



Access to Veterinary Care

Barriers, Current Practices, and Public Policy

A project of the [Access to Veterinary Care Coalition](#)

Released December 17, 2018



Maddie's
Fund

#ThanksToMaddie



THE UNIVERSITY OF
TENNESSEE
KNOXVILLE

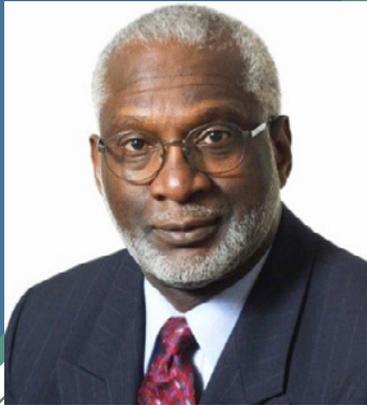
COLLEGE OF SOCIAL WORK

TABLE OF CONTENTS

Section 1: Foreword	iii
Section 2: Preface	iv
Section 3: Executive Summary	vii
Section 4: Background	1
Section 5: Population Research	5
<u>CARE Pet Owners Survey Report</u>	5
<i>Principal Investigator: Linda Daugherty, MPA</i>	
<u>CARE Veterinary Service Providers Survey Report</u>	21
<i>Principal Investigator: Linda Daugherty, MPA</i>	
<u>CARE Focus Groups with Veterinarians Report</u>	36
<i>Principal Investigator: Linda Daugherty, MPA</i>	
<u>Associated Research – Midwestern University Study of Pet Owners Experiencing Housing Insecurity</u>	42
<i>Principal Investigator: Rachael Kreisler, VMD, MSCE, DACVPM</i>	
Section 6: Pets in Society	52
<u>Pets as Family – Implications for Vulnerable Populations and Access to Veterinary Care</u>	52
<i>AVCC Member: Sarina Manifold, LCSW</i>	
<i>Graduate Student: Sonya Snyder</i>	
<u>Animal Law – Pets as Non-Property</u>	62
<i>Guest Author: David Favre, Professor of Law, Michigan State University</i>	
<u>Public Health – Increasing Access to Veterinary Care as a Means to Improving the Health of All</u>	68
<i>Guest Authors: Taylor Young, MPH and Marcy Souza, DVM, MPH, MPPA</i>	
Section 7: Considerations for Veterinarians	77
<u>Nonprofit vs. For-Profit Veterinary Services Modeling</u>	77
<i>AVCC Member: Michael Moyer, VMD</i>	
<u>Discussion – Access to Care in Veterinary Practice</u>	83
<i>AVCC Member: Brian Forsgren, DVM</i>	
Section 8: Summary and Conclusions	88
Section 9: Recommendations to Stakeholders	92
Section 10: Appendices	99
<u>Appendix 1: AVCC Member Biographies</u>	99
<u>Appendix 2: Acknowledgments</u>	107
<u>Appendix 3: CARE Pet Owners Survey Instrument</u>	109
<u>Appendix 4: CARE Veterinary Service Providers Survey Instrument</u>	117
<u>Appendix 5: Moderator Guide for Pet Care Providers Online Focus Group</u>	126
<u>Appendix 6: Incremental Care Clinical Example</u>	127

SECTION 1

Forward



As a child, I was very ill with whooping cough and pneumonia. I remember the presence of family, friends, and neighbors gathered to pay their last respects, as I gasped for breath. But more so, I remember the look of determination and hope in my mother's eyes. Many times, since that unforgettable experience, I have witnessed the power of hope, even in the direst of situations. Hope is infectious. Hope is strong.

Most families with pets regard them as family members. Increasingly, families celebrate their pet's birthday, include them in special events such as weddings, put them in their wills, and other behaviors that reveal the power of the human-animal bond. When these families encounter barriers to veterinary care, it sometimes results in their pet experiencing extended illness

and recovery, or premature death due to a preventable or treatable disease or condition. For these families, there may be emotional pain and a sense of hopelessness.

I have advocated for many years for the elimination of disparities in healthcare, removing barriers to care, and the need for a balanced community healthcare system. My mother gave birth to nine children without access to a hospital. Two of my siblings died in childhood. Access to healthcare for all citizens should be a priority to eliminate disparities in the nation's healthcare system, including the non-human members of families. The complexity of ensuring health care for humans and animals requires interprofessional collaborations to advance and support comprehensive health system strategies, and active promotion of policies and practices. This One Health approach will reduce, and ultimately eliminate, disparities in healthcare.

It is exciting to see the latest developments involving assistance animals. For example, diabetes alert dogs that alert people when their blood sugar is dangerously low and dogs who sense an impending seizure in people with epilepsy. These developments may help transform how we approach healthcare and family wellbeing, appreciating the human-animal bond.

As Surgeon General, I listened to the American people and responded with effective programs. The Access to Veterinary Care Coalition's seminal report provides information that will enable the development of evidence-based solutions. Access to veterinary care gives families a reason for hope—a way to keep families together.

David Satcher, MD, PhD
Satcher Health Leadership Institute
16th Surgeon General of the United States

Reason for Hope

"Access to veterinary care gives families a reason for hope—a way to keep families together."

Dr. Satcher was sworn in as the 16th Surgeon General of the United States in February 1998 and served until 2002. He also served as the 10th Assistant Secretary for Health in the Department of Health and Human Services making him only the second person in history to have held both positions simultaneously. His tenure of public service also includes serving as Director of the Centers for Disease Control and Prevention (CDC) and Administrator of the Agency for Toxic Substances and Disease Registry.

SECTION 2

Preface



I am proud to be a veterinarian. Not only because of our commitment to animals, but also because of the type of people attracted to the profession. We are by nature compassionate, caring individuals. Our roles in helping society are expansive, yet so often, very personal. Society today, in a significant way, is defined by the human-animal bond at all socioeconomic levels. But many families struggle to pay for veterinary care. During my seven years at Young-Williams Animal Center in Knoxville, Tennessee, I too often observed the heartache that families experience when relinquishing a beloved pet due to a treatable condition. As with other professions and industries, the veterinary profession too must find ways to ensure these families have access to needed services.

While my dad was in private veterinary practice, he often told me that providing veterinary care is 90% business and 10% medicine. I recall many of the people and their animals that were helped by my dad, only because he extended credit. The dreaded monthly preparation and mailing of statements were reminders that assisting people with animals needing medical care sometimes meant sacrifices and risks. Thankfully, today most families have other options besides credit carried by their veterinarian. Ninety percent of ensuring access to veterinary care for all pets is about the *business* of healthcare delivery. The 10% medicine, while having its challenges, is assured by the many veterinarians with the knowledge, skills, and desire to help every patient presented to them, regardless of financial constraints.

It was during my years of private practice in Maryland that I observed changes in the human-animal bond. Many of my clients' emotional connection to their pet was profound. At times, I felt inadequate in meeting the emotional and mental health needs of my clients. Consequently, as the dean of the College of Veterinary Medicine at the University of Tennessee, I hired Dr. Elizabeth Strand to establish Veterinary Social Work. Thanks to her leadership, Veterinary Social Work is now an established discipline in social work. These professionals can assist in the delivery of veterinary care by their attention to the mental and emotional needs of animal owners and the veterinary team; ultimately, helping to achieve good outcomes for all. An interprofessional team is necessary to fully support the human-animal bond. One Health encompasses people and their animals, in the context of their ecosystem. The veterinarian-client-patient relationship alone may not adequately address critical realities of the client and their ecosystem. Therefore, including allied health professionals where appropriate results in a more comprehensive approach to healthcare. That is, a One Health approach.

Due to a growing concern among some about access to veterinary care, a group of interested and knowledgeable parties were assembled during the 2015 Animal Care Expo. I appreciate Betsy McFarland and the Companion Animal Department of The Humane Society of the United States for planning and hosting that critical meeting. The Humane Society Veterinary Medical Association also provided support. An important and pivotal recommendation made by the group was that a national coalition be established to continue the discussion and facilitate solutions. Over the next year, a working group formed the [Access to Veterinary Care Coalition](#) (AVCC or Coalition), consisting of for-profit and nonprofit veterinary service providers, animal welfare and social service professionals, and educators.

On March 16, 2016, the AVCC held its first meeting. By the fall of that year, a commitment was made to do a national population study to learn more about the barriers faced by pet owners and the veterinarians' perspective on access to veterinary care. Thanks to a generous grant from [Maddie's Fund](#)[®], the AVCC commissioned the

The *Business* of Healthcare Delivery

"Ninety percent of ensuring access to veterinary care for all pets is about the business of healthcare delivery."

SECTION 2: Preface

[Center for Applied Research and Evaluation \(CARE\)](#) at the University of Tennessee to conduct the study. We wish to thank Linda Daugherty for her excellent work in performing the study. To complement the CARE study, Coalition member, Dr. Rachel Kreisler, planned and implemented a study of housing insecure pet owners. Her outstanding work helped to achieve a broader cross-sectional view of pet owners.

This report is a compilation, with the main topic being barriers to veterinary care. We want to thank all who contributed to the supporting sections that provide important contexts. Coalition member, Sarina Manifold, and graduate student, Sonya Snyder, provide the essential perspective of pets as family. Dr. Marcy Souza and Taylor Young address the crucial public health context for why access to veterinary care is critical for human health. Professor David Favre provides an essential snapshot of animals as non-property as viewed by the legal system. Coalition member, Dr. Michael Moyer, offers a sound way to compare nonprofit and for-profit veterinary practices to help clarify whether there is a level playing field from a financial standpoint. Coalition member, Dr. Brian Forsgren, who built a successful practice that serves low-income clients, shares an ethical perspective that reminds the veterinary profession of our historic commitment to find a way to help all patients presented in need of care.

I extend a heartfelt thank you to the Coalition ([see Appendix 1](#)) for their collaborative work in producing this report. The effort and dedication of this group of volunteers represents what public service is all about. The generous contribution of time and expertise by the peer reviewers helped to ensure a scholarly report. I thank you, and the many others who assisted with this project ([see Appendix 2](#)).

Last but not least, I thank Dr. Susan Krebsbach, Executive Director and Project Manager, and Amy Wiltzius, Coordinator Specialist, for their outstanding work and dedication in facilitating all planning and delivery of work products required to produce this report.

All pets deserve access to veterinary care. The AVCC hopes that this report will stimulate more dialogue and actions among all stakeholders to achieve this goal.



Michael J. Blackwell, DVM, MPH, FNAP
Assistant Surgeon General, USPHS (R)
Chair, Access to Veterinary Care Coalition

Access to veterinary care impacts millions of pets and their families. **Maddie's Fund®** recognizes this societal problem and is very pleased with the groundbreaking work that the *AVCC Report* does in addressing this animal welfare crisis.

“This is a critical report for the future of the veterinary profession and the animals we made an oath to help,” said Dr. Laurie Peek, Executive Leadership Team, Maddie's Fund®. “This will truly revolutionize the status and well-being of companion animals.”

Maddie's Fund® FACTS

Maddie's Fund® Mission

The Maddie's Fund® mission is to revolutionize the status and well-being of companion animals.

About Maddie's Fund

Maddie's Fund® is a family foundation created in 1994 by Workday® co-founder Dave Duffield and his wife, Cheryl, to revolutionize the status and well-being of companion animals. The Duffields endowed the foundation with over \$300 million. As of June 30, 2018, the Foundation has awarded more than \$225.7 million in grants toward increased community lifesaving, shelter management leadership, shelter medicine education, and foster care across the U.S.

Who is Maddie

The Duffields named Maddie's Fund® after their Miniature Schnauzer, Maddie, who, with her feisty spirit and unconditional love, provided them much joy and laughter. Maddie was with Dave and Cheryl for ten years and continues to inspire them today.



Maddie's Fund® is the fulfillment of a promise that Dave made one evening while playing with Maddie on the living room rug. That, if they ever had any money, they would give back to her kind so that other families could experience the joy she has brought to them. Maddie's Fund® invests its resources to create a no-kill nation where every dog and cat is guaranteed a healthy home or habitat. All of this, **#ThanksToMaddie!**

SECTION 3

Executive Summary

Pets have become an integral part of our families. An estimated 29 million dogs and cats live in families that participate in the Supplemental Nutrition Assistance Program, also known as food stamps. Needing public assistance is one measure of a family's capability to purchase veterinary care. However, there are also middle-class families that live paycheck to paycheck, with limited funds for veterinary care, especially when the need involves high-cost. The paradox we face is that while it may be logical that someone should not have a pet if they cannot provide veterinary care, it is difficult to defend denying companionship with pets. Consequently, pets will continue to live with families with limited means. These families deserve companionship with pets and to enjoy all of the benefits that come through these relationships.

Through a generous grant from [Maddie's Fund®](#), the Access to Veterinary Care Coalition (AVCC) commissioned a national population study to better understand the barriers to veterinary care experienced by pet owners across the socioeconomic spectrum. The study also sought to understand the knowledge, attitudes, and practices veterinarians have regarding access to veterinary care.

Households participating in the study reported owning an average of 2.2 pets, with about one out of four households owning only one pet. Households with lower incomes were more likely to own more than one pet than those with higher income levels. The majority (80.2%) of respondents indicated they strongly agreed with the statement, "My pet is considered a member of my family." In the past two years, one out of four (27.9%) households experienced barriers to veterinary care. Dogs and cats living in lower-income households and with younger pet owners are most at risk for not receiving recommended care. The overwhelming barrier for all groups of pet owners and types of care (preventative, sick, and emergency care) is financial.

One Out of Four Experience Barriers

In the past two years, one out of four (27.9%) households experienced barriers to veterinary care.



This study confirms that veterinary service providers recognize the severity of the problem and feel a commitment to explore ways to address it. The highest level of agreement expressed by veterinarians in the survey was in response to the statement "All pets deserve some level of veterinary care." Almost all respondents (94.9%) either agreed or strongly agreed with the statement. Nearly nine out of ten respondents (87.9%) indicated they agreed or strongly agreed that owned pets are a member of the family. Similarly, 86.7% agreed that not being able to obtain needed veterinary care impacts the owner's mental and emotional health.

This report is a compilation of results from national population research, associated research targeting pet owners experiencing housing insecurity, technical papers discussing pets as family, evolving animal welfare laws, public health, an economic comparison of for-profit and nonprofit veterinary practices, and a discussion about changes in

SECTION 3: Executive Summary

veterinary medicine over the past decades. Each section of the report is written to stand alone; consequently, there is some repetition of key points.

Lack of access to veterinary care is a complex societal problem with many causes. This report furthers our understanding of these complex and interrelated issues and can guide stakeholders in the development of solutions to reach underserved families with pets. Key stakeholders include veterinary service providers, social service and public health professionals, animal welfare advocates, policymakers, and society in general.

Barriers to veterinary care can be mitigated, especially through determined effort and better alignment of existing resources to achieve this outcome.



[← Back to Table of Contents](#)

Introduction

The [Access to Veterinary Care Coalition \(AVCC\)](#), a group of for-profit and nonprofit veterinary service providers, animal welfare and social service professionals, and educators (refer to the Coalition biographies in [Appendix 1](#)), was established to understand barriers to obtaining veterinary care and current practices used to reach underserved pets.* In collaboration with the [Center for Applied Research and Evaluation \(CARE\)](#) located at the University of Tennessee, a national population study was conducted to identify barriers faced by pet owners and to assess the knowledge, attitudes, and practices of veterinary service providers. The results of the study, as reported herein, are intended to serve as a guide to veterinarians, animal welfare organizations, legislators, community leaders, and other stakeholders as they seek to improve access to veterinary care.† Establishing a shared understanding of barriers to veterinary care will facilitate collaboration among stakeholders and inform public policy, with the goal of improving access to veterinary care. The AVCC encourages more evidence-based strategies to reach families who are currently underserved, making it possible for all pets to have access to some level of veterinary care.

Lack of access to veterinary care is a complex societal problem with multiple causes, with socioeconomic status being an important factor. Simply stated, millions of pets do not receive adequate veterinary care because the costs are beyond the family's ability to pay. This may be the most significant animal welfare crisis affecting owned pets‡ in the United States.

When veterinary care is not accessible, a pet may face prolonged illness, pain, and recovery time, or premature death, causing emotional distress for the family. In many instances, some of these pets are relinquished to the animal sheltering system, thus breaking up the family and adding to the burden of the animal sheltering system.¹ While veterinarians are known to be generous and charitable by discounting or giving away services, many are financially unable to provide the needed veterinary medical care required by millions of underserved pets. This in turn causes frustration among some veterinary professionals, leading to emotional pain and guilt. Furthermore, having millions of pets with inadequate health care throughout communities may present unacceptable risks to public health. Zoonotic diseases transmitted by pets can impact human health.²

A Guide to Improve Access to Care

The report is intended to serve as a guide to veterinarians, animal welfare organizations, legislators, community leaders, and other stakeholders as they seek to improve access to veterinary care.

A Major Family and Animal Welfare Crisis

It is estimated that 29 million dogs and cats live in families participating in the Supplemental Nutrition Assistance Program (SNAP) (Figure 4.1), and millions more are in financially struggling middle-class households. Recent studies³ show that more than three-fourths of Americans working full-time live paycheck to paycheck. Due to the economic circumstances of these families, their pets may have limited access to veterinary care.

* For the purposes of this report, the definition of underserved populations of pets is as follows: Pets with owners whose demographic, geographic, or economic characteristics impede or prevent access to veterinary care services.

† For the purposes of this report, the definition of access to veterinary care is as follows: Recognizing when a pet needs care, having a veterinary service provider that is physically reachable, and being able to pay for the care. It includes wellness and preventative care, sick care, and emergency care.

‡ For the purposes of this report, the definition of owned pets is as follows: Animals kept primarily for a person's or family's companionship, protection, and/or pleasure. They typically live in the home or on the property of their owner, and the owner is responsible for the animal's overall healthcare and well-being.

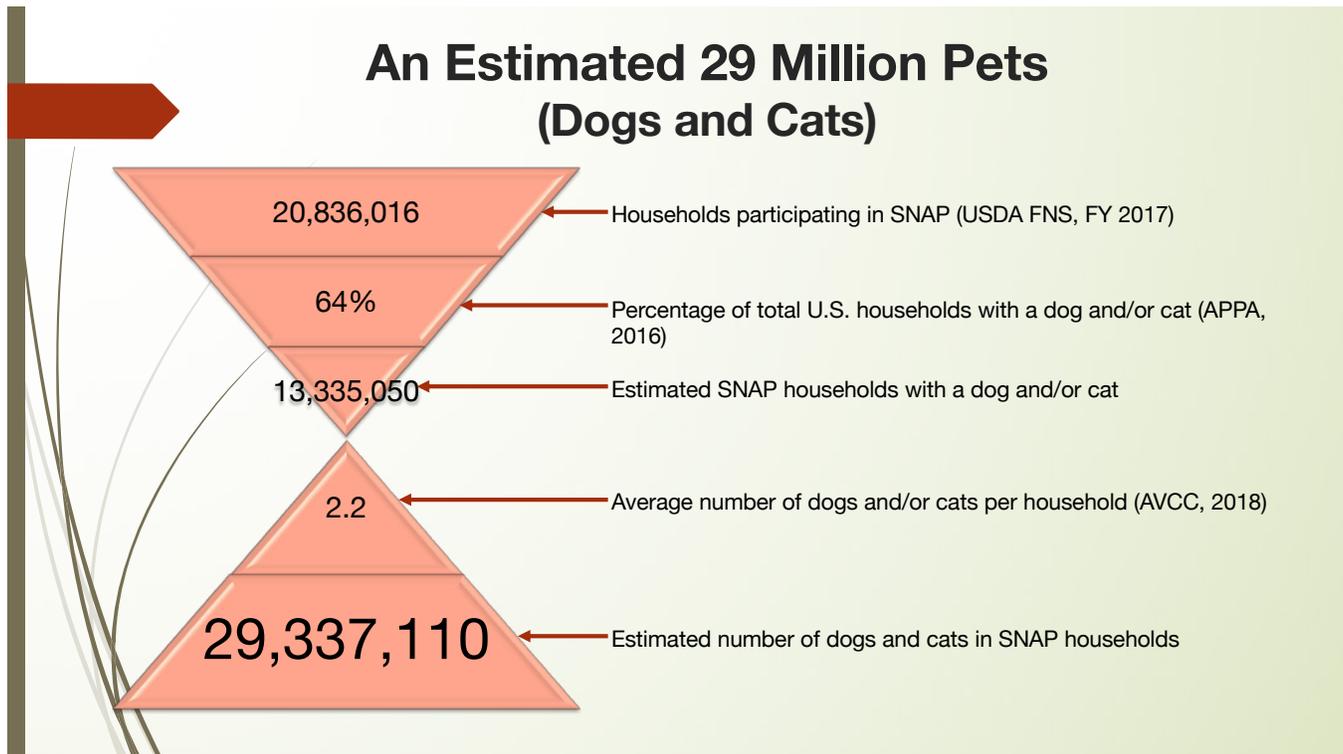


Figure 4.1: Estimated Number of Pets Living in Financially Struggling Families in the United States

A survey conducted by the American Pet Products Association (APPA) in 2016⁴ found that 64% of total U.S. households owned a dog and/or a cat. In fiscal year 2017, the United States Department of Agriculture (USDA) reported that 20,836,016 households participated in the Supplemental Nutrition Assistance Program (SNAP).⁵ Assuming the percentage of SNAP households that own a dog and/or cat is similar to the percentage of total U.S. households that own a dog and/or cat, these two numbers were multiplied to yield an estimated total of 13,335,050 SNAP households with a dog and/or cat. In a study commissioned by the Access to Veterinary Care Coalition (AVCC) that concluded in 2018, there is an average of 2.2 dogs and/or cats per household. Multiplying this average by the estimated number of SNAP households with a dog and/or cat (13,335,050) yields an estimated total of 29,337,110 dogs and cats in SNAP households.

The traditional ethical paradigm holds that families who cannot afford veterinary care should not have pets. However, denying families companionship with pets is an untenable solution. Pets enrich the lives of humans, while also benefitting from the relationship.⁶ There is evidence that the human-animal bond supports mental,^{7,8,9,10} emotional,^{11,12,13} and physical health^{14,15,16,17} and well-being.^{18,19,20} Pets bring joy, support, protection, and comfort to their families. Thus, denying a family the companionship of a pet is difficult to defend.

Many people consider their pet essential to their lives.²¹ Some homeless individuals choose to remain unsheltered to keep their pets rather than enter a homeless shelter, where pets are not allowed. Many times, people will go without food and medicine for themselves to make sure that their pet has what he/she needs. Pets motivate people to get out of bed each day and provide them with unconditional love and a connection to the community.

SECTION 4: Background

Pets in Society and the Veterinary Profession

According to the 2018 American Pet Products Association (APPA) National Pet Owners Survey, 35% of pet owners are Millennials, overtaking Baby Boomers (32%) as the largest cohort.²² This generational shift may be associated with emerging attitudes and behaviors. For example, 78% of dog owners and 67% of cat owners buy gifts for their pets. Many communities have parks where dogs can be off-leash and interact with other dogs and people. Pet clothing and apparel are becoming more common. Many communities host events that are pet-centered, such as 5K runs, Halloween costume contests, and fundraisers for assorted causes. Some employers allow pets to come to work with their owners, while certain restaurants have outdoor seating where pets can share a meal with their family. According to NationalDayCalendar.com, in 2007 the National Pet Parent Day was established as the last Sunday in April.

The veterinary profession has evolved to provide highly specialized, state-of-the-art medical care, with specialists comparable to human medicine. At the same time, in lieu of consulting a veterinarian, the internet has become a source of information about pet products and veterinary advice for at least 42% of pet owners, and this is a growing trend.²³ Also, nonprofit organizations are increasingly providing free or low-cost wellness and preventative services and, more recently, sick care services. The rise of these programs has unfortunately caused tension among some veterinarians due to a perception of unfair competition.^{24,25} Lastly, as pet health insurance becomes more common, we may expect to see a shift in how veterinary care is paid for, mirroring human health care where care is managed rather than a fee-for-service system.²⁶

Summary

Pets are considered important family members for most of the 68% of American pet owning households. Unfortunately, the cost of veterinary care is out of reach for millions of families with pets. The lack of access to veterinary care threatens the wellbeing of pets and their families.

Understanding the barriers to veterinary care pet owners face will enable stakeholders to develop effective solutions. It is important for stakeholders to be more informed about this societal crisis and collaborate to reach underserved families.



Threatening Wellbeing

The lack of access to veterinary care threatens the wellbeing of pets and their families.

References

1. Dolan E, Scotto J, Slater M, and Weiss E. Risk Factors for Dog Relinquishment to a Los Angeles Municipal Animal Shelter. *Animals*. 2015; 5:1311-1328.
2. Stehr-Green, J. K., & Schantz, P. M. The impact of zoonotic diseases transmitted by pets on human health and the economy. *Vet Clin North Am: Small Anim Pract*. 1997; 17, 1-15.
3. Living Paycheck to Paycheck is a Way of Life for Majority of U.S. Workers, According to New CareerBuilder Survey. 2017. <http://press.careerbuilder.com/2017-08-24-Living-Paycheck-to-Paycheck-is-a-Way-of-Life-for-Majority-of-U-S-Workers-According-to-New-CareerBuilder-Survey>. Accessed July 8, 2018.
4. American Pet Products Association. *APPA National Pet Owners Survey*. 2018. http://www.americanpetproducts.org/pubs_survey.asp. Accessed August 6, 2018.
5. United States Department of Agriculture Food and Nutrition Service. Supplemental Nutrition Assistance Program (SNAP) FY15 through FY18 *National View Summary*. <https://fns-prod.azureedge.net/sites/default/files/pd/34SNAPmonthly.pdf>. Accessed December 1, 2018.
6. Human Animal Bond Research Institute (HABRI). Research Website. <https://habri.org/research/>. Accessed November 10, 2018.
7. Human Animal Bond Research Institute (HABRI). Research-Mental Health Website. <https://habri.org/research/mental-health/>. Accessed November 10, 2018.
8. Human Animal Bond Research Institute (HABRI). Research-Alzheimer's Disease & Dementia Website. <https://habri.org/research/dementia/>. Accessed November 10, 2018.
9. Human Animal Bond Research Institute (HABRI). Research-Autism Spectrum Disorder Website. <https://habri.org/research/autism/>. Accessed November 10, 2018.
10. Human Animal Bond Research Institute (HABRI). Research-PTSD & Trauma Website. <https://habri.org/research/ptsd/>. Accessed November 10, 2018.
11. Human Animal Bond Research Institute (HABRI). Research-Quality of Life Website. <https://habri.org/research/quality-of-life/>. Accessed November 10, 2018.
12. Human Animal Bond Research Institute (HABRI). Research-Child Health and Development Website. <https://habri.org/research/child-health-development/>. Accessed November 10, 2018.
13. Human Animal Bond Research Institute (HABRI). Research-Healthy Aging Website. <https://habri.org/research/healthy-aging/>. Accessed November 10, 2018.
14. Human Animal Bond Research Institute (HABRI). Research-Allergies & Immunity Website. <https://habri.org/research/allergies-and-immunity/>. Accessed November 10, 2018.
15. Human Animal Bond Research Institute (HABRI). Research-Cancer Website. <https://habri.org/research/cancer/>. Accessed November 10, 2018.
16. Human Animal Bond Research Institute (HABRI). Research-Cardiovascular Health Website. <https://habri.org/research/cardiovascular-health/>. Accessed November 10, 2018.
17. Human Animal Bond Research Institute (HABRI). Research-Child Health and Development Website. <https://habri.org/research/child-health-development/>. Accessed November 10, 2018.
18. Human Animal Bond Research Institute (HABRI). Research-Child Health and Development Website. <https://habri.org/research/child-health-development/>. Accessed November 10, 2018.
19. Human Animal Bond Research Institute (HABRI). Research-Healthy Aging Website. <https://habri.org/research/healthy-aging/>. Accessed November 10, 2018.
20. Human Animal Bond Research Institute (HABRI). Research-Workplace Wellness Website. <https://habri.org/research/workplace-wellness/>. Accessed November 10, 2018.
21. Kidd, Aline and Kidd, Robert. Benefits and Liabilities of Pets for the Homeless. *Psych Rep*. 1994; 715-722.
22. American Pet Products Association. *APPA National Pet Owners Survey*. 2018. http://www.americanpetproducts.org/pubs_survey.asp. Accessed July 2018.
23. American Pet Products Association. *APPA National Pet Owners Survey*. 2018. http://www.americanpetproducts.org/pubs_survey.asp. Accessed August 6, 2018.
24. Burns, Katie. *Competition or Coexistence?* JAVMANews. September 1, 2012. <https://www.avma.org/News/JAVMANews/Pages/120901a.aspx>. Accessed September 11, 2018.
25. The Humane Society of the United States. *Nonprofit Veterinary Services*. <https://www.animalsheltering.org/sites/default/files/content/hsus-nonprofit-vet-services.pdf>. Accessed September 11, 2018.
26. Kenney, D. and petMD, L. *Pet Insurance vs. Human Insurance (Managed Care)*. https://www.petmd.com/blogs/thedailyvet/dkenney/2011/july/pet_vs_human_insurance-11418. Accessed June 18, 2018.

CARE Pet Owners Survey Report

Principal Investigator: Linda Daugherty, MPA

Purpose and Methodology

According to the American Pet Products Association (APPA), 84.6 million households in the United States own a pet: 47.1 million own a cat and 60.2 million own a dog.¹ While data is not publicly available regarding the socioeconomic characteristics of households who own a dog or cat, veterinary service providers and public health officials have observed that not all pets are receiving adequate veterinary care. It is hypothesized that the underlying reason for the lack of care may be attributed to financial constraints. Furthermore, there may be more than economic barriers that prevent households from obtaining the veterinary care that is recommended or desired. In an effort to better understand these barriers and the prevalence of pet owners' inability to obtain the desired care for their pet, a national study of pet owners was conducted by the University of Tennessee's [Center for Applied Research and Evaluation \(CARE\)](#) in partnership with the Access to Veterinary Care Coalition (AVCC). The study was funded by a grant from [Maddie's Fund](#)[®], a philanthropic foundation with a long history of funding research with the express purpose of improving the status and well-being of companion animals.

Little published research has been conducted about the barriers to veterinary care experienced by households, regardless of socioeconomic status. The dearth of research provided no framework for the study design. To ensure that an adequate sample size was acquired to test different hypotheses about factors contributing to the inability to secure desired veterinary care, a stratified sampling frame was used for the study. The frame was defined by two strata: household income and regions of the United States.

The household income stratum included three socioeconomic groups: 1) households below 138% of the federal poverty level, 2) households between 138% and 250% of the federal poverty level, and 3) households above 250% of the federal poverty level. The federal poverty level is provided by the Department of Health and Human Services and is based on household income and the number of people in the household. The 2017 guidelines were used for this study, which establishes the poverty level for a family of 4 at \$24,600. These guidelines are used to establish eligibility for federal programs. Eligibility for the Supplemental Nutritional Assistance Program (SNAP), formerly known as the Food Stamp Program, and for Medicaid in states that expanded their program under the Affordable Care Act is set at 138% of the federal poverty level. Eligibility for Cost Sharing Reduction Subsidies (CSR),² also under the Affordable Care Act, is limited to those households whose income is at or below 250% of the federal poverty level. The U.S. Census Bureau's regional definitions were used to develop the regional stratum for the study. The regions are as follows: Northeast, South, Midwest, and West.³ Definitions for the regions are found in Table 1.



SECTION 5: Population Research

Pet Owners Survey Report

The study was completed using a mixed mode approach in English only that included telephone and web-based surveys. Recent changes in communication habits have required significant methodological adjustments to be made in survey research. According to the preliminary findings from the July-December 2017 National Health Interview Survey (NHIS), 53.3% of households in the United States no longer have a landline but have at least one cell phone.⁴ Also, according to the U.S. Census Bureau, 76.7% of households reported having a broadband subscription for accessing the Internet in their home. Furthermore, households with Internet connection tend to be comprised of younger people,⁵ a demographic that is more challenging to include in survey research that relies solely on telephone interviewing. This demographic data and experience justified the addition of cell phone sample and web panels to supplement the landline sample for conducting this study. All landline and cell phone samples and web panels were purchased from Survey Sampling International, an established and highly recognized sampling company in the public opinion and marketing industries (<https://www.surveysampling.com/>).

A total of 5,652 surveys were completed: 1,662 using landline sample, 434 using cell phone sample, and 3,556 from a web panel. More than 17,000 households were contacted by telephone between August 2, 2017 and December 31, 2017 to participate in the study. A 23.3% cooperation rate for the landline sample and 21.5% for the cell phone sample using AAPOR Rate 4 calculations was achieved. The web panel was conducted between October 5, 2017 and February 7, 2018. The sample size results in a +/- 1.3% margin of error at a 95% confidence level.



Households in the income range between 138% and 250% of the poverty level were somewhat underrepresented, and those below 138% of the poverty level were slightly overrepresented. Sample records were assigned a post-stratification weight for analysis. The post-stratification weights were calculated using household income and region to produce an equitable representation of the income and regional strata. The weight assigned to each record ranged from 0.66 to 1.72. It is worth noting that only slight differences were found between results from analysis using weighted data compared to those using unweighted data. Analysis discussed in this report includes descriptive statistics and crosstabulations

to measure relationships between independent and dependent variables. Relationships were considered statistically significant if the calculated chi-square was equal to or less than .05.

The survey instrument was designed, with input from members of the AVCC, to collect information about the barriers pet owners face in securing preventative care, sick care, and emergency care for their pets. For the purposes of the survey, respondents were asked to self-identify as a pet owner as defined by someone who has a dog and/or cat. Therefore, those who care for a dog and/or cat but may not consider themselves as the pet owner would not qualify to participate in the survey. Questions were asked in such a way to determine whether barriers being faced were dependent upon the type of care needed. A second area of interest was to learn more about the options available to pet owners for receiving veterinary care. The original survey instrument and research protocol were approved by the Institutional Review Board at the University of Tennessee on July 13, 2017. An additional question to collect information about where a pet was obtained was added after data collection began. The amendment was approved on September 5, 2017. A copy of the survey instrument with the assigned IRB number may be found in [Appendix 3](#).

SECTION 5: Population Research

Pet Owners Survey Report

Profile of Pet Owners

One of the goals for conducting the survey was to gain a better understanding of the makeup of households who own a pet in the United States. The survey instrument was specifically designed to develop a profile of households who own a pet. Questions were included to determine the number of pets owned, the human makeup of the household, and where people live, including the size of their community and the type of residence (house, apartment, condo, duplex, or mobile home). Along with socioeconomic stratifications, pet owners were also subdivided by age: the youngest group of owners ranged from 18-34 years of age, the middle group of owners ranged from 35-54 years of age, and the oldest group of owners ranged from 55 years old or older.

Households included in the study reported owning an average of 2.2 pets, with about one out of four households (24.5%) owning only one pet. However, significant differences in the number of pets in the household emerged between different demographic groups (see Figures 5.1, 5.2, and 5.3).

- Households with lower incomes were more likely to own more than one pet than those with higher income levels. About one out of three households with the lowest income (37.3%) reported owning only one pet compared to 43.6% of those whose income was between 138% and 250% of the poverty level and 44.4% of those with income that exceed 250% of the poverty level.

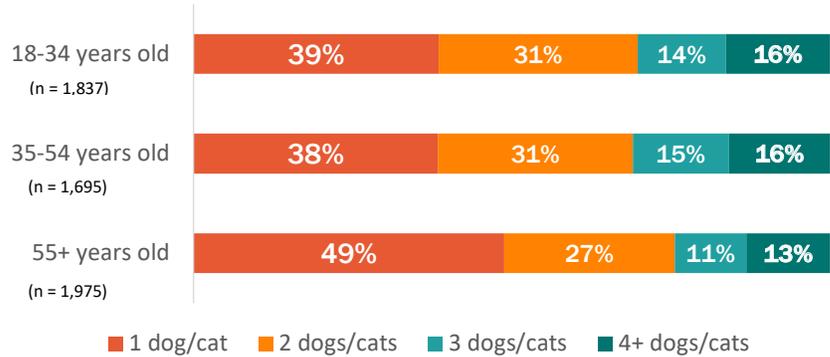


Figure 5.1: The Number of Dogs and/or Cats by age of Pet Owner

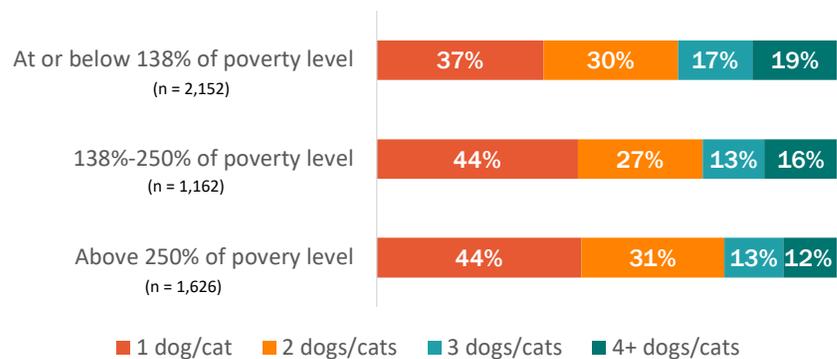


Figure 5.2: The Number of Dogs and/or Cats by Income Categories

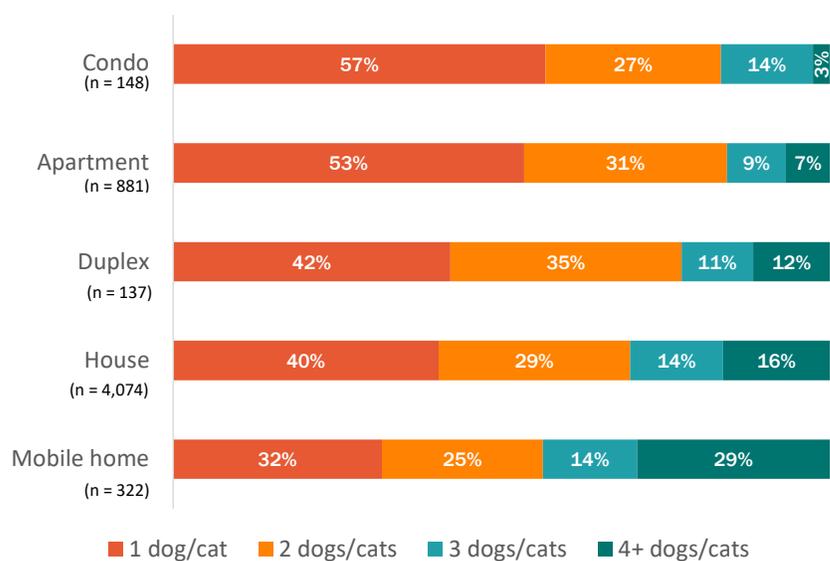


Figure 5.3: The Number of Dogs and/or Cats by Type of Residence

SECTION 5: Population Research

Pet Owners Survey Report

- There were also differences in the number of pets based upon the type of residence where pet owners lived. Those living in condos and apartments were more likely to have fewer pets than other types of residences. More than half of those living in a condo or apartment—56.7% and 53.4%, respectively—reported owning only one pet compared to 40.4% of those living in a house and 31.8% of those living in a mobile home.
- Older respondents were also more likely to report they owned only one pet compared to younger respondents. Half of those 55 years old and older (48.8%) indicated they owned only one pet compared to 38% under the age of 55.

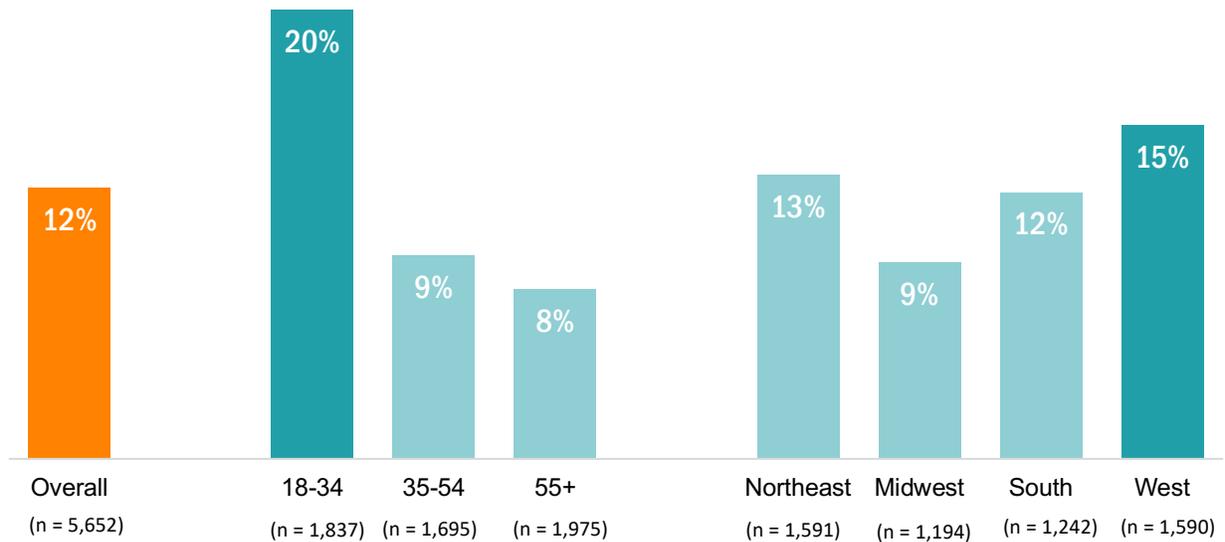


Figure 5.4: Profile of Pet Owners that Have Pet Insurance

Researchers were also interested in measuring the attitudes of pet owners in relation to their pets. When asked about their level of agreement with the statement, “My pet(s) are considered a member of my family,” the overwhelming majority of respondents indicated they strongly agreed with the statement. Eight out of ten respondents (80.2%) indicated they strongly agreed, and one out of ten (8.7%) somewhat agreed with the statement. There was little, if any, variation in this expressed sentiment between subgroups of respondents.

Pet insurance helps to defray the cost of veterinary care. While many European countries have offered policies for a number of years, the first insurance policies were made available in the United States in 1982.⁶ Only 12.0% of respondents indicated they are policy owners. While differences between socioeconomic groups might be expected, there was virtually no difference in policy ownership when comparing rates across different levels of household income. However, two differences can be seen in the survey results.

- Some variation in policy ownership was reported between regions, with the western part of the United States reporting the highest rate with 14.8% of respondents having a policy compared to 8.7% in the Midwest. However, these differences were not statistically significant.
- Younger pet owners—those between 18 and 34—were significantly more likely than their older counterparts to report owning a pet insurance policy. One out of five younger respondents (19.9%) reported owning a policy compared to less than one out of ten older respondents—9.0% of those between 35 and 54 and 7.5% of those 55 years of age and older.

SECTION 5: Population Research

Pet Owners Survey Report

According to the North American Pet Health Insurance Association (NAPHIA) *State of the Industry Report 2018*,⁷ 1.83 million dogs and cats in the United States have insurance coverage. Based on a total population of 183.9 million dogs and cats as reported by the APPA,⁸ one can estimate that less than 2% have health insurance. The discrepancy between this estimate and the results of our study can possibly be attributed to respondents—especially those between 18 and 34—considering a prepaid wellness plan as the same thing as medical insurance.

Composition of Pets in the Household

In addition to the human profile, questions were included to gain a better understanding of the number of pets that were owned, where households obtained their pet, and the spay/neuter status of the pets (see Figures 5.5 and 5.6).

- No statistically significant differences emerged in the number of pets household's owned but the composition of pets within households differed. Almost half of the households (46.5%) owned only dogs compared to 24.0% who only owned cats, and 29.6% reporting a "blended family" of dogs and cats.
- Households in the Northeast were significantly more likely than other regions of the country to own only cats. Almost one out of three households in the Northeast (30.6%) reported only owning cats compared to 19.3% of those living in the South.
- Households with higher incomes were also more likely to report only owning dogs. More than half of those with incomes exceeding 250% of the poverty level (53.2%) indicated they had only dogs compared to 43.7% of those between 138% and 250% and 40.3% of those whose income is below 138% of the poverty level.
- Males were also more likely than females to have only dogs: 51.1% compared to 43.5%, respectively.
- Younger respondents were more likely to have a "blended family," whereas older respondents were more likely to own only cats than other age categories.

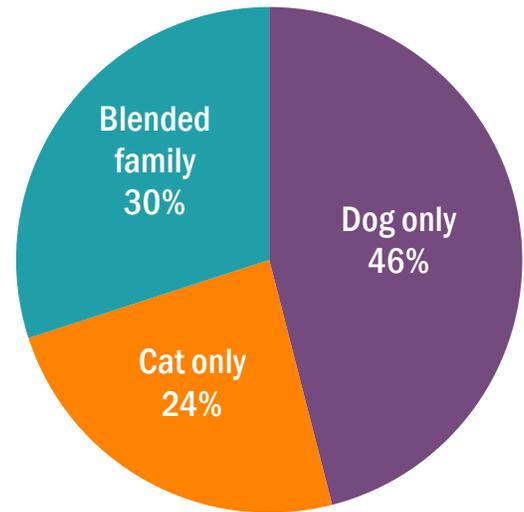


Figure 5.5: Household Pet Composition (n = 5,652)

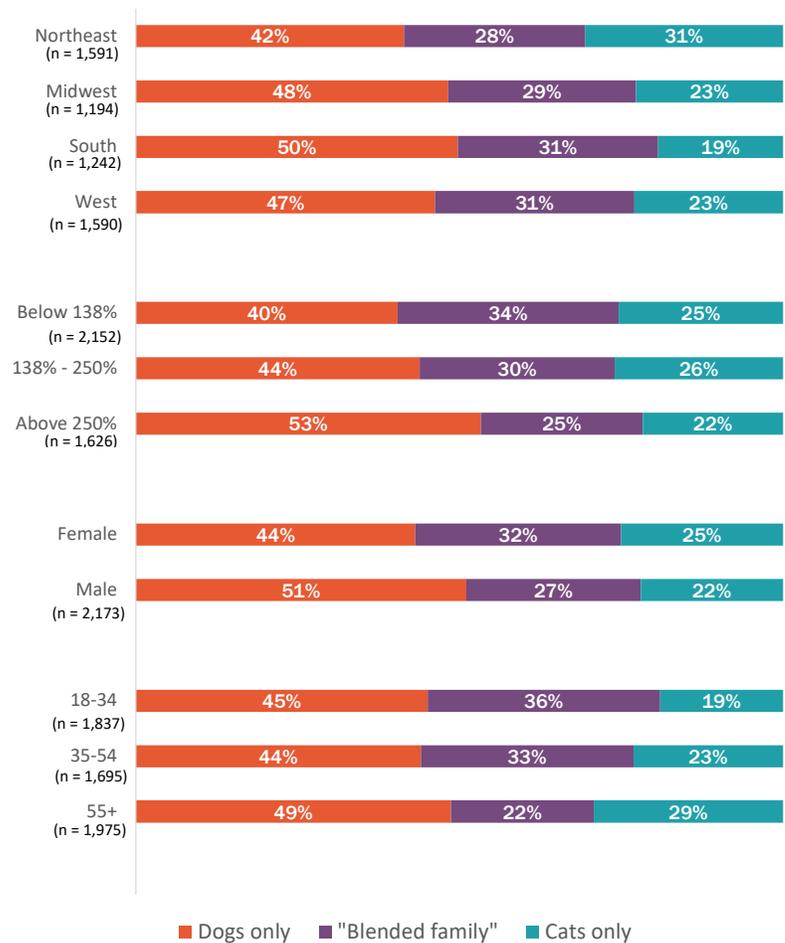


Figure 5.6: Household Pet Composition Based on Region, Income, Gender, and Age of Pet Owners

SECTION 5: Population Research

Pet Owners Survey Report

Where Pets Were Obtained and Sterilization Status

Another goal of this study was to determine where households obtained their pets and whether or not the pets were neutered or spayed. Statistically significant differences emerged in how households acquired their pets, depending on whether the pet was a dog or a cat. Moreover, whether or not the pet was spayed or neutered also differed between dogs and cats (see Figures 5.7 and 5.8).

- Dogs and cats were acquired from an animal shelter or rescue organization at the same rate. Approximately one out of four dogs and cats (27.0% and 27.4%, respectively) were reportedly adopted from this type of organization.
- Households were significantly more likely to report that they purchased a dog from a pet store or breeder and report that cats were taken in as strays. One out of three dogs (29.3%) were purchased from a commercial supplier compared to 7.8% of cats. On the flip side, one out of three cats (29.7%) were originally a stray before being “adopted” or taken in, and only 7.5% of dogs were taken in as strays.
- Dogs were more likely than cats to not be spayed or neutered. Approximately one out of four dogs (26.3%) were reported to not be spayed or neutered compared to 17.9% of cats. Of those who were spayed or neutered, cat owners were more likely to have utilized a free or reduced cost clinic for the procedure than dog owners: 15.6% of cat owners compared to 10.0% of dog owners.

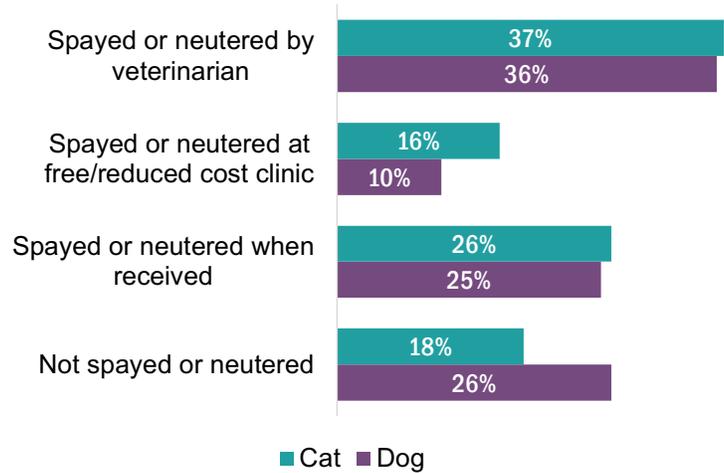


Figure 5.7: The Neutered Status of Household Pets (Cat: n = 5,624; Dog: n = 6,721)

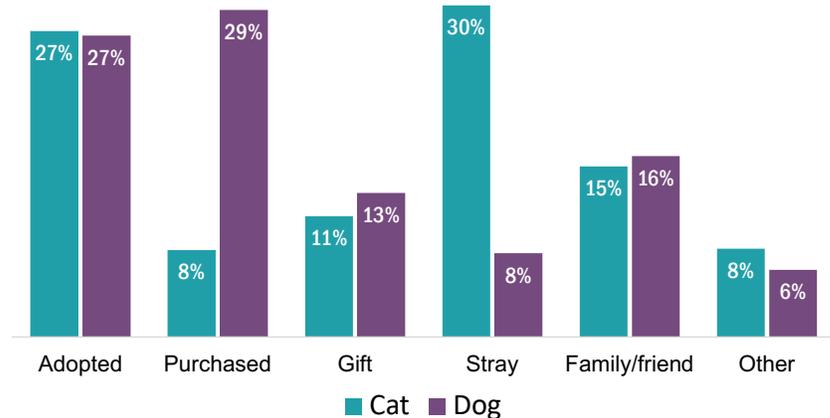


Figure 5.8: How Household Pets Were Obtained (Cat: n = 5,624; Dog: n = 6,721)

In addition to differences in how households acquired their cats and dogs and whether or not they were spayed or neutered, differences by region, household income, and the ages of respondents emerged (see Figures 5.9, 5.10, 5.11, and 5.12).

