To take care of others, you must first take care of yourself. This Mental Health Month, make a commitment to your wellbeing. STORY ON PAGE 8.

Also Inside

Looming legislation
Lawmakers are busy considering a number of animal- and veterinary-related bills. Find out what changes could be on the horizon.

Too much information
When is it permissible to share patient records—and when should you keep the information confidential?
In perfect harmony
Veterinary professionals are at a higher risk of mental illness and suicide than the general population. Like any good care plan, the key is prevention. Learn how to take care of yourself and where to turn for help when you need it.

NEWS & EVENTS
3 President’s Perspective
4 News Briefs + Event Calendar

LEGAL & REGULATORY
5 Legislative Update: OVMA is monitoring more than a dozen bills and rule proposals that could affect the way you practice.
6 Regulation Station: When it comes to patient records, how far does confidentiality extend?

PRACTICE MANAGEMENT
7 To Your Credit: Your staff swipes dozens of client credit cards each day. It sounds simple, but is it really?

COMMUNITY & MEMBERSHIP
11 Community Corner + New Members
Spring is a time of birth and growth: Flowers sprout and bloom, baby birds hatch and learn to fly, trees blossom and bear fruit. So too does our profession experience growth: Veterinary students graduate and prepare to join us as colleagues, while other students are beginning clinicals, and still others are learning of their acceptance into veterinary school. This is exciting news for the entire profession. These bright minds represent where our profession is going, and it is our job to welcome them, to foster their growth and to help them in any way we can.

As OVMA President, I have the true honor of attending the White Coat and Oath and Hooding ceremonies for OSU students. They are both excited and nervous, feeling ready and unprepared all at once. The students I have interacted with in practice ask great questions and work hard to learn and grow. They are, in a word, inspiring. More than anything, I have noticed that they are kind and compassionate; they are good to one another, and they foster teamwork—not competition. They have just as much to teach us as we have to teach them.

The growth and development of most any organism—be it a plant, animal, human child, or even a new graduate—is heavily influenced by how it begins its existence. How it starts will determine much in the course of their life: The better the start, the better the overall life. As veterinarians, we see every day how good management, care and attention makes all the difference for our patients. We know that with dairy calves, it is critical that they get clean, high-quality colostrum, and how that very first meal changes their immunity and entire start to life. The nutrition and health that they have as calves influence production, disease risk and potential.

To me, it is no different for humans; the first exposures we have to veterinary medicine—or anything—have a lasting impact. Please find a way to help influence the future of our profession by becoming a mentor, teacher or encourager of a student or new veterinarian. The veterinarians I shadowed as a student had such a profound impact on my path, and I am forever grateful. Having someone who gives you a chance, shares their experiences, and pushes you just outside of your comfort zone is so nurturing. Take time to walk through cases with a new graduate colleague, take them out for lunch and just listen, share your own struggles and victories, contribute to a scholarship fund, and reach out to youngsters. You will find that you get as much as you give—or perhaps even more.

For these students and our profession as a whole, opportunities in the field may also bring significant hurdles. As veterinarians, we are passionate about our calling, but that passion can also be our downfall. This profession asks so much of us—at times, too much. We have lost far too many colleagues to suicide, and we must make mental health a priority in veterinary medicine.

Please see Mental Health on page 8.
PHARMACY PROPOSALS PUT ON HOLD FOLLOWING OVMA COMMENTS
In response to numerous concerns, the Ohio Board of Pharmacy has placed a temporary hold on proposed rules affecting both veterinary clinics and animal shelters. OVMA filed extensive comments on the revised proposals last month, as well as previously on initial versions. OVMA continues to seek interactive dialogue with the Board of Pharmacy on all rules that affect how you store, secure, record and administer prescription drugs.

USDA APHIS, ODH TO DISTRIBUTE ORAL RABIES VACCINE
In late May, oral rabies vaccines for raccoons will be distributed in Carroll, Columbiana, Harrison, Mahoning, Stark and Tuscarawas counties, as part of a joint effort between USDA and the Ohio Department of Health. The chance for an exposure incident is considered remote. If you practice in these areas, please visit www.ohiovma.org/news for additional information.
In addition to reviewing the state biennial budget and numerous proposals from multiple regulatory agencies, we are busy tracking legislation that’s being introduced at a speedy rate. The OVMA Legislative Committee and Board of Directors have reviewed several bills and voted to take a position of support, oppose, or interested party. The first two positions are clear in their intent; as for the third, it essentially means we have not taken a formal stance for or against a particular piece of legislation. As an interested party on a bill, we continue to track its movement and engage in conversations that further shape the legislation. Please see the chart below for a summary of pending bills and the Board’s stance on each.

