent when talking with employees of nonaccredited practices at conferences and hearing about issues they face.

"Just listening to them talk sometimes gives you such pride because that would never happen at our clinic. We don't have those problems because we have AAHA guide us through those things, and we've already figured it out, so it's not an issue anymore." That excitement about having high standards thanks to AAHA is something the team shares with clients. In fact, Zurmond posts social media quizzes at least once a month relating to AAHA. While they typically have to do with the value of accreditation, one post asked how many times the AAHA logo appears at Country Hills Pet Hospital, not including computer screens. The answer: 56 times. The AAHA logo is printed on plaques and the glass doors at each entrance, table mats in exam rooms, the dog park sign, staff uniforms, business cards, posters, vaccination certificates, invoices, discharge instructions, client education handouts, and receipts, to name some examples.

Country Hills Pet Hospital also hosts an annual AAHA Day, which is essentially a free carnival for the public. The team offers AAHA cookies, games, prizes, interactive tours of the facility, kids' activities, raffles, and a sign reading, "I Love My AAHA Clinic," where pets can have their photos taken. The photos are then posted on Facebook.

"We've done that to really just celebrate the accreditation in the hospital and give clients the chance to come on in and see the behind the scenes." Zurmond said.

Allison Buerger, CVT, has worked at Country Hills Pet Hospital for a decade. She said she loves her job because the practice allows her to specialize in behavior cases—her passion—and because the staff works well together thanks to years of shared experiences.

"We are a team here; it's not the doctors at the top and everybody else at the bottom. They really include us in the care of the patients. We all get along really well, so it's just a fun team to be with. We enjoy coming here and spending the day with each other and all the different things we're able to do."

Buerger said it's rewarding to be able to use her skills as a veterinary technician instead of being relegated to tasks like restraint. She's in charge of a lot of the hospitalization care, and she works with the endoscope and laparoscope during surgeries, maintains lab work machines, and helps with client education, for instance. She's also gone out into the community to talk about physical therapy options, like laser therapy and the underwater treadmill, and other services.

"Our in-house laboratory is awesome," she said. "We can do upper-GI biopsies with no incision. We have the laparoscope available, so we can do liver biopsies with very minimal incision. We also offer boarding here for our clients. We can provide almost all aspects of care."

Sandra Pederson and her husband, John, became devoted clients of Country Hills Pet Hospital 18 years ago, after a veterinarian from a different practice dismissed their puppy's vomiting and bloody diarrhea as indigestion. When it persisted, they called an emergency line for Thompson, who ran bloodwork and diagnosed little Tank with pancreatitis. The shih tzu lived another 14 years thanks to his care. When Tank died, Country Hills sent flowers and condolences.

"We really feel if it weren't for Dr. Thompson, we wouldn't have had our puppy as long as we did those 14 years because he kept him going. He had other health issues bladder stones, surgeries—and they were just so caring," Pederson said. "We both have always felt that we don't want our pets any place else because they treat them like family."

When the Pedersons were considering adopting a three-year-old shih tzu rescued from a puppy mill, they called Thompson for advice about the breed, and he took the time to discuss potential health issues.

Now, the practice has helped the beloved dog, Leo, through issues caused by poor treatment at the puppy mill, including gastritis and dental disease. The little dog charms with his three remaining teeth and has won prizes from the practice's various photo contests, such as the one for pictures taken of pets watching a Green Bay Packers football game. The couple's daughters also take their pets to Country Hills Pet Hospital; one drives an hour and a half to get to the practice.

"We just have total respect for them, and believe you me, as customers, we know they have total respect for us because they've always shown it," Pederson said. "We think they're one of the greatest clinics there can be." \*



Freelance journalist Jen Reeder loved learning about the dedicated team at Country Hills Pet Hospital and congratulates them on this honor.







"We both have always felt that we don't want our pets any place else because they treat them like family."

-SANDRA PEDERSON

# Reduce Tech Time From Hours to Minutes





# Test Faster, Treat Better

# TEST ----- TREAT

# NEW & IMPROVED Vitamin D Test Kit

dried serum device reduces test time from hours to less than 5 minutes.

# Pure Cholecalciferol Rx D3 & Rx D3 Forte

offer two potencies for the patient with insufficient Vitamin D levels.



Sold EXCLUSIVELY to veterinary professionals throughout the world since 1999. Accept no substitute or replica.



Formulated by
ROBERT J. SILVER
DVM, MS, CVA

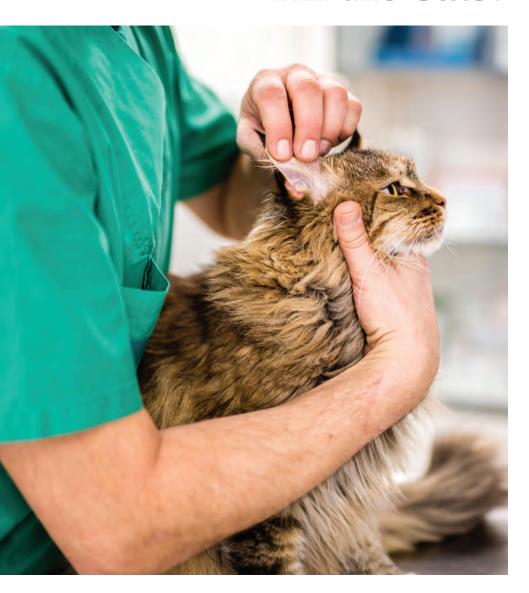
To place an order or for more information: 1-800-792-2222 RxVitamins.com

# A better culture, coming to a practice near **you**

Workplace stressors and mental health issues don't just take a personal toll on affected team members. On a larger scale, they can also be responsible for driving down employee engagement—the emotional bond team members have to your organization and its goals—which studies have identified as a key indicator of a healthy workplace culture.



# Where Are All the Cats?



"We need a paradigm shift that the cat comes to see the veterinarian for a thorough exam, and only then it will be determined what that cat needs."

—RENEE RUCINSKY, DVM, DABVP (F)

# 5 Barriers of Feline Preventive Care and How to Overcome Them

by Jennifer Reed

If getting cats in the door of your veterinary hospital is like, well, herding cats, you're not alone.

Statistics from the Bayer Veterinary
Care Usage Study III: Feline Findings,
conducted in collaboration with
the American Association of Feline
Practitioners (AAFP) in 2012, showed
that only half as many cats receive
annual exams as dogs—and most
new feline patients who do visit the
veterinarian don't return.

But why? Like everything about our finicky felines, it's complicated, but a cause worthy of exploration. In this article, we'll take a look at the most common beliefs, biases, and blocks keeping cats out of your practice and what you can do to draw them back in.