- Households living in the South were significantly different from the remainder of the country. Pets living in these households were less likely to be spayed or neutered. Furthermore, they were significantly more likely to report that their pets had been strays who had been taken in and significantly less likely to have been adopted from an animal shelter or rescue organization.
- Households in the Midwest were significantly more likely to have their pets spayed or neutered at a veterinary office or clinic.

SECTION 5: Population Research

Pet Owners Survey Report

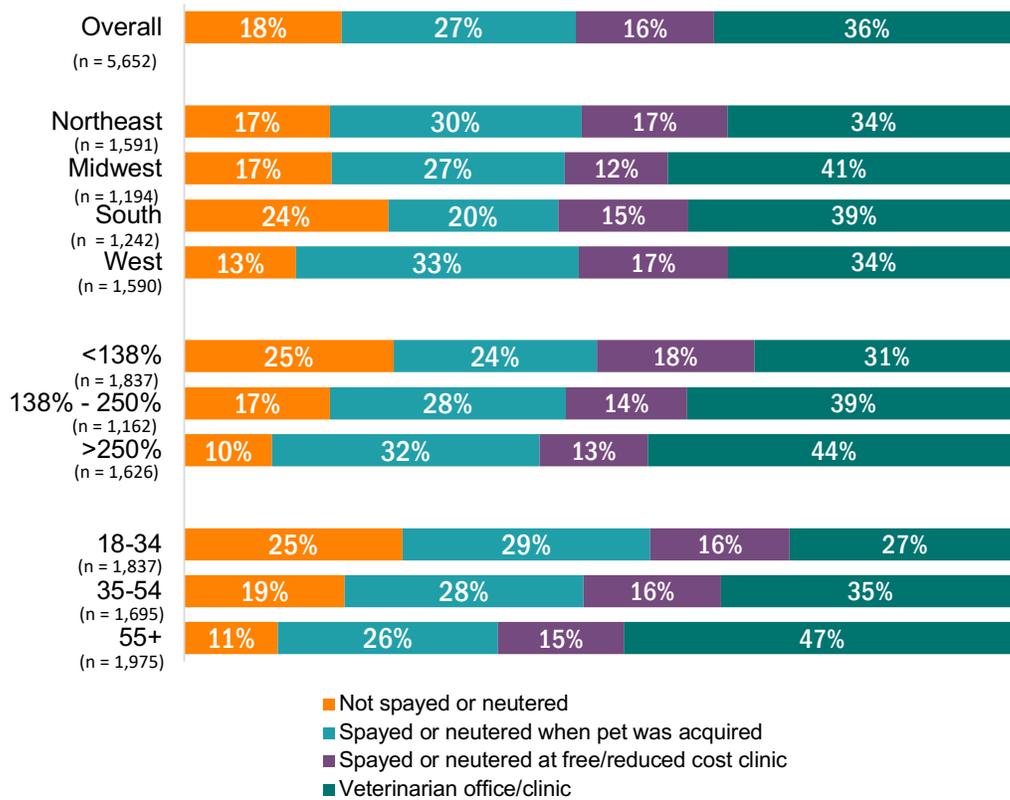


Figure 5.9: The Neutered Status of Cats Based on Pet Owner's Region, Income, and Age

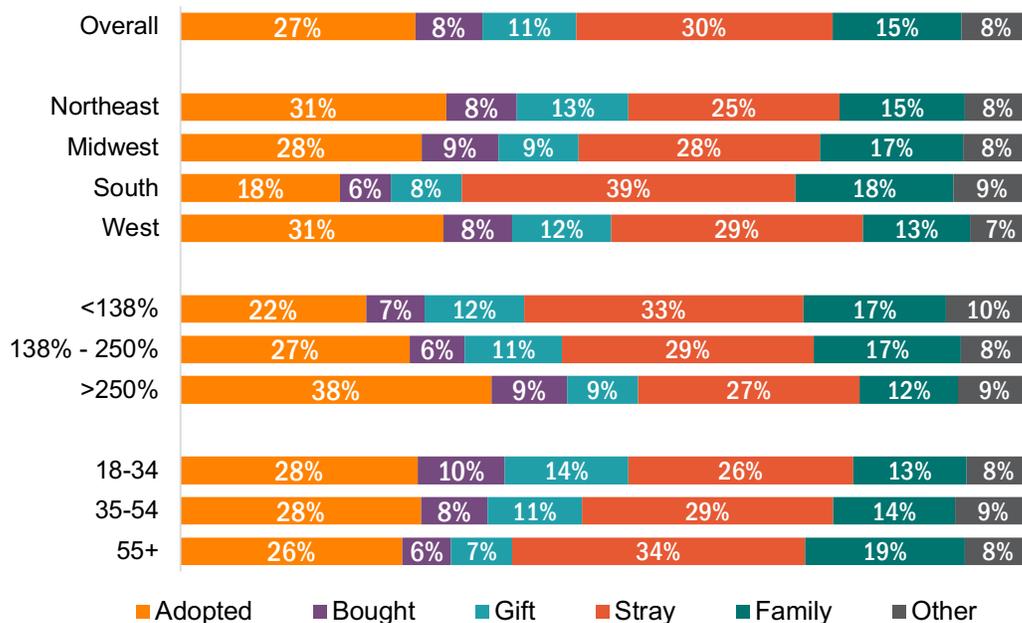


Figure 5.10: How Cats Were Obtained Based on Pet Owner's Region, Income, and Age*

*Sample size for each segment reported in Figure 5.9 is consistent with what is reported in Figures 5.10, 5.11, and 5.12.

SECTION 5: Population Research

Pet Owners Survey Report

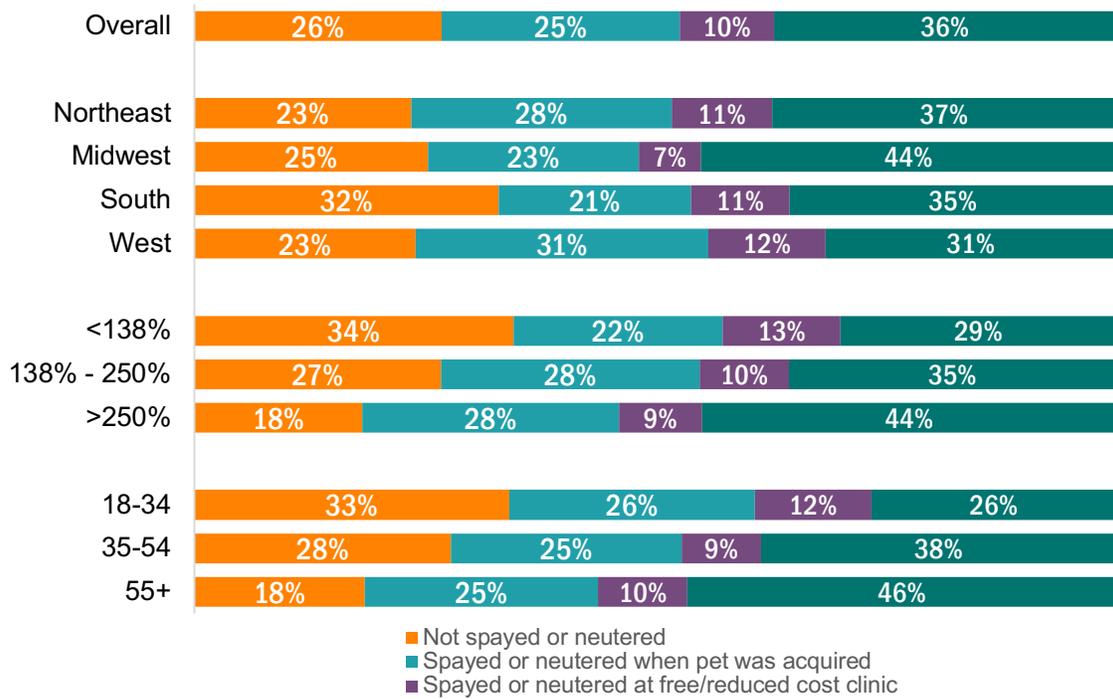


Figure 5.11: The Neutered Status of Dogs Based on Pet Owner's Region, Income, and Age*

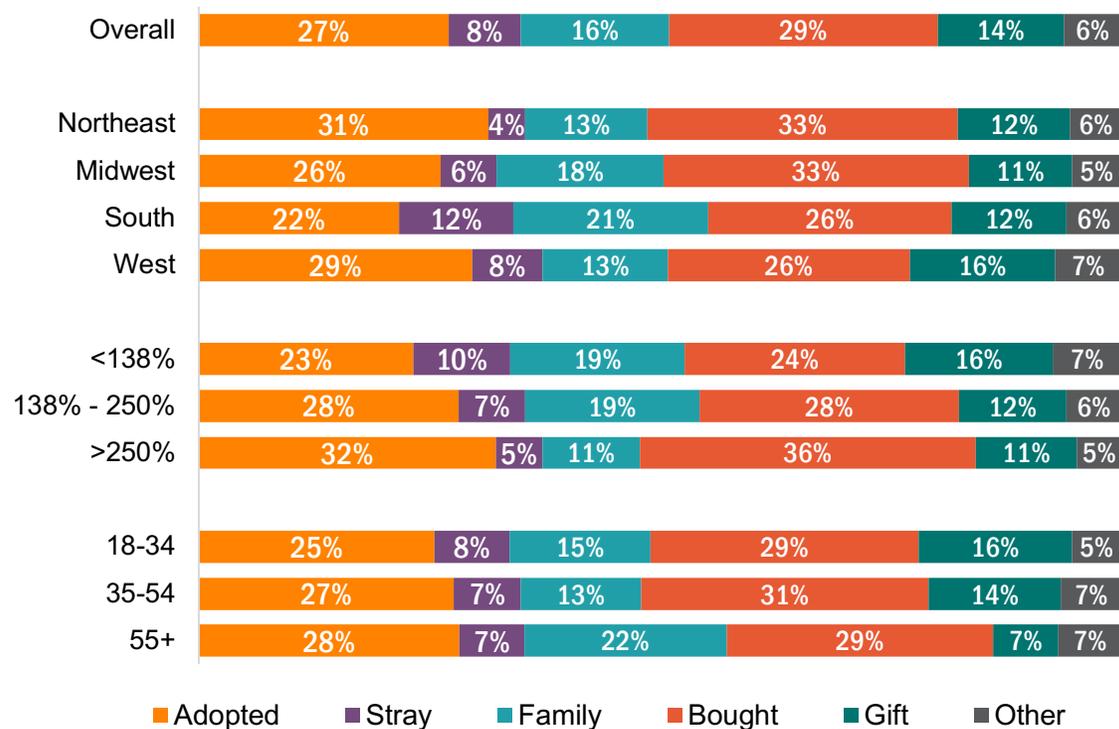


Figure 5.12: How Dogs Were Obtained Based on Pet Owner's Region, Income, and Age*

*Sample size for each segment reported in Figure 5.9 is consistent with what is reported in Figures 5.10, 5.11, and 5.12.

SECTION 5: Population Research

Pet Owners Survey Report

- Households whose income fell below 138% of the federal poverty level were also less likely than higher income households to own pets who are spayed or neutered. These households were also more likely to report that they had taken in a stray.
- Households whose income is above 250% of the federal poverty level were more likely to have acquired their dog from a pet store or breeder and acquired their cat through adoption from an animal shelter or rescue organization. Both cats and dogs living in higher income households were significantly more likely to be spayed or neutered, and their owners were more likely to have utilized a veterinary practice to perform the procedure.
- Pets living with younger respondents were less likely to be spayed or neutered. However, those who had been spayed or neutered were more likely to have had the procedure done at a free or reduced cost clinic. In addition, younger pet owners were more likely to report that they had received their pet as a gift than older respondents.
- Pets owned by older adults were more likely than other age groups to have acquired their pet from a friend or family member. However, older respondents also reported a higher incidence of taking in stray cats than other age groups. Pets in these households were also more likely to have been spayed or neutered at a veterinary office or clinic.

Veterinary Care and Barriers

The primary purpose for conducting this study was to measure the prevalence of barriers that pet owners face in obtaining desired veterinary care. Three different types of veterinary care were explored: preventative care, treatment for an illness or non-emergency injury, and emergency care. The reference point used for measuring the prevalence of these barriers was within the past two years.

Preventative Care

Preventative care was defined for survey respondents as “services a pet receives to avoid illnesses, diseases, and behavioral problems. This includes such things as annual exams; shots or vaccinations; heartworm, flea, or tick prevention; and advice about how to care for your pet.” Pet owners were then asked if there had been a time in the past two years when they wanted to receive preventative care for a pet but were not able to get it. Almost one out of four respondents (22.7%) indicated that they had not been able to obtain preventative care for at least one of their pets in the recent past. Pet owners reported facing this barrier an average of 2.4 times in the past two years.

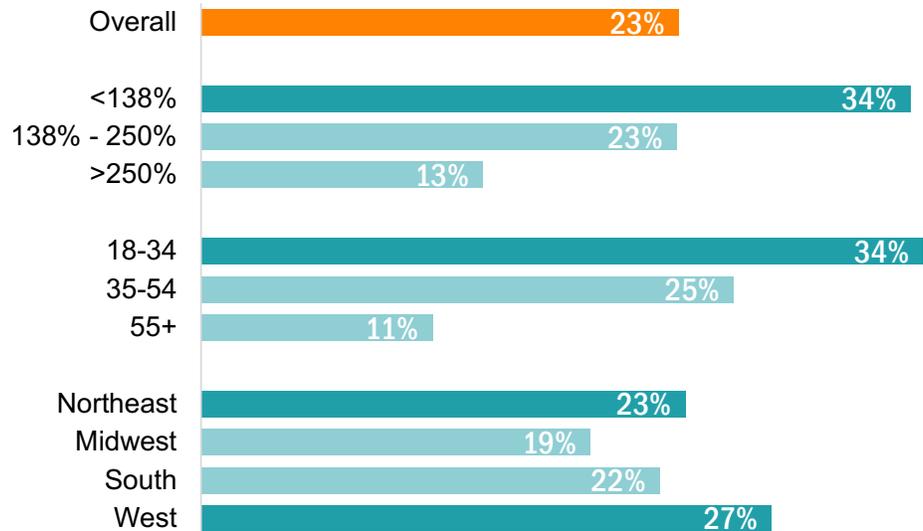


Figure 5.13: The Barriers to Preventative Care Based on Pet Owner's Income, Age, and Region*

*Sample size for each segment reported is consistent with what is reported in Figure 5.9

SECTION 5: Population Research

Pet Owners Survey Report

Experiencing a barrier to preventative care was not felt equitably across survey respondents. A barrier to preventative care was experienced disproportionately by households with lower incomes, by younger pet owners, and by those living in the Northeast and West (see Figure 5.13).

- The prevalence for experiencing a barrier to preventative care significantly decreased as household income increased. One-third of households with incomes that fell below the 138% poverty level (33.7%) indicated they had not been able to seek preventative care at least once in the past two years. The inability to seek care was reported by 22.6% of those whose household income ranged from 138% to 250% of the poverty level and continued to decline to 13.4% of those with household income that exceeded 250% of the poverty level.
- Younger respondents also disproportionately experienced a barrier to preventative care. Approximately one out of three respondents under the age of 34 (34.3%) experienced a time when they could not receive preventative care compared to 25.3% of those between 35 and 54 and 11.0% of those 55 years of age and older.
- Those living in the Northeast (23.0%) and West (27.1%) were more likely to report they were not able to receive preventative care in the past two years than those living in the Midwest (18.5%) and South (21.8%). However, the differences that emerged between regions of the country were not as large as the differences that arose between income and age categories.



Overwhelmingly, the reason for not being able to obtain the preventative care desired was financial, regardless of the pet owner's income category. Eight of ten pet owners who were unable to secure the desired care (80.0%) indicated they were not able to afford it. For those survey respondents who cited more than one reason for not being able to get the desired care, inability to afford the care continued to be reported as the most common reason.

While other reasons for not being able to get preventative care were less frequently offered, such as not knowing where to get care, lack of transportation, and not having the proper equipment like crates and leashes, differences emerged in who encountered these barriers. For instance, younger respondents were more likely than other age groups to indicate they did not know where to get the desired care or to report that they did not have a leash or carrier to transport their pet. One out of ten younger respondents who experienced a barrier attributed it to not knowing where to get care (11.0%) compared to 6.8% of those between 35 and 54 and 1.7% of those over the age of 54. Additionally, 9.0% of those in the youngest age category cited not having a leash or pet carrier as a barrier, while 4% of those between 35 and 54 and 1.3% of those over 54 cited this as a barrier.

Shots or vaccinations and heartworm, flea, or tick prevention were the types of preventative care most frequently mentioned by respondents when asked about what type of care they had not been able to obtain. Two out of three pet owners who desired preventative care (65.0%) wanted to have their pet vaccinated, and half of respondents (50.7%) wanted to treat their pet for heartworm, fleas, or ticks. A few differences in the type of care desired are noteworthy.

- Pet owners living in the West were significantly less likely to indicate they had not been able to get heartworm, flea, or tick prevention. Fewer than half of those living in this region (44.7%) mentioned needing this prevention compared to 53.2% of those in the remaining areas of the country.
- Younger respondents were significantly more likely to express they wanted advice on how to care for their pet and how to prevent pet behavioral issues than older pet owners.

SECTION 5: Population Research

Pet Owners Survey Report



Sick Care

The second type of veterinary care explored in this study was sick care. For the purposes of the survey, sick care was defined as treatment for an illness, physical injury, or behavioral problem that is not an emergency requiring immediate care. The prevalence of those who faced a barrier in receiving this type of care was significantly lower than what was reported for preventative care: 13.6% compared to 22.7%, respectively. The number of incidents reported for the inability to secure this type of needed care was also lower: an average of 1.9 times compared to an average of 2.4. It is worth noting that almost half of those who faced a barrier to receiving preventative care (44.4%) also experienced a barrier to receiving sick care. Those who faced a barrier preventing them from receiving sick care had similar traits to those who experienced a barrier to preventative care (see Figure 5.14).

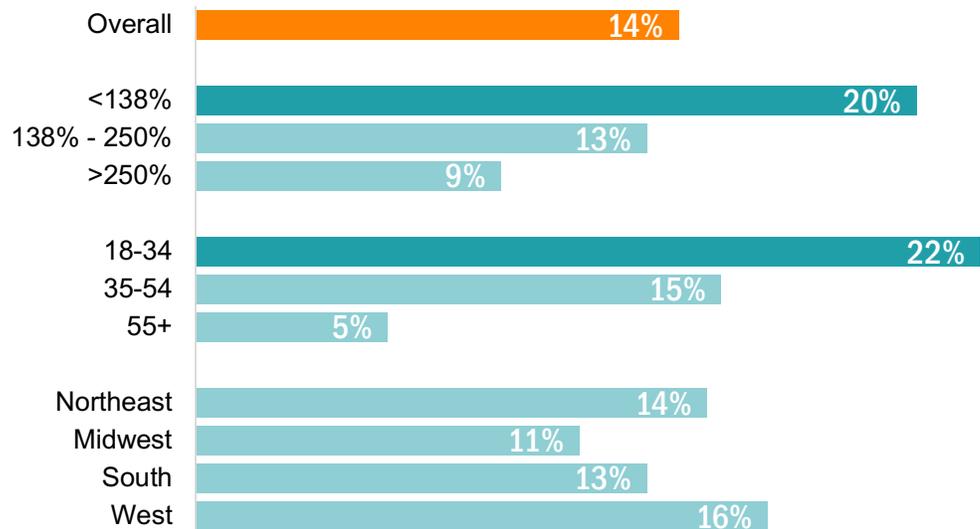


Figure 5.14: The Barrier to Sick Care Based on Pet Owner's Region, Income, and Age*

*Sample size for each segment reported is consistent with what is reported in Figure 5.9.

SECTION 5: Population Research

Pet Owners Survey Report

- As with preventative care, pet owners who faced a barrier in securing sick care were more likely to report lower household incomes. One out of five of those living in a household with incomes below 138% of the poverty level (20.3%) were unable to receive sick care at least once in the past two years compared to 12.7% with incomes between 138% and 250% of the poverty level and 8.6% with incomes that exceeded 250%.
- Younger pet owners continued to disproportionately experience a barrier to needed care. More than one out of five under the age of 35 (22.1%) reported not being able to secure the care the pet needed. The prevalence of this barrier steadily declined as pet owners aged. Less than one in six between 35 and 54 years of age (14.8%) and one in twenty (5.4%) of those over 55 years of age and older faced this barrier.

The reasons provided for not being able to receive sick care were also similar to those reported for preventative care. However, the reasons provided by respondents were more varied and not as focused on financial reasons.

- Three out of four of those who reported not being able to secure sick care (73.8%) stated the barrier occurred due to financial reasons. Interestingly, those in the middle-income group were as likely to cite inability to afford the care as a barrier as those in the lowest income category: 79.9% compared to 77.0%, respectively. Fewer respondents in the highest income bracket, 59.0%, stated that treatment was not sought for financial reasons.
- Similar to findings concerning barriers to preventative care, younger respondents were more likely to indicate they didn't know where to seek care for their pet. One in ten respondents in this age group (9.7%) cited this as a barrier compared to 6.0% of those between 35 and 54 and 0.9% of those 55 and older. Furthermore, they were more likely to indicate they didn't have a leash or pet carrier and didn't have a way getting the pet to a care provider than older respondents.

There were also differences in reasons given by respondents across different economic groups.

- Those in the highest income bracket were more likely to say they didn't have a leash or pet carrier as a barrier than other income brackets: 11.3% compared to 3.3% of those in the middle-income bracket and 6.0% in the lowest bracket. They were also as likely to say they didn't have a way to get to a veterinary care provider as those in the lowest income category: 14.8% and 13.4%, respectively.

Emergency Care

The last type of treatment that was explored for this study was emergency care. For the purposes of this survey, emergency care was defined as care for an illness, physical injury, or behavioral problem that needed immediate treatment. The incidence of pet owners not being able to meet the emergency care needs of their pet was lower than the other types of care. Less than one out of ten respondents (7.7%) indicated they needed emergency care but were unable to get it. This low number may be a function of this type of care not being as frequently needed: only one out of three pet owners indicated that emergency care for a pet was needed in the past two years. Moreover, the average number of times emergency care needs were not met in the past two years was 1.5. This is the lowest reported number for the three types of care included in the study. Regardless of the lower incidence rates, trends discussed above in reported rates by different groups continued into the third category (see Figure 5.15).

- Again, lower income households faced a barrier of obtaining needed emergency pet care at a higher rate than households with higher incomes. Approximately one out of ten respondents with a household income below 138% of the poverty level (10.8%) experienced an unmet emergency care need compared to 6.4% of those with higher incomes.



SECTION 5: Population Research

Pet Owners Survey Report

- Younger respondents were once again more likely to report an unmet veterinary care need compared to older respondents. Slightly more than one out of ten respondents between 18 and 35 had a need for emergency care but was not able to get it (12.9%). The rate of occurrence continued to decline as age increased with 8.2% who were between 35 and 54 and 2.5% of those 55 years of age and older reported they had experienced an unmet emergency care need in the past two years.

The reasons respondents provided for why they were not able to obtain needed emergency care differed from the reasons given for not receiving preventative care or sick care (see Figure 5.16). While not being able to afford care was still the most frequently cited reason for not obtaining emergency care (55.7%), not having a way to get to a facility (15.0%) and not knowing where to seek treatment (13.2%) were mentioned at a higher rate than the other types of care.

The chart below (Figure 5.16) illustrates the variation in the frequency of reasons given for not securing care between the three types of care explored in this study. While affordability remained the most frequently cited reason for all types of care, the prevalence of these financial reasons varied by the type of care desired.

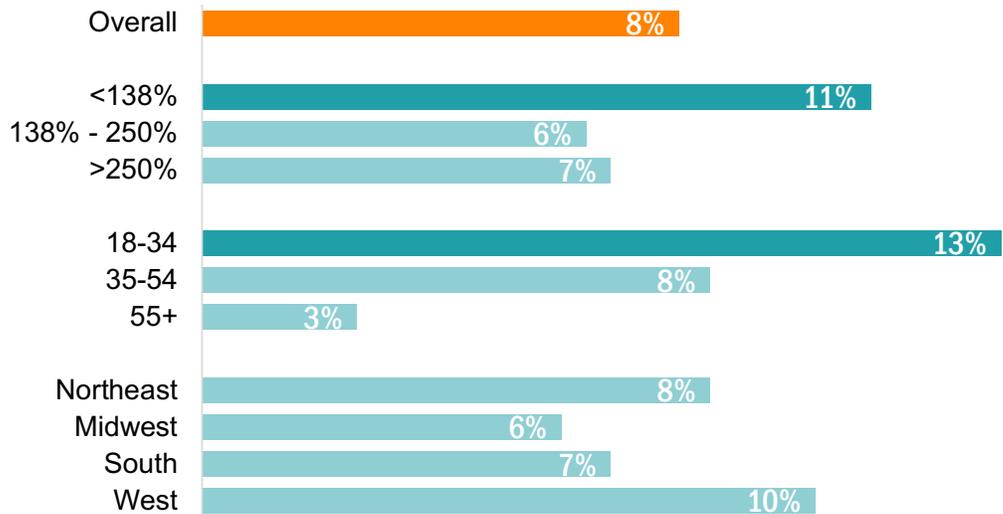


Figure 5.15: The Barriers to Emergency Care Based on Pet Owner's Region, Income, and Age*

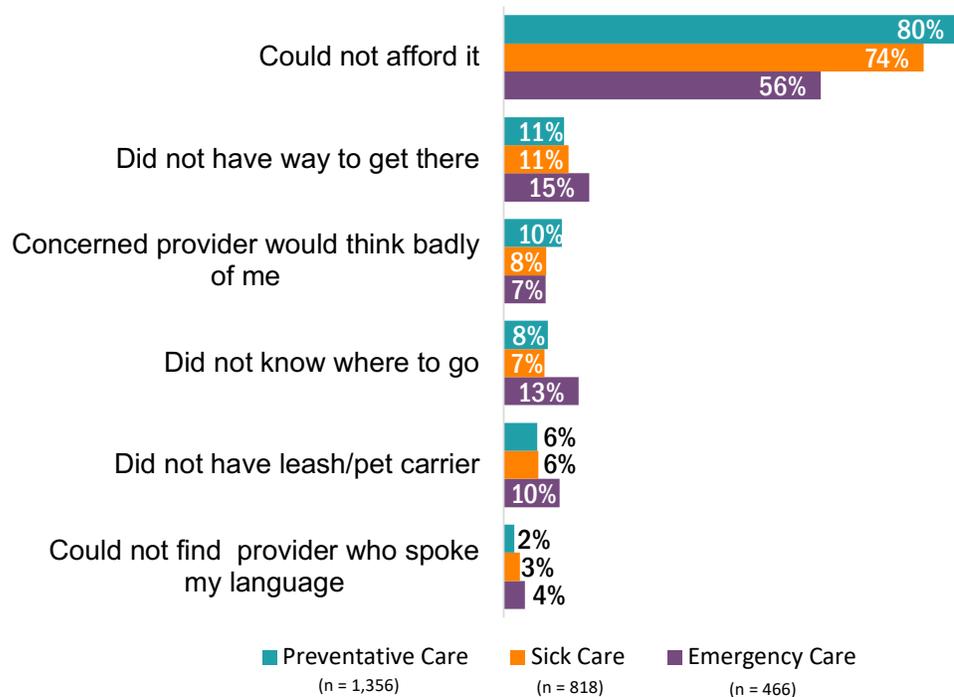


Figure 5.16: Pet Owner's Reasons for Not Receiving the Desired Treatment for Their Pet

*Sample size for each segment reported is consistent with what is reported in Figure 5.9.

Sources of Veterinary Care

Researchers were also interested in learning where pet owners seek preventative, sick, and emergency care for their pets, as well as those who elected not to seek these types of care (see Figure 5.17). Regardless of the type of care, pet owners who had not encountered a barrier to care in the past two years **and** who sought treatment, overwhelmingly relied upon a veterinary office or clinic for the pet’s care. Despite a relatively low difference, younger respondents overall were more likely to report that they utilized an animal shelter or community program to provide preventative care for their pets than their older counterparts.

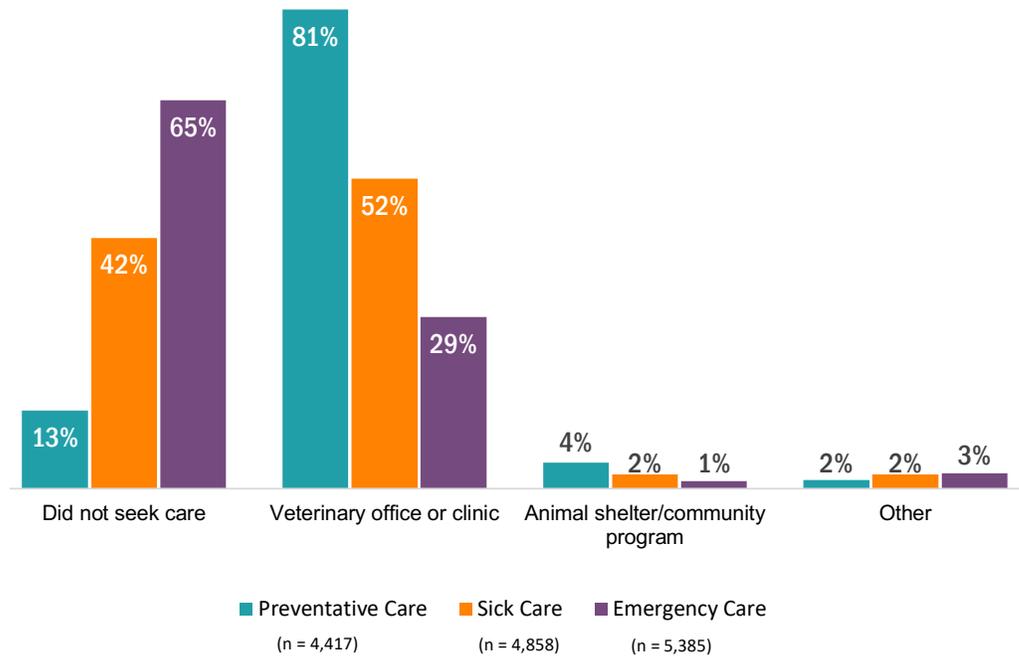


Figure 5.17: The Sources Pet Owners Use to Obtain Veterinarian Care

A significant number of pet owners who did not report a barrier to veterinary care indicated that they had not sought treatment for sick care (42.2%) or for emergency care (65.3%). Slightly more than one out of ten (13.1%) pet owners who had not encountered a barrier to preventative care indicated they had not sought this type of care for their pet because it was not wanted or needed. Pet owners whose income was in the lowest range were disproportionately represented in this group. Almost four out ten of those who did not seek preventative care had household incomes below 138% of the poverty level (39.4%) compared to 34.3% in the middle-income range and 26.3% of the highest income group.

Discussion and Conclusions

The overarching purpose of this study was to measure the prevalence of different types of barriers facing pet owners in their efforts to secure veterinary care for their pets. More than one out of four households (27.9%) included in this study reported they had experienced an inability to obtain the desired and/or needed preventative, sick, or emergency care for one or more of their pets at least once in the past two years. Using the APPA estimation that close to 80 million households in the United States own a dog and/or cat,⁹ findings from this study suggest that 22 million households may have been unable to provide the wanted or needed care for their dog or cat at least once in the past two years. Furthermore, given that 22.7% of respondents reported a barrier to receiving preventative care, 18 million households may not have been able to provide preventative care for their dog or cat during the same timeframe. The inability to provide the wanted and/or needed preventative care results in animals being vulnerable to contracting preventable diseases and poses a potential health risk to other animals. Findings from the study further suggest that dogs and cats living in lower income households and with younger pet owners are

The Overwhelming Barrier to Care is Financial

The overwhelming barrier for all groups of pet owners is financial for all types of care (80.0% for preventative care, 73.8% for sick care, and 55.7% for emergency care).

SECTION 5: Population Research

Pet Owners Survey Report



most at risk for not receiving the recommended care. More importantly, the finding that lower income households are more likely to have multiple pets than other income brackets may result in a higher prevalence of animals who do not receive care.

The reasons provided for not being able to secure care varied; however, financial constraints were the most prevalent reason given. Not knowing where to get the care needed, not having transportation to a veterinary service provider, and not having the proper equipment to transport the pet were also identified as barriers. Younger respondents were more likely to say that not knowing where to get veterinary care or not having a leash or pet carrier were barriers. Younger respondents were also more likely to report that they had received their pet as a gift and needed advice on how to care for a pet and deal with behavioral issues than older respondents. These findings suggest that there is a need for more educational opportunities for younger pet owners.

The study also produced positive findings. While the incidence is still low, younger respondents were more likely to report they have pet insurance. This may suggest that the idea of

owning an insurance policy for pets will grow in popularity and allow more households to obtain needed pet care. Furthermore, the majority of respondents indicated that they sought care and treatment for their pets from a veterinary office or clinic. This could positively position veterinarians to provide care for those with pet insurance. Finally, pet owners overwhelmingly expressed that they view their pet as a family member. Therefore, educating pet owners about the need to provide similar levels of care for their pets as they do for other family members may result in more pets receiving care.

REGION 1: NORTHEAST	REGION 2: MIDWEST	REGION 3: SOUTH	REGION 4: WEST
Connecticut	Illinois	Delaware	Arizona
Maine	Indiana	District of Columbia	Colorado
Massachusetts	Michigan	Florida	Idaho
New Hampshire	Ohio	Georgia	Montana
Rhode Island	Wisconsin	Maryland	Nevada
Vermont	Iowa	North Carolina	New Mexico
New Jersey	Kansas	South Carolina	Utah
New York	Minnesota	Virginia	Wyoming
Pennsylvania	Missouri	West Virginia	Alaska
	Nebraska	Alabama	California
	North Dakota	Kentucky	Hawaii
	South Dakota	Mississippi	Oregon
		Tennessee	Washington
		Arkansas	
		Louisiana	
		Oklahoma	
		Texas	

Table 5.1: Census Bureau Regions

SECTION 5: Population Research

Pet Owners Survey Report

References

1. APPA National Pet Owners Survey. American Pet Products Association website. http://www.americanpetproducts.org/pubs_survey.asp. Updated 2018. Accessed July 2018.
2. Obamacare: Federal Poverty Level Facts. Obamacare website. <https://obamacarefacts.com/federal-poverty-level/>. Updated 2018. Accessed June 2018.
3. Geographic Terms and Concepts – Census Divisions and Census Regions. United States Census Bureau website. https://www.census.gov/geo/reference/gtc/gtc_census_divreg.html. Updated 2018. Accessed June 2018.
4. Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July–December 2017. National Center for Health Statistics website. <https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201806.pdf>. Accessed June 2018.
5. Ryan C, Lewis JM. Computer and Internet Use in the United States: 2015. American Community Survey Reports. <https://www.census.gov/content/dam/Census/library/publications/2017/acs/acs-37.pdf>. Updated September 2017. Accessed June 2018.
6. Wikipedia contributors. Pet Insurance. Wikipedia, The Free Encyclopedia website. https://en.wikipedia.org/wiki/Pet_insurance. Updated June 19, 2018. Accessed August 5, 2018.
7. *NAPHIA State of the Industry Report 2018 Highlights*. North American Pet Health Insurance Association website. <https://naphia.org/industry/research-and-reports/>. Accessed November 30, 2018.
8. APPA National Pet Owners Survey. American Pet Products Association website. http://www.americanpetproducts.org/pubs_survey.asp. Updated 2018. Accessed November 30, 2018.
9. APPA National Pet Owners Survey. American Pet Products Association website. http://www.americanpetproducts.org/pubs_survey.asp. Updated 2018. Accessed July 2018.



[← Back to Table of Contents](#)

CARE Veterinary Service Providers Survey Report

Principal Investigator: Linda Daugherty, MPA

Purpose and Methodology

There is wide recognition within the community of veterinary service providers and public health officials that a care gap exists in veterinary medicine, which negatively impacts the health and well-being of underserved pets and their families. Nevertheless, little systematic research has been conducted to collect valid and reliable data needed to inform discussions within the veterinary medical community about how best to design and implement effective strategies to address this gap. A call for more research has been made to gain a better understanding of the scope of the problem and possible solutions.¹ In an effort to answer the call and to provide valid information for discussion, a survey of veterinarians was conducted by the University of Tennessee's [Center for Applied Research and Evaluation \(CARE\)](#) in partnership with the Access to Veterinary Care Coalition (AVCC) and funded by a grant from [Maddie's Fund](#)[®].

The study was completed using an online survey hosted by SurveyGizmo, an online survey software platform. Survey questions were designed, with input from members of the AVCC, to measure veterinarian's opinions about the severity of the care gap and reactions to potential strategies and programs to meet the needs of underserved pets. Questions were included to allow for comparisons across a spectrum of work environments to understand different perspectives for addressing the problem. Opportunities were also included for survey respondents to share their thoughts on the problem and offer possible solutions. The research protocol and survey instrument were approved by the Institutional Review Board at the University of Tennessee on January 29, 2018. A copy of the approved survey can be found in [Appendix 4](#) of this report.

A sample of veterinary service providers to be used for the survey was not publicly available because membership lists for veterinary professional associations, such as the American Veterinary Medical Association (AVMA) and state veterinary medical associations (VMAs), do not publish a list of their members. Therefore, the protocol established for the research project included an email sent to executive directors and/or presidents of all 50 state VMAs, plus the District of Columbia VMA and the Puerto Rico VMA, and 23 veterinary professional associations. In addition, representatives from 16 corporate veterinary groups, nine professional organizations, seven animal welfare groups, and two media outlets were contacted.

The email included an explanation of the study and a solicitation for their cooperation in distributing information about the survey to their veterinarian members. The email was sent from CARE under the signature of Dr. Michael Blackwell. Attached to the email was a document with suggested content for leaders to solicit participation from their members. This letter included the link to the online survey. The email was sent to 103 individual representatives of organizations on February 1, 2018 and to an additional 14 on February 15, 2018. Follow-up communications were conducted by AVCC members to encourage participation. The link was also posted on the AVCC website and Facebook page.

The survey link became active on February 1, 2018 and closed on May 29, 2018. The survey was completed in its entirety by 709 veterinarians. Responses from an additional 62 veterinarians, who completed a large portion of the survey but did not respond to all questions, were included for analysis. Because the protocol relied upon the survey link being shared by outside parties, it is not possible to calculate a response rate for the study. However, if the number of veterinary service providers published by the AVMA² is used as population size, the margin of error for the survey results is +/-3.5% at a 95% confidence level.



SECTION 5: Population Research

Veterinary Service Providers Survey Report

The basic tenet of survey research is to generalize information collected from a sample of the population to the overall population. In order to have confidence that the attitudes and opinions from this smaller sample are reflective of the overall population, it is important to identify potential bias that is introduced due to the sample differing substantially on known characteristics of the population. Despite extraordinary efforts to extend the opportunity to all veterinarians to participate in the survey, those who did participate do not match one known characteristic of the overall population. Specifically, the AVMA reported in 2017 that 60.4% of the positions among employed veterinarians were female and 39.5% were male.³ Using this statistic, females are overrepresented in the survey: 80.0% of the survey respondents reported themselves to be female (see Figure 5.18). This suggests that the findings may be skewed by attitudes expressed by female veterinary service providers. This is especially important to bear in mind because many of the differences in the responses to the survey between males and females were statistically significant. However, comments offered by the respondents and responses to survey questions provide evidence that the full spectrum of opinions and attitudes that are currently being voiced within the veterinary medical community about underserved pet owners were included. Therefore, the findings of the survey are reflective of the current viewpoints held by veterinary service providers in the United States.

Profile of Veterinary Service Providers Survey Respondents

Veterinarians who participated in the survey provide care across the United States and represent all working environments (see Figures 5.19, 5.20, 5.21, 5.22, and 5.23).

- Providers from every state except Arkansas, Montana, and North Dakota completed the survey.
- Less than one in five participants (16.9%) reported serving in a rural area, while 32.1% served in an urban area and 50.9% in a suburban area. While this distribution is skewed toward the non-rural areas of the general population, it is reflective of the membership in the AVMA, who reports a shortage of rural veterinarians.⁴
- The largest segment of the participants (39.1%) reported serving in the West, as defined by the U.S. Census Bureau.⁵
- Almost four out of ten respondents (38.1%) received their veterinary degree in the past 10 years. The oldest respondent to the survey received the degree in 1965.
- As self-defined, less than one in five (18.7%) served in low income areas and the largest segment (39.7%) served in economically diverse areas.
- The majority of respondents (61.0%) reported they currently work in a private practice. This split is consistent with AVMA membership that reports 64.6% of its membership serving in a private clinical practice. The majority of those working in a private practice (66.8%) indicated the practice was a sole proprietor or partnership practice, and half of respondents (49.9%) were associates, while 37.5% of respondents were owners of the practice.
- About one in four providers (27.9%) reported working for a nonprofit organization, 18.2% are associated with a teaching institution, and 7.8% worked with an animal control agency or local government. The

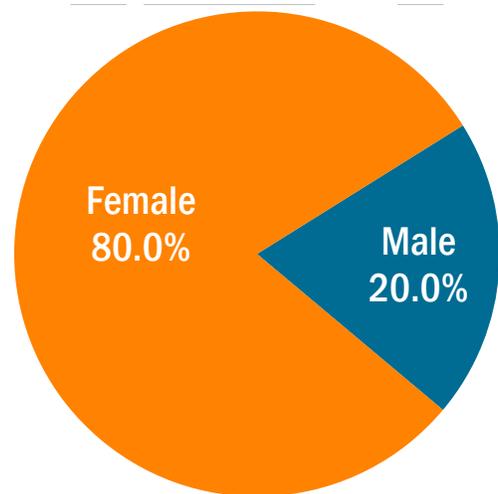


Figure 5.18: The Gender Percentages of Veterinary Service Providers Surveyed (n = 701)

SECTION 5: Population Research

Veterinary Service Providers Survey Report

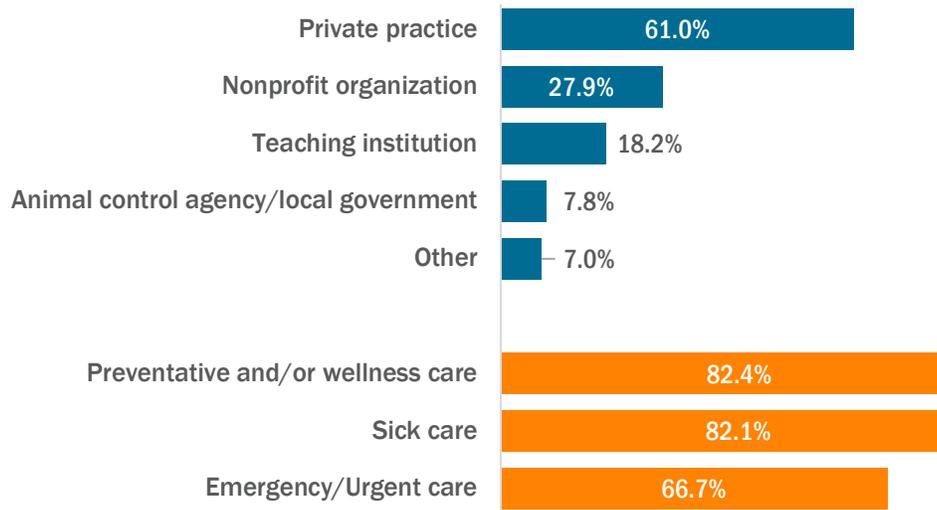


Figure 5.19: The Type of Practice and Type of Care Provided by Veterinary Practitioners Surveyed (n = 771)

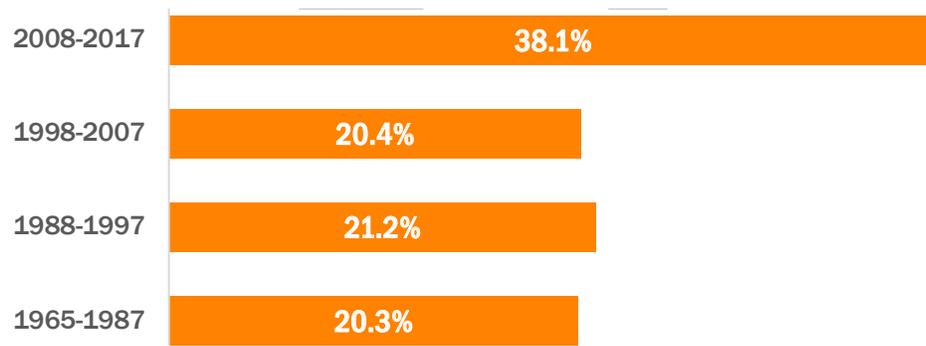


Figure 5.20: The Year Surveyed Veterinary Practitioners Received Their Degrees (n = 771)

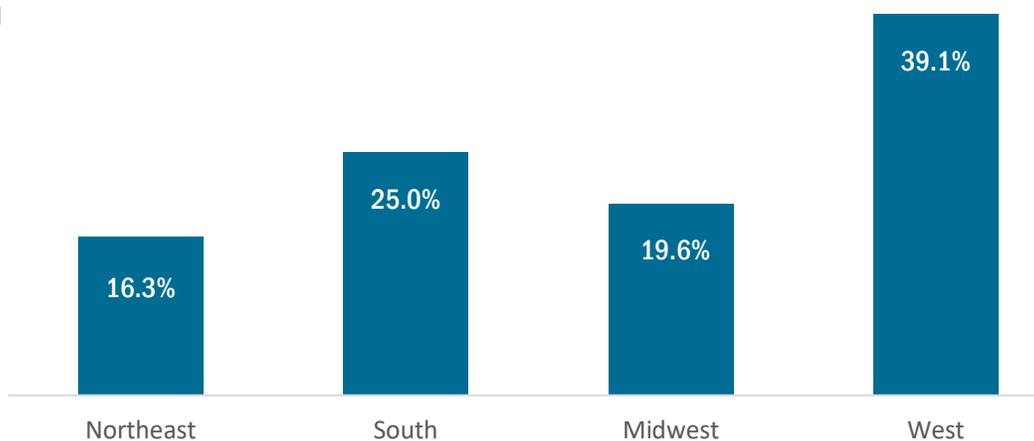


Figure 5.21: The Region Where the Surveyed Veterinarians Practice (n = 771)

SECTION 5: Population Research

Veterinary Service Providers Survey Report

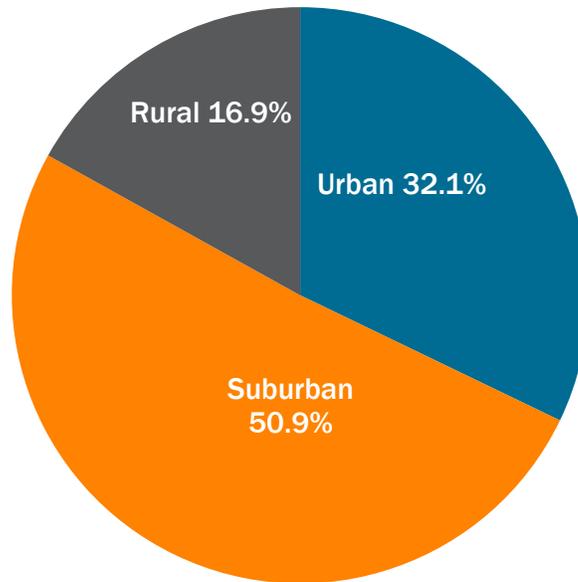


Figure 5.22: The Size of the Community in Which Surveyed Veterinary Practitioners Work (n = 771)

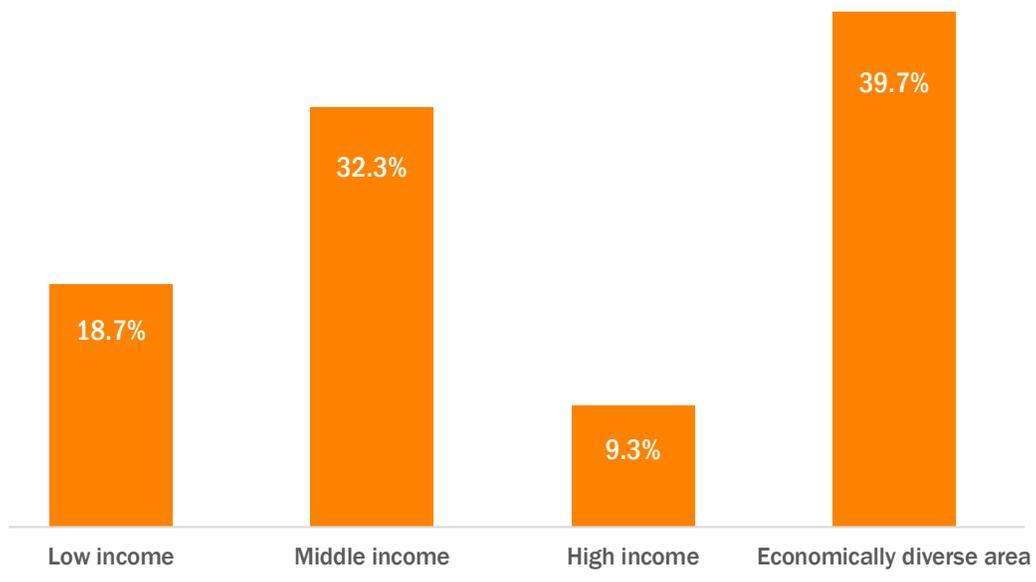


Figure 5.23: The Socioeconomic Area in Which Surveyed Veterinarians Practice (n = 771)

SECTION 5: Population Research

Veterinary Service Providers Survey Report

overwhelming majority of those currently working for a nonprofit or at a teaching institution (89.3% and 92.1%, respectively) reported that the agency or institution also offers veterinary services to the public.