As legislation is introduced and moves through the General Assembly, it is imperative that your elected officials hear from you! While OVMA staff spend countless hours reviewing proposals and talking with lawmakers on your behalf, the bottom line is, we are not the constituents who are directly affected by these bills. Nothing has a bigger impact on legislators than hearing straight from the individuals who will be impacted by their work—in other words, you. Share your unique perspective with your representatives and get automatic bill updates by joining the OVMA Grassroots Club online at www.ohiovma.org/grassroots.

### BILL NUMBER / DESCRIPTION

<table>
<thead>
<tr>
<th>BILL NUMBER / DESCRIPTION</th>
<th>STATUS</th>
<th>OVMA POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>HB 24: Makes humane agents subject to bribery law and establishes procedures for seizure of certain animals.</td>
<td>Pending in House Agriculture &amp; Rural Development Committee</td>
<td>Interested Party</td>
</tr>
<tr>
<td>HB 30: Prohibits pet food from containing remains of an animal that was euthanized by an injected drug.</td>
<td>Pending in House Agriculture &amp; Rural Development Committee</td>
<td>Interested Party</td>
</tr>
<tr>
<td>HB 33: Establishes animal abuse reporting requirements.</td>
<td>Pending in House Criminal Justice Committee</td>
<td>Interested Party*</td>
</tr>
<tr>
<td>*OVMA is working to remove penalty language in the bill while retaining civil/criminal immunity provisions for veterinarians who report suspected animal abuse.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HB 37: Revises laws governing nuisance, dangerous and vicious dogs.</td>
<td>Pending in House Criminal Sentencing Subcommittee</td>
<td>Interested Party</td>
</tr>
<tr>
<td>HB 67: Allows veterinarians to receive up to two CE credits per biennium for performing free spay/neuter services.</td>
<td>Pending in House Commerce &amp; Labor Committee</td>
<td>Opposed**</td>
</tr>
<tr>
<td>**While the Board is opposed to the bill in its current form, OVMA is working with the sponsors to improve the legislation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HB 120: Designates July as &quot;Hank Kabel Sarcoma Awareness Month.&quot;</td>
<td>Pending in House Agriculture &amp; Rural Development Committee</td>
<td>Interested Party***</td>
</tr>
<tr>
<td>***OVMA agrees with the importance of the raising awareness for both pet and human cancer research but has concerns with singling out one over another.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HB 124: Allows a residential property owner to keep small livestock and prohibits zoning authorities from regulating certain noncommercial agricultural activities.</td>
<td>Introduced in the House</td>
<td>Interested Party</td>
</tr>
<tr>
<td>HB 133 &amp; SB 7: Allows members of the military stationed in Ohio and their spouses to obtain temporary state occupational licenses.</td>
<td>HB 133: Pending in House State &amp; Local Government Committee. SB 7: Passed Senate, pending in House Armed Services &amp; Veterans Affairs Committee</td>
<td>Support</td>
</tr>
<tr>
<td>SB 32: Makes changes to laws governing pet cemeteries.</td>
<td>Pending in Senate Local Government, Public Safety &amp; Veterans Affairs Committee</td>
<td>Interested Party</td>
</tr>
<tr>
<td>SB 131: Changes professional title of &quot;registered veterinary technician&quot; to &quot;registered veterinary nurse.&quot;</td>
<td>Introduced in Senate (4/18/2019)</td>
<td>Support</td>
</tr>
</tbody>
</table>
The confidentiality of patient/client record information is not specifically addressed in the sections of Ohio law pertaining to veterinary medicine. Rather, under general common law, it has always been recommended that the sharing of patient/client information should be limited to the two parties involved—in other words, the provider and the customer—unless the client specifically agrees that it be shared with another party (vaccine records with a boarding kennel, for example).

Exceptions include when requested by a local or state government agency pertaining to a potential animal or human health concern (such as rabies vaccination status request from a local health board) or as part of a court order. In addition, the Ohio Administrative Code section pertaining to veterinary records content and maintenance (OAC 4741-1-20) requires that you share a copy of the patient record with the client when asked, as well as with a subsequent treating veterinarian.

A fairly new addition to the question of record confidentiality comes from an Ohio Board of Pharmacy rule (OAC 4729:5-3-05) that prohibits the sharing of patient records containing drug information with any third party. The exceptions are when sharing with the patient (or, in the case of veterinary medicine, the animal’s owner), another healthcare professional, a government agency, an agent of an insurance company,

When can patient records be shared?

The confidentiality of patient/client record information is not specifically addressed in the sections of Ohio law pertaining to veterinary medicine. Rather, under general common law, it has always been recommended that the sharing of patient/client information should be limited to the two parties involved—in other words, the provider and the customer—unless the client specifically agrees that it be shared with another party (vaccine records with a boarding kennel, for example).