### Barrier #1: The Initial Visit

According to Sara Fleissner Nunn, practice development director at AAHA-accredited Frontier Veterinary Hospital in Hillsboro, Oregon, the greatest hurdle to overcome with cat owners is gaining the opportunity to have the conversation in the first place.

"The most difficult thing is getting clients to bring their cat[s] in for the first preventive care visit," she said.

©iStock.com/simonkr NOVEMBER 2018 41



"There are many practices that are dog centric—some unconsciously and some [that] have doctors and staff that quietly dislike treating cats. Look at your marketing and social media. Are cats equally represented? Look at your staff. Do they have cats themselves? Look at your treatment room. Do you have a doctor or technician who won't handle cats or complains about it if they do?"

-SARA FLEISSNER NUNN

"Getting them to make that first appointment is key; that first point of contact allows you to educate and set follow-up communication in place to ensure that cat returns."

While many veterinary professionals balk at the idea of discounting valuable services, Nunn said practices must be willing to focus marketing efforts—and dollars—on getting cat owners in the door.

Identifying feline patients as an opportunity to reverse the hospital's declining visits in the aftermath of the economic recession, Frontier began promoting Cat Month in July 2009 with half off all feline exams—and saw a record number of cats in one of the few highly successful months of that year as a result.

While the promotion itself has seen many iterations over the

years—from the original discounted exam to an additional discount on a comprehensive preventive care package that includes vaccines, parasite screening, and diagnostic testing—Nunn said the positive results have been consistent, citing an increase each year in both feline visits and the specific promotion over the previous year.

"Our philosophy is that discounts can work if they are specific, time bound, diligently monitored, and evolve with changing economic conditions and client needs," she said. "We've successfully gone from using an inexpensive exam to get cats in to clients opting for a complete preventive care package for their cats in under 10 years."

# Barrier #2: Client Communication

Communication can make or break

a preventive care visit. What you say and how you say it plays a critical role in ensuring your clients receive and retain your recommendations—and return for necessary visits in the future.

Renee Rucinsky, DVM, DABVP (F), owner of AAHA-accredited Mid Atlantic Cat Hospital in Queenstown, Maryland, said longtime clients of the feline-only practice are accustomed to discussions about preventive care, but educating new clients takes time.

"The learning curve for them can be steep, and breaking those old-fashioned habits is the hardest thing to overcome," she said. "Hearing that we recommend exams every six months, that we recommend screening bloodwork annually starting at three years old, that we recommend heartworm prevention, these are all things that may never have been discussed with them before."

42 TRENDS MAGAZINE DIStock.com/Tashi-Delek

With so much ground to cover, it can be easy for clients to become overwhelmed and tune out. Instead of going into a rushed, information-overloaded sales pitch, Rucinsky recommends scheduling ample time to review the importance of your preventive care recommendations—a typical appointment at her practice lasts between 30 and 45 minutes. She also recommends leveraging other members of the practice team to provide courteous, consistent, and concise preventive care reminders at each touchpoint.

"Find a staff member or two who really like this aspect of veterinary care, and give them the freedom to drive this part of the practice," she

said. "Doctors can come up with the protocols, but let your staff do what they are trained to do."

Most importantly, she said, preventive care should always be treated as a discussion, not a checklist.

"We need a paradigm shift that the cat comes to see the veterinarian for a thorough exam, and only then it will be determined what that cat needs," she said. "Vaccines may be included, but so might strategic deworming, lab testing, behavioral and nutritional counseling, and whatever else. The days of just coming in for annual vaccines need to be over, and we need to stress that we are here for the total health of the cat for the entire life of the cat."



"Clients don't see their cats as second-class citizens to dogs anymore. They are important family members."

---RENEE RUCINSKY, DVM, DABVP (F)

# Barrier #3: Cat (Un)friendly Practices

Spritzing some feline pheromones in your exam rooms and calling yourself cat friendly? Not so fast.

Established by the AAFP and the International Society of Feline Medicine, the Cat Friendly Practice program was created in 2012 to equip practices with the tools and resources to deliver elevated care for cats and reduce the stress associated with feline veterinary visits. But it isn't about just checking the boxes, said Paula Monroe-Aldridge, DVM, current AAFP president and associate veterinarian at River Trail Animal Hospital and Pet Lodge in Tulsa, Oklahoma.

"The Cat Friendly Practice program is more than a designation that proves the practice meets certain criteria," she said. "It's about ensuring the best experience for the client and feline patient, having the entire veterinary team working together, and knowing how to treat cats in a manner that is respectful for the cat, including communicating with the cat caregiver, and much more."

This includes regularly evaluating how your practice supports feline patients and how your team's beliefs and biases can affect the care you provide, said Fleissner Nunn, a self-described cat advocate and member of the AAFP's Cat Friendly Practice Task Force.

"This question may unearth uncomfortable realities about your practice's attitude toward cats," she said. "There are many practices that are dog centric—some unconsciously and some [that] have doctors and staff that quietly dislike treating cats.

©iStock.com/vladans NOVEMBER 2018 43



"The bottom line is that cat owners love their cats and want to do the best for them. We, as veterinarians, need to educate them as to what that entails."

--PAULA MONROE-ALDRIDGE, DVM

Look at your marketing and social media. Are cats equally represented? Look at your staff. Do they have cats themselves? Look at your treatment room. Do you have a doctor or technician who won't handle cats or complains about it if they do?"

If you can easily identify these gaps in your practice, resources provided by the AAFP—including feline behavior training, low-stress handling techniques, and tips for making your facility more cat friendly—can help.

In addition, the AAFP recommends identifying the cat lovers in your practice to act as advocates for their care. "It's a great grassroots way of getting your whole staff's buy-in toward

working together to improve cat care and owner compliance," Nunn said.

# Barrier #4: Small-Dog Medicine

Just as cats are not small dogs, cat owners are not small-dog owners.

While it is crucial for veterinary professionals to learn and understand cats' unique behaviors and preferences, it's equally important to pay attention to what cat owners want and cater to their needs.

"We need to try to view the experience from both the cat and cat owner's perspectives,"

Monroe-Aldridge said. "If the client has a better experience, they will form

a bond, and they will be back. You then become a trustworthy source and can provide education that is more easily heard and retained."

For Ellen Carozza, LVT, head technician at AAHA-accredited Nova Cat Clinic in Arlington, Virginia, this means having an open and honest discussion to break down treatment roadblocks and ensure continuity of care at home.

"You have to pep talk and train them to be confident in being able to care for their cat," she said. "Speaking to them in a level they understand—not medical jargon—and getting a bit personal really does make them open up and be honest with their concerns, which allows us to individualize each care plan."

It is also important to ensure your practice is offering products that meet feline patients' needs.