- The average number of animals treated in a typical week was 79. While almost all who participated in the study reported they provided care for cats and dogs (97.3% and 95.2%, respectively), 40.5% reported they care for exotics, and 17.1% for large or farm animals.

Underserved Pets

One of the goals of this research is to measure the extent to which veterinary service providers perceive the problem of underserved pet populations in the United States and in their local community. The belief that the problem is serious was widespread among respondents, especially at the national level. Over half of the respondents (55.4%) indicated it was a severe problem at the national level, while one out of three (30.4%) reported the same level of severity in their local area. The variation in level of severity is correlated with the provider's location (See Figure 5.24).

- Using an average to better visualize these differences, means were calculated for the scale that ranged from 1 to 4, where 1 indicated that it is not at all a problem, 2 indicating that it is a minor problem, 3 indicating that it is moderate problem, and 4 designating that it is as a serious problem. Those who provided services in urban areas were significantly more likely than those who served in suburban and

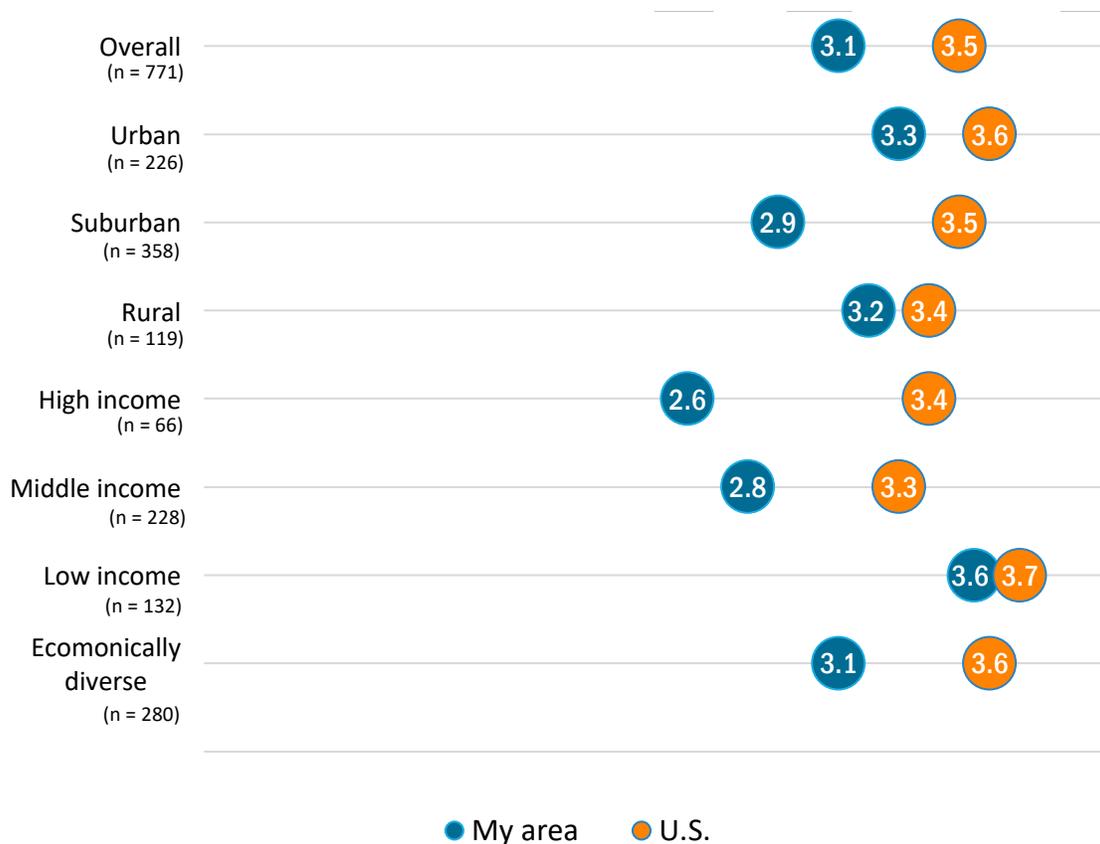


Figure 5.24: Regardless of community size or socioeconomic area, on average, veterinarians rated the severity of the problem of underserved pets as greater in the United States as a whole than in their own community

SECTION 5: Population Research

Veterinary Service Providers Survey Report

rural areas to report that the underserved pet population was a serious problem. Moreover, those serving in low-income and economically diverse areas also reported the problem to be more severe in their area than those who served in middle or high-income areas.

- Regional differences also emerged. Providers in the South reported the problem of underserved pets in their local areas was the most severe: an average of 3.3 on a 4-point scale. Those in the West reported the lowest level: an average of 2.9.

Attitudes about Owned Pets

Respondents were asked to indicate how much they agreed or disagreed with a series of statements about owned pets. Statements addressed the relationship between pet and owner, the responsibility of pet owners and society for a pet's care, and the impact of underserved pets on public health.

The highest level of agreement expressed in the survey was in response to the statement "All pets deserve some level of veterinary care."

Almost all respondents (94.9%) either agreed or strongly agreed with the statement, and little variation between subgroups was reported. Also receiving strong agreement were statements about the role of pets in the family and the impact on pet owner's emotional well-being if care cannot be obtained.

- Almost nine out of ten respondents (87.9%) indicated they agreed or strongly agreed that owned pets are a member of the family. Females were significantly more likely than males to strongly agree about owned pet's role in the family: 51.1% compared to 36.4%, respectively.
- Similarly, 86.7% agreed that not being able to obtain needed veterinary care impacted the owner's mental and emotional health. Again, females were substantially more likely to recognize this relationship: 41.1% of females strongly agreed, while 32.8% of males indicated the same level of agreement.

"All pets deserve some level of veterinary care."

Almost all veterinarians (94.9%) either agreed or strongly agreed with this statement.

Owned pets are a member of the family in which they live.



Not being able to obtain needed veterinary care impacts pet owner's mental and emotional health.



Figure 5.25: Veterinarian widely agree that "owned pets are a member of the family in which they live" and "not being able to obtain needed veterinary care impacts pet owner's mental and emotional health." (n = 771)

SECTION 5: Population Research

Veterinary Service Providers Survey Report

While not receiving the same level of agreement as the statements discussed above, a majority of respondents (62.2%) did indicate they agreed that owned pets who do not receive care pose a public health threat.

- Older veterinary service providers were significantly more likely to disagree that a lack of veterinary care for underserved pets posed a threat to public health than those who more recently received their veterinary degree. One out of four providers who graduated before 1988 (24.1%) disagreed about whether there was a threat, while only 11.6% of those who graduated after 1987 shared this opinion.

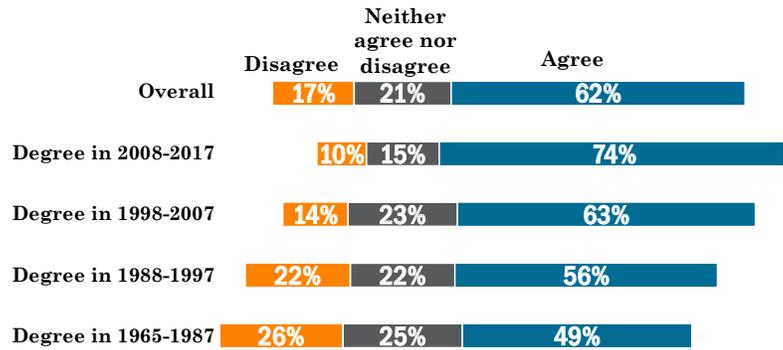


Figure 5.26: Newer graduates from veterinary school were more likely to agree with the statement “Owned pets who do not receive appropriate veterinary care are a threat to public health.” (n = 771)

There were significant variations in opinions about society’s responsibility for the care of poor people and their pets and about who should own a pet. A measure of dispersion to determine the level of differences in opinions among veterinary care providers was calculated using a consensus/dissent score for these particular questions. Low scores depict weak agreement and higher levels of dissension in opinions held by the participants. The two questions regarding societal responsibility for the vulnerable population and the right of all people to own a pet generated among the lowest consensus scores across all survey questions. The wide breadth of opinions on these matters were illustrated by comments offered in response to a request to share thoughts on how best to improve veterinary care for underserved pets. The variations were also reflected in responses to scripted survey questions on this topic. The comments below illustrate the range of differing perspectives on pet ownership and the responsibility for pet care.

“Educate people that pets are not a right, they are a responsibility. If you cannot afford something, you should not go buy it. There are too many people who feel entitlement in the U.S. because of charities and government handouts. They need to learn responsibility, not be bailed out for their poor decisions in getting an animal when they cannot afford their own basic necessities!!!!!!!!!!!!”

“I believe pets’ needs sometimes come up and some families should not have to surrender their pet because of an injury or illness, some families go thru hard times, nothing that they have caused—it’s just life.”

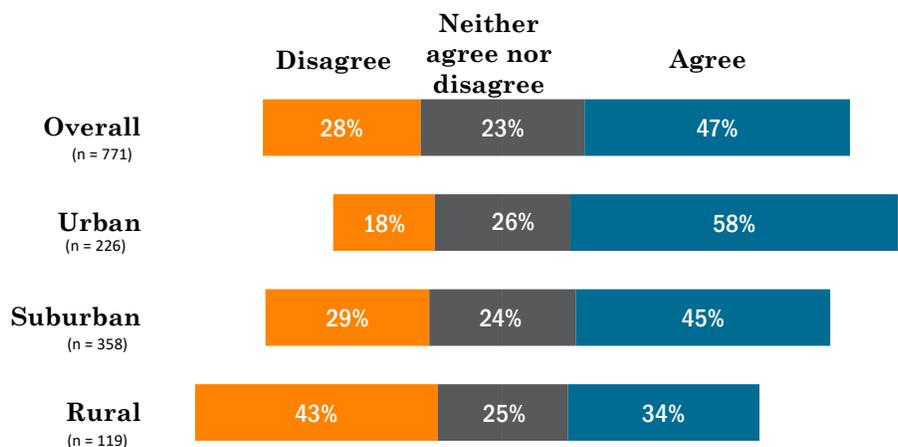


Figure 5.27: Society has a responsibility to help poor people and their pets

SECTION 5: Population Research

Veterinary Service Providers Survey Report

“Veterinary Socialism. All corporate veterinary businesses give a % to fund a large string of clinics located in underprivileged communities.”

These differing opinions continue to emerge in responses to the close-ended questions included in the survey (see Figures 5.27 and 5.28). While more respondents agreed than disagreed that poor people and their pets should be provided with a safety net (46.6%), more than one out of four (28.4%) did not agree.

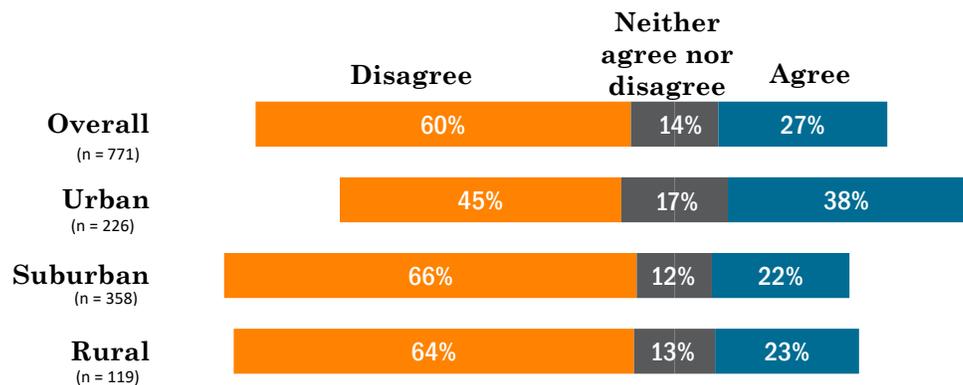


Figure 5.28: Everyone, regardless of circumstances, should be able to own a pet

- Veterinary service providers employed in urban areas were significantly more likely to report that society does bear some responsibility to care for vulnerable people and pets. More than half of urban providers (57.8%) agreed that society bears responsibility compared to 33.9% of those serving in rural areas.
- A majority of respondents (59.8%) indicated they did not think everyone, regardless of circumstances, should be able to own a pet. In fact, almost one out of four (23.9%) strongly disagreed with the idea that everyone should be allowed to be a pet owner.
- Again, providers who worked primarily in urban areas expressed a different opinion about pet ownership than their colleagues working in other areas. More than one out of three providers working in urban areas (37.8%) agreed that all people, regardless of circumstances, should be able to own a pet, while less than one out of four (22.1%) in suburban and rural areas expressed the same sentiment.

Providing Care for Owned Pets

Exploring ideas of how best to care for the underserved pet population is the driving force behind this research. As a way of soliciting input from the veterinary service community, a number of questions were developed to measure current attitudes about ideas and strategies being explored to meet the challenge of providing care for underserved pets. Comments offered by survey respondents suggest that there are disagreements within the industry on how best to serve underserved pets. One of the discussion points is defining “standard of care” and assessing whether options that may not meet this definition are acceptable for those unable to afford this level of treatment. Standard of care was defined for survey participants as “patient care that a veterinarian follows based on scientific evidence. It involves decisions that similarly qualified practitioners would make in managing the patient’s care under similar circumstances.”

Offering Alternatives

84.8% of veterinarians are comfortable with offering alternatives to the “standard of care” if their client cannot afford that level of care.

“From talking with other vets, especially those trained in internships or otherwise working in specialty hospitals, I don’t think a lot of other vets see the value in any care below standard of care (or even below gold standard). I think we need to expand awareness in the profession for the acceptability of any medicine as long as it’s still based in science and provides some relief for the pet.”

“A more forgiving professional culture regarding non-‘standard of care’ methods.”

SECTION 5: Population Research

Veterinary Service Providers Survey Report

Survey respondents were asked to indicate their level of agreement about several questions related to discussions about “standard of care” (see Figure 5.29). There was overwhelming agreement (79.7%) that veterinary service providers feel an obligation to offer the same “standard of care” to all their clients. At the same time, they reported they were comfortable with offering alternatives to this “standard of care” if their client cannot afford that level of care (84.8%).

- Providers working in low-income areas were somewhat less likely to report feeling the same level of obligation to offer the same standard of care to all clients than other practitioners: 68.9% working in low-income areas agreed compared to 81.8% of other providers.
- The level of comfort of offering alternatives to the “standard of care” if the client could not afford the care was consistent across all groups.

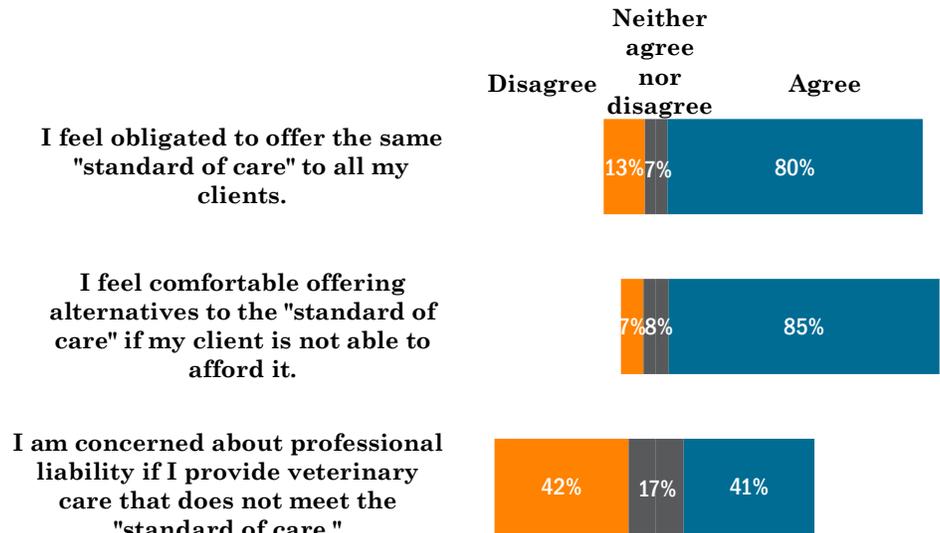


Figure 5.29: Provider opinions on “standard of care” and liability in relation to the pet owner’s inability to pay (n = 771)

While a majority of providers reported they were comfortable offering a care plan that reflects a client’s ability to pay, there was disparity in the level of concern reported in how this practice might impact their professional liability. There were equal numbers who agreed and who disagreed that they were concerned about their professional liability if they provided care based upon ability to pay. Less than half (42.0%) agreed, while the same portion (41.6%) disagreed with the statement “I am concerned about professional liability if I provide veterinary care that does not meet the ‘standard of care’ when the pet owner cannot afford it.”

Another area of discussion regarding standard of care is the impact it may have on the cost of veterinary services. Respondents were asked to reflect on how standard of care, as enforced by state boards, is contributing to the rising cost of veterinary care. Respondents were almost equally split on this topic; 38.4% of respondents disagreed that enforcement by state boards is driving up costs, while 35.0% agreed and 26.6% neither agreed nor disagreed. However, opinions shifted significantly depending on the position held by the provider.

- Those providers who were owners of a private practice were significantly more likely to agree that “standard of care” as defined by state boards is contributing to the rising cost of care: 43.7% agreed or strongly agreed compared to 31.5% among other providers.
- Moreover, those who reported working with a nonprofit organization were also more inclined to attribute cost of care to the “standard of care”: 42.8% agreed or strongly agreed, while only 32.0% of those not involved with a nonprofit expressed the same level of agreement.

Business Model Not Meeting Needs

Nearly three out four respondents (71.9%) indicated they agreed or strongly agreed that the for-profit veterinary business model is not meeting the needs of all pets.

SECTION 5: Population Research

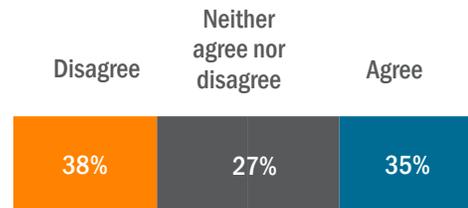
Veterinary Service Providers Survey Report

Providing the needed care for pets, whether adhering to the “standard of care” or not, can be an expensive endeavor. The desire to serve owners and their pets can be at odds with veterinary practices making a profit. There appears to be widespread agreement that the current way of doing business is not adequately serving all owned pets. Nearly three out four respondents (71.9%) indicated they agreed or strongly agreed that the for-profit veterinary business model is not meeting the needs of all pets.

Furthermore, comments offered by providers suggest that those providing veterinary services in the private sector and those providing veterinary services in the nonprofit sector are at odds about the impact of nonprofits on the profitability of private practices (see Figure 5.30). Some within the veterinary service industry perceived nonprofit organizations that offer veterinary service at a discounted cost as unfair competition for for-profit veterinary practices. Others suggested that clients who seek services from nonprofits are not the same population of owners who seek care from for-profit practices, and therefore, the two types of providers are not in direct competition. However, respondents shared an opinion that research needs to be conducted to further explore these arguments.

“Any nonprofit which provides anything beyond basic care (S/N, rabies, maybe basic parvo/distemper) should lose nonprofit status.”

"Standard of care," as enforced by state boards, is driving up veterinary costs.



“To disprove the myth that low cost clinics or nonprofit organizations directly compete with and/or steal clients from the standard private practice business models ... would help the veterinary community work together better to reach all of the pet owners instead of working against each other and leaving the under-served community with little option for veterinary care.”

The current private, for profit veterinary business model is not adequately serving all owned pets.



Nonprofit organizations that provide veterinary services at a discount are unfair competition to private veterinary practices.



Figure 5.30: Veterinarian opinions on the cost of “standard of care,” the for-profit business model, and nonprofit organizations (n = 771)

Opinions of those who owned veterinary practices diverge from others regarding the competition between nonprofits and for-profit service providers. More than half of those who owned their practice (53.4%) expressed agreement that nonprofit organizations were competing against for-profit practices. However, more than half of the overall respondents (58.8%) disagreed that nonprofits should be viewed as competition to for-profit practices.

A number of possible solutions have been suggested that would allow pet owners to obtain affordable veterinary care and still ensure profitability for veterinary service providers. Two specific solutions were addressed in this survey: implementing some type of “means testing” to determine eligibility for receiving care at a discounted cost and requiring all pet owners to purchase a health insurance policy for their pet. There was widespread support for imposing “means testing” for reduced costs but not for requiring insurance policies for pets (see Figure 5.31).

About two out of three respondents (64.5%) agreed or strongly agreed that there should be a requirement for pet owners to provide income verification prior to receiving veterinary care services at a reduced fee or at no cost.

SECTION 5: Population Research

Veterinary Service Providers Survey Report

- However, providers who served lower income areas were significantly less likely to favor imposing “means testing” prior to receiving care. Slightly more than half of those serving low-income clients (56.5%) agreed with using means testing as eligibility for receiving discounted services compared to 61.8% of those working in an economically diverse area and 70.4% of those working in middle to high-income areas.

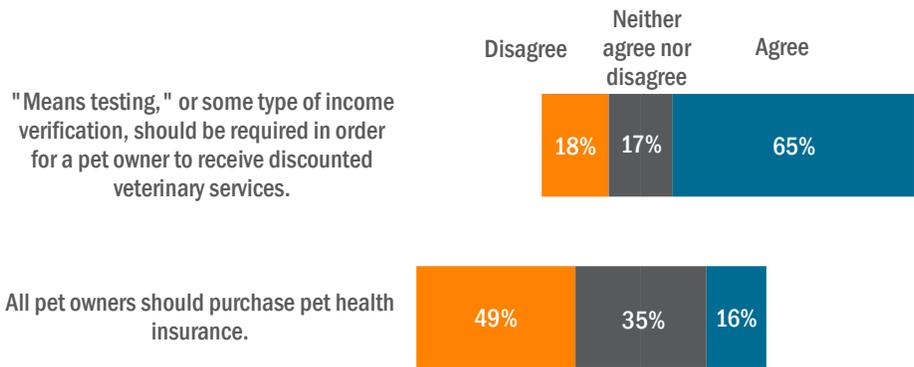


Figure 5.31: Practitioner opinions on “means testing” and pet health insurance (n = 771)

- Opinions also diverged on the concept of “means testing” among those working in private practice and those working for nonprofits. Two out of three (65.0%) providers working in private practices agreed with imposing this requirement, whereas half of those working for nonprofit organizations (51.4%) agreed. Those who currently owned their practice were even more likely to agree. Three out of four owners (73.9%) supported imposing “means testing” for pet owners.
- Half of the respondents (48.8%) disagreed with the concept of requiring pet owners to purchase an insurance policy. However, a substantial portion (35.1%) indicated they neither agreed nor disagreed with this idea. These opinions were consistent across all respondents, regardless of their type of practice or region of employment.

Improving Veterinary Care for Underserved Pet Populations

There are different opinions about the underlying causes for inadequate pet care and about how best to address the problems. Findings from this study confirm that veterinary service providers recognized the severity of the problem. Furthermore, it is apparent that most providers felt a commitment to explore ways to address the problem. Respondents were presented with a short list of strategies to increase awareness and access to veterinary care for underserved pets (see Figure 5.32). Four out of five respondents (81.7%) indicated they had taken some action to mitigate the problem. The most prevalent solutions reported were concerted efforts to learn more about the problem and to expand their skill set; thus enabling them to better meet the needs of all pets. Seeking out

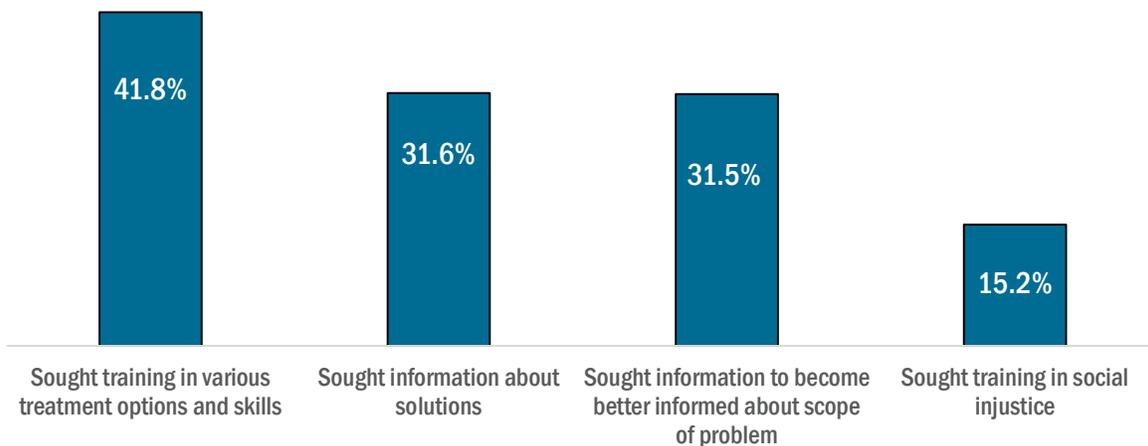


Figure 5.32: Efforts to Increase Access to Veterinary Care for Underserved Pets (n = 771)

SECTION 5: Population Research

Veterinary Service Providers Survey Report

training in various treatment options and skills was the most frequently reported action.

Furthermore, veterinarians who were employed in private practice have been actively engaged in addressing the needs of underserved pet populations (see Figure 5.33). Virtually all who were engaged in private practice (98.4%) reported they had implemented at least one financial strategy in the past year to address and mitigate the problem. The most frequently cited strategy was exploring treatment options with clients to best match their economic constraints. Other common

strategies were making clients aware of payment options and offering services at a reduced cost or on a pro bono basis. Less common strategies were making financial contributions to a general fund, such as an “Angel Fund” or a fund established for a specific pet and applying for grant funding.

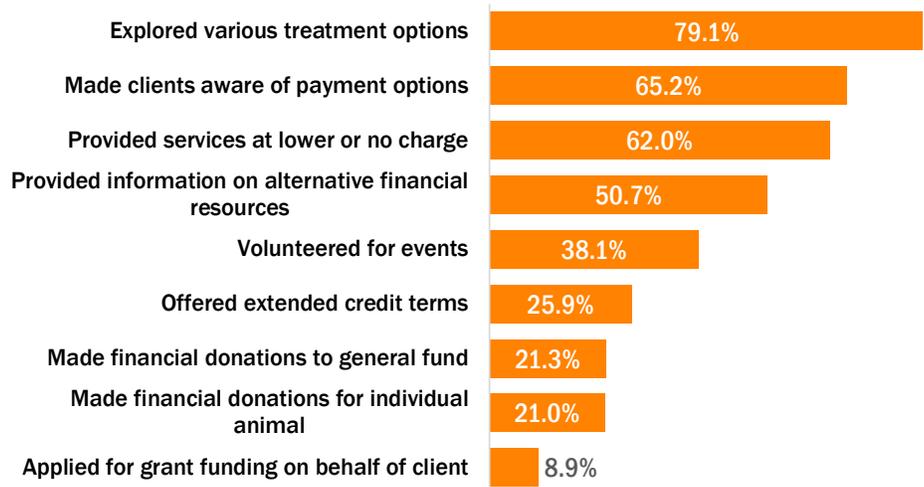


Figure 5.33: Veterinarians employed a variety of strategies to address needs of underserved pets (n = 470)

However, there are barriers that may prevent veterinarians from being able to meet the needs of all pets. A number of strategies were presented to respondents that might help them better care for underserved pets (see Figure 5.34). Many comments offered by respondents about how care for this population could be improved suggest that financial constraint was a significant factor currently being faced by veterinary service providers. These comments often discussed how the rising cost of tuition and the overwhelming level of student loan debt prevent many from being able to provide veterinary services at a discounted rate. The rising cost of supplies and pharmaceuticals were also contributing to the financial struggle many private practitioners were experiencing. Many reported they had “the heart” to serve those in need but simply could not afford to do so. Several suggested that school loan forgiveness or changes to current tax laws enabling deductions for conducting pro bono work or volunteering for low cost or free clinics would go far in helping them better serve their community. Others suggested incentivizing pharmaceutical companies to donate supplies used for low-income clients through tax credits.

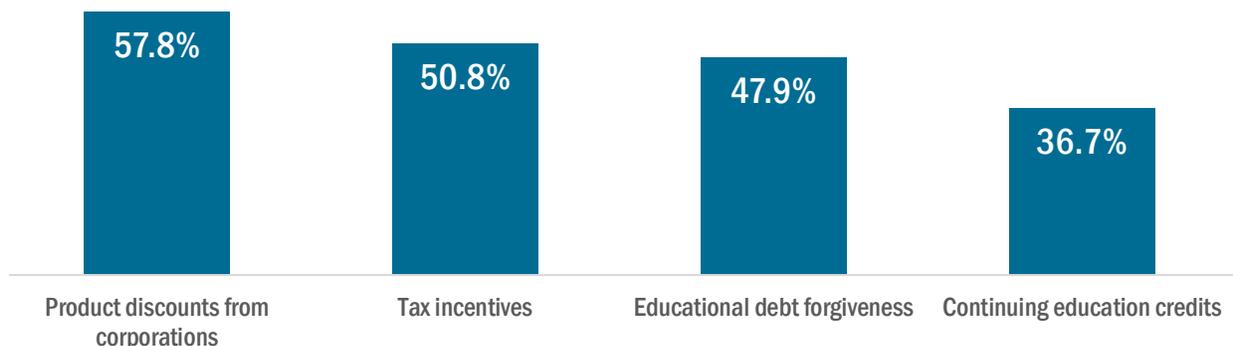


Figure 5.34: Veterinarians reported that financial assistance created more opportunities and greater incentives to meet the needs of underserved pets than would continuing education credits (n = 771)

SECTION 5: Population Research

Veterinary Service Providers Survey Report

“Veterinarians would jump at the opportunity to help pets of disadvantaged individuals if someone could figure out how to make that happen without going bankrupt or laying off members of our staff.”

“I would gladly donate my time to vaccinate and care for homeless and underserved pets if the vaccines were paid for. My student loans payments are so large that I am barely able to care for my own pets appropriately. Debt forgiveness would allow a larger number of vets to offer lower cost services.”

A number of other strategies for improving access to care for underserved pets were offered by respondents. In addition to the strategies discussed above, education emerged as an overarching theme. Education for both pet owners and for veterinary service providers were discussed extensively. Education for pet owners, according to respondents, should begin in elementary school and should include information about the responsibilities of being a pet owner and how to properly care for a pet. Educating the public from a young age about properly caring for a pet would allow people to make more informed decisions concerning pet ownership. Moreover, by offering education in schools, it would allow children of non-English speaking parents to share information with their parents about proper pet care.

“Education of pet owners is key - before they take a pet, during ownership, and when health issues arise. Educated clients can get more out of a veterinary visit, and can make better choices.”

“People should be educated on the cost of owning and providing veterinary care to an animal before they obtain the animal.”

“Educate the public about the costs of pet guardianship and advising people to NOT have pets if they are unable to afford decent veterinary care.”

Suggestions also included altering the veterinary school curriculum to include coursework on how to meet the needs of underserved pets and to provide hands-on opportunities to work with this population. According to the comments offered, students may not be receiving adequate education for diagnosing conditions without the use of high-tech equipment. This leaves many veterinary service providers without the necessary skills and experience to offer low-cost alternatives to those clients who cannot afford “gold standard” treatments. Further, some suggested that courses on the importance of public service should be incorporated into the curriculum.

“More access for veterinary students and practitioners for practical low-cost veterinary care in more areas. We need more of these programs/trainings in vet schools vs. gold-standard care which isn't practical for a majority of the population.”

“Veterinarians need to be trained in offering different levels of care, not just the top-tier gold standard.”

“Veterinary students need hands-on experience to be practice ready. There are underserved populations of pets that need help. We need to find more ways to get these two groups together so that Veterinary Students can gain this sort of practical experience while learning more about issues of access to care and diversity.”

“Make it a standard of the profession, like pro bono work for lawyers.”



SECTION 5: Population Research

Veterinary Service Providers Survey Report

Finally, many of the comments focused on the need for more collaboration between for-profit practices, nonprofit veterinary service organizations, and other nonprofits. This multi-modal approach may provide better solutions that would meet the needs of the pets, while addressing the social determinants of poverty for the pet owner. Additionally, encouraging more collaborations may lead to opportunities for nonprofit and for-profit veterinary service organizations to see the profession from each other's perspective.

"I recommend private nonprofits partnering with government organizations to provide funding for services at the government location."

"Network with other social service agencies (housing, DV, education, transportation, job placement) as often social determinants of health are affecting entire household (not just pets)."

"Private practices partner with nonprofit agencies in a more collaborative way. Example - client can't afford care - refer to shelter/nonprofit practice for service and retain client. Example - low-income patient needs care, private practice offers one-time discounted service as a way to earn client and support underserved population."

"I believe a collaborative environment needs to exist between nonprofit and for profit veterinary establishments so we can meet the needs of all pet owners. We would gladly accept referrals from for profit veterinarians when a client cannot afford their services. Emergency care is greatly lacking for the low-income community."

Conclusion

The underserved pet population is a problem in the United States, yet little systematic research has been conducted to better understand the scope of the problem or help develop successful strategies for addressing the problem. This study was funded in an attempt to fill this gap. The field of veterinary medicine is grappling with questions about society's role in providing care for the underserved pet population. There are widely varying opinions among veterinary service providers about these questions. One view is that pet ownership is a privilege and not a right, and only those who can afford proper care should own a pet. An opposing view is that all people, regardless of socioeconomic status or ability to provide proper care, have the right to own a pet. While some veterinary service providers might hold to these more extreme opinions, most are somewhere in the middle.

A concurrent discussion within the profession is how to define "standard of care" and how it affects costs. Additionally, it must be determined whether all veterinary service providers should be bound by these standards. Coupled with rising tuition costs and a heavy burden of student loans, many recent veterinary graduates are struggling to reach financial stability after investing a substantial amount of time, money, and effort into earning a veterinary degree. Furthermore, some have suggested that those in private practice regard veterinary service nonprofit organizations as competition instead of an opportunity to build collaborative relationships and partnerships. Moreover, some veterinary service providers believe that the curriculum currently offered by universities may not be adequately preparing their graduates to create effective-care plans that utilize alternatives to "gold standard" methods. These factors are negatively impacting the ability of some veterinary service providers to meet the needs of the underserved pet populations.

Despite these disagreements, veterinary service providers are committed to expanding their understanding of the problem and seeking information about how best to address it. Younger providers, those who most recently received their veterinary degree, are more likely to view the problem as a threat to public health than older providers are. This may lead to more urgent discussions and innovative strategies to meet the needs of the

Veterinary Care for All

Nearly all veterinarians surveyed agree that all pets deserve some level of veterinary care and that there is a relationship between the owner's emotional health and being able to obtain veterinary care for their pet.

SECTION 5: Population Research

Veterinary Service Providers Survey Report

underserved. Such strategies might include changes to tax laws that would allow veterinary service providers and pet care companies to receive incentives for providing services to those who cannot afford care. At the same time, the public must be better informed about the extent of the problem and be better educated about how to be a responsible pet owner. Successfully combating this growing concern will require the public and veterinary service providers, nonprofit organizations, and private practices to work collaboratively to devise the innovative solutions needed to solve this societal problem.

References

1. LaVallee E, Mueller MK, McCobb E. A Systematic Review of the Literature Addressing Veterinary Care for Underserved Communities. *J Appl Anim Welfare Sci.* 2017;20(4):381-394, DOI: 10.1080/10888705.2017.1337515.
2. Market Research Statistics: U.S. Veterinarians 2017. AVMA website. <https://www.avma.org/KB/Resources/Statistics/Pages/Market-research-statistics-US-veterinarians.aspx>. Accessed August 5, 2018.
3. Market Research Statistics: U.S. Veterinarians 2017. AVMA website. <https://www.avma.org/KB/Resources/Statistics/Pages/Market-research-statistics-US-veterinarians.aspx>. Accessed August 5, 2018.
4. San Filippo M. AVMA Urges congressional action on veterinary shortages. AVMA website. <https://www.avma.org/News/PressRoom/Pages/AVMA-urges-congressional-action-on-veterinary-shortages.aspx>. Updated January 31, 2018. Accessed August 5, 2018.
5. Census Bureau Regions and Divisions with State FIPS Codes. United States Census Bureau website. https://www2.census.gov/geo/docs/maps-data/maps/reg_div.txt. Accessed August 5, 2018.



[← Back to Table of Contents](#)

CARE Focus Groups with Veterinarians Report

Principal Investigator: Linda Daugherty, MPA

Purpose and Methodology

The focus of the research discussed in this report is to gain insights and explore strategies to best address the problem of providing for the underserved pet population in the United States. The study, funded by a grant from [Maddie's Fund](#)[®], was conducted by the University of Tennessee's College of Social Work [Center for Applied Research and Evaluation \(CARE\)](#). As part of this research, a web survey was completed by 709 veterinarians. Findings from the survey are discussed in the Veterinary Service Providers Report. At the conclusion of the survey, participants were given the opportunity to provide their name and contact information if they were interested in participating in an on-line focus group. More than one-third of those who participated in the survey (264) provided their contact information. An email invitation to participate in a focus group was extended to all 264 veterinarians.

Thirteen focus groups were conducted during the week of July 16, 2018, with at least one group held each day. A total of 50 veterinarians were scheduled to participate. However, only 39 were able to attend during their scheduled times. The veterinarians who participated had diverse professional backgrounds and represented small private practices, private hospitals and emergency clinics, large corporate practices, nonprofit shelters, academia, and governmental agencies. Veterinarians from 19 different states who served in rural and urban areas participated. There was also a wide range of experience represented in the groups— from those who had practiced veterinarian medicine for two years to those practicing more than 40 years.

Three broad topics were discussed during the focus groups: barriers faced by pet owners in securing care for their pets, barriers faced by veterinarians in meeting these needs, and promising practices for overcoming these barriers. A copy of the moderator guide, approved by the Institutional Review Board at the University of Tennessee on June 22, 2018, can be found in [Appendix 5](#) of this report. The purpose of this report is to share findings from the focus group discussions about promising practices. These findings include discussions about current programs that are viewed as effective in serving the underserved pet population and elements that are viewed as critical for programs to be successful in meeting the needs of the underserved. It is important to note that this report should not be viewed as an exhaustive list of successfully implemented programs to meet the needs of the underserved. Instead, it provides an overview of existing programs and elements within these programs that could be helpful if successfully replicated.



Programs Identified

Focus group participants were asked to identify programs that could serve as prototypes for future programs designed to meet the needs of the underserved pet owners. One program mentioned in most focus groups was [Pets for Life](#). Pets for Life is a program sponsored by the Humane Society of the United States that provides direct care for pets, training for pet owners, and mentorship to other animal welfare organizations.¹ This program is focused on a personal approach to the problem of underserved pets by understanding the needs of the pet owners and reaching out to individual communities. One of the key ingredients for the success of the program is to have a presence within the community and to work collaboratively with other social service agencies to foster a healthy human-animal bond.

SECTION 5: Population Research

Focus Groups with Veterinarians Report

*“It is quite labor intensive, but they go into low-income neighborhoods and introduce themselves to **gain their trust**. They actually go out and meet the people.”*

*“They are going into populations and communities who have issues with education to **get people within the community involved**. Then the community members can go back to the people who trust them to spread the word. Then the group works with the liaison to ensure the program is getting to the people you need to get to.”*

While the success of Pets for Life was widely recognized, some suggested that the program had been “more urban-centered” and has not been adopted in more sparsely populated areas.

“There are a different set of barriers that would need to be overcome to be successful in rural areas because everyone is more spread out.”

A second program identified by many for its effectiveness was the [Rural Area Veterinary Services \(RAVS\)](#), a nonprofit veterinary outreach program that provides free veterinary services to underserved rural communities, where access to veterinary care is limited. This outreach program provides volunteer opportunities for veterinarians and provides clinical experience to future veterinarians and veterinary technicians by serving in rural communities.²

“RAVS has a big impact on Native American reservations. It has substantially reduced the dog population on the reservations.”

*“The RAVS program has been around for a couple of decades now. It takes veterinarians, veterinary students, and veterinary technicians and goes to American Indian reservations and provides veterinary care to animals in most cases who have never, ever seen a veterinarian. The reason that can work is because these reservations are **not governed by state law and you don’t need a [state veterinary] license the way you normally would to provide that kind of care in other rural areas that can’t get veterinary care.**”*



A third program discussed was [The Street Dog Coalition](#), a program started in Colorado to serve the homeless population. The first clinic took place in 2015 and was located across from a homeless shelter in Fort Collins. The program relies on volunteers, and many supplies are donated by local or national companies.³

“The program was founded by vet in Colorado and has now expanded to other cities. The clinics are located near the shelters, so the homeless pet owners are aware that it is happening.”

A somewhat different type of program discussed by several participants is offered by academic institutions. The first, [Tufts at Tech Community Veterinary Clinic](#), is a student-run veterinary clinic that offers low-cost veterinary care for income qualified residents in central Massachusetts. This unique program is a collaborative effort between Tufts University’s Cummings School of Veterinary Medicine and Worcester Technical High School’s Veterinary

SECTION 5: Population Research

Focus Groups with Veterinarians Report

Assisting program.^{4,5,6} An additional university-based program, [Southside Community Clinic](#), is associated with Cornell University and provides veterinary care in a low-income area in Ithaca, New York. This monthly walk-in clinic provides health-care for approximately 600 animals.⁷ [WisCARES](#), an outreach partnership at the University of Wisconsin, provides veterinary care as well as housing support and advocacy and other support services for low-income families, especially those who are at risk of becoming homeless.^{8,9}

*“They have opened clinics in low-income neighborhoods. Students are getting more experience and the low-income community gets support. It gets students to **learn how to work within people’s budget.**”*

Another type of program discussed and sometimes offered by schools of veterinary medicine was a mobile unit. Schools that were mentioned during the focus groups were the University of Illinois, Mississippi State, and the University of Tennessee. The mission of many of these mobile units is to travel to rural areas that may lack access to affordable veterinary care or perhaps any type of care.

*“That mobile type option to get to the underserved areas that **don’t have a large enough population to open a full-clinic** but being able to go in temporarily every few weeks is a step in the right direction.”*

However, not all mobile units are associated with veterinary medical schools. One focus group participant discussed how the use of a mobile unit provides an economical option for low-cost spay and neuter services to a high-volume of animals. The unit serves a 12-county region that is mostly rural and is privately owned.

*“**I use vet techs in order to do more high-volume work.** Humans don’t get the same interaction time with me - pets get the same quality - people don’t.”*

There were also several successful local programs discussed that were frequently a result of partnerships between nonprofit shelters, private for-profit practices, and municipalities to meet the needs of the community. These programs are typically funded by a combination of grants, charities, and municipal taxes.

*“The goal was to reduce the overcrowding in the shelters, and it has reduced it by 50% in the past 5 years. We work with Animal Aid that is known for being low cost- **they send us referrals and then we send them clients that can’t afford the type of medicine that we practice, so we work hand in hand...**”*



*“I used to work at a shelter where we had a hospital that served the public. People paid going rates or on a sliding scale if they had lower incomes. **It allowed us to practice high quality medicine that people with money were subsidizing those who didn’t have money.** Those who didn’t have money felt like they were getting first-class medicine.”*

“I run a clinic for the homeless population that is paid for by local tax payer’s dollars and donation dollars to pay for medical services, whether dentistry or orthopedics or basic medical care. We ran the clinics at the shelter, and now we are partnering with a free spay/neuter on site. The clinic is right down

SECTION 5: Population Research

Focus Groups with Veterinarians Report

the street from the homeless shelter. We are sending the pets to local veterinarians and paying the full ticket price, so they are benefitting by getting a new client. We are not competing with private practice.”

“For-profit veterinary practices donate food and medicines that are getting close to their expiration dates. It took a while to build the relationship, but now they see that I am not taking clients away from them.”

Finally, the [Companion Animal Foundation](#) (CAF) was discussed. This program, funded by dues paid to the Rhode Island Veterinary Medical Association, is the first veterinary-based assistance program in the nation. In 2013, a pilot voucher program was launched as an alternative means of providing low-income pet owners with access to veterinary care. Since that time, the CAF has issued more than 700 voucher certificates.¹⁰

“It provides a \$100 voucher to any pet owner who doesn’t have a regular general practitioner to receive services from any general practitioner in the area. It provides an economic incentive [for the veterinarians] to address education and healthcare needs.”

Necessary Elements

In addition to specific programs offered as exemplary and worthy of replication, focus group participants discussed many elements they felt to be essential for any program to be successful. One of the first ingredients needed is a “**champion**.” The champion is the person or group of people who recognize the need for a program or service, who have the passion and connections to convince others of the importance of the service, and the stamina to stay in it for the long term.



“It has to start with like-minded practitioners who are seeing the same thing. But when your hands are tied by not being able to provide the needed service then that weighs on your heart. It has to start with a dialogue in the community, and it takes some time. Starts with a phone call asking what can you do, what are your boundaries?”

*“Our program was successful because of the **networking ability** of our previous medical director who knew everyone and was very clear about policies for referrals. She would do relief work with other vets and was very active within the vet community. She sold the program as providing **relief of compassion fatigue - provided a way for pets to stop suffering.**”*

Another essential component for a successful program is the ability to build trust within the community the program serves. Trust is built through relationships with and sensitivity to the “culture” of the community that needs the services. There was widespread recognition that working with vulnerable populations requires veterinarians to be respectful of pet owners, regardless of the circumstances in which they find themselves. Accordingly, successful programs will need to “meet” the owners where they are and to foster relationships that eventually lead to trust. One way to build trust is to identify liaisons within the community to help **build bridges between community members and the veterinary community.**

SECTION 5: Population Research

Focus Groups with Veterinarians Report

*“Going into populations and communities who have issues with education or with the denial about the importance of veterinary care to **get people within the community involved and educated**. Then they can go back to their neighbors or their families and to the people who actually trust them to spread the word. Then the veterinarian group works with the liaison to get to the people you need to get to.”*

*“It is important to build rapport in the community, and it **takes a long to build that trust**.”*

Building this rapport is especially important and difficult with vulnerable populations. Most veterinarians and veterinary students have not experienced the struggles of poverty and may require some type of sensitivity training to build cultural competencies.

*“We need to **recognize that there are cultural differences** in how people view their pet.”*

*“We work with students before they are allowed to work with the homeless community. **We find students sometimes do not have the needed social skills to work successfully with this population**.”*

Furthermore, a successful program needs to be able to **offer services in the pet owner’s native language**. Being able to communicate effectively is essential for sharing complex information about pet health issues. Having a veterinarian or veterinary technician who is fluent in at least Spanish is optimal. However, it is important to “know” the community because “there are more languages out there than just Spanish.” At a minimum, all written information needs to be offered in Spanish.

Not only is it important to have a healthy relationship with the community being served, it is imperative to have **positive and strong relationships within the veterinary community**.

*“The key to success in **fostering relationships with other clinics** is with referrals that go back and forth.”*

*“It also takes a **support of the local veterinarians**. My colleagues are now saying we are going to work with you. It wasn’t easy but now it’s successful.”*

*“It is **relationship based on a personal level** because we have worked with them and worked together. In a small community, it is not as hard to get to know each other.”*

Support from the state Veterinary Medical Associations (VMAs) is also a desired component of meeting the needs of the underserved. Much of the discussion in one focus group was devoted to the cultural differences within the veterinary community experienced across states. While there was uncertainty about which came first—the presence of more shelter veterinarians who influenced the agenda or the state VMA fostering a positive environment—there was recognition that some states are doing a better job of promoting programs that serve the underserved pet population and the needs of the pet owners. As one veterinarian



SECTION 5: Population Research

Focus Groups with Veterinarians Report

said who recently moved to a different state, “There was more of a focus on the soft sciences there that I don’t find here.” Another veterinarian who works in a rural area commented that having the support of the VMA in the state would “go a long way in recognizing there are needs outside of the metropolitan areas.” Furthermore, VMAs could advocate for national standards or license reciprocity. This would allow veterinarians to serve in neighboring states or in other areas of the country who might have a higher need.

“I have always thought we should have license reciprocity. If you are a competent veterinarian in [one state], we should assume that you are a competent veterinarian in [different state]. So, if you want to go and do a good deed in an inner city or remote areas ... you should be able to do that.”

Finally, successful programs need to be economically sustainable. This sustainability can be achieved in several different ways.

- Developing **treatment plans that are more affordable** and adopting the philosophy that “just because we can doesn’t mean we should.” Offering clients more affordable treatment options, while still practicing good medicine, was suggested by many of the focus group participants.
- Employing more **veterinary technicians** would afford veterinarians the ability to focus more on the medical needs of the pet. This shift in job responsibilities would allow veterinarians to provide a higher volume of work that results in economic efficiencies.
- Relying on mobile units to reach pet owners in rural areas that do not have the population density to support a full-service veterinary practice. **Working with local social service agencies to advertise the unit’s schedule will reduce administrative costs.**
- Identifying potential stakeholders, the “movers and shakers” in a community who are interested in animal welfare, to assist in securing program funding. However, it is important that agencies and programs working to meet the needs of the underserved pet population be mindful “to **not create fiefdoms and to be willing to work collaboratively.**”
- **Reaching out to pharmaceutical companies and pet suppliers for support.** “We have to reach out to vendors. They want to do more, and they are just waiting for us to ask.”
- **Including some type of “means test” for receiving services.** There was a general consensus among the participants that not requiring evidence of financial need devalued the veterinary services. Many believed that offering services at a minimal cost or on a sliding scale is preferable to providing “free” services. However, formal “means testing” is not necessarily required. Programs can rely on “geographic means testing” by offering services in a community that is known to be low-income.

Finding ways to meet the needs of the underserved pet population is not only essential for the health of pets, it is also imperative to the well-being of veterinarians. “One part of advocating for serving the underserved is wellness for the veterinarian... Not being able to meet the needs of the underserved could decrease my own wellness.”