Exceptions include when requested by a local or state government agency pertaining to a potential animal or human health concern (such as rabies vaccination status request from a local health board) or as part of a court order. In addition, the Ohio Administrative Code section pertaining to veterinary records content and maintenance (OAC 4741-1-20) requires that you share a copy of the patient record with the client when asked, as well as with a subsequent treating veterinarian.

A fairly new addition to the question of record confidentiality comes from an Ohio Board of Pharmacy rule (OAC 4729:5-3-05) that prohibits the sharing of patient records containing drug information with any third party. The exceptions are when sharing with the patient (or, in the case of veterinary medicine, the animal’s owner), another healthcare professional, a government agency, an agent of an insurance company,
Processing credit cards: How hard can it be?

This past month I was speaking with one of my merchants who owns a web design company, and he asked me how hard it could be to process a credit card. That got me thinking about the web of companies that are involved and how complicated this industry is. So, I thought I would share with you who is involved and how they work together, in hopes that this knowledge helps you make better-informed decisions when it comes to negotiating or dealing with issues.

There are two sides to this industry: The card-issuing side and the card-acquiring side. The former handles the cardholder side of a transaction, while the latter is responsible for the merchant side of a transaction.

KEY PLAYERS ON EACH SIDE

On the card-issuing side:
- The card brand companies
- The card-issuing bank
- Your customer, the card holder

On the card-acquiring side:
- The card brand companies
- The card acquiring bank
- The merchant service company
- The transaction processor
- The merchant (you)

ROLES OF THE KEY PLAYERS

The roles of the card holder and the merchant are obvious. But what do the others do? Let’s take a look.

The card brand companies
The card brands—Visa, MasterCard, Discover and American Express—are responsible for the upkeep of networks transmitting the payment information in real time. They also provide a risk score and risk condition code with each transaction as it occurs. This determines the interchange category and price of the transaction (you can find a copy of the interchange rates on each card brand’s website). They set the rules for card use and processing by the card holders and merchants. Lastly, they are the brand ambassadors whose job is to maintain the integrity of the brand in the public eye. Their fee for this on the acquiring side is minimal.

The card-issuing bank
The card-issuing bank must be registered with the card brands and is the financial institution that issues credit cards to consumers on behalf of the card brand companies. The issuer acts as the middleman for the consumer and the card brands by contracting with the cardholders for the terms of the repayment of transactions. Because of the risks of charge offs associated with issuing the cards, the card-issuing bank makes the lion’s share of the credit card processing fees.

The card-acquiring bank
The card-acquiring bank is the financial institution that maintains the merchant’s credit acceptance account. Also required to be registered with the card brands, the acquirer...
May is Mental Health Awareness Month, and though mental health is a 24/7/365 issue, now is the time to renew our efforts to raising awareness and breaking down stigmas. One in five adults in the U.S. experiences a mental health condition each year, and the risks are higher in our profession.

What can we do to tackle this problem in ourselves and in our colleagues? First and foremost, know that you are so important, that you deserve to feel better, and that there are people ready and willing to help you do so.

Second, take that first step and ask for help. If you are considering suicide, please reach out to the National Suicide Prevention Lifeline at 1-800-273-8255. If you are struggling with overwhelming stress, burnout, depression, substance abuse, or anything else, the Ohio Physicians Health Program (OPHP) offers free resources you can take advantage of as an OVMA member. For over a decade, OVMA has partnered with this non-profit organization that provides confidential services to improve the health and well-being of Ohio healthcare professionals. Contact OPHP online at www.ophp.org or by phone at 614.841.9690. It may be a long and difficult journey back to wellness, but it all starts with that first big step.

Third, remind yourself that you must take care of yourself first before you can take care of others. When you have a cold or the flu, how much more difficult is it to do your job? Mental health is no different. In the same way you take vitamins, eat healthy and exercise to improve your physical health, you must also take steps to care for your mental health. See the sidebar for some simple things you can do each day.

OVMA’s Wellbeing Committee is always working to provide tools, support and education on improving mental health for our members. AVMA also offers a variety of resources, including QPR (question, persuade, refer) training that teaches veterinary professionals how to identify at-risk colleagues and guide them to getting professional support. See the next page for more information.

As veterinarians, we know that preventive care and prompt treatment of illness is vital to the growth and overall health of our patients—and us. If our profession is to grow, we must be healthy in mind, body and spirit.
Dr. Yoakam’s mental health tips

Make your own health a priority. Do small things every day to improve your mental health, including:

- Foster genuine relationships and communities, and find people you can be real with.
- Take a short walk every day; even just a few minutes of fresh air and sun can boost your mood.
- Pay attention to what you eat and drink. What you consume can have a real effect on your mental and physical health.
- Monitor your screen time and social media use.
- Speak to yourself—your ‘inner voice’—as you would to a close friend. Be kind to yourself!
- Prioritize sleep and rest.
- Learn breathing techniques to help with stress. One example is box breathing:
  - Breathe in for a count of 4
  - Hold for a count of 4
  - Breathe out for a count of 4
  - Wait, don’t breathe, for a count of 4
  - Repeat several times

On average, it takes 200+ HOURS to sell a veterinary practice.