"Carrying preventive products that do more in one application can help," Carozza said. "When it comes to vaccines, carrying the ones with no adjuvant will increase compliance for yearly vaccines. Once [clients] hear the [phrase] 'vaccine-induced fibrosarcoma'—either from a friend, the internet, or you—it can be game over. Reassurance that only the highest-quality products are used on the cats to prevent these issues creates more compliance."

### Barrier #5: Bad Cat-itudes

As the saying goes, old habits die hard.

According to Jane Brunt, DVM, executive director of The CATalyst Council and owner of AAHA-accredited Cat Hospital at

44 TRENDS MAGAZINE ©IStock.com/Chalabala

Towson in Baltimore, Maryland, common misperceptions among cat owners about what cats needas well as the value proposition of getting care when they think they need it—are still among the most significant pain points of feline healthcare.

Thanks to the work of the AAFP. The CATalyst Council, and other veterinary organizations, however, these outdated beliefs finally seem to be shifting, and veterinary practices should be ready to strike while the iron is hot.

"Owners are definitely more in tune with preventive care, and, at least with our long-term clients, I truly believe it's a result of all of our hard work over the years educating them," Rucinsky said. "Clients don't see their cats as second-class citizens to dogs anymore. They are important family members. Most of the cats will have longer lifespans than the dogs in the family, and, as veterinarians, we need to make sure that we take advantage of clients wanting quality care."

At Frontier, Fleissner Nunn said there has been a noticeable shift in perception since the hospital began its cat-friendly efforts and compliance tracking—and as cats have evolved from independent, outdoor pets to indoor companions.

"Now that cats aren't getting hit by cars or falling victim to wildlife as much, cat owners have come to realize that their cats can live a very long time," she said. "As these cat owners have absorbed our education about the real benefits of preventive care in cats, especially when it comes to early detection and managing

chronic conditions, they are more likely to choose to do diagnostic testing preventively. I've heard many clients remark that they lost a past cat to kidney disease [or] diabetes, and they don't want that to happen again now that they know these conditions can be caught and treated."

Of course, Nunn said, not all cat owners are there yet, and that's OK.

"There are different types of cat owners," she said. "You need to identify the subcategories that exist in your practice, and meet them where they are by giving them what they want."

For Frontier, Fleissner Nunn said there are two main categories—the bonded "cat parents" and the "cat owners," who view their cats as secondary or low-maintenance pets—and the hospital offers preventive care packages to meet both of their needs.

Despite these differences. Monroe-Aldridge said, cat owners are all the same in one important respect.

"The bottom line is that cat owners love their cats and want to do the best for them," she said. "We, as veterinarians, need to educate them as to what that entails." \*



Jennifer Reed is a freelance writer, editor, and cat lover living in Austin, Texas.





# WHO'S ON YOUR TEAM?

Running a successful veterinary practice is easier when you have trusted service providers on your side.

# AAHA PREFERRED BUSINESS PROVIDERS

**Animal health drugs and supplies** 

**Business Insurance Program** 

**Client payment options** 

Integrated client and practice management system

**Members Retirement Program** 

**Payment processing** 

**Pet Wellness Report** 

**Practice financing** 

**Profit enhancement** 

**Veterinary education** 

**Veterinary employee benefits** 

aaha.org/pp



# Practice Finance Made Easy: Part 1



By understanding how money flows through your practice, you can drive the flow, stop money leaks, and plan for the future.

# How to Set the Stage for Financial Success

Note: This is Part 1 of a two-part series on finance. Look for Part 2 in next month's issue.

by M. Carolyn Miller

Once upon a time, there was a veterinary practice owner. Let's call him Sam. Sam got into veterinary medicine for the same reason many veterinarians do: He loved caring for animals. When he graduated, he decided to open his own practice. Did he know how to run a business? Not really. It was just a means to an end.

As the years rolled by, Sam fell into a bad habit for managing the practice's finances. He paid the bills, pocketed what was left, and rarely looked at financial reports. As a result, Sam worried a lot about money. He also had a lot of sleepless nights wondering how he would ever pay off his student loan or plan for retirement.

Sam is like a lot of veterinarians:
They are unschooled in the financial aspects of running a business. But that doesn't mean it can't be learned.
And there are big reasons to learn it.
By understanding how money flows through your practice, you can drive the flow, stop money leaks, and plan for the future.

# The Foreign Land of Financials

Learning financial management is a lot like traveling in a foreign country: There is a major language barrier.

©iStock.com/Steve Debenport NOVEMBER 2018 47



There is data you don't know how to interpret. There is insider information and resources you're unaware of. There are things you don't know that you don't know.

But if you don the traveler's mindset and get past the language barrier, you might be surprised how interestingand downright fun—it can be to watch your decisions impact outcomes. Indeed, by understanding what financial levers to pull, you can, in fact, create the kind of practice, and financial success, you always wanted.

This series is divided into two parts. Part 1 outlines how to create (or recreate) an accurate financial set of "maps" you can use to assess your practice's health. These maps consist of several types of financial reports that enable you to look at your practice's health from different angles.

Part 2 will provide various routes you can take to assess your practice's

financial health. That includes what to look for and what to see when you look. Part 2 will also show you how to identify warning signs, such as extra inventory that may be money sitting on a shelf. Finally, Part 2 will provide a roadmap through the data so you can easily surface the information you need.

## Mapmaking 101: The Chart of Accounts

Every mapmaker begins with a template. The same holds true with your financial "maps."

Your practice's financial maps consist of multiple types of financial statements. But before you even begin to generate such reports, it is critical to ensure you are using the same organizational structure in all the places your data is stored.

That organizational structure is called a Chart of Accounts. Similar to a table of contents in a book, a Chart of Accounts enables you to access the financial information you need quickly and easily.

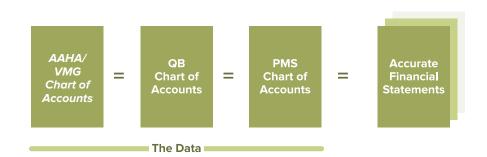
A Chart of Accounts also enables your accounting software, such as Quickbooks, and your practice management software (PMS) to categorize data similarly. If you don't use the same Chart of

Accounts in both programs before you run reports, your "maps" will be inaccurate, disorganized, and potentially incomplete.

Every accounting software program comes with a generic Chart of Accounts for a typical small business. But a veterinary practice is not a typical small business. Practices have financial data that is unique to veterinary medicine. Without an industry-specific Chart of Accounts, you may make up categories (and invariably mix up categories) that will result in inaccurate reporting.