SECTION 5: Population Research

Focus Groups with Veterinarians Report

References

1. Pets for Life. The Humane Society website. <http://www.humanesociety.org/about/departments/pets-for-life>. Accessed June 2018.
2. The Fund for Animals: Rural Area Veterinary Services. The Humane Society website. <http://www.ruralareavet.org/>. Accessed June 2018.
3. The Street Dog Coalition website. <http://www.thestreetdogcoalition.org/>. Accessed June 2018.
4. Tufts at Tech. Tufts Cummings School of Veterinary Medicine website. <http://vetmed.tufts.edu/tufts-at-tech>. Accessed June 2018.
5. McCobb E, Rozanski EA, Malcom EL, Wolfus G, Rush JE. A Novel Model for Teaching Primary Care in a Community Practice Setting: Tufts at Tech Community Veterinary Clinic. *J Vet Med Ed*. 2017;45(1):1116-1174.
6. Nolen RS. Ready for the real world - Tufts at Tech's novel teaching model prepares veterinary students for the realities of practice. *JAVMANews*. December 15, 2016. <https://www.avma.org/News/JAVMANews/Pages/161215a.aspx>. Accessed November 11, 2018.
7. Southside Community Clinic—Southside Healthy Pet Clinic: Service Learning at its Best. Cornell University College of Veterinary Medicine website. <https://www2.vet.cornell.edu/about-us/outreach/southside-community-clinic>. Accessed June 2018.
8. WisCARES website. <https://wiscare.wisc.edu/>. Accessed June 2018.
9. Nolen RS. Searching for Shelter - Veterinarians in Wisconsin fight homelessness while protecting the human-animal bond. *JAVMANews*. December 1, 2015. <https://www.avma.org/News/JAVMANews/Pages/151201a.aspx>. Accessed November 11, 2018.
10. RIVMA Companion Animal Foundation website. <http://www.companionanimalfoundation.org/>. Updated 2014. Accessed June 2018.



◀ Back to Table of Contents

SECTION 5: Population Research

Pet Owners Experiencing Housing Insecurity

Associated Research – Midwestern University Study of Pet Owners Experiencing Housing Insecurity

Principal Investigator: Rachael Kreisler, VMD, MSCE, DACVPM

Purpose and Methodology

In response to the paucity of published studies regarding barriers to veterinary care, a national study of pet owners was conducted by the University of Tennessee's [Center for Applied Research and Evaluation \(CARE\)](#) in partnership with the Access to Veterinary Care Coalition. While this study used stratified sampling and multiple contact modalities (landline, cell phone, and internet) to reach homes with a range of household incomes, there was concern that households that experience housing insecurity may not be adequately represented due to transience, which significantly decreases the ability to reach them via telephone or internet. To address this concern, an additional associated study administered via written survey was conducted to directly target this population. The Midwestern University Institutional Review Board approved the survey instrument and research protocol.

The English only written survey was designed to be self-administered, while adhering as closely as possible to the telephone interview used in the CARE study. Unlike the CARE study, respondents who owned multiple pets were only asked to respond regarding the pet that they had owned for the greatest amount of time. In addition, households were not asked about their size and income, but rather whether they had experienced homelessness within the past year and whether they received public assistance. Three veterinary outreach programs, located in the West, Southwest, and Southeast regions, distributed the written survey during the first half of 2018. A total of 142 surveys were completed: 86 from the West, 49 from the Southwest, and 6 from the East. In a pilot conducted in the Southwest region to determine the feasibility of a paper-based survey, the response rate was 30%; however, the response rate was not tracked after the pilot phase due to the pace of the clinics.

Profile of Pet Owners

Similar to the CARE study, respondents were asked about their age, ethnicity, race, gender, marital status, and highest level of education achieved. They were also surveyed regarding the total number of dogs and cats owned. For this study, respondents were additionally asked whether they had spent at least one night without a fixed, regular, and adequate place to live in the past year (referred to here as housing insecure) and whether they were on any forms of public assistance.

The mean age of respondents was 44 years, with a median of 43 years and range of 18-79 years. Females accounted for 77% of respondents, 65% received at least one form of public assistance, and 21% were housing insecure. Only 32% of respondents reported difficulty finding housing due to pet ownership.



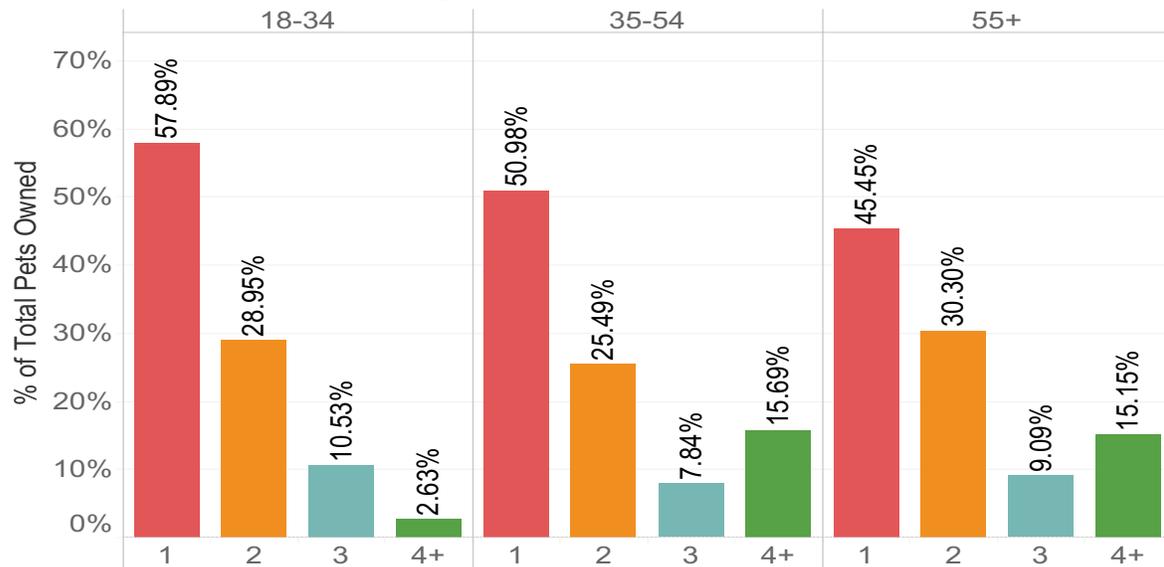
Households for this study reported owning a mean of 2.0 pets, which was similar to the CARE study. However, the distribution of pets was different, with about twice as many households, 51%, having only one pet. Unlike the CARE study, the proportion of single pet households did not differ according to markers of household income, such as use of public assistance or the presence of housing insecurity. Also, unlike the CARE study, the number of

SECTION 5: Population Research

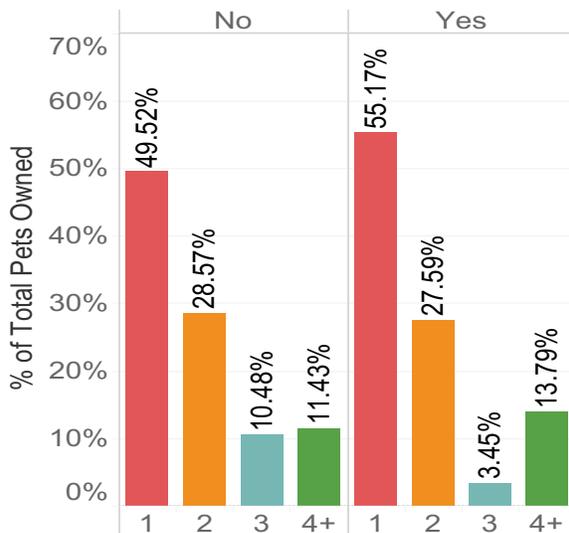
Pet Owners Experiencing Housing Insecurity

single pet households decreased with age, with 58% of respondents aged 18-34 years, 51% of respondents aged 35-54 years, and 45% of respondents 55+ years having a single pet.

Number of Pets Owned by Age of Pet Owner



Number of Pets Owned by Housing Insecure



Number of Pets Owned by Public Assistance

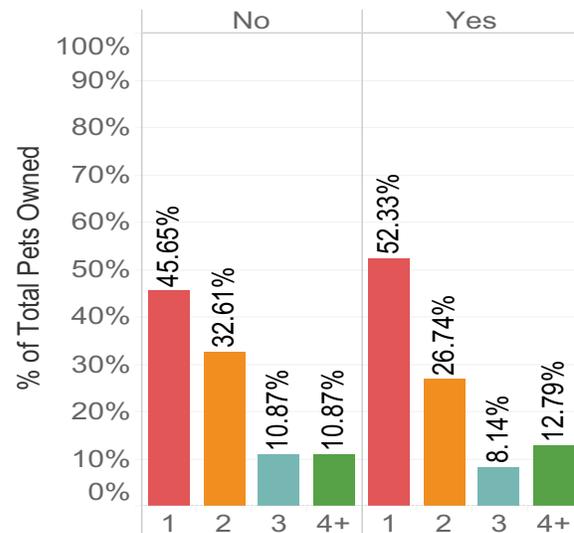


Figure 5.35: Pets and Pet Owner Demographics

Similar to the CARE study, respondents largely agreed with the statement “My pet is considered a member of my family,” with 77.9% either strongly (74.8%) or somewhat (3.0%) agreeing. Interestingly, there was only a single neutral response (0.8%). No respondents somewhat disagreed with the statement and 21.4% strongly disagreed. The consensus value, which demonstrates the degree of agreement between respondents on a scale of 0 (no agreement) to 1 (perfect agreement), for this statement was low, with a value of 0.26. There was no difference by demographic variable, such as age, sex, or income.

SECTION 5: Population Research

Pet Owners Experiencing Housing Insecurity

Pet insurance levels were low, with only 5.3% reporting that they owned pet insurance. There was no difference by demographic variables. This is less than the 12.0% reported by respondents to the CARE survey.

Profile of Pets

As with the CARE study, respondents were asked about the number of pets that were owned, where households obtained their pet, and the spay/neuter status of their pets. Unlike the CARE study, there were differences in the number of pets owned by the age of the pet owner. The number of pets owned increased with the age of the owner, with respondents aged 18-34 having a mean of 1.6 pets (median 1), respondents aged 35-54 having a mean of 2.1 pets (median 1), and respondents aged 55+ having a mean of 2.4 pets (median 2).

More than half of households (65.0%) owned only dogs, with 15.3% owning only cats and 19.7% a “blended family” of dogs and cats. Unlike the CARE study, home composition did not vary by sex. Also different from the CARE study, home composition varied by age, with older respondents more likely to own both dogs and cats. For the 18-34 age group, only 5% of families were blended, while 23% were blended for the 35-54 age group, and 29% for age 55+. Households that had experienced housing instability were slightly more likely to own only cats.

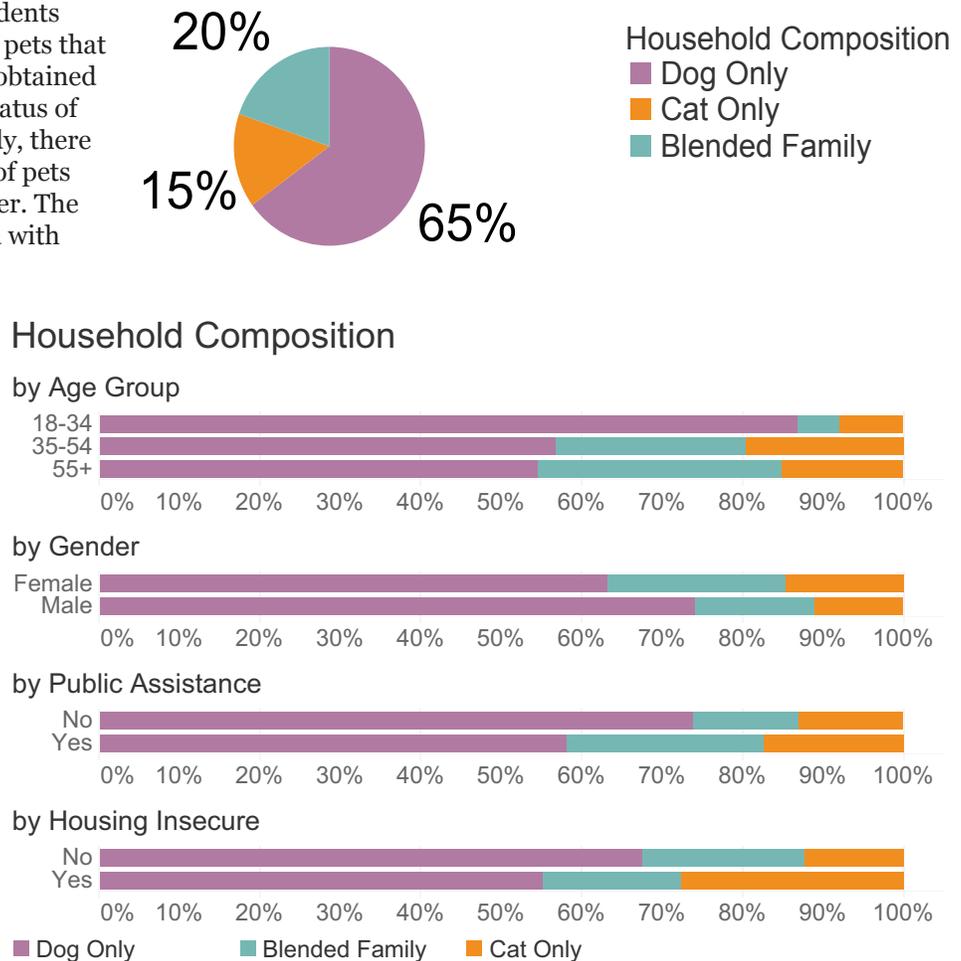


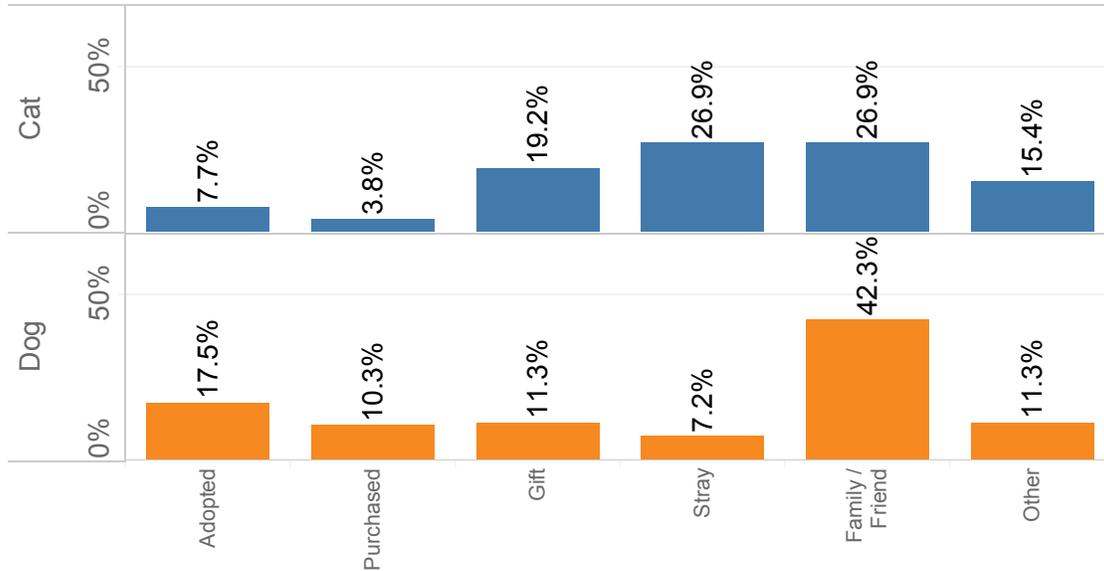
Figure 5.36: Household Compositions

Dogs were more likely than cats to have been adopted from an animal shelter or rescue organization (17.5% vs. 7.7%, respectively), purchased from a pet store or breeder (10.3% vs. 3.8%), or acquired from a friend or family member (42.3% vs. 26.9%, respectively). When considered by purposeful (adoption or purchase) versus non-purposeful (gift, stray, family or friend) modes of acquisition, pets were much more likely to be acquired through non-purposeful methods (73.0%). Cats were more likely than dogs to be acquired as strays (26.9% vs. 7.2%, respectively). As compared to the CARE survey, both dogs and cats were less likely to be adopted or purchased and much more likely to be acquired from friends or family. The proportion of strays was similar to the CARE survey. Unlike the CARE survey, there were no associations with the source of pet and the pet owner’s age.

SECTION 5: Population Research

Pet Owners Experiencing Housing Insecurity

Source of Pet by Species



Source of Pet by Purposeful Acquisition

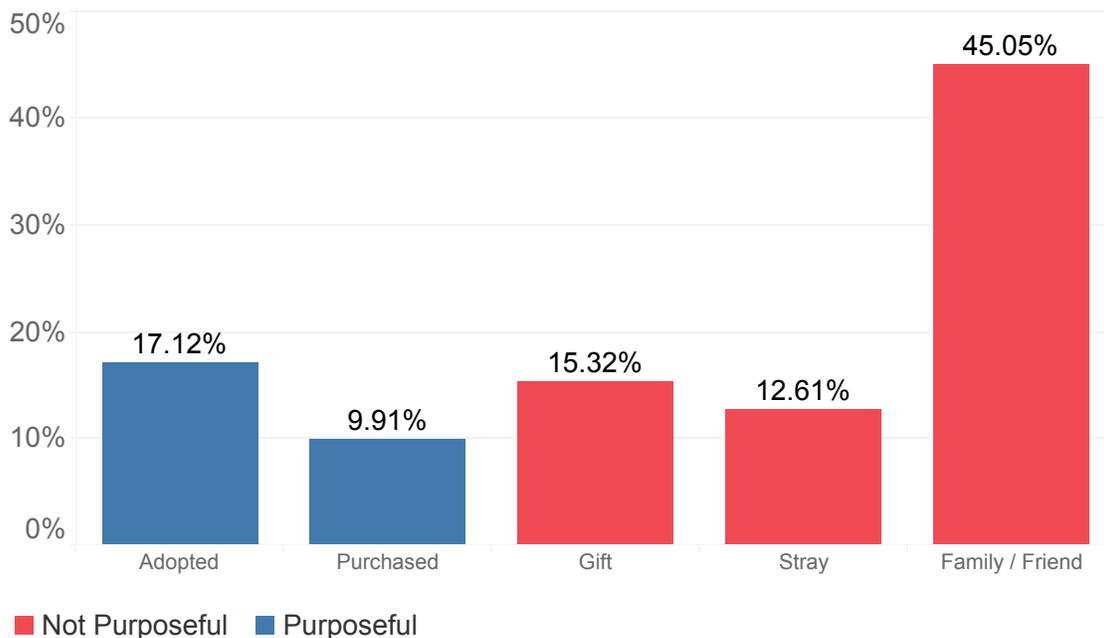


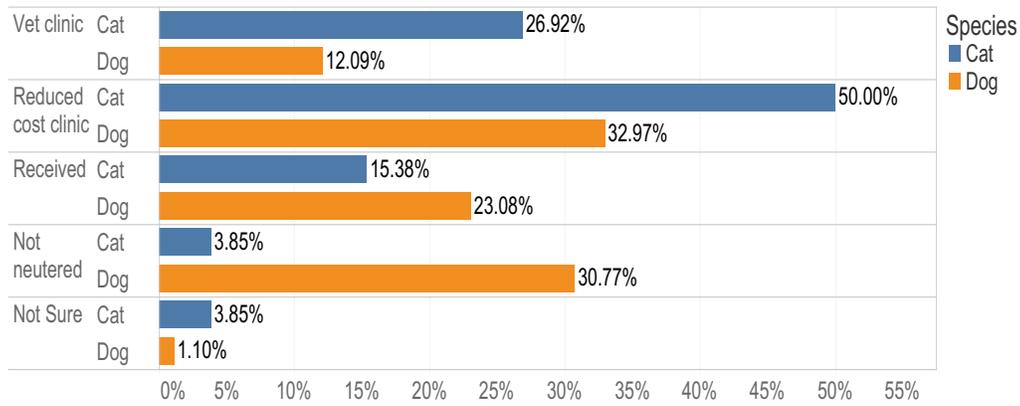
Figure 5.37: Sources of Pets

Comparable to the CARE survey, more dogs (24.6%) than cats (3.8%) were intact. Similarly, more cats (50.0%) than dogs (33.0%) were spayed or neutered at a free or reduced cost clinic. Unlike the CARE survey, more cats (26.9%) than dogs (12.1%) were spayed or neutered at a vet clinic. While it is not possible to know how many of these pet owners would have had a pet spayed or neutered at a veterinary clinic in the absence of a free or reduced cost clinic, it is significant to note that the combination of both intact and pets altered at a free or reduced cost clinic was over 50% for both dogs (63.8%) and cats (53.8%).

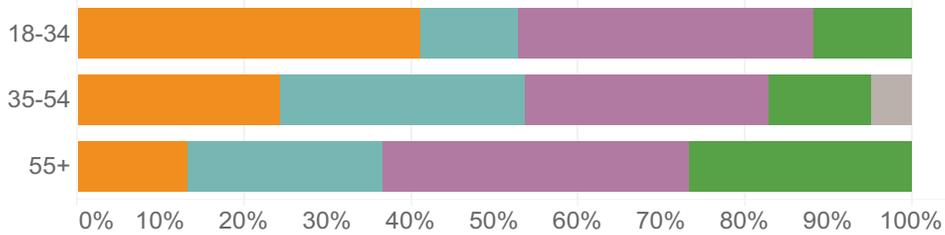
SECTION 5: Population Research

Pet Owners Experiencing Housing Insecurity

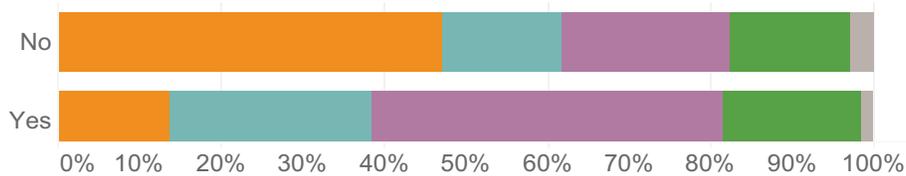
Neutered Status of Pet by Species



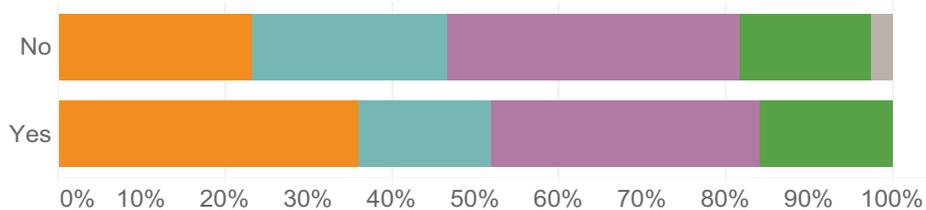
Neutered Status
by Owner Age



by Public Assistance



by Housing Insecure



- Not Sure
- Vet clinic
- Reduced cost clinic
- Received
- Not neutered

Figure 5.38: Neutered Status of Pets

SECTION 5: Population Research

Pet Owners Experiencing Housing Insecurity

As was seen in the CARE survey, older pet owners were more likely to have altered pets. However, there was no difference found for the age of pet owners who utilized free or reduced cost clinics, veterinary clinics, purchased pets, or who took in strays. No difference was found for those who used public assistance or experienced housing insecurity for source of animal, altered status, or type of clinic used for sterilization.

Veterinary Care and Barriers

Over half of respondents (57.5%) were unable to obtain preventative veterinary care within the past two years, which was more than double the cases reported by the CARE survey respondents and approaching double the reported rate of those 138% above federal poverty level. Respondents reported facing this barrier a mean of 2.6 times (median 2).

Preventative Care

Similar to the CARE survey, those who had markers of lower income were more likely to have been unable to access desired preventative care, including 75.9% of those with housing insecurity and 64.8% on public assistance. However, unlike the CARE survey, older respondents were more likely to face barriers to preventative care, with 31.6% of the 18-34 age group, 63.5% of the 35-54 age group, and 68.6% of the 55+ age group unable to access preventative care at least once in the past two years.

Barriers to care included cost of care (96.1%), lack of transportation (11.8%), inability to confine the animal (lack of leash or carrier) (2.6%), a lack of knowledge of where to go for care (9.2%), language barrier (2.6%), fear of judgment (6.6%), or other barriers (6.6%). As compared to the CARE survey, cost of care was reported as a barrier by far more of respondents, but there was no pattern to the lack of knowledge or transportation. The housing insecure were somewhat more likely to report transportation as a barrier.

For 86.8% of respondents, cost was the greatest barrier. For the remainder, the greatest barriers were lack of transportation (2.6%), fear of judgment (2.6%), and other reasons (7.9%). The reasons given for a response of other were largely related to life circumstances, like hospitalization of the pet owner or homelessness. Older pet owners, the housing insecure, and those on public assistance were more likely to cite the cost of care as a barrier.

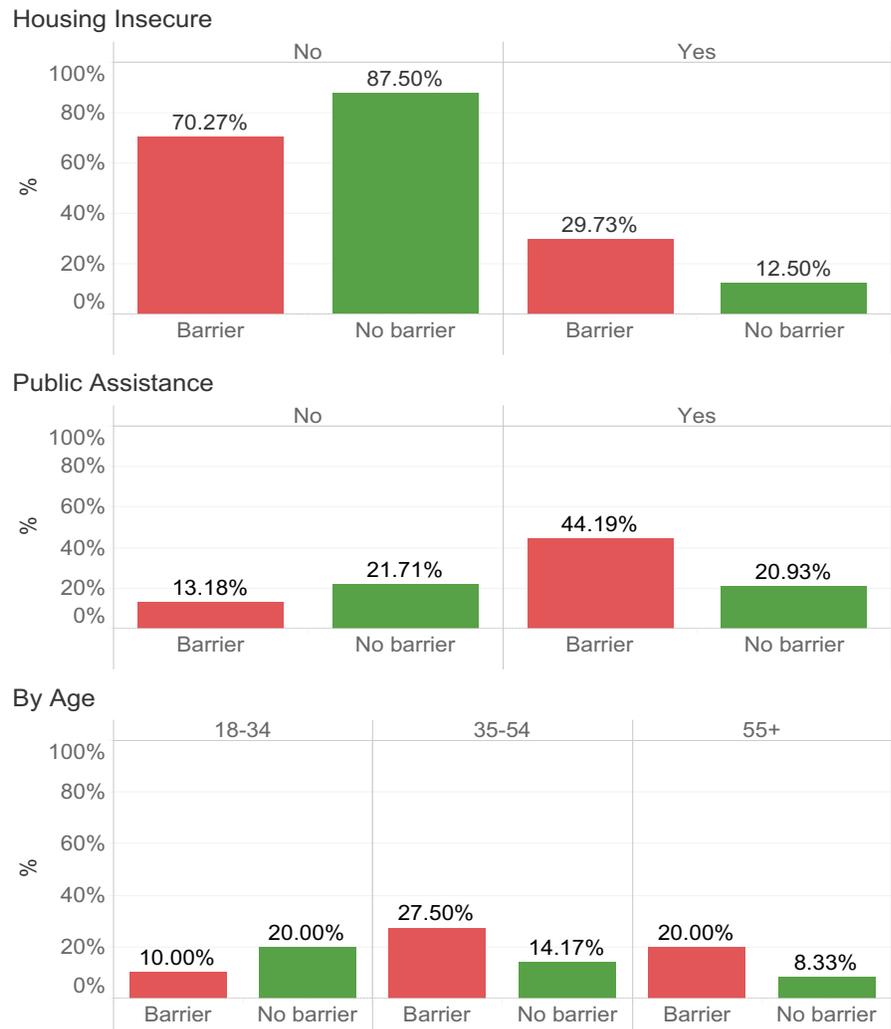


Figure 5.39: Pet Owner Barriers to Preventative Care

SECTION 5: Population Research

Pet Owners Experiencing Housing Insecurity

Desired care included immunizations (71.1%), anti-parasitics (53.9%), advice (25.0%), help with behavior (18.4%), and other (42.1%). Consistent responses to other included spay/neuter and dentistry.

Of the nearly 80% of pet owners who sought preventative care (79.0%), 54.8% sought care at a shelter or reduced cost clinic, 43.9% sought care at a veterinary clinic, and 4.1% stated other. The housing insecure were less likely to seek care at a veterinary clinic.

Sick Care

For sick care, 45.5% of respondents indicated that they had been unable to access sick care in the past two years. However, emergency care was not a barrier in the same time frame. This was less than what was reported for preventative care, but more than three times what was reported by CARE survey respondents. The mean number of times that sick care was desired but not obtained was 2.0 (median 2, range of 1-6). As was seen in the CARE survey, the number of times care was desired but not obtained was lower for sick care than for preventative care. The housing insecure, those on public assistance, and pet owners 55+ all reported more difficulty accessing sick care.

Reported barriers included cost of care (91.8%), transportation (23.0%), lack of knowledge (24.6%), other (11.5%), fear of judgment (6.6%), and lack of leash or carrier (3.3%). Similar to the preventative care reports, the housing insecure, those on public assistance, and those in the 55+ age group were more likely to cite the cost of care as a barrier to access. While indicators of low income were associated with increased barriers similar to what was found with the CARE survey, older age rather than younger was a greater barrier for this population.

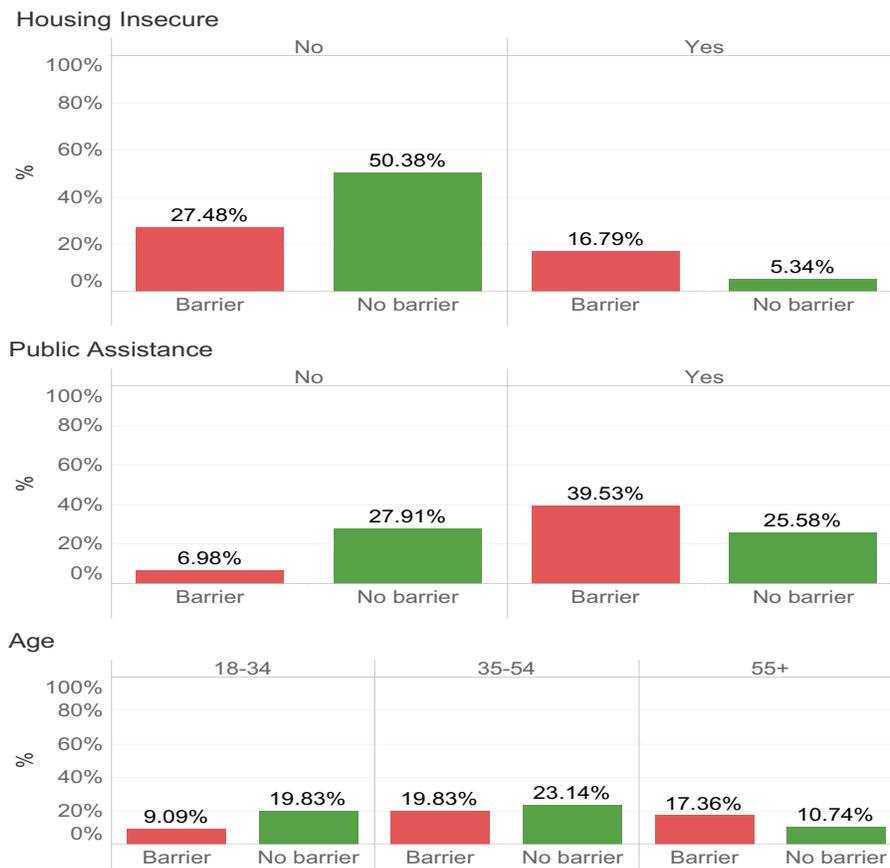


Figure 5.40: Pet Owner Barriers to Sick Care

SECTION 5: Population Research

Pet Owners Experiencing Housing Insecurity

For 95.8% of respondents, cost was the greatest barrier. For the remainder, the greatest barriers were lack of transportation (2.1%) and other (2.1%). Of those unable to access sick care, 62.4% had also been unable to access preventative care, which was a higher proportion than that found in the CARE survey.

Of the 67.5% of pet owners who sought sick care, 51.9% sought care at a veterinary clinic, 39.2% at a shelter or reduced cost clinic, and 8.9% at an unspecified location. The housing insecure and those on public assistance were less likely to visit a veterinary clinic and more likely to visit a free or reduced cost clinic.

Emergency Care

For emergency care, 26.2% of respondents indicated that they had been unable to obtain it when needed. Similar to the CARE survey, lack of access to emergency care was lower than for preventative or sick care. However, it was still over three times more than that reported in the CARE survey. Respondents indicated that they were unable to obtain care a mean of 1.6 times (median 1), which was similar to the rate reported in the CARE survey.

Reported barriers included cost (90.9%), transportation (12.1%), lack of knowledge (12.1%), fear of judgment (9.1%), other (6.1%), and lack of leash or carrier (3.0%). The housing insecure were more likely to cite the barrier of cost of care. Age was not a significant factor. While the barrier of cost was much higher than that reported in the CARE survey, results were similar for the barriers of transportation and knowledge.

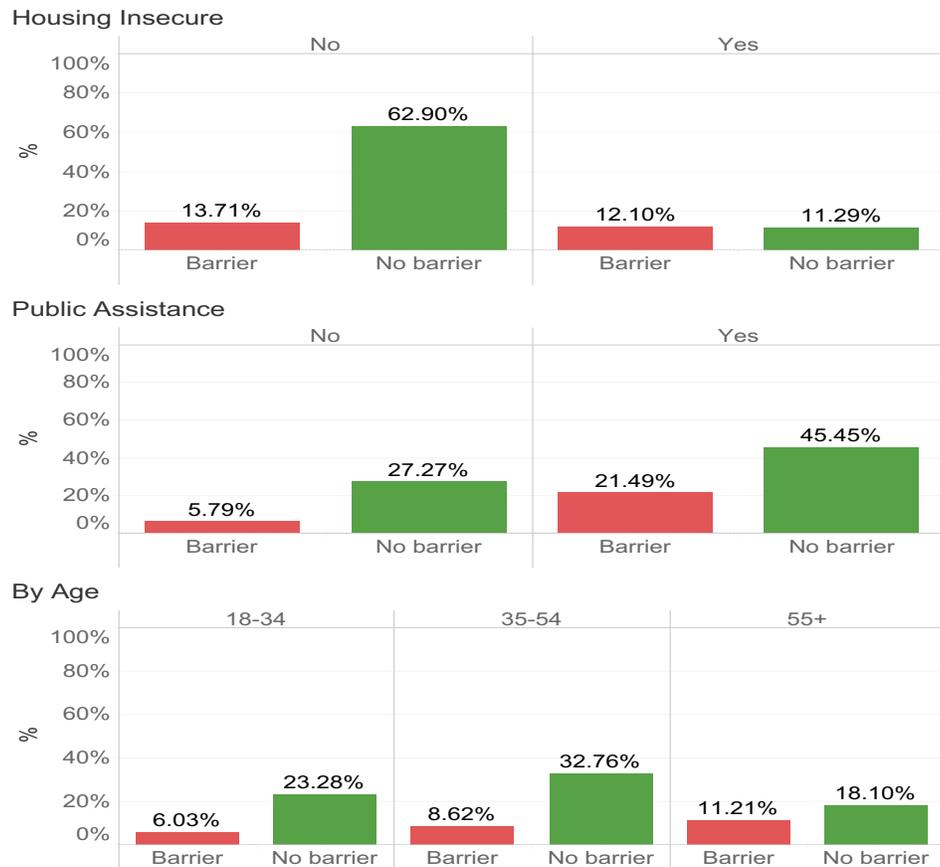


Figure 5.41: Pet Owner Barriers to Emergency Care

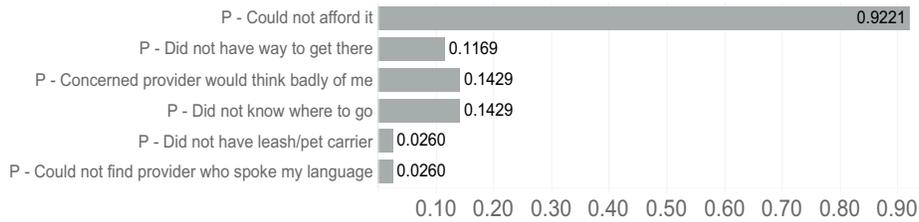
For 92.9% of respondents, cost was the greatest barrier, which differed significantly from the CARE survey. For the remainder, the greatest barrier was lack of knowledge for 7.1%. Of those unable to access emergency care, 35.8% were also unable to access preventative care.

Of the 42.6% of pet owners who sought emergency care, 69.6% sought care at a veterinary clinic, 26.1% at a shelter or reduced cost clinic, and 4.3% at an unspecified location. The housing insecure were less likely to visit a veterinary clinic.

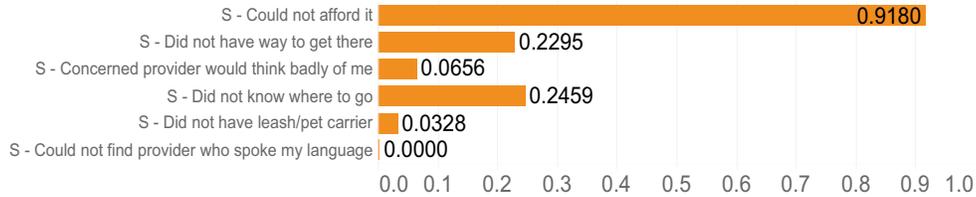
SECTION 5: Population Research

Pet Owners Experiencing Housing Insecurity

Preventative Care



Sick Care



Emergency Care

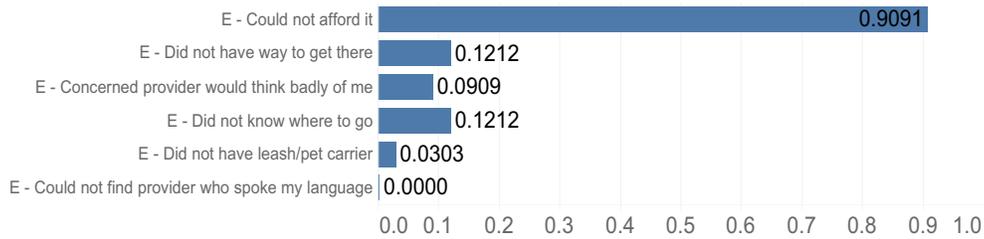
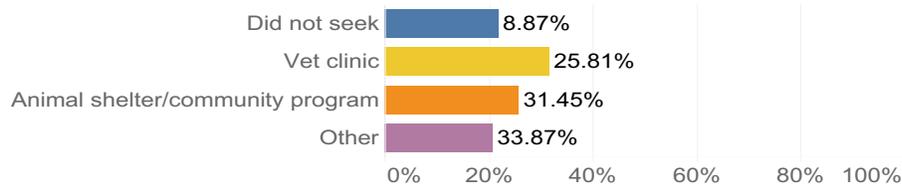
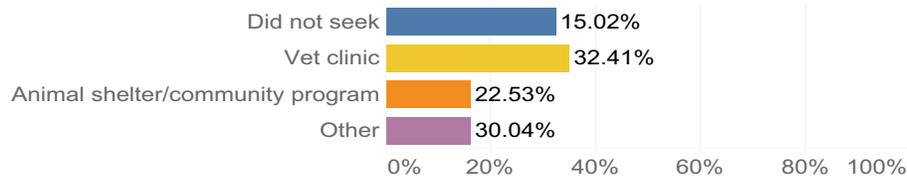


Figure 5.42: Pet Owner Reasons for Not Receiving Desired Treatment

Preventative



Sick



Emergency

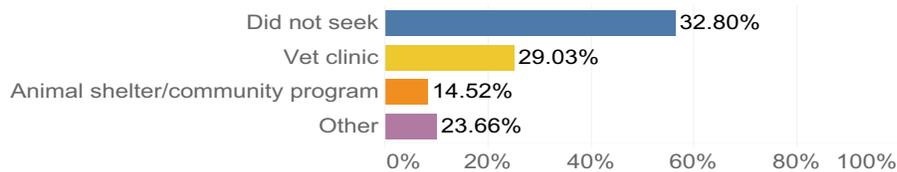


Figure 5.43: Source of Care for Pet Owners

SECTION 5: Population Research

Pet Owners Experiencing Housing Insecurity

Discussion and Conclusions

The purpose of this associated research was to survey a population which is not easily reached by traditional research methods. It also provides insight into the demographics and motivations of users of community-based clinics, particularly when compared to survey results from the general population.

The cost of care was overwhelmingly the greatest barrier faced by this population. Unsurprisingly, those with markers of low income, such as housing insecurity and use of public assistance, tended to experience greater barriers to care. Unlike the survey of the general population, older age rather than younger was consistently associated with greater barriers to care. It was also associated with ownership of more pets.

The majority of pets in this survey were acquired by presumptively non-purposeful methods. Although the source of pet question did not explicitly ask whether acquisition was purposeful, and it is possible that the friend and family source option contains a mix of both purposeful and non-purposeful acquisition, anecdotally, many friend and family transfers occur when the transferring owner cannot keep their pet and the receiving owner accepts the pet to keep it from becoming homeless. Future studies should examine this mode of acquisition in greater detail as non-purposeful acquisition makes budgeting and planning more difficult. There may be an increase in non-purposeful acquisitions as more shelters move to managed intake and relinquishment to shelters becomes more challenging.

Barriers to Care Significantly Greater

Housing insecure pet owners were two times more likely to be unable to obtain preventative care and three times more likely to be unable to obtain sick and emergency care than CARE survey respondents.



[← Back to Table of Contents](#)

Pets as Family – Implications for Vulnerable Populations and Access to Veterinary Care

*AVCC Member: Sarina Manifold, LCSW
Graduate Student: Sonya Snyder*

The relationship between humans and animals has existed for thousands of years. Over the last several decades, studies have been conducted to help us understand this relationship in terms of how it forms as well as some of the benefits of the human-animal bond.¹ Recent surveys over the last few years have estimated that between 60-70% of Americans have at least one animal in the house,^{2,3} many of those individuals indicate that their animals are considered members of the family. These companion animals depend on the individuals and families with whom they live to provide care.

Often there are barriers to providing this care. This section will discuss some of the theories used to help us understand the relationship we form with animals, some of the benefits of the human-animal bond according to the research, and some of the issues of the vulnerable populations, who often face more barriers to care. Because the focus of this section addresses the relationships that people have with animals on a more individual basis, the term pet and companion animal will be used interchangeably throughout this section.

The social work profession's primary mission is to "enhance human well-being and help meet the basic human needs of all people, with particular attention to the needs and empowerment of people who are vulnerable, oppressed, and living in poverty."⁴ A key piece of a social workers' focus is on individuals in the context of their environments, which include families, communities, and society.^{5,6,7} In other words, the social worker must take into account all of the systems that impact a particular individual. While social workers address the needs and well-being of humans, it is also important to address all aspects of the individuals' lives with whom we work, which might include relationships with animals.

The Human-Animal Bond

With a majority of US households indicating that they have at least one animal in the house,^{8,9} it is important to try to understand what contributes to the human-animal bond. Research on the relationship between humans and animals has been conducted for more than 50 years, and several theories have been used to understand this relationship. For the purposes of this paper, only two of the theories will be addressed: attachment theory and social support theory.

The first theory that will be explored to understand how relationships are formed with companion animals is attachment theory. Attachment was first investigated while studying the relationships between mothers and their infants, but it has been extended to other relationships, such as romantic partners and animals.^{10,11,12,13,14,15} Research suggests that companion animals satisfy the criteria to be considered an attachment figure, with proximity maintenance (i.e., they are sought after and available in times of need), safe haven (i.e., they offer protection and support to relieve distress), and secure base (i.e., they act as reliable presence that facilitates exploration) as the most significant features.^{16,17} The death of a pet can lead to intense feelings of grief for the owner,^{18,19,20,21,22} which can lead to separation distress, the final component of attachment.^{23,24} According to this



SECTION 6: Pets in Society

Pets as Family

theory, attachment figures and the behaviors associated with those relationships help us to cope better with the stressors of life.^{25,26} For these reasons, we understand why relationships are formed with companion animals.

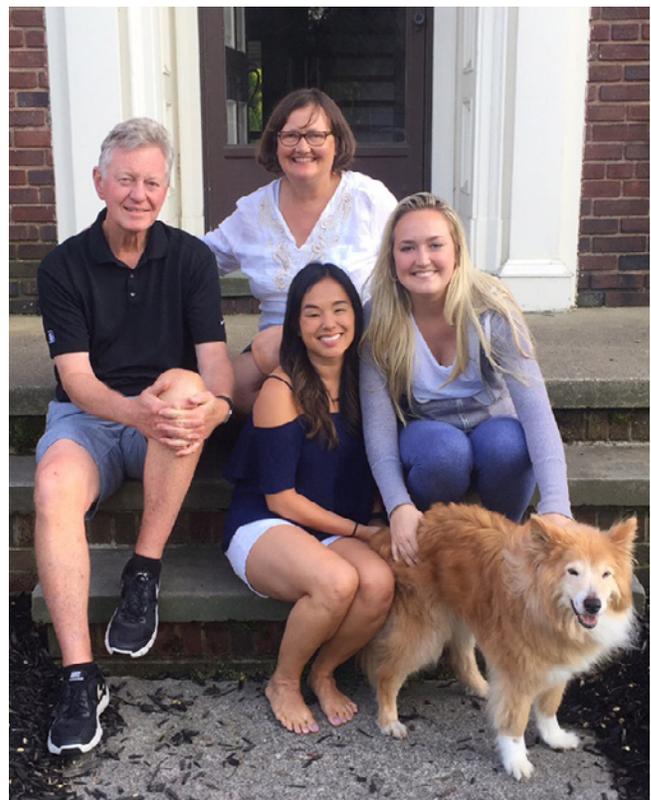
Attachment is not the same for everyone, and there is no universal model for understanding the relationships individuals form with animals. Attachment theory proposes four attachment styles, and similar styles or patterns of attachments seen in human relationships have also been identified in relationships with companion animals.^{27,28} An individual's relationship with their companion animal may be due in part to attachment style; however, it has also been proposed that the routines and rituals that one has in caregiving,²⁹ one's life circumstances,³⁰ and the language one uses to define the role they have with their animal (i.e., owner or guardian)³¹ may also play a part in the formation of and differences in the bond. Several scales have been used in the research to measure one's attachment to companion animals, such as the Lexington Attachment to Pets Scale,³² the Pet Attachment Questionnaire,³³ the Companion Animal Bonding Scale,³⁴ the Comfort from Companion Animal Bonding Scale,³⁵ and the Miller-Rada Commitment to Pets Scale.³⁶

Another theory for helping us to understand the relationship we form with companion animals is social support theory. The premise of this theory is that social support acts to buffer the health impacts of stress, either through the perception that support is available or the supportive actions, tangible or intangible, of others, which can impact an individual's well-being.³⁷ Sources of social support often include family, friends, and significant others. It has been proposed that due to advances in technology, which has allowed for greater mobility, there is more disbursement of family, possibly making support less available and potentially leading to more individuals forming relationships with animals.^{38,39,40} It is believed that companion animals can directly provide the social support as well as facilitate interactions with others, thus possibly allowing for an increase in an individual's social support.^{41,42,43} Additional support for the potential buffering effects of animals on health and mental health will be discussed in further detail below.

The Role of Animals in the Family

Animals are often reported to be members of the family,^{44,45,46,47,48,49} and this appears to be the case, regardless of racial or ethnic group membership.^{50,51} In a 2015 survey conducted by the Harris Poll, 95% of respondents indicated that they considered their animal to be a member of the family. A similar survey indicated that 59% of dog owners and 56% of cat owners viewed their animal like a child or family member.⁵² Individuals have also reported other behaviors, such as buying gifts for pets, including pets in family pictures, including pets in family rituals and celebrations (like birthdays and other holidays), and taking pets on vacations or outings. All of these behaviors are "family behaviors" in which the pet is fully integrated.^{53,54,55} Individuals in some studies have indicated that the bonds they have with their pets are closer than with other family members.⁵⁶

What defines a family? According to the 2018 US Census, a family is a group of two or more people related by birth, marriage, or adoption who reside together. This definition of family does not appear to take into account that many un-related individuals might consider themselves family, so it is important to understand an individual's personal definition of family. Results from a study regarding animals as family members indicated that while animal companions were considered part



SECTION 6: Pets in Society

Pets as Family

of the family, they were not perceived as being human.⁵⁷ Studies have also indicated that relationships with companion animals do not imply a lack of or inability to form relationships with humans,^{58,59} nor are they typically chosen as substitutes for human relationships.⁶⁰ While most individuals indicate that one of the main roles their pet plays is for companionship, love, and affection.^{61,62,63,64} The role of and relationships to a companion animal may vary based on the life-cycle of the family⁶⁵ or individual.^{66,67} Understanding the dynamics of an individual's relationship with their companion animal and the role that animal plays in regards to attachment or social support is important, particularly if the individual is experiencing barriers to providing care. For instance, an older unmarried single person who has a relationship with a pet that is like "parent and child" may have a different reaction to his/her inability to provide healthcare than a young college student who is facing a pet health need for the first time. These life-cycle differences are true for families as well. The newlywed stage will likely be different when that family moves into childrearing years. Both stages may impact the couple's ability to provide care for a pet. Companion animals often play the role of a child during the newlywed years.⁶⁸ If the family chooses to have human children, the role of the companion animal might change. In addition, because there are more members of the family during this time, a family might encounter more barriers to providing care for the animal.

Benefits

As was indicated previously when discussing the social support theory in understanding the relationship individuals form with companion animals, social support has been shown to be a protective factor for overall health and mental health. Many of the studies looking at the impact of relationships with animals were conducted with vulnerable populations, such as the elderly,^{69,70,71} homeless individuals,^{72,73,74,75,76,77,78,79,80} victims of abuse,⁸¹ individuals with mental illness,⁸² as well as racial and ethnic minorities.^{83,84,85,86} One explanation for this might be that individuals who fall into vulnerable populations are often at greater risk for poor health outcomes.⁸⁷ The benefits documented in the literature tend to fall into the categories of physiological benefits, psychological/emotional benefits, and psychosocial benefits.

Some of the physiological benefits found regarding relationships with companion animals include fostering relaxation, lowering blood pressure,^{88,89} reporting fewer doctor visits, and increasing physical activity, particularly for those individuals who have dogs.^{90,91} Decreases in depression, stress, and anxiety are a few of the psychological/emotional benefits documented in the literature.^{92,93,94,95,96} Finally, a few of the psychosocial benefits of relationships with companion animals include decreased loneliness,^{97,98,99,100,101,102,103} increased feelings of unconditional love and support,^{104,105,106,107,108,109} as well

as increased self-esteem and self-worth.^{110,111} Another documented benefit, particularly in the animal-owning homeless population, is that these individuals may give up or avoid substance use or other high-risk behaviors due to a sense of responsibility for caring for their animal and to avoid separation.^{112,113,114,115}

It is important to note that the results of the studies concerning the benefits to the physical and emotional health of individuals are often contradictory.^{116,117,118,119} It is believed that one of the major difficulties in the research on human-animal relationships is study design.¹²⁰ It has been suggested that future studies assessing the impact of relationships with companion animals on well-being take into account other aspects of the individual's health,^{121,122} personal needs and preferences,¹²³ and environment,¹²⁴ including life situation and sociocultural context.^{125,126} Given that social workers are trained to look at an individual in the context of their environment, it is important that those who may be working with vulnerable individuals assess for these factors in order to understand any benefits and potential risks of the relationship with a companion animal.