Or more, if you’re selling to a corporate buyer.

LET US DO THE WORK.

MENTAL HEALTH RESOURCES

National Suicide Prevention Lifeline
www.suicidepreventionlifeline.org | 800-273-8255

Ohio Physicians Health Program
www.ophp.org | 614.841.9690 | info@ophp.org

AVMA Wellbeing and Peer Assistance (including QPR Wellbeing Gatekeeper Training)
www.avma.org/wellbeing >> Wellbeing Programs

Mental Health America: Screening Tools
www.screening.mentalhealthamerica.net

TED Talks on Mental Health
www.ted.com/topics/mental-health

Merck Veterinary Wellbeing Study (2018)
www.merck-animal-health-usa.com >> About Us >> Veterinary and Consumer Affairs >> Veterinary Wellbeing Study

SOME OF OUR SATISFIED CUSTOMERS:

“Your fee structure was very reasonable. You guys did a great job in terms of guiding us through the process and providing input and answers to sometimes vexing questions.” - Dr. Larry Reed

“I always felt you had our back.” - Dr. Michael Kiefer and his wife, Jan

“I’m a doctor. I’m not anyone who handles this type of stuff, and I don’t want to. I would hire you guys back in a heartbeat.” - Dr. Maureen Fritch

Contact us today!

Call us for a FREE CONSULTATION. Mention this ad to receive $1000 OFF A VALUATION.

Corey Young, DDS, MBA, CVA, ABI Transition Consultant
877.866.6053 ext. 7
corey@omnipg-vet.com
When treating four-legged patients, make each moment matter.

PNC can help.

We’re making business banking easier.

At PNC, our team of dedicated Healthcare Business Bankers understands your business challenges and the important role that cash flow plays in your success. That’s why we offer a range of solutions to help optimize management of your practice’s revenue cycle and payables, so your business can run with less complexity and payments can be received promptly.

Learn more at pnc.com/hcprofessionals or by calling 877-566-1355

©2018 The PNC Financial Services Group, Inc. All rights reserved. PNC Bank, National Association. Member FDIC
Accomplishments

Dr. Andrea Miller of Liberty Pet Hospital in Powell was inducted to the Plum High School Distinguished Alumni Wall of Honor. A 1999 graduate of the Pennsylvania-based district, Dr. Miller was one of five alumni recognized for accomplishments making them “exemplary models” to the school’s current students. A small business owner since her clinic opened in 2015, her primary areas of interest are dentistry, surgery and behavior.

In the News

Dr. Laura Miller of Hilliard is passionate about curbing pet overpopulation. She took her NOMAD (short for “Neighborly Ohio Mobile Animal Doctor”) unit to the northeastern corner of the state to participate in an event sponsored by Ashtabula Low Cost Spay Neuter.

“Our NOMAD unit travels countless miles across Ohio committed to curbing the over-population of cats and saving lives,” Dr. Miller explained. “I started it to curb the cat population.”

During the day-long event, she neutered 50 cats, most of which were strays.

—Star Beacon (April 29, 2019)

On the opposite side of Ohio, Proctorville Animal Clinic—home to Dr. Mike Dyer and Amber Mullins—teamed up with One By One Animal Advocates for a TNR event in April. Funded solely through donations and run by volunteers, the event brought in more than 60 cats from a feral colony in Cabell County (just across the river in West Virginia) to be vetted and sterilized.

“I think it’s a real community benefit,” Dr. Mullins said of the TNR event. “It helps the cats, it helps the people, and I’m just happy to be a part of it.”

—The Herald-Dispatch (April 20, 2019)

Dr. Courtney O’Neill of Austintown Veterinary Clinic has been seeing an influx of itching and sneezing this spring—and not just in people. Pet owners are reporting their cats and especially dogs are also experiencing seasonal allergies from pollen, ragweed, and the occasional bee.

“Dogs think bees are flying chew toys, so I tell people to have (antihistamines) on hand all the time for something like that,” she said, adding that it’s important to check with a veterinarian for proper dosage instructions. For those pets that have year-round allergies, she suggests allergy testing and immunotherapy to curb the itching and scratching.

—WKBN 27 (April 16, 2019)

Dr. Rustin Moore, dean of OSU CVM, was recently interviewed for the Only in Appalachia movement, comprised of a group of students dedicated to changing the public’s perception of the region through positive, real-life stories.
“I can only hope that every child and young person in Appalachia could have the family, friends, mentors and roles models that I had growing up (in West Virginia),” Dr. Moore wrote when sharing the video. “I hope to be able to provide inspiration, role modeling and mentoring to as many young people as possible to encourage them to pursue their dreams.”