Another challenge with a generic Charts of Accounts: You cannot compare your practice to other similar practices in your area to see how you're doing. For instance, are your staffing costs too high? Should you be charging more for dentistry? Are your surgery fees fair? You can't answer those questions accurately if you aren't using a veterinary-specific Chart of Accounts.

Fortunately, AAHA and AAHA-Accredited Veterinary Management Groups (VMG) created a standardized Chart of Accounts specifically for companion animal practices. The AAHA/VMG Chart of Accounts can be modified for all practice types and sizes. Not only



is this helpful with your practice's financial management, it is also invaluable when you want to see if your fees, for instance, are in line with the fees of other practices.

AAHA uses this standardized system to collect industry data and generate reports. Those reports enable a member to see how they're doing and where (and if) they need to course correct.

Your AAHA/VMG Chart of Accounts is divided into five types of accounts, including what you own (your assets), what you owe (your liabilities), what you've invested in the practice (your equity), the income you receive (your revenue), and what you spend to operate (your expenses).

As you'll see when you review the AAHA/VMG Chart of Accounts, each account type carries different item numbers so you can easily recognize the category and account type. For instance, "assets" use 1,000 and 2.000 numbers, "liabilities" use 3.000 numbers, etc.

# Create Your Map: Set Up Your Chart of Accounts

To organize your financial data so they map to the AAHA/VMG Chart of Accounts, you (or your accountant) will have to replicate the AAHA/VMG Chart of Accounts in the places where your data is stored. That includes your PMS and your accounting software program.

## Step 1: Modify Your Accounting **Software's Chart of Accounts**

Your practice's accounting software program comes with a generic Chart of Accounts. Your first step is to modify (or have your accountant modify) that generic Chart of

Accounts so it maps to the AAHA/VMG Chart of Accounts.

Once that is completed, you will need to verify and/or recategorize the year's data items so they track to your now-modified AAHA/VMG Chart of Accounts. Tedious? Yes. Invaluable? Absolutely. The good news: You only have to do it once!

## Step 2: Modify Your Practice **Management Software's Chart** of Accounts

Your PMS also comes with a generic Chart of Accounts. That, too, must be verified so it maps to the AAHA/VMG Chart of Accounts. Once complete, again, you must verify/recategorize data so they map to the AAHA/VMG Chart of Accounts.

### Step 3: Migrate PMS Data

Once your AAHA/VMG Chart of Accounts are finalized in both software programs and you have edited/recategorized data, you are ready to merge the data. Your PMS data should be automatically set up to feed into and merge with your accounting software program's data.

After that happens, you're ready to produce accurate financial reports.

# Generate Your Maps: **Financial Reports**

Your basic financial maps consist of three types of financial reports. Those include the Balance Sheet, the Income and Expense Report, and the Statement of Cash Flows.

### The Balance Sheet

Your practice's Balance Sheet is a snapshot of your business. The

# **Types of Accounts**

- Assets: what you own
- Liabilities: what you owe
- Equity: your investment in the practice
- Revenue: income you receive
- Expenses: operating costs

Balance Sheet will tell you, among other things, what you can financially do in the future based on what you have today.

For instance, the Balance Sheet can tell you about your practice's assets, including:

- How much cash you have on hand
- The value of your investments
- Any accounts receivable money on its way to you
- Any prepaid services you are eliaible for
- How much your fixed assets, such as your building or equipment, are worth

The Balance Sheet can also tell you about your current liabilities, that is, any financial obligations your practice has, including:

- How much you have to pay vendors, staff, and others
- Any loans that are due
- Any services you need to perform that you have already been paid for

# The Income and Expense Report

The Income and Expense Report tells you how your practice has performed over time. It offers a historical perspective so you can, for instance,

# Language Lesson

Chart of Accounts: A list of account numbers related to five types of accounts used as a blueprint for setting up financial record-keeping systems

#### **AAHA/VMG Chart of Accounts:**

A chart of accounts designed specifically for companion animal veterinary practices. It enables practices to detail their data and perform "How are we doing?" comparisons.

Financial Statements: A series of financial reports that include the balance sheet, income and expense report, and statement of cash flows

#### The Income and Expense Report:

This has many names, including:

- Income statement
- Profit and loss (P&L) statement
- Revenue and expense statement

Balance Sheet: What you can do in the future based on what you have today

#### Income and Expense Report:

What you've done in the past (so you can improve)

Statement of Cash Flows: What flows of money into and out of your practice enable you to stay in business

Similar to a table of contents in a book, a Chart of Accounts enables you to access the financial information you need quickly and easily.

see if you are spending more or less in a given expense category from month to month.

Accountants often talk about the percentage of total revenue when they look at an Income and Expense Report. That's because that percentage figure is what is used to see if you are doing better—or worse—than the practice down the street. It's how you check your scores against industry averages.

For instance, your percentage of total revenue can show you if you are under- or overcharging in a particular category or specialty. This is important to know because it could signal why, for instance, your clients come to you for dental work but not for vaccinations.

Your percentage of revenue can also be compared against industry averages for other categories, such as labor, operating expenses, and more.



### Statement of Cash Flows

Every practice has sources of cash that come into and out of the practice. These cash flows enable the practice to operate. The Statement of Cash Flows shows you this data based on past activities.

Cash flow that comes into the practice can include operating cash flow, that is, what you receive from the business in exchange for products and services. Cash flow that comes into the practice can also include investments and financing that enable the practice to operate.

Cash flow that goes out of the practice can take the form of expenses, such as staff salaries and equipment purchases.

All of these sources of cash are outlined in the Statement of Cash Flows. This report is important because it can tell you, for instance, if you are relying too much on financing to run your practice when, in fact, you should be using what the practice makes as a result of its products and services (your operating cash flow).

## A Map Footnote: Cash Versus Accrual Method

Is your practice's revenue noted on your financials with a date that reflects the time of payment? Or is the revenue noted with a date that reflects when services were rendered regardless of whether those services were paid for? That's the basic difference between the cash or accrual method.

Most practices use a cash method of accounting. Their records "recognize" payment when the bill is paid. Larger, multilocation practices may opt for the accrual method of accounting. That means their financial records "recognize" payment when the service is rendered (not paid for).

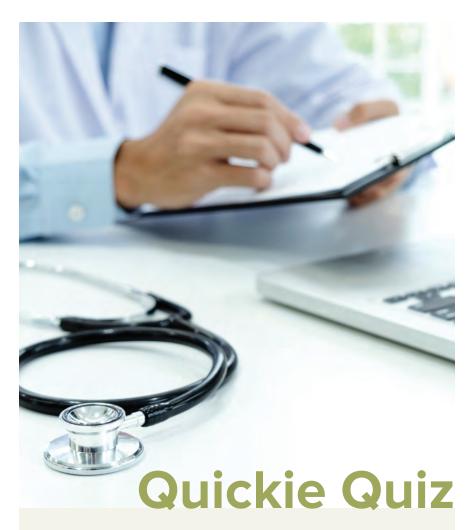
Knowing the specifics of these methods is not critical for most practice owners and managers. However, it is helpful to be aware that these methods exist.