SECTION 6: Pets in Society

Pets as Family



The Impact of Companion Animal Relationships for Vulnerable Populations

We know many individuals consider companion animals as members of the family. Some families report their companion animals are often turned to for support during times of crisis, adversity, and transition, or even acquire an animal when the family experiences significant life changes.¹²⁷ There are also situations in which a companion animal may be relinquished due to significant life situations. In one study, moving as the result of a life situation was cited as one of the most frequent reasons for relinquishment.¹²⁸ Examples of some life circumstances that may be associated with the need to move include loss of or change in a job, housing issues, health issues, financial difficulties, and even natural disasters. Individuals in these situations may find themselves homeless. “Homeless describes a person who lacks a fixed, regular, and adequate nighttime residence.”¹²⁹ This might include individuals who live on the streets; in places not meant for human occupancy, such as cars or abandoned buildings; or individuals who may have temporary shelter, for example staying with family or friends, in a homeless shelter, or in a hotel/motel.¹³⁰

Other factors associated with homelessness include living below the poverty level, decreased and/or insufficient resources for low-income families, mental illness, substance abuse, or family violence.^{131,132,133,134} It is believed that some of these issues may lead to homelessness, while others may be the result of homelessness.¹³⁵ According to the 2016 US Census data, 17.6% of families with children under the age of 18 fall below the poverty level, and that number jumps to 19.5% for families with children under the age of six. Families with children account for approximately 33% of the homeless population, and unaccompanied youth (individuals under the age of 25 who are not with a parent or a guardian) account for just over 7% of the total homeless population.¹³⁶ According to data on the number of US households with pets, 73% of households have children under the age of 18 years old.¹³⁷ One could then assume that many of the households that fall below the poverty level or fit the criteria for homelessness have an animal. Whether one is homeless or not, individuals faced with some of these psychosocial stressors are considered vulnerable.

Relinquishing a pet as the result of significant life situations is one option that vulnerable populations may consider. Other identified risk factors for companion animal relinquishment include the cost for veterinary care and inability to pay for the animal’s needs as a result of changes in the household.¹³⁸ Euthanasia is another option that may be considered for the pet when an individual experiences a financial barrier to care.¹³⁹ When it comes to homeless individuals in particular, many have indicated that they not only have difficulty affording care, but

SECTION 6: Pets in Society

Pets as Family

they also refuse services (i.e., shelters or transitional housing) as a result of accommodation policies not allowing animals.^{140,141,142,143} Additionally, some homeless individuals report putting the animal's needs above their own,¹⁴⁴ for example providing food for their animal before they are fed. In one study,¹⁴⁵ many individuals were unaware of the support or resources available and indicated a willingness to utilize these resources rather than relinquish their pet. Based on our understanding of the social support theory, animals in the lives of vulnerable individuals may provide a buffer for the stresses experienced; however, they may have a harder time providing care or maintaining that relationship.

Some studies assessing homeless individuals' attachments to their animals have reported that the attachments are stronger compared to the general population.^{146,147,148} There have been contradictory findings regarding an individual's level of attachment to their animal as a risk factor for relinquishment.^{149,150} If an individual reports a strong attachment to their animal and experiences physical, psychological/emotional, or psychosocial benefits from that animal, having to relinquish a companion animal or foregoing services important to the individual's health and/or mental health, leading to more severe issues over time. From a system's perspective, a social worker can help identify what issues the individual faces in order to help that person meet the requisite requirements of their animal, so they can then address their own needs.

It appears that pet owners who are considered vulnerable due to psychosocial stressors, such as poverty, mental or physical illness, or food or housing insecurity, face many multi-faceted barriers to caring for their pets. These barriers add stress and decrease the potential wellbeing that living with a pet can afford. As a result, a collaborative and interdisciplinary approach is needed to address these issues. Social workers trained to attend to the needs of humans in the intersection of human-animal relationships can play a role in understanding the impact of each of the systems within an individual's world. Examples of this might be: a social worker at a community mental health clinic or embedded in a primary care clinic who includes animals in intake assessments to identify how the care of the animal impacts the healthcare behaviors of the individual; or a social worker at a community organization that offers services to the homeless who helps the individual access resources, such as temporary housing for the animal, while the individual works on securing more stable housing or even access to food or veterinary care.¹⁵¹ There also appears to be systematic issues, such as policies, that contribute to ongoing oppression of the vulnerable population, which go beyond the scope of this paper. Other long-term activities available to social workers to address these issues include community organizing, advocacy, policy development, education, and research.

Veterinary Social Work

Veterinary social workers trained in the human-animal bond can be important members of the interdisciplinary team due to unique training.



SECTION 6: Pets in Society

Pets as Family

References

1. Human Animal Bond Research Institute (HABRI). Research Website. <https://habri.org/research/>. Accessed November 10, 2018.
2. More than ever, pets are members of the family. The Harris Poll website. <https://theharrispoll.com/whether-furry-feathered-or-flippers-a-flapping-americans-continue-to-display-close-relationships-with-their-pets-2015-is-expected-to-continue-the-pet-industrys-more-than-two-decades-strong/>. Updated 2015. Accessed July 2018.
3. APPA National Pet Owners Survey. American Pet Products Association website. http://www.americanpetproducts.org/pubs_survey.asp. Accessed August 10, 2018.
4. Code of Ethics. National Association of Social Workers (NASW) website. <https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English>. Updated 2017. Accessed August 7, 2018.
5. Risley-Curtiss C. Social work practitioners and the human-companion animal bond: A national study. *Social Work*. 2010;55(1):38-46.
6. Hanrahan C. Social work and human animal bonds and benefits in health research: A provincial study. *Critic Social Work*. 2013;14(1):63-79.
7. Read the Code of Ethics. National Association of Social Workers Code of Ethics website. <https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English>. Accessed June 2018.
8. More than ever, pets are members of the family. The Harris Poll website. <https://theharrispoll.com/whether-furry-feathered-or-flippers-a-flapping-americans-continue-to-display-close-relationships-with-their-pets-2015-is-expected-to-continue-the-pet-industrys-more-than-two-decades-strong/>. Updated 2015. Accessed July 2018.
9. APPA National Pet Owners Survey. American Pet Products Association website. http://www.americanpetproducts.org/pubs_survey.asp. Accessed August 10, 2018.
10. Lagoni, Butler, Hetts. *The Human-Animal Bond and Grief*. Philadelphia: W.B. Saunders Company; 1994.
11. Sable P. Pets, attachment and well-being across the life cycle. *Social Work*. 1995;40(3):334-341.
12. Archer J. Why do people love their pets? *Evol Human Behav*. 1997;18:237-259.
13. Beck L, Madresh E.A. Romantic partners and four-legged friends: An extension of attachment theory to relationships with pets. *Anthrozoos*. 2008;21(1):43-56.
14. Fine AH, Beck A. Understanding our kinship with animals: Input for health care professionals interested in the human/animal bond. In A. Fine (Ed.), *Animal-assisted therapy: Theoretical foundations and practice guidelines* (3rd ed). San Diego: Academic Press; 2010:3-15.
15. Zilcha-Mano S, Mikulincer M, Shaver PR. An attachment perspective on human-pet relationships: Conceptualization and assessment of pet attachment orientations. *J Res Personal*. 2011;45:345-357.
16. Zilcha-Mano S, Mikulincer M, Shaver PR. An attachment perspective on human-pet relationships: Conceptualization and assessment of pet attachment orientations. *J Res Personal*. 2011;45:345-357.
17. Thompson K, Every D, Rainbird S, Cornell V, Smith B, Trigg J. No pet or their person left behind: Increasing the disaster resilience of vulnerable groups through animal attachment, activities & networks. *Animals*. 2014;4:214-240.
18. Lagoni, Butler, Hetts. *The Human-Animal Bond and Grief*. Philadelphia: W.B. Saunders Company; 1994.
19. Wrobel T, Dye A. Grieving pet death: Normative, gender, and attachment issues. *Omega*. 2003;47(4):385-393.
20. Toray T. The human-animal bond and loss: Providing support for grieving clients. *J Ment Health Counsel*. 2004;26(3):244-259.
21. Risley-Curtiss C, Holley LC, Cruickshank T, Porcelli J, et al. She was family: Women of color and animal-human connections. *Affilia*. 2006;21(4):433-447.
22. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process*. 2009;48(4):488-499.
23. Zilcha-Mano S, Mikulincer M, Shaver PR. An attachment perspective on human-pet relationships: Conceptualization and assessment of pet attachment orientations. *J Res Personal*. 2011;45:345-357.
24. Thompson K, Every D, Rainbird S, Cornell V, Smith B, Trigg J. No pet or their person left behind: Increasing the disaster resilience of vulnerable groups through animal attachment, activities & networks. *Animals*. 2014;4:214-240.
25. Fine AH, Beck A. Understanding our kinship with animals: Input for health care professionals interested in the human/animal bond. In A. Fine (Ed.), *Animal-assisted therapy: Theoretical foundations and practice guidelines* (3rd ed). San Diego: Academic Press; 2010:3-15.
26. Zilcha-Mano S, Mikulincer M, Shaver PR. An attachment perspective on human-pet relationships: Conceptualization and assessment of pet attachment orientations. *J Res Personal*. 2011;45:345-357.
27. Beck L, Madresh EA. Romantic partners and four-legged friends: An extension of attachment theory to relationships with pets. *Anthrozoos*. 2008;21(1):43-56.
28. Zilcha-Mano S, Mikulincer M, Shaver PR. An attachment perspective on human-pet relationships: Conceptualization and assessment of pet attachment orientations. *J Res Personal*. 2011;45:345-357.
29. Slatter J, Lloyd C, King R. Homelessness and companion animals: More than just a pet? *Brit J Occupat Ther*. 2012;75(8):377-383.
30. Archer J. Why do people love their pets? *Evolut Human Behav*. 1997;18:237-259.

SECTION 6: Pets in Society

Pets as Family

31. Carlisle-Frank P, Frank JM. Owners, guardians, and owner-guardians: Differing relationships with pets. *Anthrozoos*. 2006;19(3):225-242.
32. Johnson TP, Garrity TF, Stallones L. Psychometric evaluation of the Lexington Attachment to Pets Scale (LAPS). *Anthrozoös*. 1992;5(3):160-175.
33. Holcomb R, Williams R, Richards P. The elements of attachment: Relationship maintenance and intimacy. *J Delta Soc*. 1985;2(1):28-34.
34. Poresky RH, Hendrix C, Mosier JE, Samuelson ML (1987). The Companion Animal Bonding Scale: Internal reliability and construct validity. *Psychol Rep*. 60(3, Pt 1), 743-746.
35. Zasloff, R. Measuring attachment to companion animals: A dog is not a cat is not a bird. *Appl Anim Behav Sci*. 1996;47(1-2):43-48.
36. Staats S, Miller D, Carnot MJ, Rada K, Turnes J. (1996). The Miller-Rada commitment to pets scale. *Anthrozoös*. 1996;9(2-3):88-94.
37. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. *J Personal Assess*. 1988;52(1):30-41.
38. Archer J. Why do people love their pets? *Evolut Human Behav*. 1997;18:237-259.
39. Johnson RA, Meadows RL. Older Latinos, pets, and health. *West J Nurs Res*. 2002;24(6):609-620.
40. Staats S, Wallace H, Anderson T. Reasons for companion animal guardianship (pet ownership) from two populations. *Societ Anim*. 1996;16:279-291.
41. Wood L, Giles-Corti B, Bulsara M. The pet connection: Pets as a conduit for social capital? *Soc Sci Med*. 2005;61(6):1159-1173.
42. Antonacopoulos N, Pychyl T. An examination of the potential role of pet ownership, human social support and pet attachment in the psychological health of individuals living alone. *Anthrozoos*. 2010;23(1):37-54.
43. O'Haire M. Companion animals and human health: Benefits, challenges and the road ahead. *J Vet Behav*. 2010;5(5):226-234.
44. Siegel JM. Companion animals: In sickness and in health. *J Soc Issues*. 1993;49(1):157-167.
45. Lagoni, Butler, Hetts. *The Human-Animal Bond and Grief*. Philadelphia: W.B. Saunders Company; 1994.
46. Cohen SP. Can pets function as family members. *West J Nurs Res*. 2002;24(6):621-638.
47. Melson GF. Child development and the human-companion animal bond. *Amer Behav Sci*. 2003;47(1):31-39.
48. Risley-Curtiss C, Holley LC, Cruickshank T, Porcelli J, et al. She was family: Women of color and animal-human connections. *Affilia*. 2006;21(4):433-447.
49. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process*. 2009;48(4):488-499.
50. Johnson RA, Meadows RL. Older Latinos, pets, and health. *West J Nurs Res*. 2002;24(6):609-620.
51. Risley-Curtiss C, Holley LC, Cruickshank T, Porcelli J, et al. She was family: Women of color and animal-human connections. *Affilia*. 2006;21(4):433-447.
52. American Pet Products Association, 2017-2018. https://americanpetproducts.org/Uploads/MemServices/GPE2017_NPOS_Seminar.pdf. Accessed August 10, 2018.
53. Carlisle-Frank P, Frank JM. Owners, guardians, and owner-guardians: Differing relationships with pets. *Anthrozoos*. 2006;19(3):225-242.
54. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process*. 2009;48(4):488-499.
55. APPA National Pet Owners Survey. American Pet Products Association website. http://www.americanpetproducts.org/pubs_survey.asp. Accessed August 10, 2018.
56. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process*. 2009;48(4):488-499.
57. Cohen SP. Can pets function as family members. *West J Nurs Res*. 2002;24(6):621-638.
58. Archer J. Why do people love their pets? *Evolut Human Behav*. 1997;18:237-259.
59. Cohen SP. Can pets function as family members. *West J Nurs Res*. 2002;24(6):621-638.
60. Favor CA, Cavazos AM. Love, safety, and companionship: The human-animal bond and Latino families. *Family Social Work*. 2008;11(3):254-271.
61. Turner WG. The role of companion animals throughout the family life cycle. *J Fam Soc Work*. 2005;9(4):11-21.
62. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process*. 2009;48(4):488-499.
63. Antonacopoulos N, Pychyl T. An examination of the potential role of pet ownership, human social support and pet attachment in the psychological health of individuals living alone. *Anthrozoos*. 2010; 23(1):37-54.
64. APPA National Pet Owners Survey. American Pet Products Association. http://www.americanpetproducts.org/pubs_survey.asp. Accessed August 10, 2018.
65. Turner WG. The role of companion animals throughout the family life cycle. *J Fam Soc Work*. 2005;9(4):11-21.
66. Wilson CC, Netting FE. New directions: Challenges for human-animal bond research and the elderly. *J Appl Gerontol*. 1987;6(2):189-200.
67. Risley-Curtiss C, Holley LC, Cruickshank T, Porcelli J, et al. She was family: Women of color and animal-human connections. *Affilia*. 2006;21(4):433-447.
68. Turner WG. The role of companion animals throughout the family life cycle. *J Fam Soc Work*. 2005;9(4):11-21.
69. Wilson CC, Netting FE. New directions: Challenges for human-animal bond research and the elderly. *J Appl Gerontol*. 1987;6(2):189-200.
70. Krause-Parello CA. Pet ownership and older women: The relationships among loneliness, pet attachment support, human social support and depressed mood. *Geriat Nurs*. 2012;33(3):194-203.

SECTION 6: Pets in Society

Pets as Family

71. Needell NJ, Meht-Naik N. Is pet ownership helpful in reducing the risk and severity of geriatric depression? *Geriatrics*. 2016;1(4):24-30.
72. Kidd AH, Kidd RM. Benefits and liabilities of pets for the homeless. *Psychol Rep*. 1994;74:715-722.
73. Singer RS, Hart LA, Zasloff RL. Dilemmas associated with rehousing homeless people who have companion animals. *Psychol Rep*. 1995;77:851-857.
74. Taylor H, Williams P, Gray D. Homelessness and dog ownership: An investigation into animal empathy, attachment, crime, drug use, health and public opinion. *Anthrozoos*. 2004;17(4):353-369.
75. Cronley C, Strand EB, Patterson DA, Gwaltney S. Homeless people who are animal caretakers: A comparative study. *Psychol Rep*. 2009;105:481-499.
76. Labreque J, Walsh CA. Homeless women's voices on incorporating companion animals into shelter services. *Anthrozoos*. 2011;24(1):79-96.
77. Slatter J, Lloyd C, King R. Homelessness and companion animals: More than just a pet? *Brit J Occupat Ther*. 2012;75(8):377-383.
78. Irvine L. Animals as life changers and lifesavers: Pets in the redemptive narratives of homeless people. *J Contemplat Ethnog*. 2013;42(1):3-30.
79. Rhoades H, Winetrobe H, Rice E. Pet ownership among homeless youth: Associations with health service utilization and housing status. *Child Psych Human Develop*. 2015;46:237-244.
80. Maharaj N. Companion animals and vulnerable youth: Promoting engagement between youth and professional service providers. *J Loss Trauma*. 2016;21(4):335-343.
81. Favor CA, Strand EB. To leave or stay: Battered women's concern for vulnerable pets. *J Interperson Viol*. 2003;18(12):1367-1377.
82. Zimolag U, Krupa T. Pet ownership as a meaningful community occupation for people with serious mental illness. *Amer J Occupat Ther*. 2009;63:126-137.
83. Johnson RA, Meadows RL. Older Latinos, pets, and health. *West J Nurs Res*. 2002;24(6):609-620.
84. Risley-Curtiss C, Holley LC, Cruickshank T, Porcelli J, et al. She was family: Women of color and animal-human connections. *Affilia*. 2006;21(4):433-447.
85. Risley-Curtiss C, Holley LC, Wolf S. The animal-human bond and ethnic diversity. *Social Work*. 2006;51(3):257-268.
86. Favor CA, Cavazos AM. Love, safety, and companionship: The human-animal bond and Latino families. *Fam Soc Work*. 2008;11(3):254-271.
87. Labreque J, Walsh CA. Homeless women's voices on incorporating companion animals into shelter services. *Anthrozoos*. 2011;24(1):79-96.
88. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process*. 2009;48(4):488-499.
89. Herzog H. The impact of pets on human health and psychological well-being: Fact, fiction, or hypothesis? *Cur Direct Psychol Sci*. 2011;20(4):236-239.
90. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process*. 2009;48(4):488-499.
91. Herzog H. The impact of pets on human health and psychological well-being: Fact, fiction, or hypothesis? *Cur Direct Psychol Sci*. 2011;20(4):236-239.
92. Wood L, Giles-Corti B, Bulsara M. The pet connection: Pets as a conduit for social capital? *Soc Sci Med*. 2005;61(6):1159-1173.
93. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process*. 2009;48(4):488-499.
94. Herzog H. The impact of pets on human health and psychological well-being: Fact, fiction, or hypothesis? *Cur Direct Psychol Sci*. 2011;20(4):236-239.
95. Krause-Parello CA. Pet ownership and older women: The relationships among loneliness, pet attachment support, human social support and depressed mood. *Geriat Nurs*. 2012;33(3):194-203.
96. Slatter J, Lloyd C, King R. Homelessness and companion animals: More than just a pet? *Brit J Occupat Ther*. 2012;75(8):377-383.
97. Singer RS, Hart LA, Zasloff RL. Dilemmas associated with rehousing homeless people who have companion animals. *Psychol Rep*. 1995;77:851-857.
98. Rew L. Friends and pets as companions: Strategies for coping with loneliness among homeless youth. *J Child Adol Psych Nurs*. 2000;23(3):125-140.
99. Kidd AH, Kidd RM. Benefits and liabilities of pets for the homeless. *Psychol Rep*. 1994;74:715-722.
100. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process*. 2009;48(4):488-499.
101. Antonacopoulos N, Pychyl T. An examination of the potential role of pet ownership, human social support and pet attachment in the psychological health of individuals living alone. *Anthrozoos*. 2010; 23(1):37-54.
102. Krause-Parello C.A. Pet ownership and older women: The relationships among loneliness, pet attachment support, human social support and depressed mood. *Geriat Nurs*. 2012;33(3):194-203.
103. Irvine L. Animals as life changers and lifesavers: Pets in the redemptive narratives of homeless people. *J Contemplat Ethnog*. 2013;42(1):3-30.
104. Kidd AH, Kidd RM. Benefits and liabilities of pets for the homeless. *Psychol Rep*. 1994;74:715-722.
105. Rew L. Friends and pets as companions: Strategies for coping with loneliness among homeless youth. *J Child Adol Psych Nurs*. 2000;23(3):125-140.
106. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process*. 2009;48(4):488-499.
107. Antonacopoulos N, Pychyl T. An examination of the potential role of pet ownership, human social support and pet attachment in the psychological health of individuals living alone. *Anthrozoos*. 2010; 23(1):37-54.

SECTION 6: Pets in Society

Pets as Family

108. Krause-Parello C.A. Pet ownership and older women: The relationships among loneliness, pet attachment support, human social support and depressed mood. *Geriatr Nurs.* 2012;33(3):194-203.
109. Irvine L. Animals as life changers and lifesavers: Pets in the redemptive narratives of homeless people. *J Contemplat Ethnogr.* 2013;42(1):3-30.
110. Herzog H. The impact of pets on human health and psychological well-being: Fact, fiction, or hypothesis? *Cur Direct Psychol Sci.* 2011;20(4):236-239.
111. Slatter J, Lloyd C, King R. Homelessness and companion animals: More than just a pet? *Brit J Occupat Ther.* 2012;75(8):377-383.
112. Rew L. Friends and pets as companions: Strategies for coping with loneliness among homeless youth. *J Child Adol Psych Nurs.* 2000;23(3):125-140.
113. Taylor H, Williams P, Gray D. Homelessness and dog ownership: An investigation into animal empathy, attachment, crime, drug use, health and public opinion. *Anthrozoos.* 2004;17(4):353-369.
114. Irvine L. Animals as life changers and lifesavers: Pets in the redemptive narratives of homeless people. *J Contemplat Ethnogr.* 2013;42(1):3-30.
115. Lem M, Coe JB, Haley DB, Stone E, O'Grady W. The protective association between pet ownership and depression among street-involved youth: A cross-sectional study. *Anthrozoos.* 2016; 29(1):123-136.
116. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process.* 2009;48(4):488-499.
117. Herzog H. The impact of pets on human health and psychological well-being: Fact, fiction, or hypothesis? *Cur Direct Psychol Sci.* 2011;20(4):236-239.
118. Peacock J, Chur-Hansen A, Winefield H. Mental health implications of human attachment to companion animals. *J Clin Psychol.* 2012;68:292-303.
119. Needell NJ, Meht-Naik N. Is pet ownership helpful in reducing the risk and severity of geriatric depression? *Geriatrics.* 2016;1(4):24-30.
120. Herzog H. The impact of pets on human health and psychological well-being: Fact, fiction, or hypothesis? *Cur Direct Psychol Sci.* 2011;20(4):236-239.
121. Johnson RA, Meadows RL. Older Latinos, pets, and health. *West J Nurs Res.* 2002;24(6):609-620.
122. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process.* 2009;48(4):488-499.
123. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process.* 2009;48(4):488-499.
124. Risley-Curtiss C, Holley LC, Cruickshank T, Porcelli J, et al. She was family: Women of color and animal-human connections. *Affilia.* 2006;21(4):433-447.
125. Wilson CC, Netting FE. New directions: Challenges for human-animal bond research and the elderly. *J Appl Gerontol.* 1987;6(2):189-200.
126. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process.* 2009;48(4):488-499.
127. Walsh F. Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process.* 2009;48(4):488-499.
128. Shore ER, Peterson CL, Douglas DK. Moving as a reason for pet relationship relinquishment: A closer look. *J Appl Anim Welf Sci.* 2003;6(1):39-52.
129. The 2017 Annual Homeless Assessment Report to Congress: Part 1 – Point in Time Estimates of Homelessness. United States Department of Housing and Urban Development website. <https://www.hudexchange.info/resources/documents/2017-AHAR-Part-1.pdf>. Accessed July 2018.
130. Cronley C, Strand EB, Patterson DA, Gwaltney S. Homeless people who are animal caretakers: A comparative study. *Psychol Rep.* 2009;105:481-499.
131. Kidd AH, Kidd RM. Benefits and liabilities of pets for the homeless. *Psychol Rep.* 1994;74:715-722.
132. Cronley C, Strand EB, Patterson DA, Gwaltney S. Homeless people who are animal caretakers: A comparative study. *Psychol Rep.* 2009;105:481-499.
133. Labreque J, Walsh CA. Homeless women's voices on incorporating companion animals into shelter services. *Anthrozoos.* 2011;24(1):79-96.
134. Slatter J, Lloyd C, King R. Homelessness and companion animals: More than just a pet? *Brit J Occupat Ther.* 2012;75(8):377-383.
135. Kidd AH, Kidd RM. Benefits and liabilities of pets for the homeless. *Psychol Rep.* 1994;74:715-722.
136. The 2017 Annual Homeless Assessment Report to Congress: Part 1 – Point in Time Estimates of Homelessness. United States Department of Housing and Urban Development website. <https://www.hudexchange.info/resources/documents/2017-AHAR-Part-1.pdf>. Accessed July 2018.
137. More than ever, pets are members of the family. The Harris Poll website. <https://theharrispoll.com/whether-furry-feathered-or-flippers-a-flapping-americans-continue-to-display-close-relationships-with-their-pets-2015-is-expected-to-continue-the-pet-industrys-more-than-two-decades-strong/>. Accessed July 2018.
138. Dolan ED, Scotto J, Slater M, Weiss E. Risk factors for dog relinquishment to a Los Angeles municipal shelter. *Animals.* 2015;5:1311-1328.
139. Morris, P. Managing pet owners' guilt and grief in veterinary euthanasia encounters. *J Contemp Ethnogr.* 2012. 41(3), 337-365.
140. Kidd AH, Kidd RM. Benefits and liabilities of pets for the homeless. *Psychol Rep.* 1994;74:715-722.
141. Singer RS, Hart LA, Zasloff RL. Dilemmas associated with rehoming homeless people who have companion. *Psychol Rep.* 1995;77:851-857.
142. Labreque J, Walsh CA. Homeless women's voices on incorporating companion animals into shelter services. *Anthrozoos.* 2011;24(1):79-96.

SECTION 6: Pets in Society

Pets as Family

143. Slatter J, Lloyd C, King R. Homelessness and companion animals: More than just a pet? *Brit J Occupat Ther.* 2012;75(8):377-383.
144. Kidd AH, Kidd RM. Benefits and liabilities of pets for the homeless. *Psychol Rep.* 1994;74:715-722.
145. Dolan ED, Scotto J, Slater M, Weiss E. Risk factors for dog relinquishment to a Los Angeles municipal shelter. *Animals.* 2015;5:1311-1328.
146. Kidd AH, Kidd RM. Benefits and liabilities of pets for the homeless. *Psychol Rep.* 1994;74:715-722.
147. Singer RS, Hart LA, Zasloff RL. Dilemmas associated with rehousing homeless people who have companion. *Psychol Rep.* 1995;77:851-857.
148. Taylor H, Williams P, Gray D. Homelessness and dog ownership: An investigation into animal empathy, attachment, crime, drug use, health and public opinion. *Anthrozoos.* 2004;17(4):353-369.
149. Shore ER, Peterson CL, Douglas DK. Moving as a reason for pet relationship relinquishment: A closer look. *J Appl Anim Welf Sci.* 2003;6(1):39-52.
150. Dolan ED, Scotto J, Slater M, Weiss E. Risk factors for dog relinquishment to a Los Angeles municipal shelter. *Animals.* 2015;5:1311-1328.
151. Cronley C, Strand EB, Patterson DA, Gwaltney S. Homeless people who are animal caretakers: A comparative study. *Psychol Rep.* 2009;105:481-499.



[← Back to Table of Contents](#)

Animal Law – Pets as Non-Property

Guest Author: David Favre, Professor of Law, Michigan State University

The status of companion animals, or owned pets, has expanded within the law to the extent that those responsible for these animals may need outside help in meeting their lawful obligations as pet owners, such as providing adequate veterinary care. However, it is useful to understand how the legal status of companion animals is evolving in response to the social shift toward viewing companion animals as members of the family in many circumstances.

The laws of the United States view animals in relation to the human community in which they live. The laws for animals in laboratories or those found in feedlots differ significantly from the laws that govern companion animals. While all domestic animals are classified for legal purposes as personal property, companion animals are a special subset of personal property. Indeed, in the eyes of the law, companion animals are beginning to move out of the category of personal property and into a category that might be named living property¹ These animals receive special considerations not afforded to other property, and the law may impose specific duties on the owners that is more suggestive of a guardianship relationship than property ownership.

New Legal Category for Pets

Companion animals are beginning to move out of the category of personal property and into a category that might be named living property.

Defining the Term “Family”

The 2017 U.S. Supreme Court opinion allowing same-sex marriages is but one indication that the legal definition of a family under U.S. law is becoming more expansive.² Even the idea that a child can have only two parents has been stretched to a new dimension. For example, California family law now allows a child to have more than two legal parents.³ There are even articles positing the position that the term “family” is a personal and private determination, potentially consisting of multiple adults, and that the individual determination of the family unit should be respected by the state.⁴

There is a legal concept at common law, known as “consortium,”⁵—the right to association and companionship among family members. U.S. law allows a member of a family to sue a third party for loss of consortium (harm done to another member of the family). New Mexico has expanded the availability of this legal action to include individuals not within the traditional intimate family, such as grandmothers. In so doing, they have developed a test to help discern who is within the core of a family. The potential factors to be considered include: “duration of the relationship; mutual dependence; common contributions to a life together; shared experience; living in the same household; financial support and dependence; emotional reliance on each other; qualities of their day to day relationship; and the manner in which they related to each other in attending to life’s mundane requirements.”⁶

A number of these criteria are satisfied in many homes, in which two-legged and four-legged beings live together. However, no state has yet to formally extended family status to a companion animal. On the other hand, state law has begun to recognize claims that seem to assume that companion animals are part of the family. Therefore, our legal system is currently in a state of transition.



SECTION 6: Pets in Society

Animal Law

The Scope of Social Change

The special legal status of companion animals is the result of an increased political visibility and support given by legislators and courts as society addresses the increasing extent to which companion animals have integrated into peoples' daily lives, becoming part of the emotional core for millions of families. There are an estimated 84.6 million pet-owning households within the United States,⁷ with families spending an estimated 69.5 billion dollars on their pets in 2017, including 17 billion dollars on veterinary care.⁸ Society's increased affinity with companion animals is partly due to these animals moving indoors. In the not-so-distant past, it was common for pets to remain outdoors. However, recent developments in veterinary medicine have significantly reduced companion animal zoonosis, which used to deter people from housing their animals inside.⁹



As further evidence of the enhanced social status of our companion animals, consider how often commercial ads feature dogs or cats as members of families. Viewers expect and are comforted to see companion animals in the living rooms on their TV screens. Likewise, evidence of change can be found in the increasing appearance of dogs as part of weddings. In a 2016 *New York Times* article, a wedding photographer based in Vermont reported that more than half of the weddings at which he worked included a pet.¹⁰ Finally, vocabulary around companion animals is shifting. One does not speak in terms of buying a dog or cat, but, rather, adopting them. In 2017,

approximately 3.3 million dogs and cats were adopted. While more dogs were bought from breeders than adopted, significantly more cats were adopted than purchased from breeders.¹¹ The family seeking an adoption is screened for overall fitness to own a companion animal, not merely for financial wherewithal, a screening that is strikingly similar to that employed in child adoptions.

Science is supportive of the benefits that companion animals bring to the family relationship. Scientific studies have found that people bond with their companion animals in a manner similar to how people bond with human family members.¹² The human-animal bond has positive effects on the physical, social, and emotional well-being of humans.¹³

Research evidence demonstrates the human-animal bond has positive human health benefits for those suffering from PTSD and autism, as well as owners in the general population. Research has found that human-nonhuman animal co-habitation correlates with positive physiological measures, such as lower blood pressure, serum triglycerides, and cholesterol levels. “[T]he presence of a pet was found to be more effective than a spouse or friend in ameliorating the cardiovascular effects of stress.”¹⁴

The importance of the bond that people have with their pets has not gone unnoticed by the legal system.

How the Law is Integrating Companion Animals into Human Families

Legal rules governing companion animals are primarily a matter of state, not federal, law. The Animal Welfare Act is the only national law regulating individual domestic animals. While it does seek to regulate physical conditions within facilities engaged in the commercial breeding of companion animals, the law does not otherwise regulate companion animal ownership or care. Therefore, the discussion of the status of companion animals set forth below references laws in specific states but is not an exhaustive list of all 50 individual state laws. Almost no state has the same set of laws as another. For some issues, a 50-state table can be found on the Animal Legal & Historical Center website.¹⁵

Pets are Becoming a Part of Family Law

It is now possible, in all fifty states, to establish a trust for the care of an animal after the owner dies; there is enhanced visibility in restraining orders and divorce proceedings; pets can be removed from the household to protect them from the risk of future harm.

Wills and Trusts

Humans can and do create pet trusts to provide for the care of their companion animal after the owner's death. The Uniform Trust Code explicitly allows for the creation of this type of trust, evidence that the legal system is adapting to changing societal norms. The creation of pet trusts illustrates one way in which human owners place animals at nearly the same level as human family members: by caring enough to provide for their animals after the human's death. It was not possible to formally do this until the laws started to change in the 1990s. Under Section 408 of the Uniform Trust Code, a trust for the care of an animal is specifically authorized and may be enforced by a person appointed in the terms of the trust or, failing an appointment in the trust, by a person appointed by the court.¹⁶ As a result, the animal is the functional beneficiary of the trust. If issues arise under the trust, the trustee may be sued by a person having an interest in the welfare of the animal. This means that the human who has legal control over the trust funds or property may be liable in court if that trustee misuses the funds (e.g., uses them for something other than the pet's needs) or otherwise fails to properly manage the trust assets.

Restraining Orders

Another area where companion animals have legal visibility is in the courts' granting of personal restraining orders. In the fall of 2016, the State of Alaska modified existing divorce law to allow victims of domestic violence to seek an order for protection of property, including "a pet, regardless of . . . ownership."¹⁷ The general definition of pet is rather sweeping: "pet means a vertebrate living creature maintained for companionship or pleasure . . ."¹⁸ The new provisions also allow a court, in the context of a protection order request, to order the payment of funds by the named party for not only support for the adult victim and minor children, but also for pets in the care of the petitioner.¹⁹ Men sometimes use violence against companion animals to intimidate women. In this context, a companion animal is provided the protections similar to those of a child. By the end of 2016, thirty-two states had protective order provisions that included animals.²⁰

Divorce

The property status of companion animals is a hindrance to their consideration as family members by courts in the context of human divorces.²¹ Until 2017, in all states, the divorce laws did not distinguish a dog or cat from other personal property in judicial property divisions. Alaska was the first state to adopt a new provision for companion animals, followed shortly thereafter by Illinois. Alaska law allows the relevant court to make specific provision in a final divorce judgment: "for the ownership or joint ownership of the animal, taking into



SECTION 6: Pets in Society

Animal Law

consideration *the well-being of the animal*.²² This statute clearly acknowledges that animals have interests independent of those of the spouses and that those interests deserve consideration by the legal system when a divorce proceeding impacts their lives. The statute effectively acknowledges that animals within a family are in the conceptual position similar to that of children, and courts have an independent duty to consider the best outcome for the animal in addition to the parties' wishes or claims of property ownership.²³

Removal of the Animal from a Home

Another parallel between the legal protection of companion animals and children manifests when the state seeks the removal of the animal from the household to protect the animal from the risk of future harm. If the owner of an animal has been charged with a criminal violation of state anti-cruelty law, perhaps beating an animal or failing to provide adequate care for an animal, then even before the criminal charges are decided, the state may seek the removal of the animal from the defendant's control with a forfeiture action. In Michigan,

[t]he prosecuting attorney has the burden of establishing by a preponderance of the evidence that a violation of this section or section 50b occurred. If the court finds that the prosecuting attorney has met this burden, the court shall order immediate forfeiture of the animal to the animal control shelter or animal protection shelter.²⁴

The state is worried that there is risk of new harm to the animal and seeks to protect the animal from this risk. This type of protection is similar to the state's ability to remove children from a family when the children are at a risk of harm. Admittedly, the removal of a child is a much more complex matter, but the state's desire to protect those in the family unit who cannot protect themselves is evident in both types of removal proceeding.

The Issue of Damages

Although laws are evolving in connection with changing societal norms and practices, the law still lags in fully effectuating society's views. The present state of the law regarding financial recovery for harm to or death of companion animals does not, for example, satisfactorily reflect the public perception of the value of companion animals.²⁵ Many times, plaintiffs file lawsuits to seek financial recovery for negligent or intentional injury or death of a companion animal.^{26,27} In these legal actions, most courts are not comfortable imposing financial penalties more extensive than the repayment of the market value of a companion animal. For example, under criminal law, the intentional killing of a neighbor's cat may result in a felony conviction and serious jail time, but in a large majority of jurisdictions, the cat's killer would only be liable to the owner for the market value of the cat in a tort action under civil law.²⁸



Over the past twenty years, state supreme courts most often have rejected attempts to expand either the cause of action available for injury or death to a companion animal beyond the destruction of property or to entertain requests for financial remedies beyond replacement cost damages when companion animals have been harmed (although some courts also allow claims for the reimbursement of reasonable veterinary expenses).²⁹ For example, courts do not typically allow an award of damages for the infliction of emotional distress based on the loss of a companion animal. In Texas, plaintiffs sought damages in an action against an employee of an animal shelter, alleging that the employee negligently euthanized their dog. A request for noneconomic damages was denied by the trial court, allowed by the court of

appeals, and finally denied by the Supreme Court of Texas. The court stated:

[L]ike courts in the overwhelming majority of other states, the Restatement of the Law of Torts, and the other Texas courts of appeals that have considered this question, we reject emotion-based liability and prohibit recovery for loss of the human-animal bond.³⁰

Extra Protection for Companion Animals

The legal system has long provided protection to animals against intentional acts of cruelty and the unnecessary infliction of pain and suffering. The first broad-based protective law was the 1867 New York anti-cruelty law. This law represented a paradigm shift, as it protected all living creatures, not just commercially valuable ones. In the past twenty years, as the state laws continue to be modified by the legislature (with legislative proposals often drafted by suburban/urban humane societies), the special status of companion animals has been increasingly politically accepted.

The introduction of aggravated animal cruelty legislation has been among the more significant recent changes. The State of Illinois, for instance, adopted a special provision under the title “Aggravated Cruelty” as follows: “No person may intentionally commit an act that causes a companion animal to suffer serious injury or death.”³¹ A first offense is a Class 4 felony and may result in (among other things) a court-ordered psychological or psychiatric evaluation.³² Liability under aggravated animal cruelty law provisions may be qualified by or conditioned on various factors. The language from this Illinois provision is,

however, without qualification. Therefore, if while driving a car in Illinois, a person intentionally runs over a cat, or alternatively, a raccoon, both acts would be a crime. However, hitting the cat would be a more serious crime.

The procedural aspects of criminal actions involving animal cruelty also have begun to bend toward the procedural aspects of criminal actions involving human violence to children or other dependents in family settings. In legislation that became effective at the end of 2016, for example, Connecticut became the first state to permit a court to order the appointment of a separate advocate for dogs and cats to represent the interests of justice in criminal abuse, welfare, or custody matters.³³ These advocates have the authority to, among other things, “consult any individual with information that could aid the judge or fact finder and review records relating to the condition of the cat or dog and the defendant’s actions, including, but not limited to, records from animal control officers, veterinarians and police officers.”³⁴ Advocates may be either attorneys or law students and serve on a voluntary basis.³⁵

The Consequences of Being within the Family – Duty of Care

Recognizing that modifications to the laws governing nonhuman animals generally are driven by the context of human relationships with companion animals, the current law can be viewed from both a positive and negative perspective in regard to the requirements of companion animal owners. Most recent changes in state laws require animal owners to do things for the animal, like veterinary care, shelter, and regular maintenance. The laws of Michigan, for example, are above average in the details required of an owner, but not unusual among the states.



Providing Adequate Care

As we recognize the importance of companion animals to so many, we should also recognize that providing adequate care for these animals is a societal problem, not just a personal one.

SECTION 6: Pets in Society

Animal Law

Michigan criminal law requires an individual who owns, possesses, or has charge or custody of an animal to provide the animal with “adequate care.”³⁶ This phrase is defined as “the provision of sufficient food, water, shelter, sanitary conditions, exercise, and veterinary medical attention in order to maintain an animal in a state of good health.”³⁷ Then, for further clarification, the phrase “state of good health” is defined as “freedom from disease and illness, and in a condition of proper body weight and temperature for the age and species of the animal.”³⁸

Ultimately, this law indicates that it is a crime to fail to keep your animal in good health. Note that the law goes beyond the traditional requirements of food and water to include providing both exercise and veterinary attention. It does not specifically require an annual exam by a veterinarian, but in order to keep an animal free from disease and illness, some level of precautionary action, like an annual exam, would be prudent. This is a significant burden for many individuals without financial resources. If an animal does get sick or injured, the law requires treatment. In Michigan, it is specifically a crime to negligently allow any animal “to suffer unnecessary neglect, torture, or pain.”³⁹ The law does not suggest how the well-being of a companion animal is balanced against the lack of resources available to an owner. Indeed, the answer may require the animal to be euthanized, because that may be a cheaper option than pursuing required medical care.

Conclusion

Companion animals are an increasingly important part of the daily lives of millions of families across the country. As integration into human families has occurred, laws have gradually begun to change, albeit on a piecemeal basis. Companion animals now have visibility and acknowledgment in trust and wills, protective orders, and, most recently, in divorce proceedings as members of a family. The increased visibility of companion animals has also resulted in enhanced requirements for their protection under state criminal law.

Some of these (and other) legal changes enhance the level of care that owners and caretakers must provide to companion animals. That care may include the provision of veterinary medical services. A legal requirement or encouragement of veterinary care gives rise to two social questions:

1. How should pet owners be educated about their legal obligations toward their companion animal?
2. How should companion animal owners that lack the capacity or resources to provide the care required for the wellbeing of their four-legged family members be supported?

References

1. Favre D. Living Property: A New Legal Status for Animals Within the Legal System. *Marq L Rev.* 10;93:1021.
2. *Obergefell v. Hodges*. 135 U.S. Supreme Court 2584. 2015.
3. Cal. Fam. Code § 7601(c). West 2014.
4. Boone Dryden JD. This Is the Family I Chose: Broadening Domestic Partnership Law to Include Polyamory. *Hamline J Pub L Poly.* 2015; 36:162.
5. Favre D, Dickinson T. Animal Consortium. *Tenn L Rev.* Summer 2017: 84:893.
6. *Fitzjerrell v. City of Gallu*. 79 P.3d 836, 840. N.M. Ct. App. 2003.
7. APPA National Pet Owners Survey. American Pet Products Association website. http://www.americanpetproducts.org/pubs_survey.asp. Accessed July 28, 2018.
8. Pet Industry Market Size & Ownership Statistics: APPA National Pet Owners Survey. American Pet Products Association website. http://www.americanpetproducts.org/pubs_survey.asp. Accessed May 10, 2018.
9. Little S. The Human-Animal Bond. Ted Talks. April 15, 2015. <https://www.youtube.com/watch?v=jjxAewIBYJk>. Accessed October 28, 2018.
10. Brady LS. If Anyone Here Objects to This Union, Bark. *NY Times*. Apr. 29, 2016. <https://www.nytimes.com/2016/05/01/fashion/weddings/dogs-cats-and-other-pets-at-weddings.html>. Accessed June 4, 2018.
11. Shelter Intake and Surrender. ASPCA website. <https://www.asPCA.org/animal-homelessness/shelter-intake-and-surrender/pet-statistics>. Accessed Nov. 5, 2018.
12. Payne E, Bennett P. Current Perspectives on Attachment and Bonding in the Dog-Human Dyad. *Psychol Res Behav Mgmt.* 2015; 8:71-72.
13. Payne E, Bennett P. Current Perspectives on Attachment and Bonding in the Dog-Human Dyad. *Psychol Res Behav Mgmt.* 2015; 8:76.
14. Walsh F. Human-Animal Bonds I: The Relational Significance of Companion Animals. *Fam Process.* 2009;48:462-466.

SECTION 6: Pets in Society

Animal Law

15. Michigan State University. Animal Legal and Historical Center: Comparative Laws Across the U.S. <https://www.animallaw.info/site/comparative-tables>. Accessed August 5, 2018.
16. Unif. Trust Code § 408, UNIF. LAW COMM'N 2000.
17. Alaska Stat. §18.66.100(c)(10) 2016.
18. Alaska Stat. §18.65.590(2) 2016.
19. Alaska Stat. §18.66.100(c)(12) 2016.
20. Wisch RF. Domestic Violence and Pets: List of States that Include Pets in Protection Orders, Animal Legal & Hist. Ctr. <https://www.animallaw.info/article/domestic-violence-and-pets-list-states-include-pets-protection-orders>. Accessed June 4, 2018.
21. Wang AB. A Divorcing Couple Asked a Judge to Treat Their Dogs like Children. Here Is His Reply. *Wash Post*. Dec. 21, 2016. https://www.washingtonpost.com/news/animalia/wp/2016/12/21/a-divorcing-couple-asked-a-judge-to-treat-their-dogs-like-children-here-was-his-reply/?utm_term=.1eaf5263a4ea. Accessed June 4, 2018.
22. Alaska Stat. §25.24.160(a)(5) 2016. (emphasis added).
23. Bulger A. Divorce Courts are Starting to See Dogs as More Than Furry Toasters. *Fatherly*. Jan. 30, 2018. <https://www.fatherly.com/love-money/when-pets-become-part-of-the-divorce/>. Accessed June 4, 2018.
24. Mich. Comp. Laws Anno. § 750.50(3).
25. Akhtar M. Property or priceless: What is the value of a pet? *Wash Post*. March 13, 2016. <http://wapo.st/1TPjiFz>. Accessed August 5, 2018.
26. DeFabritijs S. Barking Up the Wrong Tree: Companion Animals, Emotional Damages and the Judiciary's Failure to Keep Pace. *N Ill Uni L Rev*. 2012; 32:237,244.
27. Paterick Z, Paterick T, Sanbar S. A Stepping Stone Toward Companion Animal Protection Through Compensation. *Animal Law*. 2015;22:79,88-89.
28. Roukas MS. Determining the Value of Companion Animals in Wrongful Harm or Death Claims: A Survey of U.S. Decisions and an Argument for the Authorization to Recover for Loss of Companionship in Such Cases. *Animal Legal Hist Ctr*. <https://www.animallaw.info/article/determining-value-companion-animals-wrongful-harm-or-death-claims-survey-us-decisions-and>. Accessed August 5, 2018.
29. Roukas MS. Determining the Value of Companion Animals in Wrongful Harm or Death Claims: A Survey of U.S. Decisions and an Argument for the Authorization to Recover for Loss of Companionship in Such Cases. *Animal Legal Hist Ctr*. <https://www.animallaw.info/article/determining-value-companion-animals-wrongful-harm-or-death-claims-survey-us-decisions-and>. Accessed August 5, 2018.
30. *Strickland v. Medlen*, 397 S.W.3d 184, 191–92. Texas 2013.
31. 510 Ill. Comp. Stat. 70 §3.02(a).
32. 510 Ill. Comp. Stat. 70 §3.02(c).
33. *Conn. Gen. Stat. § 54-86n(a) (2016)*.
34. *Conn. Gen. Stat. § 54-86n(b) (2016)*.
35. *Conn. Gen. Stat. § 54-86n(c) (2016)*.
36. Mich. Comp. Laws Anno 750 § 50(2)(a).
37. Mich. Comp. Laws Anno 750 § 50(1)(a).
38. Mich. Comp. Laws Anno 750 § 50(1)(k).
39. Mich. Comp. Laws Anno 750 § 50(2)(f).



◀ Back to Table of Contents

Public Health – Increasing Access to Veterinary Care as a Means to Improving the Health of All

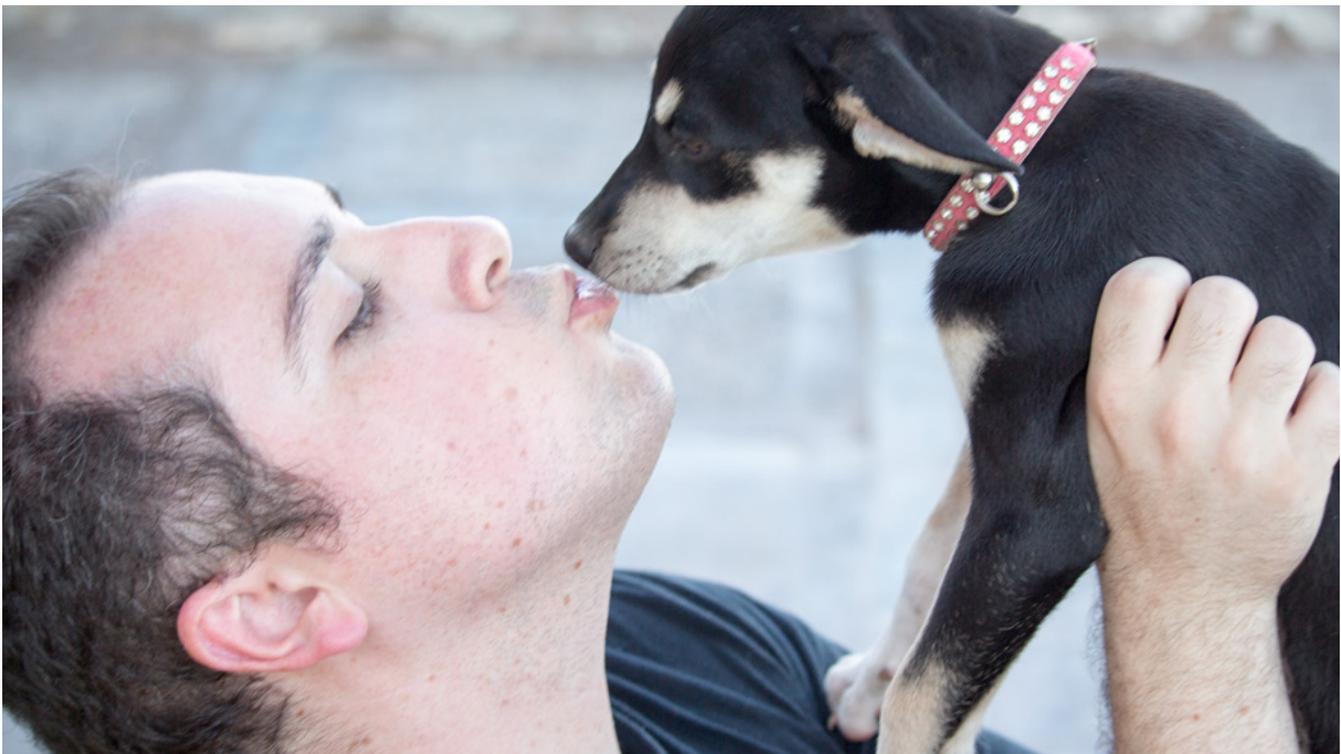
Guest Authors: Taylor Young, MPH and Marcy Souza, DVM, MPH, MPPA

Approximately 68% of United States households have a pet, which includes 89.7 million dogs and 94.2 million cats.¹ The positive aspects of pet ownership are numerous, including improved cardiovascular and mental health for pet owners, as well as potential weight loss for both the pet and owner through increased exercise. Zoonotic diseases, or diseases that pass from animals to humans, are a possible negative result of pet ownership. However, with proper education and veterinary care, the risk of contracting a zoonosis can be reduced. There should be an increase in education for pet owners about the potential positive and negative aspects of pet ownership.