—Only in Appalachia Facebook Page (April 21, 2019)

As a youngster, Dr. Jeff Reiswig never expected to become an equine dentist—in fact, his mother encouraged him to become a human physician—but it’s a career he wouldn’t trade now that he’s got it.

“Horse dentistry has been a neglected field because a lot of veterinarians don’t enjoy the work,” he explained. “But I’ve enjoyed learning a new field in the last half of my career. I find owners’ appreciation rewarding when they find their horses’ pain has resolved.”

After several years splitting his time between pet animal and equine medicine, he opted for a change. His interest in horse dentistry deepened, and in 2007, he established Equine Veterinary Dental Services in Newark, where he performs more than 1,000 procedures each year. Dr. Reiswig has been a diplomate of the American Veterinary Dental College in equine dentistry since 2015.

—The Newark Advocate (April 21, 2019)

Student Life

At the annual SAVMA Symposium in March, the SAVMA House of Delegates elected OVMA student member Laura Venner (Class of 2021) as the global and public health officer for 2020–21.

Lindsay Courtney (Class of 2021), Jeffrey Kim (2020), John Rowe (2021) and Michelle Sahr (2020) were among the 54 recipients from across the country to be awarded a $5,000 scholarship from Merck Animal Health and the American Veterinary Medical Foundation. The winners were selected based on academic excellence and leadership skills.

OVMA donates over $20K to student initiative

OVMA, with the help of 2019 Midwest Veterinary Conference attendees, raised $22,410 for veterinary and technician student scholarships as part of the 5 for 5 for the Future Program. Launched in 2012, the initiative sets aside $5 from every MVC registration to a dedicated fund for a period of five years. At the end of the original five-year period, the program had been so successful that it was renewed for another five years. In total, OVMA has donated $153,801 to student scholarships as part of the 5 for 5 program.

In Memoriam

Dr. Robert Alexander, 89, of Chardon passed away peacefully on Nov. 6, 2018. He was born on Aug. 31, 1929, in Pemberville to Kenneth and Susie Alexander.

Dr. Alexander was a graduate of The Ohio State University College of Veterinary Medicine and served in the U.S. Army. He owned the Wiley Avenue Animal Clinic in Cleveland, served as Cuyahoga County’s dog warden, and was also the director of the Cleveland Animal Protective League.

Outside of veterinary medicine, he was an avid skier and enjoyed his vacation home in Ellicottville, N.Y. He was also an active sailor and raced out of the Lakeside Yacht Club. A farmer at heart, Dr. Alexander supplied the neighborhood with vegetables and herbs from his kitchen garden. On a happiness scale of one to 10, he was always a 12.

Survivors include wife Georgiann; children Juli, Bradley (Elizabeth), David (Bonnie), Don (Donna), Rex and Ann (Tim); twin brother James; seven grandchildren; and many great-grandchildren. He was preceded in death by his parents; children Craig, Chris and Lyn; grandson Kent; and siblings Henry, Don and Doris.

New Members

Active Members
- Dr. Brit Benson
- Dr. Elizabeth Bolback-Peniston

Affiliate Members
- Dr. Tonia Minko
- Dr. Christine Gernhart
FROM BEGINNING TO END,
YOU WERE THERE FOR THEM.

Losing a pet can be emotionally devastating. Your clients depend on you to help guide them throughout their pets’ lives—as well as at the end of it. Paws & Remember offers your clients several options to cope with their loss and remember their companions in a way that is meaningful to them.

As a Paws & Remember professional member, you’ll benefit from our staff training, quality education material, and memorialization products and services that are tailored to the needs of the pet owner and their pet—enabling your practice to give the ultimate care and comfort until the very end.

Franchises are still available, so contact us today at franchise@pawsandremember.com or 1-800-342-5676 to learn more about joining our trusted network.

Cleveland
6160 Halle Drive | Valley View, OH
216-524-8860

Miamisburg
1019 S. Main Street | Miamisburg, OH
877-404-PAWS (7297)

Toledo
1021 Warwick Avenue | Toledo, OH
419-578-7387

Paws & Remember
pawsandremember.com
or another party when the client has given written authorization to do so. (Such consent remains in effect until rescinded by the client.)

**COMMON SCENARIOS**

A boarding kennel or groomer requests an animal’s vaccination history.

In this instance, providing patient records is permissible with oral or written permission from the client. Animal vaccines are not regulated as drugs; therefore, the pharmacy rule requiring written permission does not apply here.

However, be cautious when sharing records of pest preventives. Although flea and tick products are EPA regulated as insecticides—not drugs—and therefore do not need written permission to be shared, heartworm preventives are drugs. Therefore, you would need permission from the client in writing to share information about whether a patient is current on heartworm prevention.

A rescue group or humane society is seeking information on the previous care of an animal.