If it feels like you've just downloaded a lot of data, don't fear. The "maps" will be revisited in Part 2 of this series. In the meantime, see how much you've retained by taking the Quickie Quiz on the right. \*\*

Does the idea of facing your practice's finances bring up a host of fears? Watch this inspiring video from Tony Robbins with ideas for conquering some of your fears: bit.ly/20DD5bK.



M. Carolyn Miller, MA, an award-winning writer and senior instructional designer. earned a lot about financials writing this article. Kudos to James Heard, MBA, AAHA's Director of Finance, for being her expert-on-hand.



Circle true ("T") or false ("F") for each of the following statements.

- 1. Most practices use a cash method of accounting. **T**
- 2. A Chart of Accounts is a big wall map of your financial data. T F
- 3. A generic Chart of Accounts works for most small veterinary practices. T F
- 4. The AAHA/VMG Chart of Accounts can be modified for any practice size and type. T F
- 5. The AAHA/VMG Chart of Accounts is used with PMS and accounting software. T F
- 6. Three types of financial statements are the Balance Sheet, Income and Expense Report, and Statement of Cash on Hand. T F
- 7. The Balance Sheet tells you what you can do in the future. **T F**
- 8. The Income and Expense Report tells you what you did in the past. T F
- 9. The Statement of Cash Flows tells you when money is coming in. T F
- 10. Percentage of total revenue enables a practice to compare its fees, expenses, etc., with industry averages. T F

Answers: 1. T 2. F 3. F 4. T 5. T 6. F 7. T 8. T 9. F 10. T



# AAHA DIABETES EDUCATOR Certificate Course

# Ready to become your team's "go-to" expert for diabetic pets?

Gain vital knowledge and boost your confidence in managing diabetes in pets during six engaging modules.

- Gain an understanding of diabetes in dogs and cats, including how diabetes develops, is diagnosed, and is treated.
- Learn to leverage your support staff by educating them on how to manage client questions and how to understand when a diabetic emergency is occurring.
- Gain knowledge on home care team responsibilities and identifying and avoiding diabetic emergencies.
- Learn the differences between feline diabetes and canine diabetes, which insulins are typically used, and how to identify and manage stress hyperglycemia.
- Understand how to make the job of managing diabetes a little easier (and less intimidating) for both your practice and the home care team.

Designed especially for veterinary technicians, this RACE-approved certificate course provides 4 CE credits for a low investment of \$29 for AAHA members, and \$49 for nonmembers.

Get started now! Visit aaha.org/ diabetescourse

Sponsored by







# The App Every Veterinarian Is Talking About

PetDocApp.com

# BASICS OF BUSINESS BORROWING

It's not about what you need but what you can pay back.

## **5 GOOD REASONS BUSINESSES ASK FOR LOANS**

- 1. To start a business
- 2. To buy inventory
- 3. To buy equipment
- 4. To buy real estate
- 5. To expand your business

## **5 REASONS NOT TO ASK FOR A LOAN**

- 1. To make payroll
- 2. To build up a capital cushion or "rainy day" account
- 3. To fund your retirement
- 4. To fix persistent cash flow problems
- 5. To increase the owner's payout

# SMALL BUSINESS LOANS COME IN MANY PACKAGES

**Business line of credit:** It's like a credit card. Your lender sets the maximum line of credit. You pay interest and fees on the amount you borrow. As long as you keep up the payments and don't go over your maximum, you can use your line of credit.

**Payment plan:** Your vendor may offer one. It may be a great deal. Just to be sure, compare your options for vendor plan, business line of credit, and equipment loan. Negotiate!

**Equipment loan:** Look for a down payment between 5% and 20%. Expect equipment to be collateral for the loan. Compare the terms of a loan and a lease.

**Commercial mortgage:** Count on paying 0.5%–3% more than the going rate for residential mortgages. Some have to be renegotiated after five years.

**Merchant cash advance:** Take a lump sum now in return for a cut of your future credit card receipts. It's free of federal regulation, so interest rates can hit the triple digits. Yep, you read that right.

### US Small Business Administration microloan:

This is for new or expanding businesses. Costs can be up to \$50,000 for inventory, equipment, and furniture. This is not for paying off debts (sorry, recent graduates) or real estate.

## 18%

Owners who said the interest rate on their business line of credit or credit card increased in the last six months of 2017



## **HOW MUCH DEBT CAN I REALLY AFFORD?**

No guessing. No wishful thinking. The Debt Service Coverage Ratio tells all.

Annual Net Operating Income / Total Annual Debt\* = Debt Service Coverage Ratio

\*Don't fudge! Include all of your existing debt plus what you want to borrow.

If the answer is ...

- 1 = You have just enough cash flow to make your loan payments.
- 1.1 to 1.3 = You have more than you need to make your payments.
- >1.35 = Barring disaster, you have enough cash flow to get you through.

54 TRENDS MAGA ZINE ©iStock.com/Panya-, ©iStock.com/Vijay kumar

### FIGURE OUT WHAT YOU CAN AFFORD



250.000 / 265.000 = 0.94



250,000 / 210,000 = 1.19



250.000 / 185.000 = 1.35

## **EVERYONE IS NOT DOING IT**

Fifty-five percent of small business owners have no outstanding debt.

# 5 THINGS TO ASK YOURSELF . . . AND AN

- 1. Do I need what I want to buy?
- 2. What is this going to cost, really—principal, fees, and interest?
- 3. Will what I'm buying bring in enough additional money to pay off the total cost of
- 4. What's the right deal for me, considering down payment, costs, and tax deals?
- 5. What's the worst that can happen?

### **5 VERY BAD ANSWERS**

- 1. It's a great opportunity!
- 2. Whoa!
- 3. When we pull together, we succeed.
- 4. I'm sure they're offering me their best deal.
- 5. Wurst is for sandwiches! I'll make it work, I always do.



### **UNLUCKY 13!**

Percentage of small business owners who borrow from family or friends

"It is easier to refuse a friend a loan than to press him for payment." -Lewis F. Korns

## **5 WAYS TO SPOT A PREDATORY LENDER**

- 1. Interest rates are significantly higher than competitors' rates.
- 2. Fees are more than 5% of the loan value.
- 3. There is fast talk about the annual percentage rate and full payment schedule.
- 4. They say it's OK to lie (exaggerate, underestimate, fudge) on paperwork or leave a signature box blank.
- 5. They don't stop when you say, "I need to think about it."