The total national healthcare expenditure for the United States in 2015 was \$3.2 trillion.² Research is demonstrating that companion animal ownership can lead to improvements in the health of pet owners that, in turn, could provide lasting benefits due to reduced doctor visits and healthcare expenses. Caring for a pet can conversely be a source of financial stress, since all pets should receive regular veterinary care, in addition to the cost of food, other supplies and pet-related services, not to mention the incidental need for emergency medical care. On average, an owner will spend \$378 per year on veterinary visits for a dog and \$191 per year for a cat.³ For some pet owners that consider their animals to be part of the family, these added expenses can create a financial burden that limits their ability to access veterinary services, which can lead to mental stress as a caregiver for the pet.

Zoonotic Diseases

Companion animals can transmit a wide variety of diseases to people, including parasitic, bacterial, and fungal diseases. Although the transmission rate of diseases from pets to people is considered low, there are over 70 pathogens found in dogs and cats that pose a risk of transmission to people, especially those animals that have close contact with people, such as pet owners or others in the household.⁴ This report will describe a few select zoonoses, but there are additional concerns for pet owners, depending on the pet species, geographical location, and access to preventive care. A family's ability to obtain proper veterinary care for their animals directly impacts



the health of the entire family. **Therefore, it is important that families are able to obtain proper veterinary care for their animals to ensure a lowered risk of disease transmission.**

Clients living in underserved communities have become a neglected demographic by animal service providers due to concerns with cost, compliance, and cultural differences.⁵ The reduction of disease in animals and humans is a multifaceted issue that invokes the principles of One Health: a collaboration across disciplines to achieve the best health outcomes for people, animals, and the environment.⁶ Data has shown that zoonotic diseases transmitted by pets cause significant human health and economic costs.⁷ Measures to reduce risks of zoonoses include appropriate preventive medicine and sick care for pets, education on the risks and benefits of pet ownership, and practices to reduce these risks. One study found that many owners (84.1%) expect to be informed about potential zoonotic disease risks from their veterinarian, as opposed to their physician.⁸ However, if certain populations are unable to access veterinary services, that underserved community is less likely to receive education on both the risks of potential zoonoses of companion animals and how to prevent or treat them effectively. The consequences of exposure to zoonoses, actual infection from exposure, and increased risk of severe disease from infection can be particularly important for children, the elderly, pregnant women, and immunocompromised (HIV positive individuals, organ transplant recipients, patients receiving chemotherapy, etc.) individuals.

Parasitic Zoonoses

Dogs and cats can both transmit various types of parasitic infections. A common zoonotic parasite transmitted via cat and dog feces is the roundworm (*Toxascaris* spp or *Toxocara* spp). Roundworm larvae can cause serious disease when the larva travels through various organs, most notably causing blindness if it travels to the eye. Annually, at least 70 people are blinded by roundworms in the United States.⁹ Hookworm infection, another parasitic disease of cats and dogs, is caused by *Ancylostoma* larvae and leads to larva migration through the skin of humans.¹⁰ Both of these diseases are transmitted primarily through contact with soil that has been contaminated by canine or feline feces. Roundworm eggs are accidentally ingested, while hookworm larvae burrow through human skin. Preventive veterinary care dramatically reduces the prevalence of these organisms in pets and thus risk of infection to humans.

Cryptosporidiosis is a diarrheal disease caused by the parasitic protozoan *Cryptosporidium*, which can be transmitted by dogs and cats through infected feces.^{11,12} In the United States, approximately 750,000 human cases occur per year.¹³ Human infections most commonly occur from contaminated water sources. *Giardia intestinalis* is an intestinal parasite transmitted by dogs and cats that causes giardiasis in people. The symptoms include diarrhea, nausea, and vomiting.^{14,15,16} The number of cases transmitted by companion animals is unknown, but the majority of human cases are caused by ingesting contaminated food or water (1.2 million annually).¹⁷

Toxoplasmosis is a parasitic infection caused by the protozoan *Toxoplasma gondii* that is shed in cat feces. This parasite generally causes no symptoms in most people, except in infants whose mothers became infected during pregnancy or in immunocompromised individuals. If a pregnant woman becomes infected, she can have a miscarriage, deliver a stillborn baby, or deliver a baby with significant developmental abnormalities. Symptoms



in others include flu-like illness, diarrhea, vomiting, ocular damage, and seizures.¹⁸ The CDC estimates that 60 million people are infected by *Toxoplasma gondii* in the United States, but only a small percentage actually become ill due to infection.¹⁹

Risk for these various parasitic diseases can be reduced by specific treatments and education during veterinary visits. Education should focus on hand washing, not feeding pets raw diets, keeping cats indoors, and timely removal of fecal material. Also, accurate education that reinforces the human-animal bond and discourages abandoning pets by pregnant women or immunocompromised individuals is essential. Appropriate steps, including daily scooping of litter boxes and appropriate hand hygiene, can greatly reduce the risk of exposure to *Toxoplasma* in susceptible individuals.

Bacterial Zoonoses

Many bacterial zoonotic diseases transmitted by household pets cause gastrointestinal disease, and humans contract them through accidental ingestion of infected feces in contaminated food, water, or on inanimate objects.²⁰ *Escherichia coli*, or *E.coli*, is generally a harmless bacterium; however, some strains, such as *E.coli* O157:H7, can make humans and animals very sick. O157 causes diarrhea, vomiting, and sometimes a fever.²¹ Approximately 93,000 people contract an *E.coli* O157 infection annually. However, only around 6,000 of these cases are contracted directly from animals; the remainder are contracted from contaminated food or water.²² Feeding raw diets to pets can increase the risk of exposure to *E. coli*.

Campylobacteriosis is caused by *Campylobacter* spp. While primarily a foodborne disease in humans, dogs and cats are carriers of the bacteria and can shed the bacterium in their feces.²³ Annually, approximately 845,000 people have gastroenteritis due to a *Campylobacter* infection.²⁴ Although the risk of infection from animals is smaller (estimated around 187,481 cases annually) than the risk of contracting campylobacteriosis via contaminated food, there was a recent outbreak of human campylobacteriosis, spanning 18 states throughout the U.S., associated with a pet store chain selling puppies.^{25,26}

Salmonellosis is transmitted via *Salmonella* spp., which is commonly associated with reptiles, amphibians, and poultry. However, there has been a rise in infections due to dogs and cats being fed a raw diet. The American Veterinary Medical Association (AVMA) does not recommend feeding animals raw sources of protein, unpasteurized milk (excluding same-species un-weaned animals), or raw eggs and recommends reducing pet access to other animals' carcasses.²⁷ Dogs or cats that consume raw food products can become asymptotically infected with *Salmonella* or other bacteria; however, they can still shed bacteria in their feces.^{28,29} Asymptomatic shedders increase the risk of salmonellosis infection to humans. Salmonellosis can vary in severity from stomach cramps and diarrhea to sepsis and death. There is a higher risk of infection for children under five, pregnant women, the elderly, and immunocompromised persons. In 2012, 47 people had salmonellosis due to handling contaminated dog food in a single outbreak.³⁰ Multiple raw diet dog foods were recalled in February 2018 after testing positive for *Salmonella*. This recall occurred after at least two children were confirmed sick after handling contaminated raw food.³¹ The risk of contracting salmonellosis can be reduced by proper hand-washing techniques, disposing of uneaten food before it can spoil, keeping pet bowls and treats away from children, feeding commercially based or home-cooked food to animals, restricting dogs and cats' access to other animal carcasses, and avoiding feeding raw-food based diets to companion animals.³²



Finally, *Staphylococcus aureus*, or “*Staph*” for short, is a zoonotic bacterium that lives on approximately 25-40% of human skin or in nasal passages.³³ Although generally harmless, *S. aureus* can become resistant to certain antibiotics, most notably methicillin-resistant *S. aureus* (MRSA). In these cases, an infection can progress to sepsis if left untreated.³⁴ The difficulty and cost of treating MRSA or other antibiotic resistant bacteria are significant public health threats.³⁵ *Staph* can be transferred back and forth between humans and their pets; however, there is little research into how frequently this transfer occurs. One study found that pet cats were more likely to have antibiotic resistant strains on their skin compared to feral cats, 10.4% and 1.4%, respectively.³⁶ Another study found that 24 of 46 companion animals were carrying a MRSA strain that was associated with humans.³⁷ Animals can act as reservoirs of MRSA and continue to re-infect others until properly treated.³⁸ In one such case, an immunocompromised individual repeatedly became infected with MRSA until the pet dog was eventually treated for MRSA. More studies will be needed to determine how frequently zoonotic and reverse zoonotic (from human to animal) transmission occurs. Due to the close contact of owners and their companion animals, proper monitoring and treatment of MRSA in pet owners, companion animals, and anyone who would be exposed to a companion animal is needed to break the cycle of transmission.^{39,40}

Fungal Zoonoses

Ringworm (dermatophytosis) is the main fungal infection that is transmitted from dogs and cats. In humans, it will appear as a round, red, itchy lesion. Numerous species of fungi cause ringworm and are transmitted by contact with an infected animal’s fur. Cats can continuously shed fungal spores for months, and the spores can be hard to remove from a house, which puts children at a greater risk for infection due to higher risk behaviors (like putting hands in their mouth) and less fastidious hygiene habits.^{41,42} This disease is not reportable, so exact numbers of cases are not known. However, anecdotally, ringworm is common in veterinary practitioners and staff.

Other fungal diseases include fungi that can be found in the environment and infect both animals and humans but are not generally transmitted between them. Diagnosing these infections in animals can serve to increase people’s awareness about what fungal exposures they could be at risk for simply from being in the same environment. Aspergilliosis, blastomycosis, coccidioidomycosis, and cryptococcosis are all fungal infections with various clinical presentations that can affect both animals and humans. Immune compromised individuals are particularly susceptible to developing severe diseases from infection with these fungal organisms.^{43,44}

Viral Zoonoses

The most serious zoonotic viral infection transmitted by companion animals is rabies, which is caused by the rabies virus. Rabies infection is 100% preventable through vaccination. The virus is transmitted in the saliva of an infected animal and infects the central nervous system, leading to symptoms, including weakness, headache, fever, and progressing to confusion, hallucinations, hypersalivation, agitation, difficulty swallowing, and a fear of water. Death will occur within days of the onset of symptoms.⁴⁵ Globally, the canine variant of the rabies virus is estimated to be responsible for more than 95% of 59,000 human rabies deaths annually.⁴⁶



In 2015, the United States reported 67 rabid dogs and 244 rabid cats; most of these animals did not have any documentation of previous vaccination.⁴⁷ Due to canine/feline vaccination programs, successful education, and animal control programs, the United States has eliminated canine variant rabies, and human rabies cases are

rare. Annually in the United States, there are 1-2 human deaths due to rabies, and these infections are typically caused by bat bites or are acquired abroad.⁴⁸ However, there can be significant time and cost associated with post-exposure prophylaxis of humans following the bite of a potentially rabid dog or cat, as well as quarantine costs for unvaccinated pets.

Vector Borne Zoonoses

In addition to the zoonoses described above, there are others that can be transmitted through ectoparasites (fleas and ticks) carried by dogs and cats. These zoonoses include, but are not limited to, Ehrlichiosis, Rocky Mountain Spotted Fever, Lyme disease, Bartonellosis, and tapeworms. With regular veterinary preventive care, steps can be taken to prevent fleas and ticks from living on pets and, therefore, eliminating transfer to humans.

While the health risk of companion animal ownership can seem intimidating and negative, appropriate veterinary care and education can help reduce the risks and encourage healthy habits that in turn can bring health benefits to both species.

Health Benefits

It has long been reported that pets help relieve stress and improve the health of the humans around them, but until recently, research had not caught up with these claims. Researchers are now examining some of the potential health benefits of the human-animal bond and pet ownership. These benefits include improved cardiovascular health, increased physical activity and weight loss, improved mental health, and aiding children and adults with a wide range of disabilities.⁴⁹ One study noted that there was improved short-term immune function following petting a dog.⁵⁰ Another study found that owners of recently acquired pets felt minor health benefits after one month of pet ownership, and this



benefit lasted throughout the 10-month study.⁵¹ Yet another study found that pet owners visited physicians half as often as non-pet owners.⁵² These studies are just a few examples of the health benefits of pets, and recently, the Human-Animal Bond Research Institute has started financially supporting research in this area.⁵³

Cardiovascular Benefits

Numerous studies have shown the potential for pets to reduce their owners' risk for cardiovascular diseases. One study showed a reduced risk for myocardial infarction (heart attack) and all cardiovascular diseases, including stroke for both current cat owners and those whom had previously owned a cat, when compared with non-cat owners.⁵⁴ A Swedish study found that owning a dog provided the owner with social support and incentive for exercise, which ultimately led to a reduction of deaths from cardiovascular diseases.⁵⁵ Another study found that elderly pet owners had improved cardiovascular disease survival.⁵⁶ The Centers for Disease Control and Prevention (CDC) states that owning a pet can reduce blood pressure, cholesterol, and triglyceride levels.⁵⁷ In 2013, the American Heart Association (AHA) released a statement saying that owning a pet, particularly a dog, might reduce a person's cardiovascular disease risk.⁵⁸

Exercise and Weight Loss

Studies have also shown pet ownership is associated with an increase in physical activity and weight loss, and one study suggests that the obesity of pet owners and their companion animals is a complex issue that demands a One Health approach.⁵⁹ One study concluded that dog owners had 4-5 more minutes per day of moderate to vigorous physical activity than non-dog walkers or non-dog owners.⁶⁰ Gastric banding surgery patients with dogs had more weight loss 24 months after surgery than patients without dogs.⁶¹ In another study, children affected by cerebral palsy had positive impacts on motor skill performance, physical activity, and quality of life due to the presence of a family dog.⁶² Another study found that pregnant women who own a dog are 50% more likely than non-dog owning pregnant women to get the recommended 30 minutes or more of exercise per day.⁶³ Evidence for the physical benefits of dog ownership is increasing as more studies evaluate this relationship.

Mental Health Benefits

Pet ownership can have mental health benefits in both adults and children. A qualitative study found that participants were motivated to walk their dogs because of the “happiness” derived from the pleasure of the dogs and not for their own physical health benefits.⁶⁴ In another study, human-animal interactions had positive outcomes for typically-developing children as well as children with developmental disabilities; positive outcomes included reduced anxiety, increased focus, increased social interactions between their peers, and improved motivation.⁶⁵ Family pet ownership increased self-esteem, improved feelings of loneliness, and enhanced social skills in school age children in another study.⁶⁶ Foster homes that owned animals had children that were more open and developed closer relationships with their foster families.⁶⁷ Studies have associated decreased anxiety levels with owning a pet, particularly a dog.⁶⁸ In the 2017-2018 American Pet Products Association (APPA) survey of national pet owners, 65% of owners stated that their pets helped them relax or relieve stress.⁶⁹ Additional information on the mental health benefits of pet ownership can be found in the “Pets as Family” section of this report.

Limitations

Although some research has found health benefits associated with companion animal ownership, other studies have reported negative, neutral, or conflicting results.^{70,71,72,73,74} Many of the studies that found positive effects of pet ownership, whether physical or mental, had small numbers of participants or the results could not be replicated. A study on the limitations of companion animal health benefits found that many studies failed to control for health habits of humans, level of attachment with their animal, and the participants’ social support.⁷⁵ Additional research on the health effects of pet ownership is needed, and the research should focus on replicable study design, larger sample sizes, and properly controlling for confounders and bias. Despite these limitations, current research and anecdotal reports suggest that pets are generally good for humans. This is particularly true when appropriate veterinary care and education is available to help reduce the risk of zoonoses and encourage healthy habits related to physical activity and proper nutrition for both pets and their owners.



Conclusion

Companion animals have long been recognized as having the potential to positively impact human health and wellbeing. The human-animal bond is complex and continued research into its effects can provide further insight into some of the health benefits discussed above, as well as help elucidate benefits we may not know about yet. Proper education and access to routine veterinary care serves to mitigate the risks associated with pet ownership, such as those presented by various zoonotic infections. Taking a One Health approach to health means

recognizing the complexity of the relationship between humans, animals, and the environments they share and then leveraging those relationships to achieve improvements in health. Understanding the role that access to veterinary care plays in the health of not just pets but also their owners and, by extension, the communities where they coexist is essential to good public health practice and to improving the health of all.

Mitigating Risks

Proper education and access to routine veterinary care serves to mitigate the risks associated with pet ownership, such as those presented by various zoonotic infections.

References

1. APPA National Pet Owners Survey. American Pet Products Association website. http://www.americanpetproducts.org/pubs_survey.asp. Accessed July 2018.
2. Health Expenditures. Centers for Disease Control and Prevention website. <https://www.cdc.gov/nchs/fastats/health-expenditures.htm>. Accessed July 2018.
3. American Veterinary Medical Association. Center for Information Management. *U. S. Pet Ownership & Demographics Sourcebook*. 2012.
4. Stull, JW, Brophy J, Weese JS. Reducing the risk of pet-associated zoonotic infections. *CMAJ*. 2015;187(10):736-743.
5. Lavallee E, Mueller M, McCobb E. A systematic review of the literature addressing veterinary care for underserved communities. *J Appl Anim Welf Sci*. 2017;20(4):381-394.
6. One Health. Centers for Disease Control and Prevention website. <https://www.cdc.gov/onehealth/index.html>. Accessed July 2018.
7. Stehr-Green J K, Schantz PM. The impact of zoonotic diseases transmitted by pets on human health and the economy. *Vet Clin North Amer: Small Anim Prac*. 1997;17:1-15.
8. Steele S, Mor S. Client knowledge, attitudes and practices regarding zoonoses: A metropolitan experience. *Austral Vet J*. 2015;93(12):439-444.
9. Parasites–Neglected Parasitic Infections (NPIs). Centers for Disease Control and Prevention website. <https://www.cdc.gov/parasites/npi/index.html>. Accessed July 2018.
10. Zoonotic Disease: What Can I Catch From My Cat? Cornell University College of Veterinary Medicine website. <https://www2.vet.cornell.edu/departments-centers-and-institutes/cornell-feline-health-center/health-information/feline-health-topics/zoonotic-disease-what-can-i-catch-my-cat>. Accessed July 2018.
11. Robertson ID, Irwin PJ, Lymbery AJ, Thompson RCA. The role of companion animals in the emergence of parasitic zoonoses. *Int J Parasitol*. 2000;30(12):1369-1377.
12. Zoonotic Disease: What Can I Catch From My Cat? Cornell University College of Veterinary Medicine website. <https://www2.vet.cornell.edu/departments-centers-and-institutes/cornell-feline-health-center/health-information/feline-health-topics/zoonotic-disease-what-can-i-catch-my-cat>. Accessed July 2018.
13. CDC Works to Improve Cryptosporidium Tracking in the United States. Parasites–Cryptosporidium (also known as “Crypto”). Centers for Disease Control and Prevention website. <https://www.cdc.gov/parasites/crypto/cryptonet-public.html>. Accessed July 2018.
14. Zoonotic Disease: What Can I Catch From My Cat? Cornell University College of Veterinary Medicine website. <https://www2.vet.cornell.edu/departments-centers-and-institutes/cornell-feline-health-center/health-information/feline-health-topics/zoonotic-disease-what-can-i-catch-my-cat>. Accessed July 2018.
15. Rijks JM, Cito F, Cunningham AA, Rantsios AT, Giovannini A. Disease risk assessments involving companion animals: an overview for 15 selected pathogens taking a European perspective. *J Compar Pathol*. 2016;155(1):S75-S97.
16. Robertson ID, Irwin PJ, Lymbery AJ, Thompson RCA. The role of companion animals in the emergence of parasitic zoonoses. *Int J Parasitol*. 2000;30(12):1369-1377.
17. Painter J, Gargano J, Collier S, Yoder J. Giardiasis surveillance–United States, 2011–2012. *Mmwr Surveil Sum*. 2015;64(3):15-25.
18. Zoonotic Disease: What Can I Catch From My Cat? Cornell University College of Veterinary Medicine website. <https://www2.vet.cornell.edu/departments-centers-and-institutes/cornell-feline-health-center/health-information/feline-health-topics/zoonotic-disease-what-can-i-catch-my-cat>. Accessed July 2018.
19. Parasites–Toxoplasmosis (Toxoplasma infection). Centers for Disease Control and Prevention website. <https://www.cdc.gov/parasites/toxoplasmosis/index.html>. Accessed July 2018.

SECTION 6: Pets in Society

Public Health

20. Damborg P, Broens E M, Chomel BB, Güenther S, Pasmans F, et al. Bacterial zoonoses transmitted by household pets: state-of-the-art and future perspectives for targeted research and policy actions. *J Compar Pathol*. 2016;155(1):S27-S40.
21. E.coli (Escherichia coli) Symptoms. Centers for Disease Control and Prevention website. <https://www.cdc.gov/ecoli/ecoli-symptoms.html>. Accessed July 2018.
22. Hale C, Scallan E, Cronquist A, Dunn J, Smith K, et al. Estimates of enteric illness attributable to contact with animals and their environments in the United States. *Clin Infect Dis*. 54 Suppl 5. 2012;S472-9.
23. Damborg P, Broens E M, Chomel BB, Güenther S, Pasmans F, et al. Bacterial zoonoses transmitted by household pets: state-of-the-art and future perspectives for targeted research and policy actions. *J Compar Pathol*. 2016;155(1):S27-S40.
24. Kaakoush N, Castano-Rodriguez N, Mitchell H, Man S. Global epidemiology of campylobacter infection. *Clin Microbiol Rev*. 2015;28(3):687-720.
25. Hale C, Scallan E, Cronquist A, Dunn J, Smith K, et al. Estimates of enteric illness attributable to contact with animals and their environments in the United States. *Clin Infect Dis*. 54 Suppl 5. 2012;S472-9.
26. Multistate outbreak of multidrug-resistant campylobacter infections linked to contact with pet store puppies *Campylobacter* (Campylobacteriosis). Centers for Disease Control and Prevention website. <https://www.cdc.gov/campylobacter/outbreaks/puppies-9-17/index.html>. Accessed July 2018.
27. Salmonella—Animals as a Source of Infection in People. American Veterinary Medical Association website. <https://www.avma.org/KB/Resources/Reference/Pages/Animals-as-sources-of-Salmonella-infection-in-people.aspx>. Accessed July 2018.
28. Finley R, Reid-Smith R, Weese JS. Human health implications of Salmonella-contaminated natural pet treats and raw pet food. *Clin Infect Dis*. 2006;42(5):686-691.
29. Lejeune J, Hancock D. Public health concerns associated with feeding raw meat diets to dogs. *JAVMA*. 2001;219(9):1222-1225.
30. Salmonella. Multistate Outbreak of Human Salmonella Infantis Infections Linked to Dry Dog Food (Final Update). Centers for Disease Control and Prevention website. <https://www.cdc.gov/salmonella/dog-food-05-12/>. Accessed July 2018.
31. FDA Investigates Outbreak of Salmonella Infections Linked to Raws for Paws Ground Turkey Food for Pets. U. S. Food and Drug Administration. Animal and Veterinary website. <https://www.fda.gov/AnimalVeterinary/NewsEvents/ucm596071.htm>. Accessed July 2018.
32. Salmonella—Animals as a Source of Infection in People. American Veterinary Medical Association website. <https://www.avma.org/KB/Resources/Reference/Pages/Animals-as-sources-of-Salmonella-infection-in-people.aspx>. Accessed July 2018.
33. Methicillin-resistant Staphylococcus aureus. American Veterinary Medical Association website. <https://www.avma.org/KB/Resources/Reference/Pages/Methicillin-resistant-Staphylococcus-aureus.aspx#reference>. Accessed July 2018.
34. Methicillin-resistant Staphylococcus aureus (MRSA). General Information about MRSA in the Community. Centers for Disease Control and Prevention website. <https://www.cdc.gov/mrsa/community/index.html>. Accessed July 2018.
35. Antibiotic/Antimicrobial Resistance Biggest Threats and Data. Centers for Disease Control and Prevention website. <https://www.cdc.gov/drugresistance/biggest-threats.html>. Accessed November 5, 2018.
36. Bierowiec K, Płoneczka-Janeczko K, Rypuła K. Is the colonisation of Staphylococcus aureus in pets associated with their close contact with owners? *PLoS ONE*. 2016;11(5):E0156052.
37. Harrison E, Weinert L, Holden M, Welch J, Wilson K, et al. A shared population of epidemic methicillin-resistant Staphylococcus aureus 15 circulates in humans and companion animals. *MBio*. 2014;5(3):E00985-13.
38. Manian FA. Asymptomatic nasal carriage of mupirocin-resistant methicillin-resistant *Staphylococcus aureus* in a pet dog associated with MRSA infection in household contacts. *Clin Infect Dis*. 2006;36(2):E26-E28.
39. Wieler LH, Ewers C, Güenther S, Walther B, Lübke-Becker A. Methicillin-resistant staphylococci (MRS) and extended-spectrum beta-lactamases (ESBL)-producing Enterobacteriaceae in companion animals: Nosocomial infections as one reason for the rising prevalence of these potential zoonotic pathogens in clinical samples. *Int J Med Microbiol*. 2011;301(8):635-641.
40. Harrison E, Weinert L, Holden M, Welch J, Wilson K, et al. A shared population of epidemic methicillin-resistant Staphylococcus aureus 15 circulates in humans and companion animals. *MBio*. 2014;5(3):E00985-13.
41. Zoonotic Disease: What Can I Catch From My Cat? Cornell University College of Veterinary Medicine website. <https://www2.vet.cornell.edu/departments-centers-and-institutes/cornell-feline-health-center/health-information/feline-health-topics/zoonotic-disease-what-can-i-catch-my-cat>. Accessed July 2018.
42. Baumgardner D. Fungal infections from human and animal contact. *J Patient-Center Res Rev*. 2017;4(2):78-89.
43. Spickler A. Role of Immunosuppression in Zoonoses. <https://www.merckvetmanual.com/public-health/zoonoses/role-of-immunosuppression-in-zoonoses>. Accessed July 2018.
44. Taboada T. Overview of Fungal Infections. <https://www.merckvetmanual.com/generalized-conditions/fungal-infections/overview-of-fungal-infections>. Accessed July 2018.
45. Rabies. Centers for Disease Control and Prevention website. <https://www.cdc.gov/rabies/index.html>. Accessed July 2018.

SECTION 6: Pets in Society

Public Health

46. Wallace RM, Mehal J, Nakazawa Y, Recuenco S, Bakamutumaho B, et al. The impact of poverty on dog ownership and access to canine rabies vaccination: results from a knowledge, attitudes and practices survey, Uganda 2013. *Infect Dis Pov*. 2017;6:97.
47. Rabies. Centers for Disease Control and Prevention website. <https://www.cdc.gov/rabies/index.html>. Accessed July 2018.
48. Rabies in the U. S.: Public Health Importance of Rabies. Centers for Disease Control and Prevention website. <https://www.cdc.gov/rabies/location/usa/index.html>. Accessed July 2018.
49. Schreiner P. Emerging cardiovascular risk research: impact of pets on cardiovascular risk prevention. *Cur Cardiovasc Risk Rep*. 2016;10(2):1-8.
50. Charnetski C, Riggers S, Brennan F. Effect of petting a dog on immune system function. *Psychol Rep*. 2004;95(3_suppl):1087-1091.
51. Serpell J. Beneficial effects of pet ownership on some aspects of human health and behavior. *J Royal Soc Med*. 1991;84(12):717-720.
52. Saunders J, Parast L, Babey SH, Miles JV. Exploring the differences between pet and non-pet owners: Implications for human-animal interaction research and policy. *PLoS ONE*. 2017;12(6):E0179494.
53. Human Animal Bond Research Institute (HABRI) website. <https://habri.org/>. Accessed November 5, 2018.
54. Qureshi AI, Memon MZ, Vazquez G, Suri MFK. Cat ownership and the risk of fatal cardiovascular diseases. Results from the Second National Health and Nutrition Examination Study Mortality Follow-up Study. *J Vasc Intervent Neurol*. 2009;2(1):132-135.
55. Mubanga M, Byberg L, Nowak C, Egenvall A, Magnusson P, et al. Dog ownership and the risk of cardiovascular disease and death—a nationwide cohort study. *Sci Rep*. 2017;7(1):15821.
56. Chowdhury EK, Nelson MR, Jennings GL, Wing LM, Reid CM. Pet ownership and survival in the elderly hypertensive population. *J Hyperten*. 2017;35(4):769-775.
57. Healthy Pets Healthy People: About Pets and People. Centers for Disease Control and Prevention website. <https://www.cdc.gov/healthypets/health-benefits/index.html>. Accessed July 2018.
58. Levine GN, Allen KT, Braun LE, Christian HA, Friedmann EA, et al. Pet ownership and cardiovascular risk: A scientific statement from the American Heart Association. *Circulation*. 2013;127(23):2353-2363.
59. Sandoe P. Lose weight, gain quality of life. *Vet Rec*. 2012;170(8):192-194.
60. Engelberg JK, Carlson JA, Conway TL, Cain KL, Saelens BE, et al. Dog walking among adolescents: Correlates and contribution to physical activity. *Prevent Med*. 2016;82:65-72.
61. Hancock J, Jackson S, Johnson A. The importance of dog ownership. *Am J Lifestyle Med*. 2017; 11(1):86-89.
62. Tepfer AA, Ross S, Macdonald M, Udell M, Ruaux C, et al. Family dog-assisted adapted physical activity: A case study. *Animals*. 2017;7(5):35, doi:10.3390/ani7050035.
63. Westgarth C, Liu J, Heron J, Ness A, Bundred P, et al. Dog ownership during pregnancy, maternal activity, and obesity: A cross-sectional study (dogs and activity in pregnancy). *PLoS ONE*. 2012;7(2): E31315.
64. Westgarth CM, Christley R, Marvin G, Perkins E. I walk my dog because it makes me happy: A qualitative study to understand why dogs motivate walking and improved health. *Int J Environ Res Public Health*. 2017;14(8):936, doi:10.3390/ijerph14080936.
65. Gee N, Griffin J, McCardle P. Human-animal interaction research in school settings: Current knowledge and future directions. *AERA Open*. 2017;3(3):1-9, doi:10.1177/2332858417724346.
66. Purewal R, Christley R, Kordas K, Joinson C, Meints K, et al. Companion animals and child/adolescent development: A systematic review of the evidence. *Int J Environ Res Public Health*. 2017;14(3):234, doi:10.3390/ijerph14030234.
67. Carr S, Rockett B. Fostering secure attachment: Experiences of animal companions in the foster home. *Attach Human Develop*. 2017;19(3):259-277.
68. Saunders J, Parast L, Babey SH, Miles JV. Exploring the differences between pet and non-pet owners: Implications for human-animal interaction research and policy. *PLoS ONE*. 2017;12(6):E0179494.
69. APPA National Pet Owners Survey. American Pet Products Association website. http://www.americanpetproducts.org/pubs_survey.asp. Accessed July 2018.
70. Simpson A. Effect of household pet ownership on infant immune response and subsequent sensitization. *J Asthma Allergy*. 2010;3:131-7.
71. Friedmann E, Katcher A, Lynch J, Thomas S. Animal companions and one-year survival of patients after discharge from a coronary care unit. *Public Health Rep*. 1980;95(4):307-312.
72. Parker G, Gayed A, Owen C, Hyett M, Hilton T, Heruc G. Survival following an acute coronary syndrome: A pet theory put to the test. *Acta Psychiatr Scand*. 2010;121(1):65-70.
73. Gilbey A, McNicholas J, Collis GA. Longitudinal Test of the Belief that Companion Animal Ownership Can Help Reduce Loneliness. *Anthrozoos*. 2007;20(4):345-353.
74. Gillum F, Obisesan T. Living with Companion Animals, Physical Activity and Mortality in a U.S. National Cohort. *Int J Environ Res Public Health*. 2010;(6):2452-2459.
75. Chur-Hansen A, Stern C, Winefield H. Commentary: Gaps in the evidence about companion animals and human health: Some suggestions for progress. *Int J Evidence-Bas Health*. 2010;8(3):140-146.

SECTION 7

Considerations for Veterinarians

Nonprofit vs. For-Profit Veterinary Services Modeling

AVCC Member: Michael Moyer, VMD

Background

Some veterinarians express concerns about a perceived unfair competition from nonprofit veterinary service providers. Nonprofit veterinary service providers maintain that the vast majority of their clients are unable to pay for private veterinary care, consequently representing a different population of clients or market segment.

Companion animal veterinary services have traditionally been provided by independent owner/operator veterinarians in small businesses. Out of 37,840 total veterinary practices, 34,103 practices have no more than 20 total employees (including doctors), and 25,271 of those practices have fewer than 10 employees.¹ These practices are fee-for-service businesses, which cover operating expenses primarily through direct client payments. Only a very small percentage of expenses are covered through third party payments, such as pet insurance² or benevolent funds. Between 1972 and 2000, pricing in veterinary practices mirrored the consumer price index (CPI) very closely. However, starting in 2000, veterinary practice began raising prices³ at a rate significantly higher than the CPI, such that a normal veterinary fee of \$100 in 1985 dollars rose to just over \$300 in 2016. However, if that same \$100 fee were tied to the CPI, it would have only risen to \$230 in 2016. This is a \$70 (or 130%) increase in cost for standard veterinary practice. Moreover, the accelerated rate of fee increases occurred over a relatively short timeframe. From 2005 to 2016, veterinary visits declined approximately 2.6% per year, meaning fewer pet owners are returning to practices. Also, the number of pet owners who reported “no visit” to a veterinarian for their cat has increased from approximately 35% to approximately 45%.⁴

Together, these trends strongly suggest that private veterinary service pricing is outpacing some pet owner’s perceived value of service. It is reasonable to speculate that pet owners, particularly cat owners and lower income pet owners, are finding themselves

Pricing Outpacing Perceived Value

Trends strongly suggest that private veterinary service pricing is outpacing some pet owner’s perceived value of service.



SECTION 7: Considerations for Veterinarians

Nonprofit vs. For-Profit Veterinary Services Modeling

surprised by routine service prices, particularly if an owner had lapsed in care for several years before returning to their veterinarian.

Animal welfare organizations began seeing more pets with deferred care or no care being relinquished with treatable medical conditions. Some of these organizations expanded their clinical services or launched veterinary services in part to address this unmet need within their community.

Among some within the veterinary community, this expansion raises the issue of perceived unfair competition due to the tax-exempt status of nonprofits, which is a commonly stated concern voiced by practice-owning veterinarians.⁵ When referencing the nonprofits' unfair advantage relative to traditional for-profit veterinary practices, the question is raised as to how this inequity occurs. If the fairness aspect is in reference to financial impacts, then a comparison of the two business models would be useful to illustrate how they each spend fee income (or other) dollars.

What follows is an exercise to illustrate the economic impacts of a hypothetical community utilizing traditional for-profit veterinary services and the same community utilizing a nonprofit provider.

Assumptions

This comparative analysis is used to illustrate the economic differences and similarities of a traditional for-profit versus a nonprofit veterinary service provider. For this analysis, we assume that:

- A veterinarian chooses to own a for-profit practice for personal financial reasons.
- The for-profit practice is a retirement vehicle for the owner.
- Excess revenue, after expenses, falls to the discretion/accretion of the owner veterinarian/shareholders of the for-profit business model.

In contrast, the nonprofit model exists to fulfill the mission of the organization. This may be to provide care for pet owners not choosing to access veterinary care through the for-profit model for a variety of reasons, such as price, access (lack of transportation, “service deserts”), or the altruistic feeling of supporting a philanthropic cause. Some nonprofit practices are similar to an outpatient clinic, with a very limited range of services targeting a lower income demographic, and other nonprofits are full-service hospitals, indistinguishable from any comparable for-profit business. Excess revenue generated by nonprofit practices goes back to support the mission of the organization, which may be to subsidize care for pet owners unable to afford care and/or to offset other shelter-related expenditures. It can be argued that these two different practice models serve different pet owner populations and, therefore, are not in competition for the same clients.



SECTION 7: Considerations for Veterinarians

Nonprofit vs. For-Profit Veterinary Services Modeling



Model

This model illustrates the relative distribution of income and expenditures in two identically located veterinary practices (refer to Figure 7.1). One is the traditional for-profit veterinary practice with an owner, who is a veterinarian, and one associate veterinarian, and the other is a two-veterinarian nonprofit practice. Each practice begins with an established baseline, with expenses in line with known industry survey data. Over a 10-year period, there is modest growth of 4% per year, including a modest increase in cost based on a CPI of 2.1%. The total intake by the four principal stakeholders is of chief interest here: (1) the veterinarian practice owner, (2) associate veterinarians from the practice and the nonprofit, (3) the public welfare/shelter pets (this includes tax categories as taxes nominally support the public good), and (4) pet owners/pets (this is the principle source of funding for the other stakeholders). Private practice veterinarians often think donors* support the veterinary services of nonprofits. Although this is true for some, many fee-for-service nonprofit clinics are self-sustaining. These nonprofits typically offer services on either a “sliding scale” (i.e., various levels of discounted services dependent on the client’s income level) or pro bono care; this confounds comparisons, as net income significantly drops when discounts and pro bono care are performed routinely. For revenue to be equally comparable to a for-profit practice, the nonprofit would need to see significantly more patients to compensate for the revenue lost through discounting.

For-Profit Baseline Year 1	Income	Expenses	Non-Profit Baseline Year 1	Income	Expenses	10 Year For-Profit Totals	10 Year Non-Profit Totals
Fee income	\$1,000,000		Fee income	\$1,000,000		\$12,006,107	\$12,006,107
Expense Description			Expense Description				
Veterinarian Owner Payroll		\$110,000	Veterinarian Senior Payroll	\$110,000	\$110,000	\$1,209,991	\$1,209,991
Veterinarian Associate Payroll		\$85,000	Veterinarian Junior Payroll	\$85,000	\$85,000	\$934,993	\$934,993
Staff Payroll		\$200,000	Staff Payroll		\$200,000	\$2,199,983	\$2,199,983
Payroll Taxes		\$49,777	Payroll Taxes		\$49,777	\$547,543	\$547,543
Pharmacy/Vaccines		\$150,000	Pharmacy/Vaccines		\$150,000	\$1,649,987	\$1,649,987
Supplies ** (need to pay PA sales tax)		\$85,500	Supplies ** (no PA sales tax paid)		\$85,500	\$940,493	\$940,493
**Sales tax on supplies (6.0% for PA)		\$5,130	No sales tax on supplies		\$0	\$56,430	\$0
Utilities		\$16,000	Utilities		\$16,000	\$175,999	\$175,999
Laboratory		\$15,000	Laboratory		\$15,000	\$164,999	\$164,999
Office Expense		\$82,500	Office Expense		\$82,500	\$907,493	\$907,493
Rent (3K sq ft triple net lease)		\$57,600	Rent (3K sq ft triple net lease)		\$57,600	\$633,595	\$633,595
Benefits		\$30,000	Benefits		\$30,000	\$329,997	\$329,997
Simple IRA Corp. Match (owner)		\$3,300	403(b) Corp. Match		\$0	\$33,000	\$0
Simple IRA Corp. Match (associate)		\$2,550	403(b) Corp. Match		\$0	\$25,500	\$0
Car (owner)		\$7,000	Car (owner)		\$0	\$76,999	\$0
Real Estate/School Taxes (0.865%)		\$8,650	Real Estate/School Taxes (0.865%)		\$0	\$95,149	\$0
Gross Income Tax (local) (0.225%)		\$2,250	Gross Income Tax (local) (0.225%)		\$0	\$24,750	\$0
Total Expenses		\$910,257	Total Expenses		\$881,377	\$10,006,900	\$9,695,072
Net Income (Distribution to Owner)		\$89,743	Net Income (Flows to Shelter)		\$118,623	\$1,999,207	\$2,311,035
Net Marginal Taxes (PA tax rate of 43.6%)		\$39,128				\$871,654	\$0
Stakeholder Group						FP 10 Year	NP 10 Year
Veterinarian Owner		\$210,043			\$0	\$3,319,197	\$0
Veterinarian Associate		\$87,550			\$195,000	\$960,493	\$2,144,983
Public Welfare/Shelter Pets		\$104,935			\$168,400	\$1,595,526	\$2,858,578
Pet Owner/Pets		\$1,000,000			\$1,000,000	\$12,006,107	\$12,006,107

Notes: 1. Assumes 4% growth per year and 2.1% CPI.
2. Assumes non-profit does not match retirement contributions.

Figure 7.1: For-Profit vs. Nonprofit Veterinary Services Model

* The definition of a donor in this context is a person who donates money to a nonprofit organization that offers veterinary services.

SECTION 7: Considerations for Veterinarians

Nonprofit vs. For-Profit Veterinary Services Modeling

Fee Income

In this scenario, both nonprofit and for-profit practices are busy two doctor hospitals, offering similar services to the public. In general, nonprofit practices have a fee schedule similar to for-profit practices but will frequently accept partial payment (discounted) or no payment (pro bono) cases, although this is just one option. This impacts the nature of the practice considerably. By discounting or gifting 10-15% of the nonprofit's income, additional pet owners paying full price must be seen to achieve the revenue achieved by a for-profit practice. For the purposes of this illustration, no attempt was made to depict the higher volume aspect of the typical nonprofit practice nor the probable effect on overall profits that pro bono care likely has, meaning net income may be less than realized in a comparable for-profit practice (which likely has fewer charitable cases). Often it is presumed that nonprofit hospitals are being subsidized by either local or state taxes and/or donor contributions. Although the nonprofit veterinary service provider is not being subsidized by taxes, they may be subsidized, depending on the model, by donors. Animal shelters engaged in animal control might receive tax dollars via fee-for-service contracts with their respective municipalities, but many animal shelters are supported entirely through their own fundraising (i.e., donations and services). Many nonprofit veterinary service organizations do not divert donor dollars to their hospitals. In fact, a common (and growing) model is to have nonprofit hospital net income flow over to offset expenditures in sheltering operations.

Taxes

The largest percentage of taxes paid by for-profit businesses is payroll taxes. The nonprofit pays exactly the same payroll tax as the for-profit.

One of the differences in taxation between for-profit and nonprofit businesses is that for-profits pay taxes on certain consumables, which are subject to local/state sales taxes, although the total expense for this line item is a small percentage of the total expenditures (0.564% in this example). The for-profit also pays real estate/school taxes and gross receipts taxes, amounting to 0.95% and 0.247% of total expenses, respectively. The total tax advantage at the corporate level in this example is approximately 1.761%. While there is nominally a large tax on overall profits (in the model, a Sub-S Corp. K-1, Pennsylvania rate of 43.6%), the effective tax liability can be, and usually is, significantly reduced through tax minimization tactics. The veterinarian owner gains personal benefits through the corporate entity (employment, perquisites, capital wealth accumulation). No collateral benefit accrues to employees, officers, or successors of nonprofit organizations. Furthermore, there are requirements for nonprofits to publish their tax returns (990s) and employees whose salaries are above \$100,000 must be listed on those returns, as well as the compensation of officers and directors. Since the majority of veterinary practices are privately held, there is no requirement to publish compensation information in any forum.

Veterinarian Compensation

In this model, the salary and overall profits flow to the owner in the for-profit practice. Additionally, small businesses are allowed to provide additional benefits to the owner, such as a Simple IRA, a car, and related expenses. Most significantly, profits flow to the owner as a reportable and taxable distribution, whereas there is no way for profits in a nonprofit to flow to officers, directors, or employees. The requirement to list highly compensated employees on their public tax return provides some community-level feedback on excessive compensation.

Veterinarians employed by either model can be compensated comparably, though the production-based compensation formulas sometimes used in for-profit practices are rarely used in nonprofits. In this model, compensation was identical for similar levels of work: the owner veterinarian of the for-profit and the senior veterinarian of the nonprofit were presumed to have similar management duties in addition to clinical duties.



SECTION 7: Considerations for Veterinarians

Nonprofit vs. For-Profit Veterinary Services Modeling

Distribution of Income

While nonprofit and for-profit practices may offer identical and theoretically competing services to identical customers within a market, the form of practice distributes income, specifically revenue exceeding costs, vary differently:

1. The for-profit practice serves to generate wealth for the practice owner(s) and uses various tactics to maximize practice asset growth in anticipation of an asset sale at the end of the practice owner(s) career cycle. This is not illustrated in this model, but it represents a sizable additional wealth opportunity to the veterinarian owner and can be more than a million-dollar transaction.
2. The nonprofit practice effectively “sinks” the accumulated asset value of the practice in the public sphere. There is no corresponding way to liquidate the practice asset and thereby enrich individuals.
3. The for-profit practice can utilize other tax-favored expenditures to benefit the veterinarian owner, including structured retirement plans and vehicle allowances as illustrated in the model. There are other potential tax-favored benefits that might be available to the for-profit owner, such as bonuses, beneficial real estate/rent arrangements, travel and entertainment, and “destination” continuing education meetings.
4. The nonprofit is more limited in its ability to compensate employees and must disclose to the public the compensation paid to officers, directors, and employees earning more than \$100,000 via the IRS 990. The majority of animal welfare organizations employing veterinarians have little or no ability to contribute to employee retirement plans, though employee-funded plans certainly are allowed.
5. The nonprofit is able to solicit donations to support whatever programs or services that fall under its charter and could use those donations to support/subsidize veterinary services: in effect, a benevolent fund. Although uncommon, the for-profit practices can also, if they choose, charter the creation of a 501(c)(3) benevolent fund and can then legally solicit donations from the community to support/subsidize veterinary services for cases of financial hardship.

Conclusion

The foregoing illustration highlights key wealth accumulation and tax liability differences between for-profit and nonprofit veterinary service providers. While the nonprofit obviously has a smaller tax liability, the net benefit accruing to the public welfare is higher in the nonprofit vs. the for-profit model. And despite a higher tax burden imposed, the for-profit model accrues more wealth; moreover, any asset value created by the nonprofit veterinary services model is “trapped” for the benefit of the public welfare, as it cannot be liquidated or transferred for the enrichment of any individual.

For-profit practice owners are deeply invested and appropriately interested in the financial success of their businesses. Competitive threats to the for-profit practice model have expanded, and in some cases, these threats would include the encroachment from nonprofit service providers, in addition to hospice/euthanasia mobile practices, itinerant vaccine clinics, increasing number of corporate practices, declining revenue per full-time equivalent veterinarian,⁶ and on-line product sales.

Furthermore, the erosion of patient visits per veterinarian⁷ may be correlated with a fundamental elasticity between price and demand, despite an oft-repeated tribal knowledge belief that price increases in veterinary medicine do not result in fewer transactions (i.e., that price and demand are inelastic). It is not the purpose of this section to explore every possible headwind in the for-profit economic model, but the nonprofit competitive threat is just one of an emerging suite of new challenges affecting the traditional veterinary practice.

Financial Distinctions Between Nonprofit and For-Profit

The theoretical example objectively illustrates a sense of proportion of the tax advantage afforded the nonprofit and the financial benefits to the for-profit owner.

SECTION 7: Considerations for Veterinarians

Nonprofit vs. For-Profit Veterinary Services Modeling

References

1. Dicks MR, Bain B, Knippenberg R, Greenhill L. 2016 AVMA Report on the Market for Veterinary Services. *Am Vet Med Assoc*. March 2016. p 34.
2. Dicks MR, Bain B, Knippenberg R, Dutton B, Ouedraogo F, Hansen C. 2017 AVMA Economics Report of the Market for Veterinary Services. *Am Vet Med Assoc*. May 2017. p 15.
3. Dicks MR, Bain B, Knippenberg R, Dutton B, Ouedraogo F, Hansen C. 2017 AVMA Economics Report of the Market for Veterinary Services. *Am Vet Med Assoc*. May 2017. p 50.
4. Dicks MR, Bain B, Knippenberg R, Greenhill L. 2016 AVMA Report on the Market for Veterinary Services. *Am Vet Med Assoc*. March 2016. p 63.
5. Paul M. Divided we fall: Nonprofit facilities and for-profit veterinary clinics seem constantly at odds. *dvm360 Magazine*. December 1, 2013. <http://veterinarynews.dvm360.com/divided-we-fall-nonprofit-facilities-and-profit-veterinary-clinics-seem-constantly-odds>. Accessed September 26, 2018.
6. Dicks MR, Bain B, Knippenberg R, Dutton B, Ouedraogo F, Hansen C. 2017 AVMA Economics Report of the Market for Veterinary Services. *Am Vet Med Assoc*. May 2017. p 7.
7. Dicks MR, Bain B, Knippenberg R, Greenhill L. 2016 AVMA Report on the Market for Veterinary Services. *Am Vet Med Assoc*. March 2016. p 71.



[← Back to Table of Contents](#)

SECTION 7: Considerations for Veterinarians

Access to Care in Veterinary Practice

Discussion – Access to Care in Veterinary Practice

AVCC Member: Brian Forsgren, DVM

Introduction

The following discussion is an opinion piece serving as an overview of a broad range of issues and attitudes that are relevant to the access to veterinary care crisis that exists, impacting the health and welfare needs of our nation's pets. The basis for the veterinary profession is rooted in care and the idea of service to the community. However, economic concerns for these providers are an obvious issue that needs to be addressed. The rise in empathy and compassion for all animal species is a remarkable phenomenon of our time. Appreciation for the dynamic of pet ownership and the intensification of the relationship known as the human-animal bond is highly significant as veterinarians begin creating a health policy for the profession. Currently, the American Veterinary Medical Association (AVMA) has begun an initiative to refocus the profession's societal obligations in the One Health campaign.