Absent a court order or the consent of the previous owner, you generally are not at liberty to share information with a rescue group or humane society, unless it is directly to a veterinarian who is subsequently treating the animal and/or who works at the shelter.

A third-party vendor wants to contact clients about their pets.

Some of the companies you work with may want to use information from patient records to remind clients of upcoming visits and/or incentives for product use. Per the Board of Pharmacy rule, this is permissible only if you have written client permission. It is recommended that the clients be made aware in advance of why the information is being shared and how it will be used.

When in doubt, it is best to err on the side of caution when it comes to sharing patient record information—unless the owner has given permission or it is to another veterinarian who is treating the animal.

One final point relating to sharing records: You may not withhold records from a client or a subsequent treating veterinarian in the event the client has an outstanding balance due. That may only be addressed through typical financial collection avenues and not by withholding patient records.
The merchant service company
The merchant service company is the company with which you will sign the merchant service agreement. It is the only entity in this list that you will deal with regarding your merchant account. Most merchant service companies sign agreements with both the card-acquiring bank and the card brands to offer credit card services to merchants. Because of this, they have a strict set of rules within which they must act, including respecting the brand image and minimizing financial risk to the card-acquiring bank.

The merchant service company supports you, the merchant, and provides the tools you need to process credit cards: Desktop terminals, mobile terminals, virtual terminals, etc. It also sets the pricing on the account. Because of the competition for business in this space, most merchant service companies have a minimal markup.

The transaction processor
The transaction processor and the merchant service company are sometimes—but not always—the same entity. The role of the transaction processor is to connect the merchant to the card brand networks—in other words, to move transactions. They do this with server farms, internet connections and T1 lines from the phone company. For this service, they charge a small fraction of a penny per transaction.

WRAPPING IT UP
I have talked in very general terms about the amount of money that the various players in the credit card processing landscape make. To clarify, let’s look at a hypothetical $100 transaction and break down what each entity makes.

<table>
<thead>
<tr>
<th>Key Player</th>
<th>Amount of $100</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card brand company</td>
<td>$0.15</td>
<td>7.2%</td>
</tr>
<tr>
<td>Card-issuing bank</td>
<td>$1.60</td>
<td>75.8%</td>
</tr>
<tr>
<td>Card-acquiring bank</td>
<td>$0.01</td>
<td>0.5%</td>
</tr>
<tr>
<td>Merchant service company</td>
<td>$0.34</td>
<td>16%</td>
</tr>
<tr>
<td>Transaction processor</td>
<td>$0.01</td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$2.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

I made a few assumptions in this cost chart, the two biggest being the amount the card-issuing bank charged and the amount the merchant service company charged. In this example, I set the card-issuing bank’s fee at $1.60, but, referring to the interchange categories, that amount is anywhere between $0.27 and $2.99—or more. And, depending on your merchant service company, the actual amount charged could be higher or lower than the $0.34 shown.

I mentioned earlier that the only company that you will deal with is the merchant service company. By extension, the only company you can talk to about your rates is the merchant service company. And, as you can see, they only account for a small portion of the fees per transaction. So, unless they are charging you excessively, or have hidden or unnecessary fees, there is not a lot of wiggle room for lowering the fees.

I hope that this brief description of a complicated infrastructure is helpful to you and your business.

Terence Ward, vice president and owner of Meramak Inc., contributed this story. Contact him at tward@meracard.com.
FOR THE
CARETAKERS

When your life is looking out for others, First Merchants has the capital & counsel to make sure someone's looking out for you. For more information, please call 800.205.3464 or check us out at firstmerchants.com.

COMMERCIAL BANKING | PERSONAL BANKING | PRIVATE WEALTH

Investment Management solutions provided by First Merchants Private Wealth Advisors may not be FDIC insured, are not deposits of First Merchants Bank, and may lose value. Investments are not guaranteed by First Merchants Bank and are not insured by any government agency.
When referring veterinarians seek a consult or referral for advanced heart care, they need a service that can provide state-of-the-art diagnostic tools, specialized therapies and a full range of minimally invasive treatment options.

The Cardiology and Interventional Medicine Service at the Veterinary Medical Center (VMC) offers these capabilities, including a comprehensive set of cardiac diagnostic tests, such as ECGs, echocardiography and computed tomography angiography (CTA). Interventional medicine therapies entail minimally invasive procedures such as cardiac pacemaker implantations, balloon dilation of stenotic valves and coil embolizations of arteries and various tumors.

In this issue of Update for Veterinarians, we focus on our Cardiology and Interventional Medicine service and highlight the state-of-the-art diagnostic evaluation and therapies available for your patients who may need specialized care.

Section head Dr. Karsten Schober, and team members Dr. Jaylyn Rhinehart and Dr. Samantha Kochie, discuss minimally invasive procedures that eliminate the need for surgery, help reduce pain and speed recovery.