### **HOW NOT TO BE PREY**

- Don't let them scare you.
- Or pressure you.
- Or coerce you.
- Always be ready to walk away.
- Talk to your accountant, lawyer, or consultant before you sign anything.
- If it sounds too good to be true, it probably is a lie.

### **SOURCES**

"The Best Small Business Loans of 2018." US News & World Report. August 14, 2018.

"Funding Programs." US Small Business Administration.

National Small Business Association. 2017 Year-End Economic Report. 2018.





# Go beyond.

Perfection is constant transformation.

—Nia Peeples

Veterinary

Management
Institute®

Even the most experienced and knowledgeable veterinary owners and practice managers should never stop learning. Transform your management skills, your career, and your practice with AAHA's Veterinary Management Institute (VMI)—a high-level, veterinary-specific management course that takes even the most seasoned manager's skills to the next level.

Visit aaha.org/vmi to learn more and sign up.





# Can You Afford That?



Talking about charging a fee to save a pet can be uncomfortable, but with a strategic pricing strategy and the involvement of your team, the fees that are established can be understood and respected by both team members and clients.

# Why Veterinary Practices Need to Look at Pricing Differently

by Louise Dunn

Throughout your career in veterinary medicine, you've probably heard something like these comments:

"I'm sorry, I know the price seems really high. . . ."

"Our prices are getting so high, I don't think I could afford it if I didn't get my employee discount."

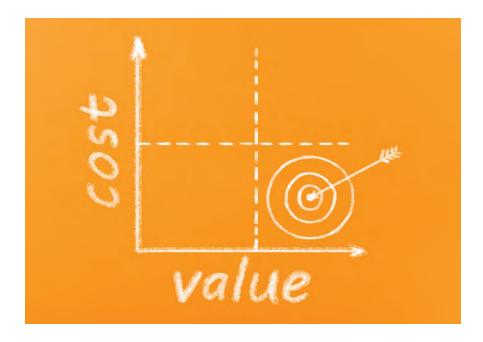
"Oh, I'm sorry Mrs. Smith. I know this estimate is a shock. We can remove some of these, or I could apply a little discount—after all, I am the owner."

Why does money make the team so uncomfortable? Why do we throw the business under the bus because of the fees, play the guilt card on those who establish the fees, and break the rules for charging clients on a whim? How can a veterinary practice establish prices that clients and team members are comfortable with but also allow the business to be profitable?

In an attempt to provide owners and managers with strategies to address pricing issues in veterinary practices, the Veterinary Hospital Managers Association (VHMA) tackled this issue in August at the VHMA Critical Issues Summit.

Not every practice owner is pricing incorrectly. But, some are doing it better than others. Some are

unsplash.com/rawpixel NOVEMBER 2018 **57** 



achieving profitable pricing structures; others are barely keeping their heads above water.

Michael Cavanaugh, DVM, DABVP (Emeritus), AAHA's chief executive officer, sees pricing as a critical issue and said it's important to "develop a pricing strategy as a component of a practice's strategic plan as an investment in future success. Pricing is a great example of something we can't keep doing the way we've always done it."

Regardless of how your practice has approached pricing in the past, it's time to assess your pricing strategies to set your practice up for future success.

# What's Wrong with Most **Pricing Structures?**

Most pricing is determined by the cost-based pricing method. The price is determined by estimating costs and adding a predetermined markup percentage. Deciding which costs to take into account is the first hurdle to overcome. Next is the markup. The

veterinary industry has some common "rule of thumb" markups that have been used over the years. Although an easy method, it is not one that takes into account other important factors, and in some cases, confusion abounds when trying to determine which costs to add to the pricing calculation and markups.

Another way to determine fees is to conduct a "mystery shopper" reconnaissance mission. You know how they work: A few employees are told to call the local competitors and pretend to be shopping for services. This adds another layer to the pricing strategy by adjusting prices based on information from competitors and trying to not be too high or too low. Like the cost-based pricing method, this is an easy way to determine fees, but it still ignores other important factors.

After all this effort is spent on determining prices, discounts are often tossed into the mix. Discountswhether for dentals, senior exams, wellness bundles, first-time visits,

or others—create a gap between the calculated asked-for price and the paid price. A real problem with discounting is that most practices do not track what the actual gap is and if the discount did anything to improve client value and loyalty (or increase revenue).

To meet economic changes and business needs, veterinary pricing structures must change.

## Why Change?

We're comfortable with what we know, and many practice owners have used the current pricing strategy for years and are hesitant to change. Remember all those seminars telling veterinarians to get paid for their time and knowledge? Well, times have changed, and now we need knowledge about how to properly calculate prices.

According to the American Pet Products Association, people are spending more each year on pet-related items, such as pet food, veterinary care, and pet supplies.



However, the percent increase in total pet industry expenditures was much stronger in 2016 (10.7%) compared to a 3.7% increase in 2018. Most expenditures are in the pet food and veterinary care categories.

A VHMA report using a same-store sample of about 600 practices revealed that both veterinary practice revenue and pet visits have increased over the past few years; however, the rate of growth has slowed from 2016 to 2018.

Fewer cats continue to visit veterinary practices compared to dogs, and new clients have been on a steady decline over the same period of time, reaching an all-time low of -10.4% in May 2018, according to the same VHMA report. The American Veterinary Medical Association (AVMA) has also released data indicating a decline in total veterinary visits for both dogs and cats from 2011 to 2016.

This means that veterinary practices need to develop strategic plans for attracting and retaining clients and team members. They also need to improve pricing structures for their products and services. These are not mutually exclusive. Clients, employees, and business profits are all intertwined in a relationship that can easily be destroyed by a lack of trust or a feeling of unfairness.

This is not about raising prices or increasing markups in order to bolster profitability, and it's not about lowering these in order to attract more clients. It is about being smart about the way prices are determined and looking at four pillars of a value-based pricing method.

# How Can an Effective **Pricing Method Be** Developed?

The four pillars belong to a value pricing framework developed by Utpal Dholakia, MS, MS, PhD, and detailed in his book, How to Price Effectively.

Pillar 1: Cost. Cost, a pillar we are familiar with, sets your base price, which is how much you need to charge to cover what it costs to provide the service or product.

Pillar 2: Reference Prices. Another familiar pillar, reference prices come from the mystery shopper data and benchmark texts that give you an idea about the range of prices charged by your competitors. Reference prices also come into play with your clients; they, too, are judging your prices related to other purchases they have made from competitors and online retailers.

Pillar 3: Customer Value. Customer value represents the total amount of money your client is willing to pay. It sets the top limit, or ceiling, on what can be charged for the product or service. Most veterinary practices do not take the time to determine this value because it requires a survey-based method, and customer value changes over time.