Moreover, the “social ethic,”¹ or the public's expectations of veterinary service providers, is a factor that needs to be recognized and proactively managed by the profession for the benefit of the human-animal bond. The pillar upon which all medical professions are based is *primum non nocere*—first, do no harm. Because veterinary providers adhere to this pillar, it is understood that a pet's lack of access to some level of veterinary care is harmful. Providing access is implicitly part of the “social ethic” mandate and the veterinary profession's responsibility, being proactive in the area of access to care and service to the human-animal bond.

“Social Ethic” Mandate

Providing access is implicitly part of the “social ethic” mandate and the veterinary profession's responsibility, being proactive in the area of access to care and service to the human-animal bond.

Access to Veterinary Care in Small Animal Practice: A General Practitioner's Point of View

Many veterinarians accept the ethical imperative to provide care along the entire socioeconomic spectrum, which is rooted in the context of the “social ethic” and public expectations.

Consider the following familiar occurrence in small animal clinics: A Good Samaritan finds an injured cat on the side of the road. The Samaritan rolls the animal into a blanket, hops into his car, and arrives at a local clinic. Upon presenting the animal and the situation to the front desk staff member, the first question he is asked is, “Are you willing to accept financial responsibility for the care of this animal? Who is going to pay the bill?”

By unwittingly prioritizing payment over care for the patient, a wrong message is sent to the Good Samaritan, as well as other clients in the waiting room. Instead, the appropriate response to such a scenario is to prioritize the animal's health and welfare. The first steps are to stabilize the patient, control pain, and determine a diagnosis, a prognosis, and a case management plan.

The public holds the veterinary profession in high esteem as the ultimate caretakers of all animals and the human-animal bond. The scene depicted above may be perceived as a violation of that trust. The public intuitively perceives the veterinary profession as the people that prioritize empathetic care over profit. Expand this scenario to the much larger reality of the socioeconomically disenfranchised pet owners, and things become much more complex.

The public's ethical expectations will mandate that the profession respond to the bigger picture of animal care as the intensification of the human-animal bond continues to expand.

SECTION 7: Considerations for Veterinarians

Access to Care in Veterinary Practice

Appreciating the Evolution of Small Animal Practice

Small animal exclusive care facilities can be seen as an outgrowth, as mixed animal practices in the 1950s responded to the rise of the middle class and the flight of populations with wealth to the suburbs. The family dog and cat became seen as a pet, rather than a utilitarian item to help with the farm. The development of the middle class also brought the financial means to care for pets, as well as an emotional attachment to them.

Fast forward to 2018 and the situation has changed dramatically. Small animal exclusive care facilities are the norm. Expansion to 24-hour emergency clinics and specialty only practices are commonplace in many economically viable communities. However, communities without economic support do not have these facilities readily available to them.

The intensification of the human-animal bond and the elevation of the status of pets has been acknowledged by the profession. Pet owners with financial means have a multitude of care options, extensive lifesaving therapeutics, and wide-ranging surgical procedure possibilities, which all mimic the explosion of health care options in the human field.



The evolution in care options and availability of new technologies is an ideal scenario consistent with the sense of responsibility for the health and welfare of the needs of our pet animal populations. Nevertheless, these high-tech advancements and care options create a steep cost factor associated with state-of-the-art care modalities, excluding lower-income pet owners, who are unable to bear the expense.

The treatment of the injured animal presented by the Good Samaritan represents a good example of medical case management in a resource-limited situation. The clinic that accepts this animal initiates palliative care, pain control, and a clinical monitoring safe harbor to observe and respond to changes in the animal's physical condition. Blood work, radiographs, MRI, and a laundry list of diagnostics simply are not financially feasible. The key component to providing this opportunity for care is the general practice veterinarian.

Certainly, some empathetic care is warranted in this case. No care is not an option. Above all, do no harm.

The financial viability of the clinic is an important reality in the management of this case. The clinic exists in the community to serve the medical needs of the pet owners to the best of its ability. If the clinic goes out of business, the access to care options for all the animals within that community suffers.

Several years ago, the typical veterinary care delivery model was a community needs-based model, where clinics were focused as a problem-solving community service. Whatever problems arose within the community's human-animal interactions were solved by the community-based clinic operation. In such a model, the veterinarian was the key person in the problem-solving approach. The buck stopped there. There were no referral or specialty services within the geographical area. Although that model still exists in many areas today, the options for the pet owner expand as the economic viability and status of the community increase.

SECTION 7: Considerations for Veterinarians

Access to Care in Veterinary Practice

The current landscape of veterinary care models may be divided into at least four types:

1. High tech, high cost, with a heavy emphasis on specialty care.
2. A visit-intensive model, emphasizing wellness, vaccinations, dental health, and marketing.
3. Nonprofit, targeting low-income clients, with an emphasis on preventative care, like vaccines and spay/neuter (in some rare instances, sick animal care and other needed services).
4. A fourth way: A general practitioner driven model, focused on problem-solving with an awareness of community and individual animal care and welfare needs, while maintaining a grasp of financial reality.

To provide a “spectrum of care*” that services all pet owners all four models need to be participatory in the process. Perhaps the most impactful model for the lower end of the socioeconomic group of pet owners is the Fourth Way model. The Fourth Way model is driven to provide “incremental care” (described in more detail later in this section) in a manner that is cost sensitive and focused on the human-animal bond. In resource minimized veterinary-client-patient relationship situations, the mission of the Fourth Way model is key.

The Fourth Way model is a reflection of the more traditional roots of veterinary care delivery, dependent on pragmatic and empathetic general practitioners. Case management at such a practice would be four-dimensional, meaning the pet, the client, the human-animal bond, and the veterinary-client-patient relationship are all in alignment with the financial reality of the situation.

Current veterinary practice management and trade journals focus on the first two models of care delivery. Contrastingly, the nonprofit models have traditionally focused on spay/neuter and vaccination. Therefore, veterinary practice management and trade journals have not routinely emphasized issues in nonprofit veterinary care models.

Additional Complicating Factors within the Culture of Veterinary Medicine

Advancement of expertise and technology is a driving force in the evolution of veterinary care. We live in an era of remarkably rapid change. The impact of economics in this time of medical miracles is certainly amplified by economic opportunity. Medical advancements should focus on the care of the individual patient. However, community healthcare issues often take a back seat to the focus on high tech cures and new pharmaceutical wonder drugs.

Obviously, the remarkable medical progress we see in veterinary medicine is a laudable achievement. The impact of this phenomenon has led to changes within the basic culture of the profession. Within the educational and care giving aspects of the veterinary profession, the following list of factors have developed that tend to highlight individual animal care rather than incorporating community needs-based animal health and welfare care:

1. Veterinary academia often emphasizes specialty care, while minimizing the development of a general practice skillset.
2. Teaching faculty members often have specific specialty-focused tracks.
3. The gap between general practice and specialty widens.
4. Dramatic increases in the cost of veterinary education;² graduating veterinarians face an average educational debt of more than \$167,000.³



* For the purposes of this report, the definition of “spectrum of care” is: The continuum of veterinary care from the very basic to the most advanced. It encompasses preventive care, like vaccines and spay/neuter; primary care, whose major task is the early detection and prevention of disease and the maintenance of health; secondary or acute care, which is concerned with emergency treatment and critical care; and tertiary care, which includes highly technical services for the treatment of pets with complex or complicated health needs.

SECTION 7: Considerations for Veterinarians

Access to Care in Veterinary Practice

5. Veterinary teaching institutions increase enrollment to meet operating costs.
6. Within the veterinary culture, there is a perceived devaluation of the general practitioner approach as care providers.
7. Care delivery promotes the “gold standard” as opposed to an “incremental care” delivery option.
8. In worse case academic scenarios, veterinary students are exposed to fear of legal retribution for not providing gold standard care than they are about treatment options.
9. The idea of “evidence-based” medicine is a newer concept in the veterinary profession.
10. Corporate entities often consolidate, or “systemize,” veterinary clinics, reducing the role and effectiveness of the general practitioner.
11. Mentoring of new and recent graduates is devalued within such a system.

These issues are mentioned as reflections of what is occurring in the world of veterinary medicine. This is not a criticism but rather a set of situations that needs to be recognized if a problem/solution scenario is going to be envisioned.

Before solving an access to veterinary care situation, an actual epidemiological appreciation for the community’s needs must be understood. The following list is offered as an overview of the community’s veterinary and medical needs:

Types of Care: The Epidemiology of Community Needs

1. Preventative/Wellness Care
 - a. Vaccines
 - b. Parasite control
 - c. Behavior
 - d. Reproductive care (i.e., spay/neuter)
 - e. Nutrition
 - f. Client education throughout the pet’s life cycle
2. Sick Care
3. Emergency/Urgent Care
4. Life Cycle Care
 - a. Pediatrics
 - b. Mid-life
 - c. Geriatrics
 - d. Hospice and end of life care



All graduating veterinarians obtaining a license can legally provide care for all of the above community needs, and treatments can be managed by a general practitioner. Postgraduate mentoring, personal enthusiasm, and continuing education give the general practitioner the opportunity to take their skills to whatever level they choose.

Incremental Care

The continuing evolution of the “standard of care” is a critical issue, which is also part of the ethical equation. This is complicated by variations in the socioeconomic reality of pet health care consumers, financial investment by the practitioner and business viability, and defensive medicine (i.e., reducing exposure to legal liability and peer-censure). The standard of care “creep” is not intentional; it has become a societal expectation for the practitioner to administer types of care because the technology is available, there is an increased risk of liability (fear of being sued if everything is not done), and the economics of maintaining a comprehensive medical facility (i.e., using technology because it produces income). Taken alone, the standard of care approach tends to embrace the “gold standard or nothing” argument. Nevertheless, in the face of minimal resources, doing something to reduce suffering is better than doing nothing. A veterinary care system that does not recognize the need for a middle-ground approach to case management with a sense of appreciation of socioeconomics, the animal’s welfare, and

SECTION 7: Considerations for Veterinarians

Access to Care in Veterinary Practice

the impact of the human-animal bond connection is in violation of Tannenbaum's first fundamental approach to our role as veterinarians.⁴ Providing some level of care while considering the situation's financial and empathetic realities would seem to be a logical, moral, and ethical approach. This would require a collaborative, common sense approach by all stakeholders.

A solution to this growing problem is the standardization of incremental care. Incremental care is defined as patient-centered, evidence-based medicine* to achieve the best possible outcomes for the patient in the context of limited resources. It avoids non-critical procedures to help control costs and focuses on prevention, early diagnosis and intervention, and in-home care that can be provided by the client. Incremental care may not include certain diagnostic procedures and treatments in the early stages of patient management but efficaciously addresses the medical problem. Simply put, it is clinical care that is a better alternative to doing nothing.

Incremental care uses the general practitioner's problem-solving approach to case management. That is, tiered therapeutic options over a time, where the primary caregiver monitors clinical response with an eye on attributable causality when making a diagnosis and treatment plan. The key components to incremental care case management are:

1. Practical-minded general practitioner
2. Facilities and available equipment
3. Trained and motivated support staff
4. Client communication
5. Use of new technology options (e.g., telehealth)

Managing the case incrementally requires frequent communication with the client and reevaluations by clinical exam, ideally by the original attending veterinarian. Client communication is key. Client acceptance and compliance are important. Also, it is important that state licensing boards and professional liability insurance companies recognize incremental care as appropriate medical care when there are financial restraints.

To see incremental care case management in action, refer to [Appendix 6: Incremental Care Clinical Example](#).

Conclusion

Veterinary general practitioners are healers, who think through options and make recommendations based on education and their responsibility to the pet and the pet owner. Moreover, the practicing veterinarian is the ultimate guardian of the integrity of the human-animal bond. The care of the individual patient, as exemplified by the clinical example provided, needs to be broadened to provide a care network that can manage the health and welfare needs of the community in which we practice. The goal of incremental care is to make the animal as healthy and comfortable as possible, while preserving the integrity of the human-animal bond. It takes into consideration the quality of life within the socioeconomics of the pet owner.

First Branch of Veterinary Ethics

Descriptive: values or standards of the profession outlining what is acceptable behavior determined by peers.

- Jerrold Tannenbaum, JD

The Goal of Incremental Care

The goal of incremental care is to make the animal as healthy and comfortable as possible while preserving the integrity of the human-animal bond. It takes into consideration quality of life within the socioeconomics of the pet owner.

* For the purposes of this report, the definition of evidence-based medicine is: The conscientious, explicit, and judicious use of current best proof in making decisions about the care of individual patients. It seeks reliable answers that can help find the best treatment; it is based on scientific proof and not just theories and/or anecdotes.

SECTION 7: Considerations for Veterinarians

Access to Care in Veterinary Practice

References

- 1 Rollin B. Animal production and the new social ethic for animals. The Humane Society Institute for Science and Policy Animal Studies Repository website. https://animalstudiesrepository.org/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1041&context=acwp_awap. Updated 1993. Accessed September 18, 2018.
- 2 2017 AVMA & AAVMC Report on The Market for Veterinary Education. AVMA and the Association of American Veterinary Medical Colleges website. 2017.
- 3 Financing Your Veterinary Medical Education. AVMA website. <https://www.avma.org/About/SAVMA/StudentFinancialResources/Pages/default.aspx#refs>. Accessed September 18, 2018.
- 4 Tannenbaum J. *Veterinary Ethics-Animal Welfare, Client Relations, Competition and Collegiality*. 2nd ed. St. Louis, MO: Mosby; 1995.



SECTION 8

Summary and Conclusions

Data gathered from the national population study of pet owners conducted by [CARE](#) and the Associated Research corroborates financial constraints as the most prevalent barrier to veterinary care. Given the estimated number of affected families, this is arguably the most significant animal welfare crisis affecting owned pets in the United States, impacting not only the estimated 29 million dogs and cats in families receiving public assistance but also Americans working full-time who find themselves living paycheck to paycheck.

The following is a summary of this compilation of research and scientific papers.

Pet Owners

The CARE Pet Owners Survey found that 27.9% of pet owners, or one out of four, experience barriers to veterinary care. Other important take away points include:

- *Households with lower incomes are more likely to own more than one pet.*
- *Care is most frequently sought from private veterinary clinics.*
- *80% of pet owners agree that their pets are family members.*
- *Younger pet owners are more likely to have pet insurance.*
- *Dogs are more likely to be purchased, while cats are more likely to be acquired as strays.*
- *Younger pet owners are less likely to have their pet spayed or neutered but also more likely to take advantage of free/reduced cost services.*
- *Dogs are less likely to be spayed/neutered than cats.*

This study also found that experiencing a barrier to care increases as income decreases, thus establishing that lack of access to veterinary care is primarily associated with lower socioeconomic status. This may help explain why younger pet owners are more likely to face barriers, since their income levels are, on average, lower than their older counterparts are.

The overwhelming barrier for all groups of pet owners is financial for all types of care (80.0% for preventative care, 73.8% for sick care, and 55.7% for emergency care). This suggests there is a need for a financial support system for accessing veterinary care that opens the door for more families to receive it.

Non-Financial Barriers

Besides financial barriers, less frequently reported barriers to veterinary care, which varied in frequency by type of care, included:

- Not knowing where to get care
- Lack of transportation
- Not having the proper equipment (like crates and leashes)

Veterinary Service Providers

It is reaffirming to learn that most veterinarians who responded to the survey agree that all pets deserve some level of veterinary care and view owned pets as family members. In addition, most agreed that there is a relationship between the owner's emotional health and being able to obtain veterinary care for their pet. These attitudes can serve as a driver to eliminate barriers to veterinary care.



SECTION 8: Summary and Conclusions

In contrast, the majority of veterinary respondents do not think everyone is entitled to own a pet. However, veterinarians in urban areas were more likely to believe that everyone is entitled to a pet and that society bears some responsibility to help care for all pets. There was broad agreement shared during the focus groups with veterinarians that there is a need for public education about the real costs associated with pet ownership, including veterinary care.

Many respondents felt obligated to provide the same standard of care to all their patients. About half of them indicated they are worried about professional liability when providing less than the highest standard of care. However, when pet owners cannot afford it, most (84.8%) are comfortable offering alternatives.

Comments offered by respondents suggest a belief that there is tension between for-profit and nonprofit veterinary service providers. This may be largely related to the perception that nonprofits' tax-exempt status provides an unfair competitive advantage. The majority of veterinary respondents think that there should be means testing to justify pet owners using nonprofit (or any reduced-cost) services. Also, some of those who are employed in a for-profit practice shared they felt the profession is being “de-valued” when nonprofit clinics offer reduced cost immunizations and spay/neuter services. Furthermore, they feel they are losing their client base to low-cost clinics. Those employed in the nonprofit sector argue that few pet owners they serve could seek care from a for-profit practice. However, it was acknowledged that research has not been conducted to allow either side to substantiate their arguments.

Respondents indicated that the rising cost of completing veterinary school and medical supplies is preventing more veterinarians from offering care at reduced-costs to vulnerable populations than in times past. If the cost of providing care were reduced, veterinarians would be willing to offer services at lower prices. Options to help with the financial burden that veterinarians face include tax incentives, educational debt forgiveness, continuing education credits, and product discounts from corporations.

Respondents felt they needed more education about meeting the needs of underserved pets, alternatives to specialty care, and offering varying levels of care.

There is uncertainty about the benefits of pet insurance. Almost half of the respondents (48.8%) disagreed with requiring pet owners to purchase an insurance policy, and a substantial portion (35.1%) indicated they neither agreed nor disagreed with this idea. This finding indicates an opportunity to explore what role pet insurance might play in resolving the issue of access to veterinary care.

Current Practices

Most veterinary service providers felt a commitment to explore ways to address the problem of access to veterinary care. Respondents were presented with a short list of strategies to increase awareness and access to veterinary care for underserved pets. Four out of five respondents (81.7%) indicated they had taken some action to mitigate the problem. There were several prevalent solutions reported. One was making concerted efforts to learn more about the problem and to expand their skill set; thus, enabling them to better meet the needs of all pets. The most frequently reported action was seeking training in various treatment options and skills. Virtually all who were engaged in private practice (98.4%) reported they had implemented at least one financial strategy in the past



SECTION 8: Summary and Conclusions

year to address and mitigate the problem. The most frequently cited strategy was exploring treatment options with clients to best match their economic constraints. Other common strategies were making clients aware of payment options and offering services at a reduced cost or on a pro bono basis. Less common strategies were making financial contributions to a general fund, such as an “Angel Fund” or a fund established for a specific pet.

Pet Owners Experiencing Housing Insecurity

A written survey based on the CARE Pet Owner Survey was administered to pet owners attending events associated with three geographically diverse veterinary outreach programs in order to include a population that may be too transient to be readily reached by telephone or web panel. In many ways, respondents to this survey were similar to the CARE survey. They demonstrated high levels of attachment to their pets, more dogs than cats were intact, sought care at approximately the same rate, and markers of low income were associated with barriers to care. Also, like the CARE survey respondents, these respondents reported facing barriers to preventative, sick, and emergency care, although in much greater numbers. Similarly, economic barriers were by far the most commonly reported.

Respondents were different from the CARE survey respondents in several important ways. These pet owners were two times more likely to be unable to obtain preventative care and three times more likely to be unable to obtain sick and emergency care. Older age was associated with the ownership of more pets as well as greater barriers to care. Respondents were more likely to have used a free or reduced cost clinic to have their pets spayed or neutered as opposed to a private practice veterinarian. The source of their pets was also very different, with the majority of pet owners acquiring their pet through a method likely to be non-purposeful, such as gift, stray, family or friend, as compared to adoption or purchase. Much of this difference was driven by the category of family and friends. Non-purposeful acquisition of pets is likely to compound the issues that this population faces when seeking veterinary care.

Pets as Family

People form the same type of emotional attachment to their pets as they do to other family members and most consider them part of the family. The social support pets provide humans has been demonstrated by physiological benefits, such as lower blood pressure, fewer doctor visits, and increased physical activity. In addition, pets can provide psychological benefits, such as decreased rates of depression, stress, anxiety, decreased loneliness, unconditional love and support, increased self-esteem, and connection to the community.

The positive emotional impacts that pets can have are particularly important for vulnerable populations, such as the elderly, children, and the homeless, who may have stronger attachments to their pets.

When owners cannot provide needed care or afford veterinary services, they are at risk of relinquishing their pets. This is stressful for the entire family.

When addressing the barriers to accessing veterinary care, it is important to have a collaborative and interdisciplinary approach. Social workers trained in the human-animal bond can be important members of the interdisciplinary team due to the unique training of the profession of veterinary social work, which not only addresses the needs of people, particularly the vulnerable and oppressed, but also takes into account all of the systems that impact an individual.



SECTION 8: Summary and Conclusions

Animal Law: Pets as Non-Property

The law evolves with changing social conditions and attitudes. The nature of the family has gone through many transitions in the past fifty years. As the composition of the core family has become smaller, the position of the companion animal has grown in importance. Many of these animals are physically and emotionally integrated fully into households around the country. The importance of pets to so many humans has created a political space for enhancing the legal status of companion animals.

Pets are becoming a part of family law. It is now possible to create a trust for the care of an animal after the owner dies. This is available in all fifty states. More recent is the enhanced visibility of animals in divorce proceedings. Since 2016, three states have adopted laws that allow a judge to consider the interest of any companion animal when determining a property settlement within a divorce. Companion animals are increasingly covered under court granted protective orders against vindictive spouses. Criminal law is becoming more demanding of animal owners. In many states, veterinary care is now required as a matter of criminal law. As we recognize the importance of companion animals to so many, we should also recognize that providing adequate care for these animals is a societal problem, not just a personal one.

Public Health Implications of Pets without Veterinary Care

Approximately 68% of households in the United States have at least one pet, and these companion animals have long been recognized as having the potential to positively impact human health and wellbeing. However, pet ownership can potentially have negative impacts, such as the transfer of diseases to humans. Proper education and access to routine veterinary care serves to mitigate the health risks to humans associated with pet ownership. Understanding the role that access to veterinary care plays in the health of not just pets but also their owners and, by extension, the communities where they coexist is essential to good public health practice and to improving the health of all.

Nonprofit vs. For-Profit Veterinary Services Modeling

The predominant form of business delivering companion animal veterinary services remains the 1-2 doctor independently owned for-profit veterinary practice.

There has been a historical friction between some of these independent practice owners and perceived (or real) competition from nonprofit organizations offering veterinary services to the public. More recently, the economic success of private veterinary practices (and indeed, veterinarians) has been challenged by economic cycles, expanding competition, loss of pharmacy, spay/castration, vaccine revenue, and increasing complexity in management, human resources. Simultaneously, nonprofit organizations have been hiring more veterinarians skilled in shelter medicine and are exploring expansion of veterinary services into the general public market.

The theoretical example presented in this report is a comparison/contrast of two small animal practices whose only difference is form of incorporation, a for-profit vs. a nonprofit. It objectively illustrates the financial distinctions between them and gives a sense of proportion to the tax advantage afforded the nonprofit and the financial benefits to the for-profit owner. Many other nonprofit business models exist, particularly indigent/low-income spay/neuter or preventive care clinic models that service a very different market than most for-profit practices. This model is a “worst case” scenario for a nonprofit charging market rate fees on par with other local private veterinary service providers.



SECTION 8: Summary and Conclusions

Discussion – Access to Veterinary Care in Veterinary Practice

This discussion by guest author, Dr. Brian Forsgren, covers a broad range of issues and attitudes that are relevant to access to veterinary care in veterinary practice. The author advances the position that the public's ethical expectations mandate that the profession respond to the bigger picture of animal care as the intensification of the human-animal bond continues to expand.

Veterinary general practitioners are healers, who think through options and make recommendations based on education and their responsibility to the pet and the pet owner. Moreover, the practicing veterinarian is the ultimate guardian of the integrity of the human-animal bond. The care of the individual patient, as exemplified by the clinical example provided, needs to be broadened to provide a care network that can manage the health and welfare needs of the community in which we practice. The goal of incremental care is to make the animal as healthy and comfortable as possible while preserving the integrity of the human-animal bond. It takes into consideration quality of life within the socioeconomics of the pet owner.

It is logical to think that people who cannot afford veterinary care should not have a pet. However, many do, and there is no apparent movement to take them away, nor should there be, given the human-animal bond, except in the most egregious circumstances.

Consequently, it is vitally important that the veterinary profession, in collaboration with others, ensure access to veterinary care for these families.



[← Back to Table of Contents](#)

SECTION 9

Recommendations to Stakeholders

The AVCC's recommendations are intended to focus stakeholders as they seek to eliminate barriers to veterinary care and develop public policy strategies to ensure access to veterinary care for all pets, regardless of the family's socioeconomic status.

RECOMMENDATION #1: Improve veterinary care delivery systems to serve all socioeconomic groups.

Too many families are underserved by the current system of delivery of veterinary care. Improving access to veterinary care for families with limited income will benefit from a One Health approach, including new funding and patient care strategies. In addition, an overwhelming majority of Pet Owners Survey respondents, regardless of household income, reported they most frequently sought care from a private veterinary clinic rather than community organizations or other sources of care. This substantiates the need to align existing private veterinary service providers with a system of veterinary care for those without it.

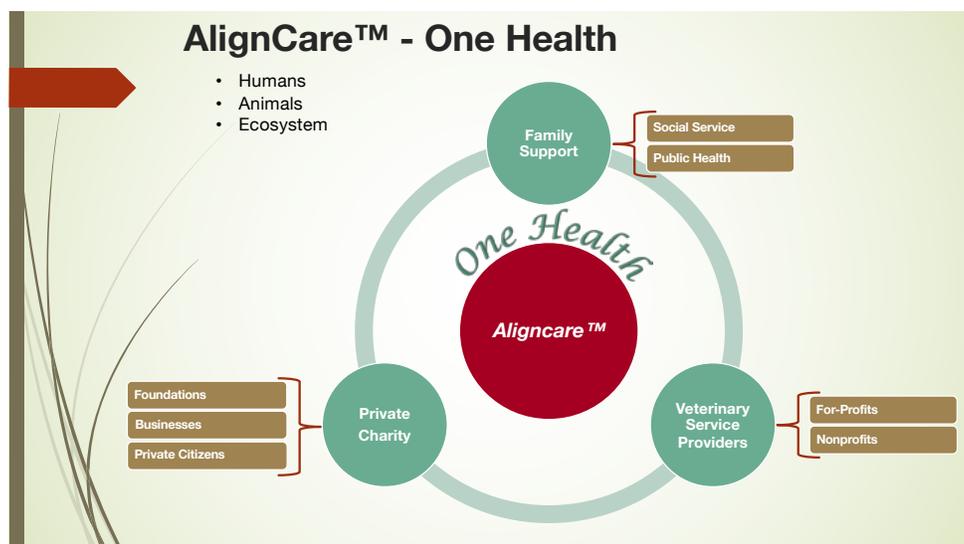
Options for Low-Income Families

A review of the literature addressing veterinary care in underserved communities concluded that more research is needed regarding the effectiveness and efficiency of community medicine initiatives.¹

The way most programs for low-income families are delivered fall into one of four categories:

1. Collaboration with veterinary service providers.
2. Mobile veterinary clinics.
3. Veterinary clinics designed specifically for low-income pet owners.
4. Veterinary services brought to the community.

An important strategy to more effectively reach underserved families is to improve collaborations among stakeholders, aligning resources and efforts to improve access to veterinary care, including sick care. AlignCare™, a research and development project of subsidized veterinary care, funded by [Maddie's Fund®](#), is such a strategy. AlignCare™ targets families receiving public assistance. It is a One Health model that *aligns* resources from family support social service and public health entities with for-profit and nonprofit veterinary service providers, using charitable donations from foundations, businesses, and private citizens.



SECTION 9: Recommendations to Stakeholders

AlignCare™ merges these programs and activities into a One Health system of veterinary care, resulting in better health maintenance for the entire family. Period reports will be made available as the project progresses.

Options for Middle-Class and Above Families

Some middle-class families also struggle financially to cover veterinary care expenses for their pets. Although programs exist to assist this socioeconomic group, there is room for improvement.

Wellness Plans

Pet wellness plans are designed to ensure that pets have access to important preventative care by covering expenses associated with these services. These plans may include services like annual physical exams; vaccinations; spay/neuter surgery; flea, tick, and heartworm preventative; and teeth cleaning. They may also include diagnostics, such as blood panels, heartworm tests, fecal tests, etc. These necessary expenses are planned and predictable each year.

Health Care Credit Cards

Similar to regular credit cards, these products allow pet owners to secure a line of credit and have associated interest, fees, and limits. The difference between these cards as opposed to traditional credit cards is that they can only be used for veterinary and, in some cases, human health care expenses. The pet owner can apply at the time service is needed and used repeatedly without reapplying (subject to credit approval). This provides the pet owner with an option to pay a large sum of money for veterinary care and then pay it off in increments. In order to qualify, the pet owner must have a reasonable credit rating, but this option works for a substantial segment of the population.

Pet Health Insurance

Pet health insurance can help by reducing immediate out-of-pocket expenses for some or most of the costs of diagnosing, treating, and managing a pet's illness or injury. It can mitigate a healthcare crisis in which a needed medical intervention is more expensive than what a family's financial resources allow. However, currently only a small percentage of pet owners purchase pet health insurance. More research is needed for ways to increase participation.

A study showed that most veterinarians believe that pet health insurance coverage would decrease the frequency of economic euthanasia and financial stress of clients, positively impacting the veterinarian-client relationship. Also, the ability to provide the desired medical care for their patients would improve overall stress level and job satisfaction.²

Most pet health insurance companies in the U.S. use the indemnity insurance model. That is, a “fee-for-service” plan, where the insurance company pays a set portion of the total charges. Covered pet owners pay the bill directly to the veterinary service provider and then submit the receipt of the paid bill to the insurance company for reimbursement. The insurance company decides which services and procedures will be reimbursed, and any costs not covered are paid by the policy holder. For those who are not able to pay the initial bill—even with the promise of reimbursement—this model is not a viable option.

Options for All Socioeconomic Groups with Financial Need

There are several programs that may be offered by individual veterinary clinics to clients who have a need for financial assistance. They typically fall into one of four categories:

1. Charitable fund umbrella groups

These are programs that provide veterinary clinics with a way to offer financial support for veterinary services to clients facing personal financial hardships, as well as a means to support stray animals who are injured or pets rescued from abuse and neglect. This is done by the group serving as the umbrella 501(c)(3) organization, accepting donations on behalf of a veterinary practice. The funds are then used at the discretion of the veterinary practice to provide discounted or no-charge veterinary care for the pets of clients who have a financial need, and provide care for stray, neglected, and abused animals.

SECTION 9: Recommendations to Stakeholders

2. Angel Funds
This is a term often used to describe funds made available by veterinary clinics for clients in financial need to cover some or all the cost of services provided.
3. In-house payment plans
Offered to clients who do not qualify for other forms of credit. These plans allow the client to pay for services rendered incrementally over time.
4. Good Samaritan discounts
Discounts provided by some veterinary clinics for people who are willing to accept financial responsibility for a pet that is not theirs (for example, a stray animal they found).

Economic Models for Providing Veterinary Care

Although a compelling hypothetical for-profit vs. nonprofit veterinary service modeling example was provided in this report, the need for a more robust study of economic models for providing veterinary care is needed. The bottom line is that innovative business models that serve a broader population and various socioeconomic groups need to be developed for both corporate and privately owned veterinary practices. In addition, identifying if there is an “unfair competition” differential between for-profit and nonprofit veterinary service providers would be helpful.

RECOMMENDATION #2:

Provide incremental care to avoid non-treatment.

Historically veterinarians have found a way of providing veterinary care even when finances are barriers. The AVCC proposes the standardization of incremental care when financials are an issue, thus avoiding doing nothing. Incremental care is an improvement strategy that is patient-centered, evidence-based medicine in the context of limited resources. It avoids non-critical procedures to help control costs, while also achieving good outcomes for the patient. Incremental care focuses on prevention, early diagnosis and intervention, and in-home care provided by the pet owner, when appropriate.

More research is needed, including:

1. Characterization of an incremental improvement strategy using tiered therapeutic options based on clinical response over a time continuum.
2. How to best utilize technology (e.g., telehealth) to control costs.
3. Achieving client communication that facilitates patient care and monitoring, and informs when reevaluation is needed: for example, how to improve client acceptance and compliance.

An example of this type of research is the study conducted by Colorado State University that evaluated the outpatient treatment protocol for canine parvoviral enteritis.³ The results demonstrated that the survival rates of patients receiving outpatient care (80%) was almost as high as hospitalized treatment (90%), concluding that an outpatient protocol may be a reasonable alternative for dogs that cannot receive in hospital treatment for parvoviral enteritis.

One of the recommendations of the Initiative for Accessible Veterinary Healthcare (IAVH) is the establishment of a veterinary practice research network.⁴ This will be helpful in characterizing incremental care.

As incremental care is further characterized, veterinarians and veterinary students will need opportunities to learn how to practice it. Such training should assist in appropriate medical decision making and provide a better understanding of the consequences of administering—or not administering—a particular service or treatment.

It is important that state licensing boards and professional liability insurance companies recognize incremental care as appropriate medical care when financial constraints and other factors will not permit more advanced care. Doing so promotes non-defensive medicine and minimizes the veterinarian’s fear of legal repercussions and peer-censure.

SECTION 9: Recommendations to Stakeholders

RECOMMENDATION #3: Improve availability of valid and reliable information to educate pet owners.

Pet owners should be able to easily find and access information about how to care for their pet. It is important that this information reaches a diverse pet owning public, including low-income families.

Of the hundreds of comments received in the CARE Veterinary Service Providers Survey, many thought a key component of the solution is to provide education to pet owners about veterinary care and animal behavior. Pet owners can benefit from some means of identifying reliable sources of online pet information: for example, a certification program to verify accuracy would be valuable. Although the internet provides a convenient and wide-reaching distribution channel for pet educational material, other channels need to be explored to reach pet owners who do not have access to the internet.

Pet Ownership and Veterinary Care

The hundreds of comments received by the AVCC from veterinarians about pet education ranged from helping new pet owners select the best pet to fit their families, to a breakdown of the cost of veterinary care, to the benefits of spaying/neutering a pet, to what it means to be a responsible pet owner, including paying for planned and unplanned expenses.

The CARE Pet Owners Survey found that households with lower incomes are more likely to own more than one pet. Considering this, an educational outreach program about responsible pet ownership that is targeted to these families could be of tremendous benefit. This would help people who are considering pet ownership understand the financial cost of basic care, as well as veterinary care, before choosing to bring a pet into their homes. In addition, this type of outreach could include connecting with lower income families who already own a pet(s) with information about resources available to assist with care and promote pet retention.

Education is a cornerstone to build on.

One of the methods for researching barriers to veterinary care was to set Google Alerts, starting in June 2017, with search terms including “barriers to veterinary care,” “underserved pets,” “homeless pets,” “cost of veterinary care,” “pet insurance,” and “telehealth.” These search parameters generated three to twenty articles from the internet every day. It is evident that there are many existing resources available to educate families on a range of veterinary topics. It would be helpful to align existing resources such that the information is easily found, veterinarian-endorsed, and evidenced-based, providing an educational tool to which veterinary professionals could direct pet owners or anyone seeking valid and reliable information. According to the 2017 APPA National Pet Owners Survey, 60% of dog owners and 49% of cat owners use veterinarians as a source of information. Also, the internet was a source of information for 42% of dog owners and 48% of cat owners.⁵ These statistics support the idea that many stakeholders would benefit from a robust, user-friendly website.

Assistance with Veterinary and Pet Care

In addition to information about pet ownership and veterinary care, it would also be beneficial to align resources to help pet owners find information on sources of financial assistance, pet food bank locations, pet-friendly housing, places and qualifications for low-cost spay/neuter/vaccines, pet-friendly transportation options, and more, complementing what is already available from local animal welfare organizations.

Animal Law

As the human-animal bond tightens, society is gradually accepting the idea of pets as family members as a new social norm. Some workplaces are beginning to offer pet insurance as an employee benefit, allowing employees to bring their pets to work, taking “pawternity leave” when adopting a new pet, or taking bereavement time after the death of a pet.⁶ Changes in the social norms may drive changes in public policy, elevating the legal status of pets to that similar to children. All fifty states have animal cruelty laws in various forms. In some states, such as

SECTION 9: Recommendations to Stakeholders

Michigan, it is *specifically a crime* to negligently allow an animal “to suffer unnecessary neglect, torture, or pain.” However, the law is unclear as to how to balance the well-being of a companion animal with the lack of resources available to an owner. It may be that other states will pass similar laws regarding an owner’s responsibility to their pets and the legal implication of not providing needed care. The [Michigan State University Animal Legal & Historical Center](#) provides a comprehensive repository of information about animal law, with the ability to search by federal, state, and tribal laws. Familiarity with this resource would help veterinary professionals stay current on laws pertaining to pet ownership and responsibility, as well as the legal protections of pets.

Continuing Education for Veterinarians

The Veterinary Service Provider Survey generated dozens of comments suggesting it would be helpful to have more continuing education opportunities on topics related to access to veterinary care, such as providing veterinary care to underserved populations. The AVCC encourages the development and offering of educational opportunities to assist veterinary professionals in providing incremental care in a culturally competent way to underserved populations.

Zoonotic Diseases

Zoonotic diseases are another topic for improvement through education. Pet owners can become frustrated when they hear one recommendation from their physician and a different recommendation from their veterinarian regarding their risk of getting sick from their pets. A classic example of this is toxoplasmosis. Years ago, obstetricians would often advise pregnant women to get rid of their cats (some still do) to lower their risk of contracting this zoonotic disease, which can cause a miscarriage or malformation of the fetus. A better understanding about the life cycle of the organism, modes of transmission, and the risk of infection has led to more specific and rational advice for pregnant women, enabling them to keep their cat. It would be helpful to have consistent reliable sources of information to reduce confusion.

Education as a Way of Controlling the Cost of Care

No educational program can replace the expertise of a veterinarian nor the value of an in-clinic visit. However, education is critical to ensuring the health of pets and their families. A pet’s health and well-being can be greatly impacted by how well their owner is informed throughout all the pet’s life stages and engaged in their care. Since not everything in a pet’s life is preventable, education delivered in both a proactive and reactive distribution model will help pet owners know what to do when their pet gets sick or is injured and recognize when it’s time to take their pets to their veterinarian. Attention should be given to:

1. How, when, and where educational materials and advice should be distributed for maximum impact.
2. The range of distribution channels and media, including digital (web, text, newsletters, etc.), video (demonstrable how-to’s), and non-digital (books, pamphlets, etc.) outlets.
3. Education and advice about all aspects of pet wellness, including behavior and training; pet proofing and toxicities; simple self-care and first aid; diet, weight management and exercise; as well as environmental enrichment.
4. Learning designed for the whole family and the inclusion of materials that are family friendly, helping to foster a mindful next generation of pet owners.
5. Being culturally competent and geographically relevant, while meeting the unique needs of AlignCare™ participants.

Education will help pets and their people enjoy long, happy, and healthy lives, helping control the cost of care by preventing and mitigating problems.

SECTION 9: Recommendations to Stakeholders

RECOMMENDATION #4:

Develop public policies that improve access to veterinary care and pet retention.

Pets are personal private property, like a car or a table, and have been treated as such when disputes over possessions and damages and disposal have arisen. However, their legal status is evolving, and in many cases, they are similar to minor children. For example, Michigan is the first state to require that families provide care and will be held legally responsible in the case of failure to provide that care.

The other side of this responsibility is how to support pet owners who do not have the resources to provide for their pets as the law dictates. The AVCC recommends a One Health approach that aligns resources of veterinary and human health to ensure that the entire family, including human and pet, is having his/her needs met.

Pet-Friendly Transportation

The Pet Owner Survey reported that up to 15% of pet owners had barriers due to transportation issues, depending on the type of care sought. The AVCC recommends legislation that would allow pets on public transportation so that pet owners can affordably transport their pets to veterinary care providers.

Pet-Friendly Housing

The “Pets as Family” section pointed out that when it comes to homeless individuals in particular, many have indicated that they not only have difficulty affording care, but they also refuse services (i.e., shelters or transitional housing) as a result of accommodation policies not allowing animals. Many pets are unwillingly relinquished to the animal sheltering system each year, because of the lack of affordable housing that allows pets.

The AVCC recommends that more rental properties and temporary housing, such as homeless or domestic abuse shelters, accommodate pets.

Incentivizing Veterinarians

The Veterinary Service Provider Survey asked veterinarians for feedback regarding their interest in helping underserved populations of pets. Many responded that they would like to provide care to underserved populations, but they were restrained by personal finances or workplace rules about the type of care they could offer. The AVCC recommends further investigation into ways to incentivize veterinarians to provide care for these populations. Ideas include tax incentives, educational debt forgiveness, continuing education credits, and corporate donation of products.

RECOMMENDATION #5:

Other areas needing research.

Impact of Planned vs. Unplanned Pets

Both the CARE and Associated Research studies collected data about how pets were obtained, classified as purposeful or planned (i.e., adoption or purchase), and non-purposeful or unplanned (i.e., gift, stray, many from family or friends). Additional research is needed to understand the impact of how pets are obtained, especially in lower income families, as unplanned acquisitions can make budgeting and preparation more difficult. It would be interesting to know such things as:

1. Do unplanned pets experience barriers to veterinary care more frequently than planned pets?
2. Are planned pets more likely to be retained?
3. Is the human-animal bond stronger with planned vs. unplanned pets?
4. Is there education that can be provided that improves pet retention for both planned and unplanned pets?
5. Do planned pets receive better care than unplanned pets?

SECTION 9: Recommendations to Stakeholders

Impact on Data Results if “Caring For” Pets Where Included

CARE Pet Owners Survey respondents were asked to self-identify as a pet owner as defined by someone who has a dog and/or cat. Therefore, those who care for a dog and/or cat but may not consider themselves as the pet owner did not qualify to participate in the survey. Additional research is needed to determine if the data results would be different if those who self-identify as “caring for” a pet, but not the pet owner, were included.

Attitudinal Differences Between For-Profit and Nonprofit Veterinarians

The CARE Veterinary Service Providers survey indicated attitudinal differences between for-profit and nonprofit veterinarians regarding pet ownership and access to veterinary care. More research is needed to better understand these differences and their implications for increasing access to the underserved.

Geographical Attitudinal Differences Between Veterinarians

The CARE Veterinary Service Providers survey found that veterinarians in self-identified urban areas were more likely to believe that everyone is entitled to a pet and that society bears some responsibility to help care for all pets. Additional research is needed to further explore these differences.

References

1. LaVallee E, Mueller MK, McCobb E. A systematic review of the literature addressing veterinary care for underserved communities. *J Appl Anim Welf Sci*. 2017;20(4):381-394.
2. Kipperman B, Kass P, Rishniw M. Factors that influence small animal veterinarians’ opinions and actions regarding cost of care and effects of economic limitations on patient care and outcome and professional career satisfaction and burnout. *J Am Vet Med Assoc*. 2017;250(7):785-794.
3. Venn EC, Preisner K, Boscan PL, et al. Evaluation of an outpatient protocol in the treatment of canine parvoviral enteritis. *J Vet Emerg Crit Care*. 2017;27(1):52-65.
4. Stull JW, Shelby JA, Bonnett BN, Block G, Budsberg SC, Dean RS, Dicks MR, Forsgren BW, Golab GC, Hamil JA, Kass PH, King LJ, Lund EM, Maddux ML, McFarland JM, McKenzie BA, Moyer MR, Olson PN, Wittum TE. Barriers and next steps to providing a spectrum of effective health care to companion animals. *J Am Vet Med Assoc*. 2018;253(11):1386-1389.
5. APPA National Pet Owners Survey. American Pet Products Association website. http://www.americanpetproducts.org/pubs_survey.asp. Accessed September 13, 2018.
6. Funto O. These are the most pet friendly companies to work for. Moneyish website. <https://moneyish.com/ish/these-are-the-most-pet-friendly-companies-to-work-for>. Updated June 22, 2018. Accessed September 6, 2018.

The AVCC Report

Improving access to veterinary care requires insights into and understanding of barriers faced by pet owners and veterinary service providers. The AVCC’s report offers insights that improve our understanding, and exposes areas needing additional study.

Appendix 1: AVCC Member Biographies

Anne Bayer, DVM

Partner, Open Door Veterinary Care

Coalition Representative Group:
Nonprofit Veterinary Service Providers

Dr. Anne Bayer has a particular interest and commitment to developing a sustainable, affordable, full service veterinary care model that will provide services for all cats and dogs, regardless of the client's income level. She is keenly aware that many companion animals are relinquished to shelters because the owners are financially unable to secure veterinary services. Providing this model is the mission of Open Door Veterinary Care.



Anne was previously the Senior Director of Medicine at Humane Alliance, a Program of the ASPCA. She was instrumental in developing six comprehensive mentorship programs attended annually by more than 1,000 veterinary professionals. She dedicated almost eight years of service to this department in an unswerving effort to improve the standard of care for patients of spay/neuter clinics in communities across the nation.

Prior to employment with Humane Alliance, Dr. Bayer worked in private veterinary practice for seven years. She has lived in Asheville, North Carolina since graduating from Kansas State University College of Veterinary Medicine in 2003. Her free time is devoted to mountain biking, kayaking, and entertaining her little dog Mini.

Michael Blackwell, DVM, MPH

Director, Program for Pet Health Equity
University of Tennessee, Knoxville, College of Social Work

Coalition Representative Group: Chair

A life of public service is what exemplifies Dr. Michael Blackwell. Like his father, he earned a Doctor of Veterinary Medicine degree from Tuskegee University. He also earned a Master of Public Health degree from Loma Linda University.

Dr. Blackwell's career has been anything but traditional. He currently serves as the Director of the Program for Pet Health Equity, College of Social Work, University of Tennessee, Knoxville. His mission is to improve access to veterinary care, especially for families with limited means. He chairs the Access to Veterinary Care Coalition. Previous to this position, Dr. Blackwell served as:

- Dean, College of Veterinary Medicine, University of Tennessee
- Chief of Staff, Office of the Surgeon General of the United States
- Deputy Director, Center for Veterinary Medicine, Food and Drug Administration
- Chief Veterinary Officer, U.S. Public Health Service
- Chief Veterinary Officer, The Humane Society of the United States.



During 23 years on active duty, he achieved the rank of Assistant Surgeon General (Rear Admiral) of the U.S. Public Health Service Commissioned Corps. Also, he owned and operated private veterinary practices in Oklahoma and Maryland.

SECTION 10: Appendices

Appendix 1: AVCC Member Biographies

Dr. Blackwell has received numerous awards and recognitions, most notably, the U.S. Public Health Service Distinguished Service Medal (which is the highest personal honor award), and the Meritorious Service Medal (the second highest personal honor award). He also twice received the Surgeon General's Exemplary Service Medal.

Ted Cohn, DVM, AVES (Hon)

Senior Consultant, DVM Consultants

Coalition Representative Group: Other Animal Care Professionals

Dr. Ted Cohn has devoted almost forty years of service to the people and animals of Colorado and the veterinary medical profession. Since graduating from Tuskegee University with his DVM degree, Ted has distinguished himself as a veterinarian and a leader, both locally and nationally.

Dr. Cohn began his career in private practice as an associate veterinarian at Aspenwood Animal Hospital. Next, he took a position at University Hills Animal Hospital, where he was a partner and hospital director. He also served as a veterinarian on call for the Denver Zoological Gardens.

As for his work in leadership, Dr. Cohn has served in numerous positions, including as the president of the Denver Area Veterinary Medical Society, the Colorado Veterinary Medical Association (CVMA) and the American Veterinary Medical Association. He served for six years on the Board of Directors for the Animal Assistance Foundation (AAF), the last two years as the foundation's treasurer. The AAF is a Colorado based group that actively supports improvement of animal welfare within the state, through grant making.

Dr. Cohn was honored as the recipient of the CVMA President's Award twice and named the Colorado Veterinarian of the Year for 2006. The Colorado Association of Veterinary Technicians honored him with their Technician Advocate Award, and Tuskegee University presented Dr. Cohn with their Distinguished Alumnus Award in 2013. Most recently, the CVMA awarded Dr. Cohn with their 2015 Distinguished Service accolade. Additionally, the American Veterinary Epidemiology Society awarded him with an honorary degree, in recognition for his ardent support for the One Health movement.

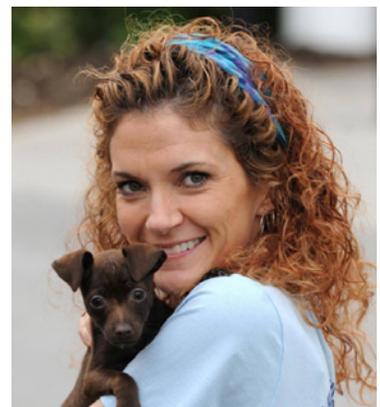


Teresa L. Fisher

Program Director, Companion Animal Initiative of Tennessee
University of Tennessee, Knoxville, College of Veterinary Medicine

Coalition Representative Group: Veterinary Schools

Teresa Fisher received her first BS in Computer Animation from East TN State University in 1997. After working on software to help train veterinarians she returned to school and received her second BS in Animal Science from the University of Tennessee in 2002 and is currently working toward her third BS, this time in Anthropology. She will begin her pursuit of a PhD in Cultural Anthropology beginning in the fall of 2016. She is also involved as a member of the Institute of Agriculture Employee Relations Committee at the University, the Commission for Women at the University, Treasurer of the Animal Control Association of Tennessee, a member of Animal Haven Knox County, a member of ASPCA, HSUS, and SAWA and is active in many other industry organizations. Her dedication to animal welfare is obvious in her involvement within the industry and community.



SECTION 10: Appendices

Appendix 1: AVCC Member Biographies

Currently Teresa serves as the CAIT (Companion Animal Initiative of Tennessee) program director for the University of Tennessee College of Veterinary Medicine, where she has taken a grass-roots organization to a statewide resource and educational force for improving animal welfare. Teresa has been an inspirational member and facilitator of a community team that created a humane education curriculum for K-12 grade, Learning to Save Lives, in partnership with the local newspaper. She has created multiple elective courses for veterinary students in outreach including: Responsible Pet Ownership, Cultural Influences on Animal Health Care and Introduction to Shelter Medicine. In 2013, she led the efforts to establish a spay/neuter elective for fourth year veterinary students and secure a mobile spay/neuter unit for the college in order for students to travel to animal shelters in East Tennessee to provide services to those shelter animals.