Dr. Schober and Dr. Rhinehart are just two of the three board-certified cardiologists within the service, with the third being Dr. Randolph Winter, along with two residents and two cardiology technicians who stand ready to assist you, whether through consult or a visit.

We welcome your continued feedback on our services and thank you for choosing the VMC each time you refer a patient in need of advanced care.

Karin Zuckerman, MHSA, MBA
VMC Director
Degenerative mitral valve disease is the most common heart disorder the cardiology team sees, particularly in small breed dogs. In the United States, however, treatment is limited to medications and some dietary regimens, to delay the onset of congestive heart failure. Studies are currently exploring non-invasive procedures, says Dr. Rhinehart.

The service also provides state-of-the-art treatments for dogs with tracheal and bronchial collapse, says Dr. Karsten Schober, cardiology professor and service head. “These therapies include tracheal stent placement for dogs with severe tracheal collapse, and bronchial stenting in dogs with severe bronchial collapse.”

A new VMC clinical trial involving a sedated thoracic CT study of dogs with and without pulmonary hypertension aims to add to the body of knowledge on mitral valve disease, adds Dr. Rhinehart. “It’s exciting because we are using the new CT machine, which makes the study quick and safe for heart patients, as only sedation is needed. We’re looking to see if changes in the lungs explain why some dogs with mitral valve disease get pulmonary hypertension and others don’t.”

Alicia Byrd, cardiology service coordinator, manages the interventional suite, ordering supplies and ensuring that equipment is up-to-date, and assists the team with clinical support and client education. The cardiology team sees between 8 to 10 appointments per day and is one of the most heavily consulted VMC services.

An ongoing collaboration with cardiologists at Nationwide Children’s Hospital has helped the team address more complex cases, Dr. Rhinehart adds, including those involving atrial septal defects, congenital heart anomaly, as well as stenting procedures.

Dr. Samantha Kochie, a second-year cardiology resident, notes that the collaboration with referring veterinarians is an important one.

“We receive frequent consultations from primary care veterinarians. In some cases, if a client can’t afford to refer, we help them with options to perform at their clinic.”

For more information and emergency/after hours contact 614-292-3551 or visit vet.osu.edu/vmc.

### Heart Disease Signs: What to Look For

- **Dogs** – coughing, hard or fast breathing, collapsing
- **Cats** – hiding, dragging legs, fast breathing, fainting
Dilated cardiomyopathy (DCM), a disease of the heart muscle, weakens contractions and the heart’s ability to pump. Signs of the disease, which is prevalent in large breed dogs such as Great Danes, may seem to develop quickly, but the underlying abnormalities and progression to overt heart failure may take months to years to become evident.

While some dogs with DCM may live for one to three years, others may succumb to the disease more quickly. Because there is no cure for primary DCM, veterinarians must manage the clinical signs with medications and diet.

A recent case illustrates the complexities of this disease, as well as how the VMC Cardiology and Interventional Medicine service worked closely with the referring veterinarian to address the signs of DCM.

In early March 2019, Bullet, a five-year-old Great Dane, presented to the VMC cardiology team for evaluation of atrial fibrillation and an enlarged heart. The referring veterinarian, Dr. Brandy Morgan CVM '01, who operates the Ohio Valley Animal Care Center in Moundsville, West Virginia, had called in advance to let the team know she had done a complete evaluation of Bullet and suspected he had atrial fibrillation, says Dr. Samantha Kochie, a second-year cardiology resident.

“She said the ECG showed his heart rate as high, about 270, and that she had done blood work, taken his blood pressure, which was normal, and taken chest x-rays—and that his heart looked enlarged,” says Dr. Kochie, who recommended that Bullet be seen at the VMC immediately.

Owner Sheila Nelson-Hensley noted that two weeks prior Bullet seemed lethargic, was short of breath and had decreased appetite.

“We have been seeing Dr. Morgan for several years and trust her wholeheartedly,” says Sheila. “When she told us we needed to take Bullet to Ohio State, we didn’t hesitate. Knowing that she and Dr. Kochie were communicating frequently about our case made it easier for us, knowing that the collaboration of these two doctors would lead to the best possible treatment for our Bullet.”

Dr. Kochie and the cardiology team placed an IV catheter in Bullet upon his arrival and gave him an injection to slow his heart rate, which eventually came down to 140. They followed with diagnostic tests to understand what the underlying heart disease was.

The tests confirmed Dr. Morgan’s findings: The electrocardiogram showed that Bullet was in atrial fibrillation and had a high heart rate; the echocardiogram confirmed an enlarged left atrium and ventricle that had significantly reduced pump function, as well as minimally thickened mitral valve leaflets; chest x-rays indicated congestive heart failure.