Pillar 4: Value Proposition. This pillar consists of the unique characteristics of your practice relative to your competitiors. It tells you which of the other pillars are to be weighted more in your pricing decision and why the client should buy from your practice instead of a competitor. Your team is one of those unique characteristics: Who they are, how they behave with patients and clients, and the level of knowledge they posses make them unique to you.

# Statement of Ownership, Management, and Circulation (All Periodicals Publications **Except Requester Publications)**

- 1. Publication Title: Trends magazine
- 2. Publication Number: 758810
- 3. Filing Date: 09/28/2018
- 4. Issue Frequency: Monthly 5. Number of Issues Published Annually: 12
- 6. Annual Subscription Price: \$60
- 7. Complete Mailing Address of Known Office of Publication: American Animal Hospital Association, 12575 W. Bayaud Ave. Lakewood, CO 80228-2021. Contact Person: Karie Simpson. Telephone: 303-986-2800
- 8. Complete Mailing Address of Headquarters or General Business Office of Publisher: American Animal Hospital Association, 12575 W. Bayaud Ave. Lakewood, CO 80228-2021
- 9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor. Publisher: American Animal Hospital Association, 12575 W. Bayaud Ave. Lakewood, CO 80228-2021. Editor: Ben Williams, 12575 W. Bayaud Ave. Lakewood, CO 80228-2021. Managing Editor Karie Simpson, 12575 W. Bayaud Ave. Lakewood, CO 80228-2021
- Owner: American Animal Hospital Association. 12575 W. Bayaud Ave. Lakewood, CO 80228-2021
- 11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities: None
- 13. Publication Title: Trends magazine
- 14. Issue Date for Circulation Data Below: 10/01/2018
- 15. Extent and Nature of Circulation: Average No. Copies Each Issue During Preceding 12 Months
  - a. Total Number of Copies: 31,208
  - b. Paid Circulation
    - (1) Mailed Outside-County Paid Subscriptions Stated on PS Form 3541: 27,435
    - (2) Mailed In-County Paid Subscriptions Stated on PS Form 3541: 0
    - (3) Paid Distribution Outside the Mails Including Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Paid Distribution Outside USPS®: 1.466
    - (4) Paid Distribution by Other Classes of Mail Through the USPS: 0
  - c. Total Paid Distribution: 28,901
  - d. Free or Nominal Rate Distribution
    - (1) Free or Nominal Rate Outside-County Copies included on PS Form 3541: 1,887
    - (2) Free or Nominal Rate In-County Copies Included on PS Form 3541: 0
    - (3) Free or Nominal Rate Copies Mailed at Other Classes Through the USPS (e.g., First-Class Mail): 0
  - (4) Free or Nominal Rate Distribution Outside the Mail (Carriers or other means): 223
  - e. Total Free or Nominal Rate Distribution: 2,110
  - f. Total Distribution: 31.011
  - a. Copies not Distributed: 167
  - h. Total: 31,178
  - i. Percent Paid: 93.2%
- 15. Extent and Nature of Circulation: No. Copies of Single Issue Published Nearest to Filing Date
  - a. Total Number of Copies: 30,336
  - b. Paid Circulation
    - (1) Mailed Outside-County Paid Subscriptions Stated on PS Form 3541: 26.858
    - (2) Mailed In-County Paid Subscriptions Stated on PS Form 3541: 0
    - (3) Paid Distribution Outside the Mails Including Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Paid Distribution Outside USPS®: 1,407
    - (4) Paid Distribution by Other Classes of Mail Through the USPS: 0
  - c. Total Paid Distribution: 28.265
  - d. Free or Nominal Rate Distribution
    - (1) Free or Nominal Rate Outside-County Copies included on PS Form 3541: 1,868
    - (2) Free or Nominal Rate In-County Copies Included on PS Form 3541: 0
    - (3) Free or Nominal Rate Copies Mailed at Other Classes Through the USPS (e.g., First-Class Mail): 0
    - (4) Free or Nominal Rate Distribution Outside the Mail (Carriers or other means): 59
  - e. Total Free or Nominal Rate Distribution: 1,927
  - f. Total Distribution: 30,192
  - g. Copies not Distributed: 144
  - h. Total: 30,336
  - i. Percent Paid: 93.6%
- 17. Publication of Statement of Ownership will be printed in the 11/1/2018 issue of this publication
- 18. Signature and Title: Karie Simpson, Managing Editor

The key takeaway is that your pricing structure should not involve a blanket strategy of charging two times the cost or increasing everything by 3%. As Dholakia pointed out at the VHMA meeting, it needs to be about knowing the "floor" to cover costs, investigating the "ceiling" to know what clients will pay for, understanding the "range" your competitors are charging, and promoting your "uniqueness."

# What Can Your Practice Afford to Do?

It will become necessary to begin to move your pricing strategy from cost-based to value-based pricing. Moving to a value-based pricing strategy involves six steps, some of which you may already do.

- Identify your target customers, which is something most veterinary practices have a good handle on. However, don't forget to look outside the box for opportunities for new clients.
- Determine competitive offers. Look at benchmarks,

- local competition, and other service industries.
- Compare apples to apples.
   Collect information and evaluate what garners clients' attention and business.
- 4. Identify what makes you different. Do you offer something different? Are you lacking a key service or product?
- 5. Assess the economic value of these differences.
- 6. Calculate a value-based price.

Veterinary businesses must look at pricing differently. Doing a cost analysis still applies, but the pricing route taken must involve segmenting pricing and aligning the pricing structure with the strategic plan of the business. Pricing should be reviewed on a quarterly basis (or at least every six months).

The veterinary industry is full of compassionate professionals.

Talking about charging a fee to save a pet can be uncomfortable, but with a strategic pricing strategy

The key takeaway is that your pricing structure should not involve a blanket strategy of charging two times the cost or increasing everything by 3%.

and the involvement of your team, the fees that are established can be understood and respected by both team members and clients. In the end, it can be a win-win-win for the patient receiving medical care, the client perceiving a fair value, and the business realizing a successful profit. \*\*



Louise Dunn is the owner of Snowgoose Veterinary Management Consulting, which is based in North Carolina. Find her on the web at snowgoosevet.com.









Negotiates exclusive discounts, preferred pricing, and rebate offers



Offers lower membership fees



Provides more vendors



Guarantees you'll save \$300 in the first year, with average savings up to

**\$15,000**PER YEAR\*!

\*Savings vary by practice and are dependent on purchase volume.

JOIN
ADVANTAGE
AND COMPETE
WITH THE
BIG CATS



"[Our practice] already saved a lot of money for the first quarter. It allows us to invest in other things."