Among her many distinguished accomplishments, Teresa has established a spay/neuter helpline that provides information on low-cost services to anyone in TN; she's led the production of 10 annual volumes of the Animal Laws of TN Book; and has been instrumental in creating collaborations and partnerships throughout the industry to further humane principles and spay neuter efforts. She has created an outreach program to assist our homeless citizens and their pets in Knox County and she is a team leader for the Knox County Disaster Animal Response Team. Teresa also developed Feral Fixin, a TNR program for feral cats in East TN which later won the Sigma Delta Team award.

Teresa is the 2010 recipient of the National Hill's Animal Welfare and Humane Ethics Award in recognition for advancing animal welfare through extraordinary service and furthering humane principles, education and understanding. In 2015, Teresa also led the CAIT program to receive the Carnegie Classification for Community Engagement, a classification that honors collaboration between institutions of higher education and their larger communities (local, regional/state, national, global).

Brian Forsgren, DVM

Chief of Staff, Gateway Animal Clinic
Cleveland, OH

Coalition Representative Group: For-Profit Veterinary Service Providers

Dr. Forsgren is a small animal practitioner working in Cleveland Ohio. Since 1980 his career focus has been to strive to provide "access to care" to all pet owners irrespective of their financial status. The fiscal realities associated with such a strategy have led to an interesting and exhausting practice life. His practice experience has been completely immersed in low-income pet ownership and all the trappings that that includes. For this opportunity he is remarkably thankful.

The 2008 financial crisis has complicated the demands on access to care.

The fragility of the Human Animal Bond became intensified as the pet owner's financial commitment to this phenomenon entered free fall. Greater demands for services by the public have occurred within an environment of financial chaos. Concurrently, the evolution of veterinary education and industry dollars has focused on anything but "primary care." Big-ticket therapy rules.

This is a huge problem logistically relative to ethical imperatives implicit to our profession's moral mandate to providing care. Polar opposites realities are developing relative to the delivery of actual animal welfare medical care on a socioeconomic and epidemiological basis. Forsgren refers to these trends as "the perfect storm".

Providing care has been the key to Forsgren's professional life. He is dedicated to the idea that the key to maintaining cost control and providing quality empathetic care is rooted in a powerful general practitioner population of caregivers. Championing the role of the general practitioner will be his focus for the remainder of his days.



SECTION 10: Appendices

Appendix 1: AVCC Member Biographies

The role of the general practitioner goes well beyond the simplistic model of a “widget” within a soulless system practice machine. The GP is the person that empowers the “hero” model of a practitioner that is three dimensional in their conceptualization of who they are relative to animal welfare, the Human Animal Bond implications and the socioeconomics of where this dynamic is going emotionally, financially and ethically.

Forsgren has been awarded the AVMA’s Bustad Award in 2009. In that same year The Ohio State University College of Veterinary Medicine presented him with the status of Distinguished Alumnus. In 2010 the Humane Society of the United States Veterinary Medical Association bestowed upon him the Veterinary Advocate of the Year Award. He is still baffled by such tributes. How does a person get awards for doing what is expected of them? Is not living an certain way reward enough?

Inga Fricke, CAWA

Director, Keeping Pets in Homes
The Humane Society of the United States

Coalition Representative Group: Animal Protection Organizations

Inga Fricke, CAWA, is Director, Keeping Pets in Homes, at The Humane Society of the United States (HSUS), where she oversees various programs and services designed to elevate the standards of animal care in shelters and rescue groups nationwide, and to assist animal care professionals in their lifesaving work. Prior to joining The HSUS, Inga served as administrator of the Wyandot County Humane Society/H.O.P.E. Clinic, helping to found the Wyandot County Equine Rescue, and as Shelter Manager for Loudoun County Animal Care and Control.



William Gilles, DVM

Director, WisCARES Program
University of Wisconsin-Madison, School of Veterinary Medicine

Coalition Representative Group: Veterinary Schools

Dr. William Gilles is the founder and director of the WisCARES Program at the University of Wisconsin-Madison. WisCARES is a collaborative program between the Schools of Veterinary Medicine and Social Work that provides social services, housing support, and veterinary medical care to pet owners experiencing homelessness and housing instability in Madison, Wisconsin. He teaches a course on social justice in veterinary medicine and works hard to bring a systems-focused lens to the question of increasing access to veterinary medical care. Prior to WisCARES, his clinical experience was in feline-only general practice and emergency medicine, where he was able to truly come to appreciate the impact and importance of the human-animal bond.



SECTION 10: Appendices

Appendix 1: AVCC Member Biographies

Lisa Greenhill, MPA, EdD

Associate Executive Director for Institutional Research and Diversity
Association of American Veterinary Medical Colleges

Coalition Representative Group: Veterinary Schools

Lisa Greenhill currently serves as the Associate Executive Director for Institutional Research and Diversity at the Association of American Veterinary Medical Colleges (AAVMC). Dr. Greenhill directs the Association's internal study of academic veterinary medicine through collaborative research, analysis and publication efforts. She also manages the *DVM: DiVersity Matters* initiative, which promotes increased representation of underrepresented persons in academic veterinary medicine, inclusive academic environments and the inclusion of diversity related professional competencies in the DVM curriculum.



Dr. Greenhill previously served nearly five years with the AAVMC during which time she managed legislative and regulatory policy issues including agriculture production, biomedical research, professional education, food safety and environmental health. She holds a Masters in Public Administration with a concentration in public policy from George Mason University in Fairfax, VA and a Doctorate in Education from Benedictine University in Lisle, IL.

Laura Helmueller, DVM

THRIVE Affordable Vet Care, Chief Medical Officer Emancipet (former)

Coalition Representative Group: Nonprofit Veterinary Service Providers

With her great love for animals, Laura, a native Texan, knew she wanted to be a veterinarian as a child. The daughter of a Methodist minister and a schoolteacher, she has always embraced helping others and supporting her community. Laura earned her Doctor of Veterinary Medicine degree from Texas A&M University in 2001. She has had the opportunity to work in many fields of veterinary medicine, including owning a mixed animal practice, corporate medicine, nonprofit, and full service small animal practice.



Laura joined Emancipet, a nonprofit organization with a mission to make spay/neuter services and veterinary care affordable and accessible to every pet owner, in 2008. Beginning as a relief veterinarian, she worked her way up to Chief Medical Officer. During her tenure, she took Emancipet from a disorganized spay/neuter clinic with no standard operating procedures to one of the nation's most respected spay/neuter programs with one of the lowest post-surgical complication rates. She also led Emancipet's medical transition into offering wellness and preventive care, heartworm treatments, dentals and special surgeries. Laura developed a strong mentorship program for new graduates to orient them in the practice and train them quickly into High-Quality, High-Volume Spay/Neuter.

Laura is passionate about increasing access to veterinary care for all families and their pets. She is also committed to working with veterinarians to develop treatment options for patients so that more pet owners can afford care for their pets. Laura enjoys creating a culture of coaching and excellence among the veterinarians in the organizations that she works with.

Laura lives in Austin, TX with her two children and her silly Boston terrier/pit bull cross, Peppa. She enjoys anything pertaining to food, home improvement projects, puppy breath, and spaying large in-heat dogs safely at record speeds.

SECTION 10: Appendices

Appendix 1: AVCC Member Biographies

Cristie Kamiya, DVM, MBA

Member-At-Large, Association of Shelter Veterinarians
Chief of Shelter Medicine, Humane Society Silicon Valley

Coalition Representative Group: National Professional Veterinary Organizations

Cristie graduated from Colorado State University, College of Business with a Master of Business Administration degree in 1999, and then went on to receive a Doctor of Veterinary Medicine degree from Colorado State University, College of Veterinary Medicine and Biomedical Sciences in 2005. In 2013, Cristie completed a 3-year residency in shelter medicine with the University of California, Davis Koret Shelter Medicine Program, and is currently Vice President, Medical Operations and Chief of Shelter Medicine at Humane Society Silicon Valley. Prior to her residency, Cristie worked as a shelter veterinarian in humane societies, municipal shelters, High Quality High Volume Spay & Neuter clinics, and rescues in the Denver-Boulder areas of Colorado, the greater Phoenix metro area of Arizona, and the Sacramento and San Francisco Bay areas of Northern California. Her main interests include infectious diseases, shelter management, and surgery, and she enjoys traveling and volunteering with organizations that provide veterinary services to underserved areas in the U.S. and internationally. Cristie joined the Association of Shelter Veterinarians, Board of Directors in 2014.



Susan Krebsbach, DVM

Assistant Director, Program for Pet Health Equity
University of Tennessee, Knoxville, College of Social Work

Coalition Representative Group: Executive Director

Dr. Susan Krebsbach, affectionately known as Dr. Susan, has always had a passion for animals. But, her initial career path did not lead her to veterinary medicine. After graduation from the University of Wisconsin-Madison with a Bachelor of Science degree in industrial engineering, she started out as a systems engineer for the IBM Corporation. After being promoted to the level of advisory marketing representative, she was recognized as one of the top 5% marketing representatives in the country.



Following her calling and pursuing her passion for animals, Dr. Susan turned in her briefcase for books to start veterinary school at The Ohio State University. After graduation, she worked as a small animal general practitioner, started a veterinary animal behavior consulting service, Creature Counseling, and was a veterinary consultant for Maddie's Fund® and the Humane Society Veterinary Medical Association.

Dr. Susan currently serves as the assistant director of the Program for Pet Health Equity (PPHE) at the University of Tennessee, Knoxville College of Social Work. The mission of the PPHE is to drive the formation of a family-centric veterinary health care system that focuses on pets not adequately served by the current system. Dr. Susan is also honored to be the executive director of the Access to Veterinary Care Coalition, a diverse group of individuals promoting pet retention as it pertains to access to veterinary care by removing barriers and guiding public policies to ensure access to veterinary care for all pets.

Dr. Susan resides in her home state of Wisconsin—where winter lasts nine months out of the year, beer and brats are considered a culinary delicacy, and the Green Bay Packers are a religion. It is from here that she permeates her true dedication to the enhancement of the special relationship that exists between pets and their people and advocating for the wellbeing of all animals.

SECTION 10: Appendices

Appendix 1: AVCC Member Biographies

Rachael Kreisler, VMD, MSCE, DACVPM

Assistant Professor of Shelter Medicine
Midwestern University, College of Veterinary Medicine, Department of
Pathology and Population Medicine

Coalition Representative Group: Academic Programs

Rachael's interest in feline health and lifesaving work in shelters sparked her return to university after decade long career in information technology. Prior experience included a stint at IBM as well as founding her own small software business. She was admitted to the University of Pennsylvania School of Veterinary Medicine (Penn Vet) in 2008.

After graduation, Rachael worked as a Lecturer in Shelter Medicine and Surgery at Penn Vet while she completed the Master of Science in Clinical Epidemiology (MSCE) program at the University of Pennsylvania's Center for Clinical Epidemiology and Biostatistics. In 2015 Rachael joined Midwestern University's College of Veterinary Medicine (CVM) for the extraordinary opportunity to create a Shelter Medicine didactic curriculum, extracurricular surgical and medical volunteer program and clinical rotation from the ground up. She is also course organizer for a practice management elective. She supported Midwestern's commitment to One Health by establishing the CVM as a part of the interdisciplinary Health Outreach (HOME) program which provides free healthcare to the homeless while strengthening bonds between disciplines in the medical community.

Rachael's research has focused on topics that inform clinical decision-making, affect shelter and at-risk animal populations and improve veterinary student education. Personal interests include photography, travel and reading, and she has a special fondness for gray cats.



Sarina Manifold, LCSW

Assistant Professor of Practice with Veterinary Social Work
University of Tennessee, Knoxville, College of Veterinary Medicine

Coalition Representative Group: Veterinary Social Work

Sarina Manifold, LCSW, is an Assistant Professor of Practice with Veterinary Social Work (VSW) at the University of Tennessee (UT) Veterinary Medical Center, and has been with Veterinary Social Work for 7 years. She is a Licensed Clinical Social Worker and certified Grief Recovery Specialist®. Sarina provides crisis intervention, end-of-life and treatment decision-making, resources, and grief counseling to clients of the Small and Large Animal Hospitals as well as to members of the community. She is also the coordinator of the communication training at the UT College of Veterinary Medicine. Sarina graduated from High Point University in High Point, NC with her Bachelor's Degree in Psychology, and received her Master's Degree in Social Work from the University of Tennessee, Knoxville.



Sarina has had an interest in grief and bereavement support for many years. As a Veterinary Social Worker her main focus is on grief and bereavement support for individuals and families who have experienced the death of their companion animal. Other areas of interest and clinical work include compassion fatigue support and communication skills training for animal related professionals, as well as advocating for animal owner's access to veterinary care. In this capacity, Sarina participates in a Knoxville-based community outreach program that provides free vaccines and preventatives for the animals of qualifying individuals.

Sarina is married with 2 fur-children: a 2 year-old Shepherd mix and a 13-year-old cat, and her newest addition is her 5-month-old daughter. In her spare time, Sarina enjoys spending time with family, reading, and running.

SECTION 10: Appendices

Appendix 1: AVCC Member Biographies

Michael R. Moyer, VMD

President and Owner, Bridgewater Veterinary Hospital, Inc.
and Bridgewater Consulting
Bensalem, PA

Coalition Representative Group: For-Profit Veterinary Service Providers

Dr. Michael R. Moyer is the owner of Bridgewater Veterinary Hospital, Inc. and Bridgewater Consulting in Bensalem, Pennsylvania. A 1990 graduate of University of Pennsylvania, he returned to teach at Penn from 2006 through 2012 as the Rosenthal Director of Shelter Animal Medicine. In addition to clinical practice, lectures and surgical instruction, he consults in a variety of local, state, and national efforts in veterinary medicine, animal welfare, and animal sheltering.

Dr. Moyer has extensive professional volunteer leadership experience with alumni, local, state, and national veterinary medical associations. He has held various elected and appointed positions within these organizations, notably having served as the PVMA's President for the year 2004 and as President of the University of Pennsylvania Veterinary Medical Alumni Society for 2007 and 2008, and is a Past-President of the American Animal Hospital Association. He was awarded the PVMA Veterinarian of the Year award for 2005, the Student AVMA Community Outreach Award in 2010, and the Delaware County SPCA Animal Welfare Leadership Award in 2011.

His hobbies include home improvement, cooking, sporting clays, fencing, road bicycling, adventure motorcycling, and he has won athletic prizes in odd racquet sports.

Akshay Verma

Veterinary Student at Michigan State University
President of the HSVMA Student Chapter

Coalition Representative Group: Other Animal Care Professionals

Akshay Verma is a DVM student at Michigan State University where he is the HSVMA Chapter President and Co-Founder. He also works for INDOGO Canine Nutrition Company as the head of Research and Development. In collaboration with a board-certified veterinary nutritionist, INDOGO has produced a dog food completely free of animal-derived ingredients that will be the first to undergo feeding trials that meet and exceed AAFCO protocols. In addition, he serves as a member of the Michigan Friends of Companion Animals' Development Committee, which successfully passed humane pet acquisition ordinances in several municipalities. Previously, he earned his bachelor's degree from the University of Michigan, Ann Arbor where he was awarded highest honors for his thesis on the welfare, scientific, and social concerns associated with appearance-based dog breeding. At U of M, he was Director of the Michigan Animal Respect Society.



Appendix 2: Acknowledgments

Producing *Access to Veterinary Care: Barriers, Current Practices, and Public Policy* was more than a two-year process that included: creating the Access to Veterinary Care Coalition ([AVCC](#)), conducting surveys by the [Center for Applied Research and Evaluation \(CARE\)](#) and Midwestern University, and writing the report. The purpose was to identify barriers faced by pet owners and to assess the knowledge, attitudes, and practices of veterinary service providers.

Coalition members and staff are eternally grateful to [Maddie's Fund®](#) for their support of this important work.

Coalition Members

Anne Bayer, DVM
Michael Blackwell, DVM, MPH
Ted Cohn, DVM, AVES (Hon)
Teresa Fisher
Brian Forsgren, DVM
Inga Fricke, CAWA
William Gilles, DVM
Lisa Greenhill, MPA, EdD
Laura Helmueller, DVM
Cristie Kamiya, DVM, MBA
Susan Krebsbach, DVM
Rachael Kreisler, VMD, MSCE, DACVPM
Sarina Manifold, LCSW
Michael R. Moyer, VMD
Akshay Verma

Refer to [Appendix 1](#) for Coalition member biographies.

Principle Investigators

Linda Daugherty, MPA
Assistant Director
Social Work Office of Research and Public Service/
Center for Applied Research and Evaluation
University of Tennessee, Knoxville
College of Social Work

Rachael Kreisler, VMD, MSCE, DACVPM
Assistant Professor of Shelter Medicine
Midwestern University
College of Veterinary Medicine, Department of
Pathology and Population Medicine

Staff

Michael Blackwell, DVM, MPH
AVCC Chair

Susan Krebsbach, DVM
AVCC Executive Director

Amy Wiltzius, CVT, LAT
Coordinator Specialist

Technical Support

Amanda Hand
Technical Writer

Joy Chambers
Graphic Designer

Guest Authors

David Favre, JD
Professor of Law & The Nancy Heathcote Professor of
Property and Animal Law
Michigan State University
College of Law

Marcy Souza, DVM, MPH, DABVP, DACVPM
Associate Professor
University of Tennessee, Knoxville
College of Veterinary Medicine, Department of Public
Health

Sonya Snyder
Graduate Student
University of Tennessee, Knoxville

Taylor Young, MPH
Veterinary Student
University of Tennessee, Knoxville

SECTION 10: Appendices

Appendix 2: Acknowledgments

Peer Reviewers

Bridget Bain, PhD
Assistant Director of Analytics
American Veterinary Medical Association

Roger Haston, PhD
Chief of Analytics
PetSmart Charities

Joan Heminway, JD
Professor of Law
University of Tennessee, Knoxville
College of Law

Emily McCobb, DVM, DACVAA
Clinical Associate Professor
Tufts University
Cummings School of Veterinary Medicine

Fran Ortiz, JD
Professor of Law
South Texas School of Law Houston

David Patterson, PhD
Director
Clinical Doctorate Program and Cooper-Herron
Endowed Professor in Mental Health Research &
Practice
University of Tennessee, Knoxville
College of Social Work

CC Sheldon, DVM
Instructor
Veterinary Technician Program
Madison College

Apryl Steele, DVM
President and CEO
Dumb Friends League

Jason Stull, VMD, MPVM, PhD, DACVPM
Assistant Professor
The Ohio State University
College of Veterinary Medicine, Department of
Veterinary Preventive Medicine

Janice Valenzuela, DVM, MPH
Minority Health Program
Wisconsin Department of Health Services

Appendix 3: CARE Pet Owners Survey Instrument

I am calling from the Center for Applied Research and Evaluation at the University of Tennessee. We are conducting a national survey with pet owners. May I ask you a few questions?

1. No – TERMINATE
2. Yes

Q1. For the purposes of this study we are defining a pet owner as someone who has a dog or cat. Do you currently have a dog or a cat?

1. No – POLITELY TERMINATE INTERVIEW
2. Yes

The purpose of this study is to find out more about what types of care people need for their pets, where they receive the care, and any problems they may have in getting the care they want for their pet. There are no right or wrong answers and all of your answers are confidential. The survey will last about 10 minutes and is being paid from a grant by Maddie’s Fund®, a non-profit organization interested in the status and well-being of pets. This study has minimal risks and there are no direct benefits of participating however it may help to improve pet care in the future. If you have any questions, please contact the lead researcher at the University of Tennessee, Linda Daugherty at 865-974-2730. If you have questions about your rights as a participant, please contact the University of Tennessee’s Office of Research Compliance at 865-974-7697.

Q2. First, I would like to get some information about your pets. How many dogs do you own?
_____ ENTER #

Q3. How many cats do you own? _____ ENTER #

[THIS INFORMATION WILL BE USED TO CREATE A LIST OF PETS IN HOUSEHOLD TO BE USED AS REFERENCE FOR SUBSEQUENT QUESTIONS]

ASKED FOR EACH PET

Q4. How old is the pet? _____ ENTER # OF YEARS (ENTER 0 IF LESS THAN 1 YEAR)

ASKED FOR EACH PET

Q5. Which of the following statements is true for this pet?

1. The pet is not spayed or neutered
2. The pet was spayed or neutered when I got the pet
3. I had the pet spayed or neutered at a free or reduced cost clinic
4. I had the pet spayed or neutered at a veterinarian’s office or clinic
5. Not sure
6. Refused

ASKED FOR EACH PET – NEW QUESTION

Where did you obtain your pet?

1. Adopted from an animal shelter/rescue organization
2. Bought at a pet store, from a breeder, or from another source
3. Received as a gift
4. Was a stray that I took in
5. Received from a friend or family member
6. Other: PLEASE SPECIFY _____
7. Not sure
8. Refused

We have heard from many pet owners that sometimes they have problems with getting the kind of care they would like for their pets. We are trying to understand what kind of care is needed and how we might best be able to help. In order to do that, we need to know what problems exist. I am going to ask you a few questions about three different types of care that pet owners seek for their pets. We would like for you to answer as honestly as possible. There are no right or wrong answers.

SECTION 1 – PREVENTATIVE CARE

The first type of care I am going to ask you about is preventative care. These are services a pet receives to avoid illnesses, diseases, and behavioral problems. This includes such things as annual exams; shots or vaccinations; heartworm, flea, or tick prevention; and advice about how to care for your pet.

Q6. In the past two years, has there been a time that you wanted or needed preventative care for your pet(s), but was not able to get it?

1. Yes
2. No – **SKIP TO Q12**
3. Refused – **SKIP TO SECTION 2**

Q7. **[SKIP THIS QUESTION IF ONLY ONE PET]**

For which pet(s) were you not able to get preventative care? **CHOOSE FROM POPULATED LIST**

Q8. I would like to ask you a few questions about those times. About how many times did you want to get an annual exam or preventative care for your pet(s) but was not able to get it? _____

[USE 99 FOR REFUSED]

Q9. Thinking about the most recent time, what type of care did you want to get for your pet(s)?

[READ RESPONSES AND SELECT ALL THAT APPLY]

1. Shots or vaccinations
2. Heartworm, flea, or tick prevention
3. Advice about how to care for my pet
4. Help with preventing behavioral issues
5. Other: PLEASE SPECIFY _____
6. Refused

SECTION 10: Appendices

Appendix 3: Pet Owners Survey Instrument

Q10. What were the reasons that you were not able to get the care?

[READ RESPONSES AND CHECK ALL THAT APPLY]

1. I could not afford it
2. I did not have a way to get there
3. I did not have a leash or pet carrier
4. I did not know where to get the care
5. I could not find a veterinarian or care provider who speaks my language
6. I was concerned a veterinarian or care provider would think badly of me for not seeking care sooner
7. Other: PLEASE SPECIFY _____
8. Refused

Q11. [IF RESPONDENT CHOOSES MORE THAN ONE RESPONSE IN Q10]

Which of those reasons would you consider to be the biggest reason for not being able to get the preventative care you wanted or needed?

1. I could not afford it
2. I did not have a way to get there
3. I did not have a leash or pet carrier
4. I did not know where to get the care
5. I could not find a veterinarian or care provider who spoke my language
6. I was concerned a veterinarian or care provider would think badly of me for not seeking care sooner
7. Other
8. Refused

SKIP TO SECTION 2 – SICK CARE

Q12. Thinking about the most recent time your pet(s) received an annual exam or preventative care, where did you receive the care?

1. I did not seek preventative care – **SKIP TO SECTION 2**
2. Veterinary office or clinic
3. Animal shelter or community program
4. Other: PLEASE SPECIFY _____
5. Refused

Q13. What type of care did you get? [READ RESPONSES AND CHECK ALL THAT APPLY]

1. Shots or vaccinations
2. Heartworm, flea, or tick prevention
3. Advice about how to care for my pet
4. Help with a behavioral problem
5. Other: PLEASE SPECIFY _____
6. Refused

SECTION 2 – SICK CARE

The second type of care is sick care. This type of care includes treatment for an illness, physical injury, or behavioral problem that is **NOT** an emergency requiring immediate care.

Q14. In the past two years, has there been a time that you wanted or needed treatment for an illness for your pet(s), but was not able to get it?

1. Yes
2. No – **SKIP TO Q20**
3. Refused – **SKIP TO SECTION 3**

SECTION 10: Appendices

Appendix 3: Pet Owners Survey Instrument

Q15. [SKIP THIS QUESTION IF ONLY ONE PET]

For which pet(s) were you not able to get sick care? **CHOOSE FROM POPULATED LIST**

Q16. I would like to ask you a few questions about those times. About how many times did you want to get sick care for your pet but was not able to get it? _____ [USE 99 FOR REFUSED]

Q17. Thinking about the most recent time you wanted or needed sick care and was not able to get it, what was the illness, injury, or symptom(s)? _____

Q18. What were the reasons that you were not able to get the care for your pet?

[READ RESPONSES AND CHECK ALL THAT APPLY]

1. I could not afford it
2. I did not have a way to get there
3. I did not have a leash or pet carrier
4. I did not know where to get the care
5. I could not find a veterinarian or care provider who speaks my language
6. I was concerned a veterinarian or care provider would think badly of me for not seeking care sooner
7. Other: PLEASE SPECIFY _____
8. Refused

Q19. [IF RESPONDENT CHOOSES MORE THAN ONE RESPONSE IN Q18]

Which of those reasons would you consider to be the biggest reason for not being able to get the care you wanted or needed for your pet(s)?

1. I could not afford it
2. I did not have a way to get there
3. I did not have a leash or pet carrier
4. I did not know where to get the care
5. I could not find a veterinarian or care provider who spoke my language
6. I was concerned a veterinarian or care provider would think badly of me for not seeking care sooner
7. Other: PLEASE SPECIFY _____
8. Refused

SKIP TO SECTION 3 – EMERGENCY CARE

Q20. Thinking about the most recent time one of your pets received treatment for an illness, where did you receive the care?

1. I did not seek treatment for an illness – **SKIP TO SECTION 3**
2. Veterinarian office or clinic
3. Animal shelter or other community program
4. Other: PLEASE SPECIFY _____
5. Refused

Q21. What was the illness or symptom that was treated? _____

SECTION 3 – EMERGENCY CARE

The last type of care I am going to ask about is emergency care. This type of care is for an illness, physical injury, or behavioral problem that needed immediate treatment.

Q22. In the past two years, has there been a time that you wanted or needed emergency care for your pet(s), but was not able to get it?

1. Yes
2. No – **SKIP TO Q28**
3. Refused – **SKIP TO Q30**

Q23. **[SKIP THIS QUESTION IF ONLY ONE PET]**

For which pet(s) were you not able to get emergency care? **CHOOSE FROM POPULATED LIST**

Q24. I would like to ask you a few questions about those times. About how many times did you want to get emergency care but was not able to get it? _____ [USE 99 FOR REFUSED]

Q25. Thinking about the most recent time you wanted or needed emergency care and was not able to get it, what type of emergency care did your pet need? _____

Q26. What were the reasons that you were not able to get the care?

[READ RESPONSES AND CHECK ALL THAT APPLY]

1. I could not afford it
2. I did not have a way to get there
3. I did not have a leash or pet carrier
4. I did not know where to get the care
5. I could not find a veterinarian or care provider who spoke my language
6. I was concerned a veterinarian or care provider would think badly of me for not seeking care sooner
7. Other: PLEASE SPECIFY _____
8. Refused

Q27. **[IF RESPONDENT CHOOSES MORE THAN ONE RESPONSE TO Q26]**

Which of those reasons would you consider to be the biggest reason for not being able to get the care you wanted or needed?

1. I could not afford it
2. I did not have a way to get there
3. I did not have a leash or pet carrier
4. I did not know where to get the care
5. I could not find a veterinarian or care provider who spoke my language
6. I was concerned a veterinarian or care provider would think badly of me for not seeking care sooner
7. Other: PLEASE SPECIFY _____
8. Refused

Q28. Thinking about the most recent time your pet received emergency care, where did you receive the care?

1. I did not seek emergency care – **SKIP TO Q31**
2. Veterinarian office or clinic
3. Shelter or other community program
4. Other: PLEASE SPECIFY _____
5. Refused

Q29. What type of care did you get? _____

SECTION 10: Appendices

Appendix 3: Pet Owners Survey Instrument

Q30. Now I have just a couple of questions about your pet(s). Please tell me how much you agree or disagree with this statement. My pet(s) is/are considered a member of my family.

1. Strongly disagree
2. Somewhat disagree
3. Neutral
4. Somewhat agree
5. Strongly agree
6. Refused

Q31. Do you have medical insurance for your pet(s)?

1. No
2. Yes
3. Not sure
4. Refused

Q32. Do you have medical insurance for yourself?

1. No
2. Yes
3. Not sure
4. Refused

Q33. If you were looking for veterinary care, where would you look? _____ ENTER RESPONSE
We have just a few questions to help us in our analysis. Please remember that all of your answers are completely confidential.

Q34. First, what is your age? _____ ENTER AGE [USE 999 FOR REFUSED]

Q35. Do you consider yourself to be a female or a male?

1. Female
2. Male
3. Other
4. Prefer not to answer

Q36. How many people currently live in your household? _____ ENTER #

Q37. **[IF Q36 > 1]** How many children 18 and under live in your household? _____ ENTER #
[USE 99 FOR REFUSED]

Q38. In what state do you currently reside? _____ [USE 99 FOR REFUSED]

Q39. What is your zip code? _____ [USE 99999 FOR REFUSED]

SECTION 10: Appendices

Appendix 3: Pet Owners Survey Instrument

Q40. Which of the following best describes where you live? Do you live in a large city (over 100,000 people), a small city (between 20,000 and 100,000 people), a town (between 5,000 and 20,000 people), a small town (Fewer than 5,000 people), or in a rural area?

1. Large city
2. Small city
3. Town
4. Small town
5. Rural - non farm
6. Rural - farm
7. Not sure
8. Refused

Q41. Do you live in a house, apartment, condo, duplex, mobile home, or some other type of dwelling?

1. House
2. Apartment
3. Condo
4. Duplex
5. Mobile home
6. Other
7. Refused

Q42. Are you Hispanic, Latino/a, or Spanish origin?

1. No
2. Yes
3. Not sure
4. Refused

Q43. Which of the following racial categories describes you? You may select more than one. Would it be

1. American Indian or Alaskan Native,
2. Asian,
3. Black or African American,
4. Native Hawaiian or Other Pacific Islander, Or
5. White
6. [Do Not Read] Hispanic/Latino
7. [Do Not Read] Other
8. [Do Not Read] Refused

Q44. What is the highest grade or year of school you completed?

1. 11th grade or less
2. High school graduate or GED
3. 1 to 3 years of college (Some college or technical school)
4. Bachelor's degree
5. Graduate degree
6. Refused

SECTION 10: Appendices

Appendix 3: Pet Owners Survey Instrument

Q45. What is your current marital status? Are you married, living with a partner, divorced, separated, widowed, or single?

1. Married
2. Living with a partner
3. Divorced
4. Separated
5. Widowed
6. Single
7. Refused

Q46. Thinking of all the income everyone in your household gets, such as work, retirement, Social Security, and other money from the government. If you add together everyone's before-tax income for a month, would it be more than \$_____, about \$_____, or less than \$_____?

[FIGURES WILL BE PROVIDED BASED UPON NUMBER OF PEOPLE IN HOUSEHOLD AND CURRENT POVERTY LEVEL DEFINITIONS]

1. More than
2. About the amount
3. Less than
4. Refused

FOR THOSE WHO INDICATED AT LEAST ONE BARRIER This survey is the first stage of our research about pet owners who are not always able to get the care for their pets that they would like. Would you be interested in participating in future research on this topic?

1. Yes – What is the best way for us to contact you about future research?
2. No

Those are all of our questions. Thank you for taking the time to participate in our survey.

IRB NUMBER: UTK IRB-17-03879-XM

IRB APPROVAL DATE: 09/05/2017

Appendix 4: CARE Veterinary Service Providers Survey Instrument

Q:CONSENT

The University of Tennessee, working in association with the Access to Veterinary Care Coalition (AVCC), received a grant from Maddie's Fund® to conduct a national study to learn more about underserved populations of pets. This survey is being distributed to veterinarians across the United States who work in different types of settings. There are no risks associated with this study other than those encountered in everyday life. Your participation in this survey is voluntary and will provide you with no direct benefits. However, it may help to improve delivery of veterinary services and pet care in the future. All answers are confidential, and it should not take more than 15 minutes of your time to complete. If you have any questions, please contact the lead researcher at the University of Tennessee, Linda Daugherty, at lindad@utk.edu or at 865-974-2730. If you have questions about your rights as a participant, please contact the University of Tennessee Office of Research Compliance at 865-974-7697. If you would like a copy of this consent form, you may print it from your screen or request a hard copy from Linda Daugherty.

CONSENT

I have read the above information. I had the opportunity to print a copy of this form. Clicking on the button to continue or <next> and completing the survey constitutes my consent to participate.

QUALIFYING QUESTION

Do you provide veterinary care for pets in any capacity?

Yes → Continue with survey

No → End survey with following message: Thank you for your interest in our survey. Unfortunately, we are only including those who provide direct veterinary care for pets in this phase of our research. If you would like to learn more about addressing underserved pets and their people, please visit the Access to Veterinary Care Coalition (AVCC) website at <http://avcc.utk.edu>.

Q:Q1

We would like to begin by asking you a few questions about you and your role in providing veterinary care. Which of the following best describes your current work environment? (Choose all that apply)

1. Private practice
2. Nonprofit organization
3. Teaching institution
4. Animal control agency (local government)
5. Other – Please specify:
6. Prefer not to answer

Q:Q2

[If more than one of the above (Q1) was selected], Where do you spend the majority of your time?

1. Private practice
2. Nonprofit organization
3. Teaching institution
4. Animal control agency (local government)
5. Other [TEXT PROVIDED FOR "OTHER" ABOVE WILL DISPLAY HERE]
6. Prefer not to answer

Q:Q1a

[IF YES TO "Private practice" in Q1] Are you the owner or an associate of the private practice?

1. Owner
2. Associate
3. Other- Please specify:
4. Prefer not to answer

SECTION 10: Appendices

Appendix 4: Veterinary Service Providers Survey Instrument

Q:Q1b

[IF YES TO “Private practice” in Q1] Is the private practice where you work a sole proprietor/partnership practice, corporation/franchise practice, or referral practice?

1. Sole proprietor/partnership practice
2. Corporation/franchise practice
3. Referral practice
4. Other- Please specify:
5. Prefer not to answer

Q:Q1c

[If “YES” to Nonprofit organization in Q1] Does the nonprofit where you work offer veterinary services to the public?

1. Yes
2. No
3. Prefer not to answer

Q:Q1d

[If “YES” to teaching institution in Q1] Does the teaching institution where you work offer veterinary services to the public?

1. Yes
2. No
3. Prefer not to answer

Q:Q1e

[If “YES” to Animal control agency in Q1] Does the animal control agency where you work offer veterinary services to the public?

1. Yes
2. No
3. Prefer not to answer

Q:Q3

For which types of animals do you provide care? CHECK ALL THAT APPLY

1. Cats
2. Dogs
3. Exotics
4. Large/Farm animals
5. Other [please specify]:
6. Prefer not to answer

Q:Q4

For the purposes of this survey, the following definition should be used:

Owned pets: Animals kept primarily for a person’s or family’s companionship, protection, and/or pleasure. They typically live in the home or on the property of their owner and the owner is responsible for the animal’s overall healthcare and well-being.

About how many owned pets do you provide veterinary care for in a typical week? _____

SECTION 10: Appendices

Appendix 4: Veterinary Service Providers Survey Instrument

Q:Q5

DEFINITIONS

For the purposes of this survey, the following definitions should be used:

Preventative and/or wellness care: These are services an animal receives to avoid illnesses, diseases, and behavioral problems. It includes such things as annual exams; vaccinations; heartworm, flea, or tick prevention; and advice about how to care for the animal.

Sick care: This type of care includes treatment for an illness, physical injury, or behavioral problem that is **NOT** an emergency requiring immediate care.

Emergency/Urgent care: This type of care is for an illness, physical injury, or behavioral problem that needs immediate treatment.

Which services or types of care do you provide? CHECK ALL THAT APPLY

1. Preventative and/or wellness care
2. Sick care
3. Emergency/Urgent care
4. Other [please specify]:
5. Prefer not to answer

We are interested in exploring how the veterinary needs of underserved populations of pets are being met, and how meeting these needs may be improved. Please remember that there are no right or wrong answers and that all of your answers are confidential.

DEFINITIONS

For the purposes of this survey, the following definition should be used:

Underserved populations of pets: Pets with owners whose demographic, geographic, or economic characteristics impede or prevent access to veterinary care services for their pets.

Q:Q6

We would like to know how big of a problem you believe underserved populations of pets is in the United States and in your community. First, how much of a problem do you believe underserved populations of pets are in the United States?

1. Not at all a problem
2. A minor problem
3. Moderate problem
4. Serious problem
5. Not sure
6. Prefer not to answer

Q:Q7

How much of a problem do you believe underserved populations of pets are in your area?

1. Not at all a problem
2. A minor problem
3. Moderate problem
4. Serious problem
5. Not sure
6. Prefer not to answer

SECTION 10: Appendices

Appendix 4: Veterinary Service Providers Survey Instrument

Q:Q8.

For the purposes of this survey, the following definition should be used:

Standard of care: Patient care that a veterinarian follows based on scientific evidence. It involves decisions that similarly qualified practitioners would make in managing the patient’s care under similar circumstances.

How strongly do you agree or disagree with each of the following statements?

THESE QUESTIONS WILL BE PRESENTED IN RANDOM ORDER	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	No answer
a. “Standard of care,” as enforced by state boards, is driving up veterinary costs.	1	2	3	4	5	6
b. I feel obligated to offer the same “standard of care” to all of my clients.	1	2	3	4	5	6
c. I feel comfortable offering alternatives to the “standard of care” if my client is not able to afford it.	1	2	3	4	5	6
d. “Means testing,” or some type of income verification, should be required in order for a pet owner to receive discounted veterinary services.	1	2	3	4	5	6
e. The current private, for profit veterinary business model is not adequately serving all owned pets.	1	2	3	4	5	6
f. Nonprofit organizations that provide veterinary services at a discount are unfair competition to private veterinary practices.	1	2	3	4	5	6

SECTION 10: Appendices

Appendix 4: Veterinary Service Providers Survey Instrument

Q:Q9

DEFINITIONS

For the purposes of this survey, the following definition should be used:

Owned pets: Animals kept primarily for a person’s or family’s companionship, protection, and/or pleasure. They typically live in the home or on the property of their owner and the owner is responsible for the animal’s overall healthcare and well-being.

THESE QUESTIONS WILL BE PRESENTED IN RANDOM ORDER	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	No answer
a. Owned pets are a member of the family in which they live.	1	2	3	4	5	6
b. Not being able to obtain needed veterinary care impacts pet owner’s mental and emotional health.	1	2	3	4	5	6
c. Society has a responsibility to help poor people and their pets.	1	2	3	4	5	6
d. Everyone, regardless of circumstances, should be able to own a pet.	1	2	3	4	5	6
e. Owned pets who do not receive appropriate veterinary care are a threat to public health.	1	2	3	4	5	6
f. All pet owners should purchase pet health insurance.	1	2	3	4	5	6
g. I am concerned about professional liability if I provide veterinary care that does not meet the “standard of care” when the pet owner cannot afford it.	1	2	3	4	5	6
h. All pets deserve some level of veterinary care.	1	2	3	4	5	6

SECTION 10: Appendices

Appendix 4: Veterinary Service Providers Survey Instrument

Q:Q10

Of the following, which would better help you to provide veterinary services to underserved populations of pets?

CHECK ALL THAT APPLY

1. Tax incentives
2. Educational debt forgiveness
3. Continuing education credits
4. Product discounts from corporations
5. Other - please specify:
6. None of the above
7. I am not interested in providing services to underserved populations of pets
8. Prefer not to answer

Q:Q11

Veterinary service providers employ different strategies to address the needs of underserved populations of pets. Which of the following financial strategies has your practice or organization used in the past year? **CHECK ALL THAT APPLY**

THAT APPLY

- a) Reduced fees and/or donated services.
- b) Bartered for services.
- c) Offered different payment options.
- d) Offered financial support from a fund managed by the practice (e.g., an Angel Fund).
- e) Offered extended credit terms.
- f) Provided volunteer opportunities.
- g) Provided an alternative compensation option for veterinary employee(s) (i.e., outside of production) interested in serving the underserved.
- h) Offered financial support from an external fund, e.g., AVMA Veterinary Care Charitable Fund.
- i) Some other strategy - please specify: _____
- j) None of the above
- k) Prefer not to answer

Q:Q12

Which of the following financial strategies to address the needs of underserved populations of pets have you as an individual used in the past year? **CHECK ALL THAT APPLY**

- a) Made clients aware of different payment options.
- b) Explored various treatment options.
- c) Offered extended credit terms.
- d) Provided services at lower or no charge.
- e) Made financial donations towards a veterinary service for individual animals.
- f) Made financial donations towards a general fund that pays for veterinary care.
- g) Volunteered for events that increase access to veterinary care.
- h) Applied for grant funding on behalf of a client (e.g., GVMA Foundation Fund for Companion Animals).
- i) Provided information on alternative financial resources (e.g., increasing credit card limit, contacting family members and friends, crowd-funding sites, rescue organizations, etc.).
- j) Some other strategy - please specify: _____
- k) I don't work in a situation that allows me to employ any of these strategies
- l) None of the above
- m) Prefer not to answer

SECTION 10: Appendices

Appendix 4: Veterinary Service Providers Survey Instrument

Q:Q13

IF WORKING IN A FOR-PROFIT PRACTICE.... Does your clinic/company have a written policy about providing veterinary care for underserved populations of pets?

1. No
2. Yes
3. Prefer not to answer

Q:Q13a

[IF YES TO Q13] Please briefly describe this policy: _____

Q:Q14

IF WORKING IN A FOR-PROFIT PRACTICE.... How often does your practice not provide treatment for sick owned pets for economic reasons?

1. Never
2. Rarely (handful of times per year)
3. Moderately (a few times each month)
4. Frequently (several times each week)
5. Prefer not to answer

Q:Q15

We would like to get your input on how best to improve veterinary care for underserved populations of pets. What recommendations would you offer? _____

Q:Q16

We are interested in learning about innovative practices that are providing veterinary care to underserved populations of pets. Please describe below a practice that you are involved with or aware of that could be replicated in other areas. Provide as much detail as possible about how the program is structured and what makes it successful. _____

Q:Q17

We have a few more questions that will help us with our analysis. What gender do you consider yourself?

1. Female
2. Male
3. Other
4. Prefer not to answer

Q:Q18

Where did you receive your veterinary degree? [DROP DOWN BOX WITH LIST FROM AVMA.ORG INCLUDING "PREFER NOT TO ANSWER" AND "OTHER"]

Q:Q18A

IF OTHER: Where did you receive your degree? _____

Q:Q19

What year did you receive your veterinary degree? DROP DOWN BOX WITH YEARS LISTED FROM 1930 THROUGH 2017 AND "PREFER NOT TO ANSWER"

SECTION 10: Appendices

Appendix 4: Veterinary Service Providers Survey Instrument

Q:Q20

Where do you get information about issues and/or concerns in the veterinary profession? **CHECK ALL THAT APPLY**

1. Communication from veterinary medical associations (e.g., AVMA, state and specialty VMAs)
2. Veterinary online communities (e.g., Veterinary Information Network (VIN))
3. Veterinary publications
4. Veterinary conferences and/or meetings
5. Social media (e.g., Facebook, Twitter, etc.)
6. General news media (e.g., newspapers, broadcast news, etc.)
7. Other – Please specify: _____
8. Prefer not to answer

Q:Q21

In what state(s) do you currently provide veterinary services? DROP DOWN BOX WITH STATES INCLUDING “PREFER NOT TO ANSWER” AND OTHER

Q:Q21a

If “Other to Q21 “Where you currently provide veterinary services?”

Q:Q22

Which of the following best characterizes the area where you provide veterinary services the majority of the time?

1. Urban
2. Suburban
3. Rural
4. Prefer not to answer

Q:Q23

Which of the following best describes the area where you provide veterinary services the majority of the time?

1. Low income
2. Middle income
3. High income
4. Economically diverse area
5. Prefer not to answer

Q:Q24

Finally, we are interested in learning how you have been involved with increasing access to veterinary care for underserved populations of pets. Which of the following have you done? **CHECK ALL THAT APPLY**

1. Raised awareness about the scope of the problem.
2. Raised awareness about solutions to the problem.
3. Supported efforts to broaden interpretation of “standard of care”.
4. Lobbied state veterinary boards to more clearly identify the definition of “standard of care.”
5. Sought training in various treatment options and skills.
6. Sought training in social injustice, dealing with different ethnic groups, and/or overcoming language and education barriers.
7. Sought information to become better informed about the scope of the problem.
8. Sought information to become better informed about solutions to the problem.
9. Learned communication and documentation skills involving clients to prevent misunderstandings that could lead to litigation.
10. Other (please specify):
11. NONE OF THE ABOVE
12. PREFER NOT TO ANSWER

SECTION 10: Appendices

Appendix 4: Veterinary Service Providers Survey Instrument

Q:Q25

We will be conducting online focus groups with veterinary service providers in the next few months and would like to invite you to participate. If you are interested, you will be directed to another page to provide your contact information, which is not linked to your responses to this survey.

Would you be interested in participating in one of these online focus groups?

1. Yes
2. No

IF YES, the following hyperlink will be embedded: <http://www.surveygizmo.com/s3/4136266/Focus-Group> leading to this message:

Thank you for your participation in our survey and your interest in participating in an online focus group. Please provide your contact information below.

First Name:

Last Name:

Email address:

Phone number:

If you would like to learn more about addressing underserved pets and their people, please visit the Access to Veterinary Care Coalition (AVCC) website at <http://avcc.utk.edu>.

IF NO: Thank you for taking the time to complete our survey. **If you would like to learn more about addressing underserved pets and their people, please visit the Access to Veterinary Care Coalition (AVCC) website at <http://avcc.utk.edu>.**

Appendix 5: Moderator Guide for Pet Care Providers Online Focus Group

Purpose of Question	Question and possible probes
Introduce study and establish ground rules	Hi. Thank you for joining us today. I am Linda Daugherty and am from the Center for Applied Research and Evaluation at the University of Tennessee. As you know, we are conducting a national study with veterinary service providers to learn more about how underserved pet owners' needs can best be met, specifically those who own a dog and/or cat. There are just a few things that I need to tell you before we begin. First, everyone's opinion is important and I really want to hear from all of you. Because we are conducting this focus group online, it is important that we take turns when we speak and not try to talk over each other. Please keep in mind that there are no right or wrong answers to our questions. This is not a time to try and change other people's minds – we just need to respect that we may not always agree or that we may have different opinions. The second thing is to remind you that this session is being recorded. The recording will be transferred to a secure server here at the University of Tennessee. All notes will also be stored on a secure server or in a locked filing cabinet in my office to be transferred from the digital recorder to the University of Tennessee secure server. Any report or publications from these groups will not personally identify you in any way.
Warm up question	I would like to start by asking each of you tell us your first name; what type of practice you are currently working and where it is located.
Barriers for pet owners	I would like for you to share your thoughts on the severity of underserved pets in your area. PROBE What barriers are most commonly experienced by pet owners of dogs and cats in your area?
Barriers for veterinary service providers	Now I would like for you to share your thoughts on the barriers experienced by veterinarians who provide care, or desire to provide care, to these pet owners. PROBE IF NECESSARY Is there legislation in your state that makes it difficult for veterinarians to provide care to those who might not be able to afford care? Are there professional norms that might be violated by serving this population?
Best practices	If you were tasked with creating a program or system that would provide needed veterinary care to underserved pets, specifically dogs and/or cats, what would it look like? What elements would be essential? Are there any existing programs or models that could serve as prototypes?
End	Those are all of the questions that I have for you. Is there anything that you feel I didn't ask that would be important for me to know about how best to provide veterinary care for underserved pets?

Appendix 6: Incremental Care Clinical Example

At 2:30 in the afternoon you are presented a referral from the local emergency/specialty practice in your community.

The radiograph indicates a radio-dense foreign body in the esophagus of a seven-year-old spayed female dog. She has been unable to hold down food or water for three days.

The owner went to their regular veterinarian two days ago. He referred her to a specialty group. The specialty practice ran blood work, which was essentially normal. The quote for endoscope removal, anesthesia, and hospitalization came to \$3500. The owner had already paid \$445 for the initial consultation and radiographs.

The owner holds a low level clerical job at the county. She is a single mother, drives a six-year-old Toyota, and has recently had a rather extensive fingernail/manicure that includes a rhinestone on each of her index fingers.

Her false eyelash on the right eyelid is coming loose (presumably due to crying).

She has been denied Care Credit.

At this point, what is obvious to the clinician is that the options are limited. Leaving the foreign body lodged in the esophagus would undoubtedly lead to an excruciating death by eventual esophageal perforation and calamitous thoracic pathology.

Without solving the problem, euthanasia on humane grounds could be validated.

Before there was technology that could allow a clinical endoscopic attempt to remove the foreign body, the veterinary clinician was forced to consider either a surgical approach to the esophagus or attempt a removal through a gastrostomy with removal via a digital or instrument approach at the gastroesophageal junction.

Such a problem-solving attitude is essential in the toolbox of any general practice clinician. The majority of small animal clinical operations do not have endoscopes in their practices.

So, the clinician adopts the third option.

After a thorough explanation of risks and benefits to the client and the ability for the clinic operation to allow for a payment plan, the intrepid general practitioner proceeds to take the only realistic approach to solving the clinical problem while preserving the human-animal bond.

A midline abdominal incision is made. The stomach is elevated and a gastrostomy made. A digital exploration of the distal esophagus identifies the foreign body. Copious KY Jelly and use of obstetrical forceps frees the foreign body from the esophagus.

The foreign body turns out to be a piece of pork bone.



SECTION 10: Appendices

Appendix 6: Incremental Care Clinical Example

The stomach wall is sutured back together and the body wall closed with a simple interrupted pattern.

One hour later the dog is awake and drinking water. Two hours later the dog is reunited with her owner.

A radiograph is taken ten days later to evaluate the status of the esophagus. The dilation is still present. The owner reports no incidences of vomiting or regurgitation. The dog is happy and eating with no difficulty.

No further testing is recommended. The owner is advised to follow up immediately if any additional gastrointestinal symptoms develop.

Three years later the dog is still eating and happy. The owner paid off the balance within six months of the clinical intervention.

Above all, do no harm. Perhaps an update to this classic medical dictum should be: **Above all, do something!**