After an overnight stay in the ICU, Bullet’s blood work was monitored to assess electrolytes and kidney response to diuretics, and re-check x-rays were taken. He was started on a number of medications to address a variety of concerns, including fluid accumulation in the lungs, blood vessel dilation and high heart rate.

“Our goal was to slow the heart rate down from 270/280 to the low 100s,” says Dr. Kochie. Bullet was still lethargic but had some steady improvement in his attitude, respiratory rate and heart rate. Although there is no cure for DCM, medications are initiated in the hopes to manage and control the clinical signs of DCM and arrhythmias, but each patient responds differently, says Dr. Kochie.

Dr. Morgan adds that she has been consulting with and referring clients to the VMC for 18 years and appreciates that collaboration, especially in complex cases like these. “The referral coordinators and doctors have always been available and very helpful,” she says.

Sheila was grateful for the VMC team’s prompt response. “They understood our fears and concerns, and Dr. Kochie helped us get through the challenging first few days at home.”

Blue Buffalo Veterinary Clinical Trials Office Seeks Participants

If you have a patient that might be eligible for any of the following trials, please contact our Blue Buffalo Veterinary Clinical Trials Office at: cvm-clinicaltrials@osu.edu or 614-247-8706.

- Dogs with degenerative mitral valve disease
- Cats with heart disease (Hypertrophic cardiomyopathy)

Please visit vet.osu.edu/vmc/clinical-trials for a full list of current trials.
Dr. Jaylyn Rhinehart’s interest in veterinary cardiology came during her undergraduate years at Purdue University, in a class for students applying to the school’s veterinary program. “During one of the lectures, a cardiologist at Purdue presented some cases and that’s when I knew—that’s what I want to do!” she recalls. Dr. Rhinehart completed her veterinary degree at Purdue University and went on to do her internship at the University of Florida. Following her cardiology residency at Ohio State, and after passing her cardiology board exam in summer 2016, she was hired on as a VMC faculty member.

Today Dr. Rhinehart is assistant professor of Cardiology and Interventional Medicine, and one of three board-certified cardiologists in the VMC service. She enjoys the aspects of radiology and the various imaging methodologies as well as the ability to perform noninvasive procedures. “It’s awesome what we can do with today’s technology,” she says.

A typical day ranges from the academic to clinical, teaching and class work with residents in the mornings, followed by rounds with students. The team then follows up with cases, doing consults and performing procedures.

In addition to teaching, one of the biggest rewards Dr. Rhinehart notes, is “the clients we work with and seeing how dedicated they are to their pet and helping them live longer and feel better.”

The complexity of cardiology is what initially drew Texas native Dr. Randolph Winter to the specialty. A graduate of the Texas A&M University College of Veterinary Medicine, Dr. Winter completed his small animal rotating internship at Colorado State and his cardiology residency at Texas A&M. In December 2018, he joined the faculty of the VMC’s Cardiology and Interventional Medicine service as assistant professor of cardiology.

He wants referring veterinarians to know that the service team is experienced with minimally invasive procedures for congenital heart defects—occlusion of patent ductus arteriosus (PDA), balloon valvuloplasty for pulmonic stenosis and balloon dilation for subaortic stenosis.

“It’s really rewarding when we place a device to occlude a PDA in a puppy with heart failure,” he says. “This procedure provides that dog with essentially a normal lifespan, free of medications. We can also perform this in very large dogs and dogs as small as three pounds.”

“I am always happy to chat about a case that we have seen or even just to provide advice.”

Upcoming CE Events
College of Veterinary Medicine Continuing Education

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 8</td>
<td>Orthopedic and Rehabilitative Treatment Options</td>
<td>Dublin</td>
</tr>
<tr>
<td>May 30</td>
<td>Arthrocentesis, Toledo</td>
<td></td>
</tr>
<tr>
<td>August 16</td>
<td>2nd Annual Companion Animal Veterinary CE Conference</td>
<td>Ohio State Veterinary Medical Center</td>
</tr>
</tbody>
</table>

For more details, please visit: vet.osu.edu/alumni/continuing-education

Transitions and Departures

We welcome the following clinicians in their new roles: Dr. James Howard, to assistant professor, small animal surgery and Dr. Joe Lozier, to assistant professor, farm animal medicine.

Dr. Karina Creighton, small animal emergency and critical care medicine, and Dr. Austin Hinds, farm animal medicine, have left the VMC.

Dr. John Bonagura, professor of cardiology and interventional medicine, has retired from Ohio State and will continue his career at North Carolina State University. We are grateful for his numerous contributions to the College of Veterinary Medicine, including his research in the areas of cardiac drugs, and the use of echocardiography and Doppler studies to assess cardiovascular function.

Find us on Facebook
The Ohio State University College of Veterinary Medicine
The Ohio State University Veterinary Medical Center
The Ohio State University Veteran Medical Center at Dublin