— CHANTALE KUZMIAK Oldwick Animal Hospital, Whitehouse Station, NJ

"Worth the investment. Give it a try and you'll see."

— JILL RENFREW Macungie Animal Hospital, Macungie, PA

Visit aaha.org/advantage to get started.



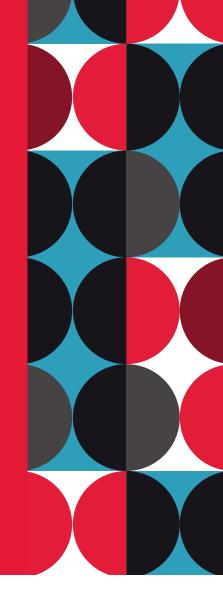
## **Advertiser Index**

<b>AAHA-Accredited Veterinary Management Groups 14</b> aaha.org/vmg
AAHA Advantage
AAHA Culture Initiative
AAHA Diabetes Educator Certificate Course
AAHA Preferred Providers
AAHA Press
Connexity
ASPCA Pet Health Insurance
Banfield Pet Hospital
Boehringer Ingelheim Inside Back Cover

Doctor Multimedia
Hill's Pet Nutrition
InTouch Practice Communications Back Cover InTouchVet.com
IDEXX
Merck Animal Health
MWI Animal Health Inside Front Cover mwiah.com
Rx Vitamins
<b>Veterinary Management Institute</b>
Zoetis Petcare

Trends magazine is not responsible for contact information not specifically provided by an advertiser for use in the Advertiser Index or for other company contact information not listed in this index. Please contact the advertiser directly for all product information.

# LOOKING FOR WAYS TO SLASH COSTS WITHOUT CUTTING CORNERS?



HAVING A HARD TIME CONNECTING WHAT YOU DO NOW TO THE ORIGINAL REASON YOU WANTED TO BECOME A VETERINARY PROFESSIONAL? OVERWHELMED BY YOUR MARKETING OPTIONS, OR EXHAUSTED BY TRYING TO DO IT ALL?

Find solutions to the issues **you told us** keep you up at night at Connexity, AAHA's extraordinary conference experience for accredited members.

Early registration savings: sign up by January 31 to save \$100 per person!



September 12-15, 2019 | Indianapolis, Indiana Tackle your most pressing practice challenges at aaha.org/connexity.

# in the community

# Mush!

by M. Carolyn Miller

The Iditarod, a 1,000-mile sled dog race that attracts an international crowd of followers, journalists, volunteers, and participants, takes place each spring in Alaska. Traveling from Anchorage to Nome in subzero temperatures, race participants cross some of the most beautiful and treacherous terrain in the country.

Mushers from all walks of life—fishermen, lawyers, doctors, miners, artists, and natives—participate in the race. So, too, do 40 veterinarians, but not as race participants.

David Palmini, DVM, founder and managing director of AAHA-accredited Sano Hospital for Animals in Conifer, Colorado, is one of those veterinarians. For the past 10 years, he has donated his time, services, and travel expenses to the sled dog teams during the race.

"Shortly after I bought my practice in 2003, I did an after-hours C-section for the president of the Rocky Mountain Sled Dog Club," Palmini said. (Located at 8,200 feet, Sano Hospital is in a mountain town southwest of Denver.) "He started referring mushers to me." (Today, Sano Hospital serves about six sled dog teams.) "He also invited me to work regional sled dog races in Colorado."

Palmini did just that. And in 2007, he took a sled dog training course in Anchorage that involved performing prerace checks for the Iditarod. He later applied to work the race using what he learned.

"The dogs are bred and trained for running in cold weather, which makes orthopedic and weather-related issues surprising minimal," said Palmini. "In long-distance races, gastrointestinal ulcers, rhabdomyolysis, and aspiration pneumonia are the biggest issues race vets are on the lookout for."

Add the stress of a time-sensitive race and difficult weather to those unique health challenges and you have the ingredients for a perfect storm.



A sled dog poses for the camera.

"This year's race had a total of 67 teams and 1,072 dogs. With only 40 veterinarians and 27 checkpoints, the veterinarians have to leapfrog along the route," Palmini explained. "Keeping the vets ahead of the mushers is a constant challenge, in large part due to the weather."

Inclement weather can turn back small planes loaded with volunteers, veterinarians, dog food, and supplies at a moment's notice. In this year's race, Palmini didn't make it to his first checkpoint until day three. Normally, he would work four or five checkpoints in a race.

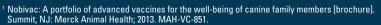
But it's all in a day's—or a long night's—work during the race.

For Palmini's staff, the greatest takeaway from the 2018 race was the beaver skin gloves he brought back. But for Palmini, it was about the experience. He spent time in a native village where the indigenous language—sprinkled with English profanities "because [the language] has more satisfying cuss words"—was spoken daily. He also witnessed the nonchalance of a local volunteer who caught fire, rolled in the snow to put the fire out, and then made a joke about it.

It doesn't get much better than that. \*\*

# Dogs take enough risks on their own.





The only vaccine that prevents

canicola, L. grippotyphosa,

leptospirosis caused by Leptospira

L. icterohaemorrhagiae, and aids in the prevention of L. pomona.

\*\* L. grippotyphosa

Merial is now part of Boehringer Ingelheim.

RECOMBITEK® is a registered trademark of Merial. ©2018 Merial, Inc., Duluth, GA. All rights reserved. VAC16TRADEADS2 (01/18).



**Prevents your patients** 

from shedding bacteria

into the environment

after exposure\*



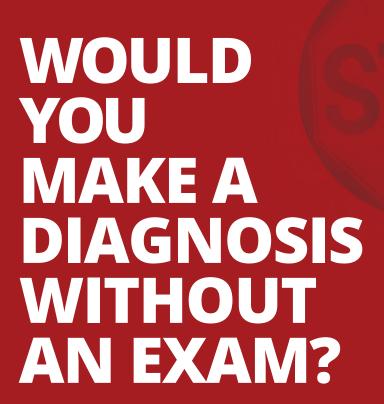


The only bacterin to

provide a 15-month

duration of immunity\*\*

<sup>\*</sup> Indicated for the prevention of leptospirosis and leptospiruria caused by *L. canicola, L. grippotyphosa* and *L. icterohaemorrhagiae* and as an aid in the prevention of leptospirosis and leptospiruria caused by *L. pomona.* 



Then why would you develop a marketing plan without a thorough analysis of your practice's position and needs? AAHA practices qualify for a FREE digital impact report and telephone consultation designed to educate and empower you to make informed marketing decisions.

Take control of your success. Call 1-800-493-9003 today!

**GET YOUR FREE DIGITAL IMPACT REPORT** 



InTouchVet.com 800-493-9003

